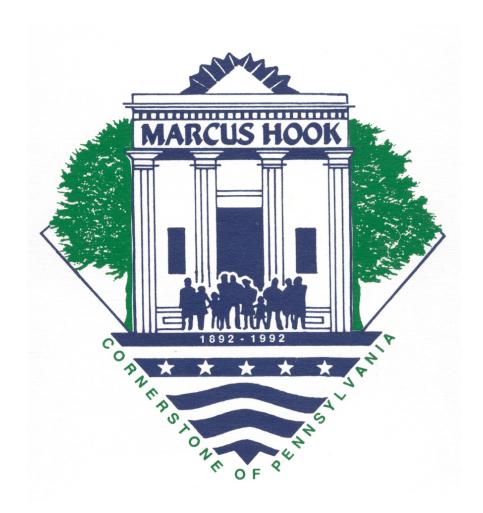
COMPREHENSIVE PLAN



MARCUS HOOK BOROUGH

Delaware County, Pennsylvania

2002

COMPREHENSIVE PLAN

FOR THE

BOROUGH OF MARCUS HOOK

OCTOBER 7, 2002

Prepared for the citizens of the Borough of Marcus Hook

by the

Delaware County Planning Department

This project was financed in part with funding from the Community Development Block Grant Program under Title 1 of the Housing and Community Development Act of 1974, P.L. 93-383 (as amended).

The logo was approved by Borough Council on February 3, 1992. It was designed to represent the overall character, culture, and history of Marcus Hook and incorporates the Borough's motto "The Cornerstone of Pennsylvania."

The diamond shape represents the quality in the Borough.

The Municipal Building façade was chosen as a unique Marcus Hook landmark.

The people in front of it represent the diverse community support and the public/private partnerships which have contributed to the vitality of the Borough.

The sunburst at the top shows the bright and promising future ahead.

Wrapping the two sides are sycamore trees which are native to the Borough and reflect the new growth, attention to the environment, and concern for the beautification of the community.

The straight and wavy stars and stripes lend a patriotic feel. The waves represent Marcus Hook's proud beginning as a waterfront settlement. The five stars refer to the five star quality of life as well as the five war memorials throughout the Borough.

BOROUGH OF MARCUS HOOK COUNCIL

Albert Argentine, President Mervin Boyer, Vice President Jack Frieze Anthony Gallo Bernard W. Gallo Arthur Sutherland Joan Sylvester

MAYOR

George A. McClure, Mayor

BOROUGH OFFICIALS

Bruce A. Dorbian, Manager Charles J. Catania, P.E., Engineer Louis G. Stesis, Solicitor Bernard Gallo, Code Enforcement Officer

PLANNING COMMISSION

Roland Faries, Chairman James Muzyk, Vice Chairman William Dooley Robert Kersey Rebecca Stier

ACKNOWLEDGMENTS

The Delaware County Planning Department greatly appreciates the assistance given by the Marcus Hook Borough Comprehensive Plan Task Force in the preparation of this document.

COMPREHENSIVE PLAN TASK FORCE

Roland Faries, Planning Commission Chairman
Ronald Beachboard, Zoning Hearing Board
William Dooley, Planning Commission
Anthony Gallo, Council
Bernard Gallo, Council
Robert Kersey, Planning Commission
James Muzyk, Planning Commission
Rebecca Stier, Planning Commission
Bruce A. Dorbian, Borough Manager

The Delaware County Planning Department also thanks all of the other Borough officials and residents who rendered their assistance through surveys and participation during meetings held for the preparation of this comprehensive plan.

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^{*} former staff members

BOROUGH OF MARCUS HOOK DELAWARE COUNTY, PENNSYLVANIA

RESOLUTION NO.

WHEREAS, the Borough of Marcus Hook deemed it in the best interest of the Borough to update the Comprehensive Plan; and

WHEREAS, a Comprehensive Plan, including maps, charts, and text, has been prepared by the Delaware County Planning Department, working with a task force of elected and appointed officials and citizens of the Borough, indicating recommendations for the future development of the Borough; and

WHEREAS, a public meeting of the Planning Commission was held on July 18, 2002 and a public hearing was held on September 5, 2002, pursuant to public notice, and no substantial revisions in the proposed Comprehensive Plan resulted therefrom.

NOW, THEREFORE, BE IT RESOLVED that the Marcus Hook Borough Council does hereby approve and adopt the Comprehensive Plan for the Borough of Marcus Hook dated October 07, 2002, and that this plan shall henceforth constitute the Comprehensive Plan of the Borough of Marcus Hook under and in accordance with Article III of the Pennsylvania Municipalities Planning Code, Act 247 of 1968, as amended.

RESOLVED this 7th day of October, 2002.

		COUNCIL OF THE BOROUGH OF MARCUS HOOK
		By:
		Albert Argentine
		President of Council
Attest:		
	Bruce A. Dorbian	
	Borough Manager	
		George A. McClure
		Mayor

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CHAPTER 1

INTRODUCTION

NATURE OF THE COMPREHENSIVE PLAN

Comprehensive plans express a community's vision of its future. They attempt to attain this vision, or at least bring it as close as practically possible to reality, by offering recommendations concerning to what uses land in the community should be put, how the movement of people and goods should take place, how housing should be provided and maintained, how the community should provide services to its citizens, and how the community should interact with adjacent communities. Comprehensive plans also outline the steps that are necessary to get from the present conditions to the envisioned future. Once adopted by Borough Council, the plan should serve as a guide for future decisions concerning development and redevelopment as well as an outline for implementing ordinances and programs. Typically, the purpose behind the comprehensive plan is to shape and guide the future of the community by retaining its best features or attributes and, where possible, enhancing those positive characteristics. At the same time, the plan should recommend policies and methods to minimize or remove its undesirable features.

The Pennsylvania Municipalities Planning Code (MPC) (Act 247) requires comprehensive plans to include a statement of the community's development goals and objectives as well as plans for functional areas such as land use, transportation, etc. However, in addition to the required plan elements, this plan contains sections about the Borough's demographic characteristics, its vision for the future, and its characteristics as a livable community.

PLANNING PROCESS

Before the adoption of this plan, the Borough used the Joint Comprehensive Plan that was prepared by the Delaware County Planning Department (DCPD) in 1978 for the communities of Marcus Hook and Trainer Boroughs and Upper and Lower Chichester Townships. Since that plan was prepared more than twenty years before the adoption of this report and since Marcus Hook carried out and successfully attained most of the recommendations of that plan, the Borough employed DCPD in May of 1998 to prepare an updated plan.

This plan is the result of an extensive effort by many people. The staff of DCPD performed the research and drafted the text in coordination with a Task Force appointed by Borough Council. This Task Force and DCPD staff met regularly to exchange information and review the work performed by DCPD staff. Borough staff, especially the Borough Manager, also provided valuable assistance.

The document itself contains a significant amount of data concerning conditions within the Borough. This data represents a snapshot of the Borough as it was in the late

1990s and in 2000. Much of the information was obtained from an analysis of U.S. Census documents, Borough documents such as building permits and Zoning Hearing Board records, and County documents such as subdivision reviews, parcel records, and maps. Information concerning the Borough's existing development was obtained from land use surveys conducted by DCPD staff in 1999 and 2000. This project was financed in part with Community Development Block Grant (CDBG) funds made available by the U.S. Department of Housing and Urban Development (HUD).

PLAN UPDATING AND IMPLEMENTATION

Active implementation actions are necessary in order for the plan to be of value to the community. Although a plan prepared with accuracy, diligence, and community input and support has the potential to be instrumental in guiding the future development and direction of the community, this potential will not be realized if it is not implemented. Unfortunately, a single act or a single document cannot accomplish implementation of the plan. It is a series of public and private actions that must be initiated when feasible and timely and monitored by responsible agencies and officials. The success of such efforts requires the cooperation of Borough residents and coordinated efforts of public officials and agencies.

Because of the rapid growth in technological advances and the nation's shift from a manufacturing to a service economy, the time horizon for the conclusions of this study will be much shorter than that for the 1978 plan. Accordingly, we are designating the period between the years 2002 and 2012 as the overall time frame during which the conclusions of this study will be most relevant or applicable. However, the Borough should update the plan to reflect changing conditions such as new census figures, the addition of major employers, changes in the roadway system or public transportation, etc. In any case, the plan should be regularly reviewed by a Planning Committee designated for that purpose, but not less frequently than every three years. These periodic revisions could primarily reflect major changes and events; they need not be comprehensive or exhaustive. With this limited agenda, people would be more willing to serve on any group whose purpose is to update this study. Because the plan would be periodically updated to reflect major changes, it would be a dynamic, flexible, and usable document.

BOROUGH'S PROACTIVE APPROACH

As noted above, all recommendations contained in this report were first discussed with the Task Force and other local officials. In a good number of cases, after a given course of action was discussed, the Borough proceeded to implement the recommended action – before this study was completed and adopted. This proactive approach to implementing a plan that is only in draft form reflects the approach of the Borough to "get things done" without delay. Unfortunately, most municipalities suffer from inertia – plan recommendations are often ignored for many years and sometimes are forgotten altogether.

As mentioned above, Marcus Hook Borough recognized the futility of planning without subsequent implementing actions by carrying out nearly all of the recommendations of the 1978 comprehensive plan. Today, the Borough has charted a course to implement this study.

REGIONAL SETTING

Marcus Hook Borough is located on the northern banks of the Delaware River in the southwestern corner of Delaware County, abutting the northern boundary of the State of Delaware. The Borough has an area of 1.14 square miles. About 70% of the land is devoted to industrial uses, with the principal companies being Sunoco and ConocoPhillips, both petroleum refining enterprises. The distance to Philadelphia International Airport is approximately 11 miles, to Center City Philadelphia, 20 miles, and to Wilmington, Delaware, about 15 miles. See Map 1-1.

Some of the principal, regional roads are located in or near Marcus Hook. The nearest interchange of I-95 is only one mile away, and I-476 (the Blue Route) is only 3.5 miles from the Borough. U.S. Route 13 traverses Marcus Hook, while PA Route 452 originates at 10th Street and provides a connection to municipalities north of the Borough. Therefore, the Borough is located quite near the major highway network serving the region, and, in the case of I-95, the entire East Coast.

Amtrak's Northeast Corridor rail line and the Conrail freight line traverse the Borough. A Southeastern Pennsylvania Transportation Authority (SEPTA) passenger railroad station is located in the Borough on Market Street along the Amtrak line. Conrail serves the Borough with its Chester Industrial Track freight line. Conrail, which recently invested about \$5 million in upgrading this track, offers good connections to Norfolk Southern and CSX main lines. The Acela high-speed commuter train, which began service in December 2000, makes 20 round trips daily (17 on the weekends) between New York City and Washington, D.C., passing through Marcus Hook 40 times a day. While not serving the Borough directly, this "bullet train" stops in Wilmington and at 30th Street station in Philadelphia and may bring some notoriety to Marcus Hook.

Direct access to the Atlantic Ocean and to all of the world's ports is available from the Port of Marcus Hook via the Delaware River and Delaware Bay. It is estimated that a work force of more than 500,000 resides within a 30-minute commute of Marcus Hook. This range includes fine residential areas serving a variety of income levels, good schools, universities, shopping centers, cultural attractions, and community services.

PLAN ORGANIZATION

Following the overview in Chapter 1, the plan identifies the direction and ideals for Marcus Hook in Chapter 2, Goals, Objectives, and Vision Statement. The historic and archaeological resources of the Borough are addressed in Chapter 3, Historic Preservation. Chapter 4 explores the Borough's natural features and environmental issues, while Chapter 5 analyzes the Census 2000 data relating to population and housing for Marcus Hook and

Delaware County. The housing issue is covered in Chapter 6, Housing. An inventory of existing land uses and recommendations for appropriate future uses is explored in Chapter 7, while Chapter 8 considers local streets, highways, and public transit options and proposes changes for improvement. Chapter 9 relates to the level and adequacy of community facilities while recreational facilities and future improvements are discussed in Chapter 10. Chapter 11 lists the features of a livable community that Marcus Hook already has and those that it can improve or introduce to make it a more desirable community. Chapter 12 sets forth the steps and tools for implementing the recommendations of the plan. The report concludes with Chapter 13, which lists the priority actions that the Borough should take within the first three years after adopting the plan to continue its planning and development process.

CHAPTER 2

VISION STATEMENT, GOALS, AND OBJECTIVES

VISION STATEMENT

Visioning is a relatively new and commonly used tool in developing the goals, objectives, and policies of a comprehensive plan. A vision statement describes in general terms the residents' overall opinion of and commitment to their ideal community. Therefore, it identifies the community's ultimate long-range goal.

The vision of the Borough is to create a community that cherishes its heritage, fosters socially and economically healthy environments, encourages safe human-scale development, and efficiently uses land, infrastructure, and public facilities and services.

While this vision statement provides the broad concept of the community's long-term vision, some elaboration is necessary to provide a clearer picture of this idealistic society. The statements below are designed to portray this long-term vision.

The Borough is striving toward a community that:

- 1. Maintains and encourages stable, blight-free neighborhoods where homeowners and residents can invest with reasonable assurance that their investment is secure;
- 2. Preserves the layout of the Borough, ensuring compatible, neatly spaced residences along streets that are pedestrian oriented and discourage high volumes of vehicular traffic and speeds;
- 3. Encourages diversity in land uses, economic development, housing opportunities, and social and cultural activities;
- 4. Encourages and supports businesses, government, and citizens to work together to attain common goals and to fully capitalize on the community's resources;
- 5. Capitalizes on its unique cultural characteristics to develop new retail, service, and tourism opportunities;
- 6. Supports planned and designed public spaces and facilities that promote the maximum opportunity for social interaction and engagement;
- 7. Promotes the conservation of open spaces and the provision of parks and public recreational facilities designed for all members of the community, regardless of age, interest, or physical ability;

- 8. Offers age-appropriate recreational facilities and programs to residents of all abilities;
- 9. Utilizes Market Square Memorial Park and vicinity for boating, fishing, and a multitude of other outdoor recreational activities, Borough-wide festivals and events, and limited commercial activities;
- 10. Provides and supports pedestrian-oriented and human-scale streetscape and urban design that fosters a sense of place, pride of place, belonging, and accessibility for all members of the community;
- 11. Provides a setting that encourages people to locate, remain, or return to Marcus Hook out of choice because the community offers a healthy and enriching environment in which to raise their families;
- 12. Preserves its cultural resources by supporting the rehabilitation of historically or architecturally significant structures and sites;
- 13. Provides an integrated network of lighted multi-use paths/trails utilizing public rights-of-way and greenbelts;
- 14. Provides and maintains attractively landscaped entranceways and streetscapes containing shade trees along clean, well-maintained streets.

GOALS, OBJECTIVES, AND POLICIES

In order to attain or at least come close to the generalized ends expressed in its vision statements, a comprehensive plan must contain a clear statement of goals and objectives. This statement should be a reflection of the needs and desires of the community as well as an indication of the actions required to achieve that envisioned future.

The term goals, as used in this chapter, is an expression of the generalized endpoints or ultimate purposes that the community strives to achieve. Objectives, on the other hand, are more specific and measurable actions necessary to move towards these goals. In most cases, several objectives must be achieved or nearly achieved before the goal is reached. Policies are the very specific actions or directions that must be taken and effectively carried out so that a given objective is attained. In general, objectives can be reached only by carrying out several policies.

The goals, objectives, and policies identified in comprehensive plans typically contain highly interrelated statements. For example, goals/objectives stated in terms of land use issues are frequently strongly related to those framed as transportation issues. Whenever this occurs, it is important to ensure that these statements are reasonably consistent with one another.

One of the most critical elements of well-crafted goals and objectives is that they reflect the needs and desires of the community. Accordingly, it is necessary to elicit the views and opinions of local officials and residents to prepare useful statements of goals and objectives.

HOW TO USE THIS CHAPTER AND PLAN

Marcus Hook Borough Council should always turn to this plan when considering policy matters. It should consult this report to see the basic direction the plan sets forth and the more specific objectives it outlines for the various areas such as land use, transportation, recreation, etc.

Similarly, when Council or other local boards or officials are considering specific matters, they should consult this chapter as well as the specific chapter of the study that addresses the topic in question to see if the report provides guidance and direction. In many cases, communities ignore their own comprehensive plan which contains valuable information on how to approach, treat, and make decisions on the very topics with which they are having difficulty.

The objectives and recommendations outlined in the report are based on the combined input from local residents, staff, and elected and appointed officials as well as that of DCPD. Therefore, the study should be used as a reference guide in providing guidance on a wide variety of issues, problems, and challenges facing the community.

HISTORIC PRESERVATION GOAL

Preserve, protect, and promote the abundant, historically significant resources of the Borough.

Objective 1

To develop and employ a range of preservation and adaptive reuse techniques for historically significant sites.

Policies

- a. Update the Historic Resources Survey of 1981 to include the most current discoveries and create a mechanism to document new information as it becomes available.
- b. Maintain and support the library as the primary holder of the Borough's historic resources.
- c. Enforce demolition provisions of existing ordinances to avoid haphazard loss of historic resources.

d. Develop an historic conservation district or overlay for those areas to be preserved from demolition or uncharacteristic modification.

Objective 2

To ensure the preservation of Viscose Village – a unique residential neighborhood.

Policies:

- a. Seek National Register of Historic Places status.
- b. Develop an overlay conservation district for the Village to preserve its distinguishing characteristics.

ENVIRONMENTAL GOAL

Protect the natural environment and support efforts to improve and enhance the environmental quality of the Borough.

Objective 1

To protect the existing natural resources and environmentally sensitive areas from inappropriate land uses and development.

Policies

- a. Discourage new development in floodplains, wetlands, and on inappropriate soils.
- b. Establish riparian buffer and stream bank stabilization programs along Marcus Hook Creek to protect the integrity of the creek and adjacent floodplain areas.
- c. Encourage and support an expanded role for the area Environmental Advisory Council (EAC) to include improvement of water quality, open space preservation, and other environmental concerns.

Objective 2

To implement a local stormwater management program.

Policies

a. Participate in and support the development of a map of the storm sewer system of the Borough.

- b. Adopt a Borough stormwater management ordinance.
- c. Cooperate with the EAC in establishing and promoting storm drain stenciling and other public outreach programs.

Objective 3

To support, monitor, and assist in efforts to clean up and reuse contaminated sites.

Policies

- a. Develop plans for a viable reuse of industrial sites, especially the former FMC (Viscose) complex, and support efforts to clean up environmental degradation of the site.
- b. Work with and monitor efforts of the Department of Environmental Protection (DEP) to determine the extent of site contamination and develop plans for reuse opportunities for the former FMC property.
- c. Participate or assist in efforts to determine levels of contamination and clean-up of known or suspected brownfields sites, including the refineries.
- d. Monitor legislation concerning brownfield remediation and reuse, especially the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Pennsylvania Act 2 Land Recycling Programs.

HOUSING GOAL

Provide affordable housing opportunities for all Borough residents with an emphasis on increasing the percentage of homeowners in the Borough.

Objective 1

To improve the condition of existing single-family and rental housing units.

Policies

- a. Pursue marketing efforts to increase the use of the County's Owner-occupied Rehabilitation Program for households with less than 80% of median family income (MFI).
- b. Partner with a local lending institution to offer a low-interest home equity loan program to rehabilitate owner-occupied properties whose owners have incomes greater than 80% of MFI, which would allow existing owners to add amenities not present.

- c. Continue the vigilant regulation and inspection of rental units in the Borough by strict enforcement of the BOCA Property Maintenance Code.
- d. Collaborate with the Delaware County Housing Authority to provide case management for Section 8 tenants who violate their lease terms.
- e. Develop home improvement educational programming for Borough residents.

Objective 2

To encourage construction of affordable new housing.

Policies

- a. Enter into partnerships with volunteer organizations, such as Habitat for Humanity, as a means to construct new housing in the Borough.
- b. Pursue in-fill development where possible as a strategy.
- c. Support the proposed Market Square Redevelopment Area for single-family detached and senior housing units.
- d. Use CDBG funds for infrastructure work to underwrite the cost of new housing.

Objective 3

To increase the percentage of homeowners in comparison to renters and provide opportunities for first-time home buyers.

Policies

- a. Pursue marketing efforts to increase use of the County's Homeownership First Program, especially for existing renters to purchase the properties in which they live.
- b. Pursue marketing efforts to promote Marcus Hook as an attractive community for first-time home buyers.
- c. Use owner held mortgages as a means to encourage existing renters to purchase units.

- d. Encourage the development of an employer-sponsored homeownership program with Sunoco, ConocoPhillips, and other large employers in the Borough.
- e. Encourage the Marcus Hook Community Development Corporation (MHCDC) to acquire those properties in the worst condition, rehabilitate them, and then sell those units to first-time home buyers. To prevent speculators from acquiring the properties, deed restrictions could require occupancy by owners for at least fifteen years.

TRANSPORTATION GOAL

Provide and maintain a transportation system that offers a choice of travel modes and ensures convenient, efficient, and safe travel to points within and outside the Borough.

Objective 1

To cooperate with SEPTA to improve train station facilities and bus service in the Borough.

Policies

- a. Relocate the train station to the east side of Market Street.
- b. Replace the trailer serving as the train station with a permanent building.
- c. Improve directional signage between the train station and the central business district (CBD), Market Square Memorial Park, and other points of interest.
- d. Encourage SEPTA to reroute the 114 bus to bring the route closer to the Borough.
- e. Work with SEPTA to revise bus routes and/or schedules to improve the bus connection between Marcus Hook and Granite Run Mall.

Objective 2

To provide appropriate parking arrangements and facilities in a way so as to balance parking needs and the Borough's desire to retain its character as a person centered, not automobile centered, community.

Policies:

a. Retain street parking in the business district to provide easy access to businesses in the CBD and retain on-street parking in residential areas as

an insulating measure shielding pedestrians from street traffic and enhancing the pedestrian-friendly character of local streets.

b. Provide additional off-street parking in the vicinity of Market Square Memorial Park.

Objective 3

To promote Marcus Hook as a unique and attractive community in southern Delaware County by beautifying the entranceways along major roadways.

Policies

- a. Develop an attractive entranceway plan that coordinates aesthetic improvements of the three main entranceways to the Borough.
- b. Direct the local Planning Commission to advise the Borough on all entranceway improvements and activities.
- c. Improve the identification of the Borough by providing newer, larger, and more attractive signs that contain a common theme and design and include Borough logos and slogan.
- d. Where possible, provide well-maintained planted areas along the main entranceways.
- e. Participate in and support the Routes 291/13 beautification and East Coast Greenway efforts.

COMMUNITY FACILITIES GOAL

Provide reliable and cost-effective private and public services and facilities at reasonable and predictable costs.

Objective 1:

To maintain or improve the level of emergency services (police, fire, ambulance) in order to meet or exceed state standards.

Policies:

- a. Support the continued standard training programs for personnel of the Borough fire, police, and ambulance departments.
- b. Consolidate the two local fire companies to maximize efficiency of resources.

- c. Work with the fire companies to recruit volunteers using all incentives and means possible, such as open houses, promotions, and other methods.
- d. Encourage the County Emergency Services Department (911) to implement any and all technological upgrades and systems revisions available, including that of a geographic information system (GIS).

Objective 2:

To provide more effective and efficient police service by expanding existing services and introducing new methods.

Policies:

- a. Expand patrolling methods, such as walking and bicycle beats, which improve interaction with residents.
- b. Develop a community-oriented town watch program that focuses on preventive methods.
- c. Investigate purchase of retrofited police vehicles outfited with the latest technological advances at about one half the cost of new vehicles to reduce capital expenditures.

Objective 3:

To facilitate the effective and efficient working of all Borough departments by employing available technology and other methods.

Policies:

- a. Ensure the proper amount of office working space for all departments.
- b. Diversify library functions and seek financial contributions from surrounding municipalities who utilize the facilities and services of the Mary M. Campbell Library.
- c. Create an internet homepage so that the public can interactively access information concerning the Borough, including current activities, publicity, and municipal ordinances.
- d. Pursue the development of a Borough operated and maintained GIS to assist in day-to-day land use decisions and public inquiries.

PARKS, RECREATION, AND GREENWAYS GOAL

Provide an age-appropriate supply of recreational facilities, programs, and points of interest to serve existing and future populations.

Objective 1

To expand Borough holdings at the riverfront and devote some additional acquisitions to park and recreational areas and facilities.

Policies:

- a. Connect all nonindustrial holdings in the vicinity of Market Square Memorial Park with a system of coordinated walkways/bikeways, plantings, signage, and other equipment and facilities to unify the waterfront area.
- b. Provide additional parking in the vicinity of the waterfront to serve existing and future waterfront facilities and attractions.

Objective 2

To develop a greenway/walkway network that includes biking and walking paths linking parks and other destinations in the community in order to further enhance the Borough as a livable and walkable community.

Policies

- a. Develop a bicycle/pedestrian trail loop in the vicinity of Williamson Field, Chestnut Street, Penn Avenue, and the Linwood Spur of the Conrail line.
- b. With Trainer Borough, conduct a feasibility study for development of a greenway park along Marcus Hook Creek.

Objective 3

To participate in the development of the Route 13 beautification and East Coast Greenway efforts anticipated to extend along the East Coast and traverse the Borough along Route 13 in order to further enhance the livability and walkability of the Borough.

Policies:

a. Work with the County's consultant to identify the desired corridor and preferred treatments.

- b. Encourage property owners along the corridor to adopt compatible landscaping plans and to support the necessary changes to the public right-of-way.
- c. If necessary, encourage property owners to provide some right-of-way for the project.

RESIDENTIAL LAND USE GOAL

Maintain the Borough as an attractive, stable, and blight-free community that is pedestrian friendly and contains distinct and compact neighborhoods and a variety of housing types.

Objective 1:

To ensure stable, blight-free neighborhoods by protecting residential areas from physical deterioration.

Policies:

- a. Identify vacant and underutilized parcels and develop them in in-fill fashion to prevent the blighting effects of vacant lots.
- b. Conduct reviews of existing inspection and enforcement program practices and codes and strengthen and coordinate these as necessary to effectively deal with the effects of an aging housing stock.
- c. Adopt strong performance standards as part of the proposed new zoning ordinance to limit impacts of noise, smoke, air pollution, glare, and vibration.
- d. Protect residential neighborhoods and properties from nearby refineries and other industrial uses by adopting ordinances containing screening and buffering measures, particularly in areas where industrial uses abut residential areas.

Objective 2:

Maintain distinct and livable residential neighborhoods designed to promote interaction among residents and easy access to important destinations.

Policies:

a. Encourage maintenance and improvement of front porches and alleys, which provide opportunities for mobility and interaction among neighbors.

- b. Maintain the condition of sidewalks and construct new sidewalks and trails to encourage pedestrian movement and easy access to major local destinations.
- c. Promote neighborhood-based activities such as block parties and celebrations, as well as maintenance and repair activities.

NONRESIDENTIAL LAND USE GOAL

Strengthen nonresidential areas through new construction, the rehabilitation and reuse of deteriorating structures, and the introduction of mixed use developments and improvements to the CBD.

Objective 1:

To attract and encourage a mixed use, transit-oriented development (TOD) in the vicinity of the Market Street Bridge.

Policies:

- a. Package and market this area as a future mixed use development to attract developers and businesses.
- b. Encourage developers to provide common features such as plazas, signage, benches, and other amenities.
- c. Build a relocated train station on the east side of Market Street as a focal point of this development area.

Objective 2:

To develop Market Square Memorial Park and adjacent area as a mixed use and multi-purpose destination with recreational, commercial, and related activities.

Policies:

- a. Evaluate the conclusions of the feasibility study for this area and compare them with the recommendations of this plan.
- b. Provide common signage, lighting fixtures, paving materials, and other accessories to beautify and lend unity to the area.
- c. Provide linkages between the park area and other local destinations by installation of well-marked pedestrian and bicycle paths.

d. Establish this area as a destination by providing activities and amenities to attract and serve visitors from the Borough, County, and region.

Objective 3:

To redevelop the Viscose/FMC area in accordance with its level of environmental clean-up.

Policies:

- a. Reuse existing 10th Street buildings to retain the historical and aesthetic character by renovating for office, commercial, or residential occupancy.
- b. Provide green space and reclaim public access to Marcus Hook Creek.
- c. Introduce less intensive industrial uses to serve as a buffer between residential areas and the ConocoPhillips refinery.

Objective 4:

To revise the existing zoning code to achieve consistency with recommendations of this plan for nonresidential development.

Policies:

- a. Revise the zoning regulations for the waterfront in the vicinity of Market Street to allow for a greater variety of uses and activities.
- b. Revise the zoning ordinance to accommodate and provide appropriate controls for commercial and mixed use developments that require greater area and height regulations and additional landscaping, signage, and other requirements than the existing provisions tailored to the needs of the CBD.
- c. Prepare zoning regulations applicable to the former Viscose properties to allow and control uses consistent with the degree of hazardous waste clean-up.

LIVABLE COMMUNITY GOAL

Preserve and maintain the characteristics that make the Borough a livable community and provide or enhance features that would further increase the Borough's level of livability.

Objective 1:

To provide for a variety and mix of uses and activities as well as a diversity of social, cultural, and commercial activities.

Policies:

- a. Continue redevelopment programs that provide low-density, single-family dwellings in the Borough to provide a variety of housing types and meet current housing preferences.
- b. Prepare revised zoning controls that allow and regulate apartments above retail and other commercial uses, particularly in the CBD and in the area east of the Market Street Bridge.
- c. Encourage participation in community activities to bring residents together and foster community pride.
- d. Facilitate the maintenance and development of the CBD to provide improved retail and service shopping within walking distance of residents' homes.

Objective 2:

To encourage layout and design of lots and buildings to promote human activity and interaction.

Policies:

- a. Provide for small, compact lots and shallow front yards in a revised zoning ordinance, other ordinances, and as a matter of Borough policy.
- b. Encourage provision of front porches to create a transition from and connection between the house and the street to promote interaction between residents and passersby.
- c. Encourage garages with access from rear alleys to limit the amount of cars and trash trucks on the street and stimulate pedestrian activity.

Objective 3:

To provide a network of trails, walkways, greenbelts, and sidewalks throughout the community with emphasis on connecting important destinations and supporting improvements and facilities related to the East Coast Greenway and maintaining existing sidewalks.

Policies:

a. Construct a multi-use trail loop along the Linwood Spur of the Conrail line, Williamson Field, and several roads in the eastern part of the

- Borough to significantly enhance walking, jogging, and bicycling opportunities.
- b. Support preparation of a feasibility study for development of a greenway park along Marcus Hook Creek to create walking and recreational facilities.
- c. Provide a pedestrian linkage between Market Square Memorial Park and other parks, trails, the business district, the train station, and other important destinations. Encourage residents to walk and bike by promoting the pedestrian facilities in order to reduce congestion, support healthy activity, and increase the livability of the Borough.

CHAPTER 3

HISTORIC PRESERVATION

INTRODUCTION

Marcus Hook's history spans over 300 years. There are many physical reminders of this rich history still present in Marcus Hook's architecture, street patterns, and waterfront orientation. Many of the events described in the following historic chronology may no longer be evident at the places where these events occurred. In addition, there may be archaeological deposits that form another layer of local history that is not readily apparent. However, even without the physical reminders present, all of the events listed below contribute to the overall character of present-day Marcus Hook and may play a role in shaping its future. This historic legacy can play an important role in the preservation of the community.

HISTORIC OVERVIEW

Prior to the arrival of the first Europeans in the 17th century, the Okehocking branch of the Lenni-Lenape Tribe occupied the lands that now constitute the Borough of Marcus Hook. Swedish explorers built the first trading post in the 1640s and settled the area until the Dutch wrested control of the area and held it from 1655 to 1664. With the fall of New Amsterdam (New York), the settlement came under English control. At this point, King Charles I granted William Penn vast acreage that included the area known as "Marrites Hoeck." This began the migration of English settlers, primarily Quakers, to this area, thus creating a market town and port of call for overseas commerce.

During the 18th century, Marcus Hook emerged as an active port. Shipbuilding industries flourished, and the town was a center for fishing, harvesting abundant schools of herring, sturgeon, and shad. The notorious pirate "Blackbeard" is said to have used the town as a safe haven, frequenting a string of taverns known as "Discord Lane" that stood along present-day 2nd Street.

The importance of transportation to Marcus Hook emerged at this time, as the Indian trails of the 17th century slowly evolved into the roads of the 18th century. The "Kings Highway," known today as U.S. Route 13 or 10th Street, traversed Marcus Hook between the City of Chester and the Delaware State border. This accessibility stimulated the growth of the area, as stage inns, hotels, and commercial ventures emerged to serve travelers and residents alike.

With the turn of the 19th century, Marcus Hook witnessed rapid change and growth. Its role was as the primary port of call for Philadelphia, as well as a hub of small shipbuilding companies and fishing fleets. The construction of the Philadelphia-Wilmington and Baltimore Railroad proved to bring about further drastic changes, as the

increased accessibility encouraged commercial and residential development to spread and supported the existing industries.

In the latter part of the century, Marcus Hook evolved into a resort destination. City dwellers from Philadelphia migrated to this outlying region via the newly established rail and trolley lines, establishing summer residences in inns and elegant private homes. Lindenthorpe Park, an early amusement park, was a big attraction along the waterfront between 1897 and 1901.

The transition from the 19th to the 20th century ushered in the beginning of a new era for Marcus Hook. Spurred by the excellent rail, road, and port facilities, new industrial interests settled in the Borough. In 1901, the Sun Oil Company purchased 82 acres with river frontage and was refining oil a year later. Additional industrial growth followed with the Union Petroleum Company, the Sinclair Refining Company, the American Viscose Company, and many smaller firms establishing their operations in this advantageous location. The industrial power of Marcus Hook was exemplified during World Wars I and II, as the Borough contributed significantly to the military efforts.

In 1910, the American Viscose Company established North America's first manmade fiber manufacturing plant in the Borough, mass-producing rayon, the first manmade fiber. The physical complex built for this production included a planned community of worker housing called "Viscose Village." This Tudor-style residential area retains much of the visual appeal that it had almost 100 years ago.

The Borough prospered during these times, reaching a population high of over 5,300 in 1920. Although housing was built specifically for industrial workers, as increasing amounts of land were devoted to industry, a much smaller portion of the town remained residential. Today, industrial uses occupy approximately 70% of the land area.

HISTORIC CONTEXTS

Today the Borough is defined by not only its geographical location, but also by its distinctive buildings, structures, and land uses. The historical record of the Borough has spanned three centuries, and much physical evidence remains of this history, thus providing a sense of local identity. This can be witnessed in four different contexts or threads of history that relate to separate and distinctive geographic areas of the Borough.

Unlike other communities whose historic themes do not have such distinct geographic boundaries, Marcus Hook is fortunate enough to have retained its four main historic contexts – waterfront, industrial, commercial, and residential – within their original geographic areas. Documenting these contexts is a way of understanding what is still left of the Borough's historic past. It can also be the impetus for further preservation of those elements that are intact and the restoration of those historic settings that are currently endangered.

Waterfront Context

Geographic Location:

- The Delaware River, Green Street, Church Street, and 4th Street encompass the waterfront area not devoted to industry. This area represents a small portion of the total waterfront of the Borough.
- The areas along the waterfront to the east and west of Market Square Memorial Park and its immediate environs are industrial.

Then and Now:

- The waterfront was the site of early hotels, rooming houses, and residences relating to fishing, shipping, recreational, and historical uses. Some of the buildings relating to this early history still exist on Delaware Avenue, such as part of the Riverview Hotel.
- Market Square Memorial Park is the focus of waterfront recreational activity and the heart of the waterfront; it no longer caters to long-term visitors but draws day visits from residents and others in the area.

Unique Patterns and Design Features:

- Market Square Memorial Park provides a large public open place connected to the Delaware River and acts as a major focal point for recreation and various Borough events.
- Many well-maintained vacant lots contribute to the visual openness of this area.
- The approach down Market Street to the recreational waterfront is a divided boulevard; its spacious dimensions emphasize its past prominence. It could become an important area for revitalization, reverting to its origins as a market square near the waterfront.
- The buildings along Delaware Avenue are generally two to three stories and face the waterfront. They retain a pedestrian-oriented scale and allow for views of the river.

Industrial Context

Geographic Location:

• There are two principal industrial areas in Marcus Hook: (1) west of Green Street and (2) east of Church Street. The first area is bounded by the Amtrak

rail line on the north and the Delaware River on the south, while the second is bordered by 10th Street on the north and the river to the south. These two areas account for most of the industrial land use in the Borough.

Then and Now:

- The present industrial areas are located on much of the historical industrial land, where many of the late 19th century and early 20th century red brick, industrial buildings are still standing. Industrial land use now consists mainly of tank farms, refineries, and manufacturing plants.
- The deep-water shipping facilities that created an ideal location for industrial uses are still crucial to current waterfront industries.
- Present-day 10th Street (Route 13) was originally the Kings Highway, which was the main thoroughfare between Philadelphia and Wilmington, spurring the early economic vitality of Marcus Hook. Today, it primarily provides access to I-95, the State of Delaware, and other waterfront communities.
- The Philadelphia-Wilmington Railroad helped to create yet another mode of transportation for the new industries of Marcus Hook in the latter part of the 19th century, and today it is still a viable alternate means of freight and public transit.

Unique Patterns and Design Features:

- The existing industrial uses are generally set back an appropriate distance from major roads, contributing to the spacious feeling along the major arteries of the Borough.
- Structures important to the early industrial history of the Borough, the County, and the state are still standing both within and outside of the holdings of the oil companies and are being reused in many cases by the present industrial complexes. Manufacturing buildings, such as the Knabb Barrel Factory (presently a lumberyard) and the American Viscose Corporation's administrative building, are just two examples.
- Later industrial buildings of the Sun Oil Company are identified by yellow brick, which is still found throughout the municipality.

Residential Context

Geographic Location:

• The residential areas are generally located between Church and Green Streets and in Viscose Village north of 10th Street and east of Yates Avenue.

Then and Now:

- The first areas of settlement were along the waterfront at the foot of Market Street. Those structures were directly related to the waterfront activities of the times, such as fishing, shipbuilding, and other port activities.
- Marcus Hook was developed in a compact and close-knit fashion and continues to be a community where residents are able to walk to work and shopping areas, as well as to civic and leisure activities and places.

Unique Patterns and Design Features:

- The community retains its historic boundaries and "streetscapes," which contribute toward the small town atmosphere and neighborhood character. Housing types and styles reflect various stages of the Borough's past development.
- With few exceptions, local architectural styles reflect the historical trends of the late 19th and early 20th centuries, retaining much of the integrity of that period. Variations of these styles occur block by block. For example, many areas have rowhousing featuring flat roofs, bay windows, one-story front porches, and small front yards (exemplified by the housing built by Sun Oil for its workers on 8th Street). Another type can be seen on Church Street, where Neoclassical rowhouses with two-story columned front porches date to the 1920s. Finally, Viscose Village is a fine example of an entire neighborhood built with its own distinct architectural identity.
- The Borough has a network of alleys that provide off-street spaces for residents. They provide an area for parking, gardening, socializing with neighbors, and a greater sense of "home."
- Another strong pattern reinforcing a sense of neighborhoods is the compact arrangement of housing along the narrow side streets. Most of the residences have front porches and have either a narrow front yard or a minimal setback. A prime example can be found on 2nd Street, where neighbors can sit on their front porches and talk with neighbors and passersby.
- A reoccurring element of the Marcus Hook physical environment is the stone wall. Italian stone masons were employed by industrial companies for construction purposes and became an active segment of the Marcus Hook population in the 19th century. Their work is evident throughout the Borough.

Commercial Context

Geographic Location:

• The primary commercial areas are located along 10th Street east and west of Market Street and on both sides of Market Street for about two or three blocks north and south of 10th Street.

Then and Now:

- Historically, the hub of commercial activity was along the waterfront, but as industrial uses proliferated along the waterfront during the 19th century, it slowly crept inland to the present node at the crossroads of Market and 10th Streets.
- U.S. Route 13 was a major thoroughfare between Wilmington and Philadelphia and grew in importance as traffic increased. However, with the construction of I-95 in the 1960s, much of the through traffic bypassed the downtown commercial area, causing a decline in business activity.

Unique Patterns and Design Features:

- The commercial area retains historical small town characteristics. These include on-street parking, tree-lined sidewalks, and two- and three-story buildings with storefront façades and minimal setbacks.
- The majority of existing buildings date to the early 20th century, and many hide original façades beneath their current façade treatments.
- The commercial area consists of stores at street level, with apartments or businesses on upper floors.

HISTORIC RESOURCES SURVEY OF 1981

Marcus Hook was among the first few Delaware County municipalities to have an historic resources survey completed. This survey, *Delaware County Historic Resources Survey: Report and Findings for Marcus Hook Borough*, was completed in August 1981. It was prepared by DCPD and partially funded by the Pennsylvania Historical and Museum Commission (PHMC). While having only advisory status, its findings can be incorporated into law by adopting a specific zoning class or a separate historical preservation ordinance that has the force of law. Table 3-1 identifies the main historic resources while Appendix A briefly notes their significance. See Map 3-1.

TABLE 3-1
HISTORIC RESOURCES SURVEY OF 1981

Map#	Name	Date
1	Sea Captain's home	Late 18 th century
2	Rooming house for sailors	Late 18 th century
3	Riverview Hotel	18 th century
4	Spread Eagle Hotel	Pre-1782
5	Beachfront house	1850-1880
6	St. Martin's Church and Cemetery	1845
7	Early 18 th century structure	Early 18 th century
8	John Larkin residence	1700-1750
9	Blackbeard's Mistress's house	Late 17 th century
10	Early residence on "Discord Lane"	Early 18 th century
11	Colonial house	Late 18 th century
12	Victorian Gothic residence	1850-1880
13	First brick house	1845
14	Stone residence on Market Street	Early 18 th century
15	Victorian Gothic structure	Late 18 th century
16	Cokesbury Methodist Church	1871
17	Colonial vernacular residence	Early 18 th century
18	Victorian Gothic residence	1850-1880
19	Italianate residence	1860-1880
20	Marcus Hook Fire Company	1908
21	Immaculate Conception RC Church	1917
22	Commercial structure with original storefront	Late 19 th century
23	Semi-detached residences	1880-1910
24	Queen Anne residence	Late 19 th century
25	American Viscose Administration Building	1910
26	Viscose Village	1907-1911
27	Early residential structure	1750-1800 (est.)

SOURCE: Delaware County Historic Resources Survey Report and Findings for Marcus Hook Borough, August 1981

Updating the Survey

The resources in the survey should be considered a base list only, not a final or complete listing. Examples of additional resources that should be included are the "ice breakers" along the waterfront and buildings on the industrial properties that relate to earlier industrial efforts of the late 19th and early 20th centuries. Other possible additional resources are the stone walls and public monuments located throughout the Borough, as

well as commercial buildings on Market Street which retain their original integrity beneath later façade treatments.

In the process of updating the survey, notation should be made of any demolitions of listed properties as well as further historical, architectural, or archaeological information uncovered since 1981. It is also important to note that PHMC now considers any structure over 40 years old as potentially historic.

Additional resources relating to archaeology should be included in the event that additional evidence is uncovered. There is underground potential for Native American and European settlements, as well as subsequent residential and industrial development. Documenting these archaeological resources will provide additional information concerning the character of the community. Archaeological examples include the areas extending along Market Street, which are the sites of early settlements dating to the 17th century, and the federal Quarantine Station located along the Delaware State line, which operated from 1887 to the 1950s at this location. Also, scattered areas north of 10th Street, east of Market Street, and extending into Trainer Borough may contain evidence of encampments and earthworks relating to the War of 1812.

VISCOSE VILLAGE

Viscose Village is an asset to the town due to its architectural and historic significance as a planned community. Its outstanding architectural features need to be protected and preserved. Residents should be encouraged to avoid destruction or alteration of architectural components on the individual buildings and to maintain the buildings to prevent deterioration. The general design pattern of the community as a whole, such as the streets radiating from a central plaza, should be protected.

The Viscose Village Historic Resource Assessment & Preservation Plan, prepared by DCPD in 1992, proposes a series of recommendations, some of which have been enacted, that the Borough should consider. For example, the initiation of a stay of demolition may prevent the loss of valuable structural and other components within the Village. While historically significant, the creation of an historic district may be too restrictive, but a conservation district with monetary incentives and an educational component could be successful in maintaining the character of the Village. The study also provides specific recommendations relating to the structural repair of houses in the Village by enumerating and suggesting sound and effective methods and materials for repair of the units without or with only minimal disturbance of the original design. Some of the components addressed include walls, masonry, siding, porches, awnings, windows, and roofs. It should be noted that the Borough has enacted many of the recommendations in the 1992 study.

Recommendations

Because of its unique architectural and historical features, Viscose Village should be preserved to approach its original character. To that end, the Borough should prepare a summary of the recommendations in the *Viscose Village Historic Resource Assessment & Preservation Plan* relating to the repair of buildings using methods and materials that would not destroy or alter the original design. This summary could be offered in a format of do's and don'ts and included either in the Borough newsletter, *Marcus Hook News*, or in a separate pamphlet to be distributed to Village residents. The Borough should consult this study for recommendations relating to the actions the Borough could take to preserve the unique features of the Village.

The Borough should also seek low-interest loans for remodeling some of the buildings and properties closer to their original exterior condition, including street furniture. These funds can also be used for the removal of fences, the return of hedges, and sidewalk maintenance. Also see Chapter 7, Land Use, and Chapter 11, A Livable Community.

CHAPTER 4

ENVIRONMENT

INTRODUCTION

The natural environment is an important consideration in the comprehensive planning process since it influences the type, location, and intensity of land use. Although Marcus Hook is almost completely developed, a discussion of the natural environment is included here. Specifically, this discussion focuses on soils, topography, wetlands, floodplains, stormwater, and air and water quality.

NATURAL FEATURES

Soils and Topography

Existing Conditions

Most of the soils in Marcus Hook consist of a soil group called Made Land. This refers to the type of soil mixture present after grading and/or filling by earthmoving equipment during the construction of buildings or other improvements. Made Land soils can be composed of many different native soils in almost any combination and typically display few of the characteristics of the original native soils. In addition, some portion of the coastline in Marcus Hook has been filled to accommodate development.

Topography is analyzed by examining the nature and severity of slopes in a given area. Due to the fact that Marcus Hook lies within the coastal plain, there are no steep slopes (15% to 25%). See Map 4-1.

Recommendations

Since most of Marcus Hook has been developed for many years, the potential exists for contamination of existing soils. Accordingly, proposals for redevelopment activities should include the necessary site investigations to ensure that the location is suitable for the proposed use. See the Brownfields section in this chapter.

Wetlands

Existing Conditions

Wetlands play a crucial role in the function of natural systems. These functions include the ability to stabilize the water regime, improve water

quality, and provide habitat for plants and animals. In addition, due to their aesthetic value and species diversity, wetlands offer opportunities for passive recreation and education.

Although the National Wetlands Inventory (NWI) (1991) shows a few wetland areas, a DCPD field survey in 1999 did not reveal any significant wetland areas in the Borough.

Floodplains

Existing Conditions

When rainstorms or snowmelt generate more runoff than watercourses can accommodate, streams overflow their banks and drain to adjacent low-lying areas. This condition is known as flooding. When this process occurs repeatedly over time, it creates a natural overflow area called a floodplain. Floodplains play an important role in maintaining water quality and supply. They can act as overflow areas for floodwaters, serve as wildlife habitat areas, and support vegetation. Any alteration of the floodplain, such as damming, stream diversion, or development, will disrupt natural flow and drainage patterns, which could then threaten the health and safety of the community.

Floodplains are the most common natural feature regulated by municipalities. In 1968, the National Flood Insurance Act was passed by Congress, providing federally subsidized flood insurance for structures which are within floodplains. This was followed by Act 166, enacted by the State General Assembly in 1978. It requires flood-prone communities to regulate uses and activities in the floodplain by local ordinances. The purpose of these ordinances is to prevent loss of life and property.

The Pennsylvania Department of Community and Economic Development (DCED) defines the following flood-related terms:

- 100-year Floodplain The floodway and the maximum area of land that is likely to be flooded by the 100-year flood as shown on the floodplain maps provided by the Federal Emergency Management Agency (FEMA) to the municipalities.
- Floodway The portion of the 100-year floodplain, including the watercourse itself and any adjacent land area, that must be kept open in order to carry the water of a 100-year flood.
- Flood-fringe Area The portion of the 100-year floodplain outside of the floodway area.

Floodplain development in Marcus Hook is regulated by Chapter 99 of the Code of the Borough of Marcus Hook. Therefore, Marcus Hook is in compliance with state regulations and is eligible to participate in the National Flood Insurance Program (NFIP) that allows property owners in the floodplain to purchase federally backed flood insurance. See Map 4-1.

Recommendations

It is recommended that the Borough continue to enforce its code dealing with floodplain development and make any amendments necessary as new flood insurance rate maps become available or regulations change. The Borough should also consider protection of the riparian buffer and floodplain area along Marcus Hook Creek, possibly in conjunction with an open space/park initiative.

ENVIRONMENTAL ISSUES

Air Quality

Existing Conditions

Clean air is an important component of a healthy and livable community. In general, impacts of air pollution include increased risk to the health of humans, plants, crops, and wildlife. Clean air can provide social and economic benefits such as the ability to attract new businesses and employment and increase property values and overall quality of life. Sources of air pollution are widespread and can be classified as point, area, or mobile sources. Industries or other high intensity uses are the most visible point source dischargers. Some examples of area sources are dry cleaning operations or fuel marketing processes. Mobile sources include automobiles, trucks, aircraft, lawnmowers, etc. Regulation of area and mobile sources of pollution is very difficult. In addition to the point, area, and mobile sources generated within Marcus Hook, the Borough receives pollution from the larger regional area through the transport of pollutants by prevailing winds.

Air quality monitoring and regulation is carried out at the federal level by the Environmental Protection Agency (EPA) and at the state level by DEP. Often, it is difficult to obtain site-specific air quality information, such as that for an individual municipality. However, it is possible to look at the quality of air of larger regional areas of which Marcus Hook is a part.

Generally speaking, air quality is improving in southeastern Pennsylvania. According to the *National Air Quality and Emissions Trends Report* of 1997, during the period between 1988 and 1997, common air pollutants (carbon monoxide, nitrogen dioxide, sulfur dioxide, and fine particulate matter) have been shown to have declined significantly in the Philadelphia (PA-NJ) metropolitan statistical area. Despite these improvements, high levels of ground level ozone remain a problem for southeastern Pennsylvania. Marcus Hook is part of a larger regional area that has a problem with high levels of ground level ozone.

One way to assess the level of pollution is to compare pollutant levels to national standards. When an area does not meet national air quality standards for one or more of the common air pollutants, it is designated a "non-attainment area." According to recent data

from EPA, southeastern Pennsylvania is consistently meeting national air quality standards for all common pollutants except ground level ozone. Marcus Hook is located in the ozone non-attainment area that covers parts of Pennsylvania, New Jersey, Maryland, and Delaware.

The above discussion has focused on the air quality of the southeastern Pennsylvania region of which Marcus Hook is a part. Another way to examine the air quality of Marcus Hook is to consider the data from the closest, long-term air quality monitoring station located in the City of Chester. The narrative below pertains to data obtained from that station.

DEP uses a "Pollutant Standards Index" to categorize air quality on any given day as either "good," "moderate," "unhealthful," "very unhealthful," or "hazardous" (Figure 4-1). The index is a combined measure of five common air contaminants — carbon monoxide, sulfur dioxide, fine suspended particulate matter, ozone, and nitrogen dioxide. To determine the severity of the air pollution, the levels of each pollutant are compared to national air quality standards. An excess of just one of the pollutants, such as ozone, can push the index rating into a worse than "moderate" air quality category.

Hazardous Very Unhealthful Moderate Good

FIGURE 4-1

Between 1979 and 1997, there were no "hazardous" air quality days measured at this station. However, during this time there were days with worse than "moderate" (i.e., unhealthful or very unhealthful) air quality ratings.

Unhealthful

Another important local air quality issue for the Borough is air toxics. In 1995, Marcus Hook was selected as a study area for an environmental risk study initiated by EPA and DEP. Interim results from this study show that Marcus Hook had lower health risks associated with the pollutants than were measured in similar industrial areas in Philadelphia and Baltimore. However, this same study also showed that improvements in the emissions of air toxics are needed to reduce potential health risks. Because of its predominance in Marcus Hook, industry is an important source of air pollutants that should be discussed. Permitting of these industries by DEP has led to a reduction in emissions and improved air quality in recent years. Currently, there are six industries that are permitted within Marcus Hook. Two of these, Sunoco and Epsilon, are required to submit an emissions inventory. The larger facilities are inspected by DEP each year, and

the smaller facilities are inspected every other year. To reduce emissions from industries, DEP has instituted programs such as "leak detection and repair" where leaky valves are located and repaired or controlled.

Recommendations

Air pollution does not follow municipal boundaries and is, therefore, difficult to manage at the local level. For this reason, the state and federal governments are in the best position to manage air quality issues. However, this situation does not preclude local involvement. It is, therefore, recommended that the Borough, preferably through its joint EAC, participate in and support regional air quality efforts. For example, opportunities exist to help design Pennsylvania's Clean Air Plan by attending public comment sessions or by participating in stakeholder or advisory groups. The EAC is also an excellent body to help educate residents about the difference the individual can make in improving air quality, such as following DEP's "ozone action tips" or by participating in "ozone action days." To date, the EAC has provided the opportunity for regular information exchange among residents, local industries, and state government. As a result, local awareness and understanding of industrial processes and their impact on air quality has increased significantly. The EAC should uphold its close working relationship with industries and the State and should continue to provide a communication link between residents and industries.

Water Quality

Existing Conditions

Water quality is important from the viewpoint of maintaining the health of humans, flora, and fauna and supporting recreational activities. In Marcus Hook, there is a direct link between water quality and the future use and enjoyment of the Delaware River waterfront. Good water quality encourages fishing, boating, biking, walking, and similar activities along the waterfront. These activities can also contribute to economic revitalization of this area.

Sources of water pollution are usually described as either "point sources" or "nonpoint sources." Point sources are identifiable and confined discharge points. Examples include discharges into waterways from municipal and industrial sewage treatment plants and storm sewers. Nonpoint sources are diffuse and unconfined. Such sources consist of pollution resulting when rain washes oil, litter, fertilizers, and animal wastes from streets, parking lots, lawns, and farmlands to streams and rivers. The Delaware River and Marcus Hook Creek are the two water bodies that abut the Borough; both are subject to point and nonpoint sources of pollution.

Historically, the Delaware River Estuary watershed suffered from extremely poor water quality. At the height of World War II, the lower Delaware River was an open sewer with some reaches devoid of the oxygen needed to support fish and other aquatic life. However, since that time the river has exhibited a dramatic recovery in water quality,

especially in oxygen levels. This progress is due, in large part, to improvements in wastewater treatment facilities and methods, as well as the reduction or removal of industrial discharges as mandated by the federal Clean Water Act.

Despite these improvements, the Delaware River is still confronting challenges in terms of water quality. A recent management plan for the Delaware Estuary (1996) indicated that improvements must be made in the areas of toxics, metals, and organic pollutants. The most recent water quality report by the Delaware River Basin Commission (DRBC) (1998) indicated that the Delaware River water quality near Marcus Hook is still impaired with respect to supporting an "aquatic life" use. In other words, the water quality in this location is not meeting the water quality standards set by EPA that are necessary for fish and other aquatic life to live and naturally reproduce. Further, the same DRBC report also shows that due to point and nonpoint sources of pollution, the water quality of the Delaware River in this location is not sufficiently clean to support fish consumption. Consequently, fish consumption advisories will stay in effect for this portion of the Delaware River.

One way that the Delaware River receives pollutants is via its tributaries. One of these is Marcus Hook Creek, which forms the eastern boundary of the Borough. The headwaters of Marcus Hook Creek are located in Upper Chichester and Aston Townships. Flowing southward toward the Delaware, the creek passes through Lower Chichester Township and the Boroughs of Marcus Hook and Trainer. Preliminary results (1999) of DEP's Unassessed Waters Program show that Marcus Hook Creek is "impaired" with respect to its Warm Water Fishery designation. As a result, the creek was placed on the year 2000 list of impaired waters in Pennsylvania. To correct this situation, regulations will follow. How these regulations would impact the Borough is not yet clear.

In addition to the State's Unassessed Waters Program, other monitoring efforts have been carried out sporadically on Marcus Hook Creek. These include DEP biologist studies, industrial compliance reports, and a monitoring effort by one citizen that is currently underway. A member of the joint EAC and the Delaware Riverkeepers is carrying out the citizen monitoring program in Marcus Hook. To support this activity, the Sunoco refinery has purchased monitoring equipment, and the ConocoPhillips refinery has provided a donation for data management and quality control. Currently, the monitoring involves chemical analysis and visual assessment. Results of these analyses are sent to the Delaware Riverkeepers, a nongovernmental organization that compiles and analyzes volunteer information from 24 sites within the estuary.

Recommendations

The most effective approach to managing water quality is a watershed-based approach. Since the activities of one municipality will affect the water quality of others downstream, it is imperative that each municipality does its part. Therefore, it is recommended that the Borough partner with other municipalities located in the Marcus Hook Creek watershed to consider the most effective courses of action. As with air quality, the existing joint EAC is the most appropriate body to spearhead this effort. In addition, it is recommended that the joint EAC consider expansion of its current activities to include educational programs on water quality, such as storm drain stenciling. With respect to the existing citizen monitoring effort, it is suggested that the EAC determine the level of interest in expanding the program by adding more sampling sites and more parameters.

Stormwater Management

Existing Conditions

Stormwater, as defined by the Stormwater Management Act (PA Act 167), is "drainage runoff from the surface of the land resulting from precipitation, including snow or ice melt." Although stormwater runoff occurs naturally, the quality, quantity, and velocity of stormwater can be influenced by construction and other development activity. Typically, the more impervious surface within a watershed, the less precipitation is able to percolate into the ground, resulting in stormwater runoff flowing directly into streams. This stormwater, which picks up oil and gasoline deposits from parking lots and driveways, road salts and other chemicals from streets, and other chemicals from lawns, is believed to be a primary source of nonpoint source pollution in waterways.

A major objective of Act 167 is to assure that the maximum rate of stormwater runoff is no greater after development than before. The Act also seeks to manage the quantity, velocity, and direction of stormwater runoff in a manner that protects health and property. The Act requires Pennsylvania's counties to prepare stormwater management plans for each state-designated watershed within their boundaries and municipalities within these watersheds to adopt stormwater management regulations consistent with the watershed plan. Although to date, Delaware County has adopted two Act 167 watershed management plans (for Ridley and Chester Creeks), a plan for another watershed is currently underway (Darby Creek). Marcus Hook lies within the Marcus Hook Creek watershed, which is designated as part of the larger Delaware River watershed. Therefore, any standards developed for the control of stormwater as part of an Act 167 plan will be a component of a much larger plan for the entire Delaware River rather than for the smaller Marcus Hook Creek watershed.

With the exception of several remaining vegetated areas scattered throughout the Borough, most of Marcus Hook is paved, leaving very little land area for natural percolation of stormwater into the soil. Stormwater management within the large

industrial areas such as the refineries is handled on-site in conformance with state and federally required National Pollutant Discharge Elimination System (NPDES) permits. The Borough is served by an underground storm sewer system that collects rainwater from various portions of the Borough for discharge via one of two major pipes to the Delaware River.

The Borough does not have combined sanitary/storm sewers and does not appear to have any specific flooding problems resulting from inadequate, undersized, or poorly maintained storm sewers. Severe flooding events do not appear with any frequency; however, on a few occasions when significant rainfall events have combined with a high tide, some of the storm sewer outlets became submerged for brief periods. This does not appear to be a significant problem for the Borough.

The Borough recently received a \$30,000 CDBG grant through the FY 2001 application for identifying and mapping the existing storm sewer network of the entire Borough. This action was necessary because of past flooding and soon to be required regulations on both the quantity and quality of stormwater.

Recommendations

Recent proposed revisions to the federal Clean Water Act's Water Pollution Control Program will require small urbanized municipalities, such as Marcus Hook, to obtain permits under EPA's NPDES program for their storm sewer systems by March 2003. This program will also require municipalities to adopt a local stormwater management program designed to reduce stormwater pollutants transported through the system. Required elements of this program include public education and outreach, public involvement, illicit discharge detection and elimination, construction site stormwater runoff control facilities, post-construction stormwater management for new developments, and pollution prevention/good housekeeping.

Although currently there are no stormwater management standards required under Act 167, there is no reason that the Borough cannot, or should not, adopt regulations that address the method by which stormwater quantity and quality from new development or redevelopment should take place. The State of Pennsylvania has model ordinance provisions that can provide the Borough with guidance concerning stormwater management. The adoption of such ordinance provisions, particularly if accompanied by the development of a public outreach strategy and a program to map, maintain, and enforce regulations governing discharges, should help the Borough to comply with the upcoming NPDES Phase II requirements.

The Pennsylvania Infrastructure Investment Authority (PENNVEST) is a low-interest revolving loan program administered by the State to assist the Borough with repair and replacement of existing water, sewer, and stormwater management infrastructure. In order to be eligible for PENNVEST stormwater funding, the Borough will be required to show evidence that it has adopted stormwater management regulations.

It is recommended that the Borough initiate the following actions:

- 1. Work with the County and the State to develop local stormwater management regulations governing both quantity and quality of stormwater.
- 2. Pursue any needed funding for repair and replacement of storm sewer system components as the need arises.
- 3. Develop a program, possibly in coordination with the EAC, to address public education concerning nonpoint sources of pollution from stormwater runoff.

Brownfields

Existing Conditions

Marcus Hook, like other highly industrialized communities in the country, has a number of properties that presently or in the past manufactured or processed materials or products that could be considered hazardous by today's standards. As such, the possibility exists that through past disposal practices, storage methods, or by accident, the site may have become contaminated. Therefore, the use or reuse of these sites for activities other than manufacturing or heavy industry may not be safe, depending on the proposed reuse of the site. For example, it might be deemed unsafe to place a day care center within a structure or on a site that once manufactured a hazardous chemical used for cleaning without first decontaminating it. Such sites, which are or are believed to be contaminated, are most commonly known as "brownfields."

In 1980, Congress passed CERCLA, commonly known as "Superfund." The primary purpose of this program was to facilitate clean-up of extremely contaminated sites by requiring all "potentially responsible parties" (PRPs) to contribute to its cost. A PRP is anyone who has ever owned, had a legal interest in, or disposed of materials at a property and is liable for clean-up. Because of this liability, developers and banks have been hesitant to purchase these sites for development/redevelopment. Additionally, the process of identifying a severe problem on a site, getting it on the CERCLA National Priority List for clean-up, identifying the PRPs, and actually cleaning up the site can take many years.

Known or suspected brownfield sites in the Borough include the 22 parcels at the FMC (Viscose) site, the industrial property containing an old vermiculite dump at Walnut and Pine Streets, and the vacant Allied Chemical and General Chemical properties along Route 13. There is also the potential for contamination within the operating refineries. However, the degree to which the refinery properties will be subject to redevelopment and how their operations may affect their reuse are currently unknown.

Of particular interest to the Borough is the FMC site (formerly the American Viscose property), which has been the subject of scrutiny over the past several years. EPA found that the site contains a number of hazardous materials including organic compounds, volatile organic solvents, asbestos, and heavy metals above standards, as well as other polyaromatic hydrocarbons (petroleum). DEP is pursuing site clean-up under State Act 108 of 1988, the Hazardous Sites Cleanup Act, which is the state equivalent to EPA's CERCLA (Superfund) Program. The Act grants DEP the authority to conduct site investigations and assessments and provide for the clean-up of sites releasing or threatening the release of hazardous substances or contaminants into the environment. A fund was established to provide DEP with the financial resources needed to plan and implement a timely and effective response and calls for recovery costs from parties responsible for conducting the responses.

The State is evaluating all previous studies and is preparing a report that addresses needs relative to future studies and clean-up. Work was begun in the summer of 2001 to fill in data gaps with more borings and wells in order to have a comprehensive picture of the site and to develop estimated costs for clean-up. The State is working with the owners of the FMC property to discuss any role that they might take in assisting the State in site testing and clean-up.

In May of 1995, Governor Ridge signed into law three bills (Acts 2,3, and 4) which constitute the State's Land Recycling Program. Act 2, the Land Recycling and Environmental Remediation Standards Act, is the primary piece of legislation that constitutes the Land Recycling Program. The major goal of the program is to foster voluntary reuse and redevelopment of contaminated sites. The four major components include uniform clean-up standards, standardized review procedures, financial assistance, and releases from liability for both site testing and clean-up. An Act 2 clean-up effort generally involves a private sector initiative to utilize the site for a profit-making venture. Thus, the required level of clean-up is based in great part on the proposed use of the site, and clean-up efforts tend to come much faster than they otherwise would under CERCLA. According to Pennsylvania's Land Recycling Program Annual Report (July 1998), the program has been responsible for the remediation of 267 sites, including many in Delaware County. For more details concerning the various elements of the Land Recycling Program, refer to DEP fact sheets in Appendix B.

Recommendations

The actual degree of contamination and relative determination of clean-up needed for various sites cannot be determined until an actual site assessment is performed. Such site assessment will involve collection of historical data concerning uses at the various sites, an examination of permits and manufacturing processes for the sites, and in some cases full soil, air, water, and other analysis to determine present-day site conditions. The specifics of the type of site assessments that must be performed on each site will be determined by the State. Depending on ownership and status, funding for site assessment may be available under the State's Act 2 Land Recycling Program.

Under Act 2, the basis for requiring a particular level of clean-up on a site is the proposed future use. Therefore, it is important for the Borough to maintain reasonable expectations as to its future use based, in part, on the potential to attract redevelopment. While the first impulse may be to plan and zone for land uses that require the lowest levels of clean-up in order to attract developers, this is not a wise choice. It should be remembered that acreage in a waterfront community such as Marcus Hook is a valuable commodity for a number of uses, not just industrial (particularly if it provides access to the river). Therefore, it is recommended that the Borough maintain a vision for the "highest and best use." This means that if the Borough believes that the best use for a former industrial site is a boat ramp, park, office, condominium, commercial district, or even a day care center, then the Borough should plan and zone accordingly. As for the FMC site, the Borough should continue to work with DEP to pursue any and all opportunities for clean-up and reuse of the site.

Specifically, the Borough should consider the following with regard to brownfields redevelopment:

- 1. Establish a long-range vision for reuse of some of its industrial areas (particularly portions of its refineries). See Chapter 7, Land Use.
- 2. Remain apprised of legislation concerning brownfields and brownfields development.
- 3. Pursue both economic and institutional opportunities for site assessment and redevelopment of known or potentially contaminated sites within the Borough.

Solid Waste Management and Recycling

Existing Conditions

While municipal solid waste disposal is a service provided free by the County to all municipalities, the various methods and associated local costs associated with its collection can differ. Marcus Hook Borough currently contracts with Laxton Enterprises, Inc. for residential solid waste (trash) collection twice weekly (Tuesdays and Fridays). This service costs the Borough approximately \$35,000 per year. It is paid out of the Borough's budget, and residents are not charged a separate fee for this service. Industrial, commercial, and apartment unit (four units and above) waste collection service is privately contracted by the generator. All residential and commercial waste is taken to a County transfer station for subsequent transport to the American Refuel plant in the City of Chester, where it is incinerated. The incinerator ash is subsequently transported to a County-owned landfill in Berks County. The Borough provides bulk waste pickup once a week for a nominal charge of \$15 for up to three items.

Disposal of waste requiring special handling, including infectious, pathological, and chemotherapeutic waste, is not the responsibility of either the Borough or the County. Each

producer or processor of such waste is responsible for the storage, transport, and disposal of these materials in accordance with their respective operating permits, as issued by DEP.

The Borough's population is low enough that it falls below PA Act 101 (Municipal Waste Planning, Recycling, and Waste Reduction Act of 1988) municipal curbside source separation and collection requirements. However, the County does maintain igloos next to the Borough's Highway Department garage for residential drop-off of brown, clear, and green glass, as well as aluminum.

The Delaware County Solid Waste Department reports that for 1998, the Borough (private hauler and Borough highway department combined) delivered 1,175.76 tons of solid waste to the County's transfer station. County recycling records indicate that 2.01 tons of glass and aluminum were recycled from Borough igloos, and 3.68 tons of yard waste were recycled, constituting .48% of the Borough's residential waste stream. Recycling from commercial establishments resulted in the diversion of an additional 533.28 tons of various materials.

The County currently conducts a regular household hazardous waste collection program, which permits drop-off of designated items several times a year at various County facilities.

Recommendations

The Borough appears satisfied with its solid waste disposal system. Therefore, when its current contract with Laxton Enterprises expires, it should continue to pursue its practice of competitively bidding its twice-weekly collection service.

The Borough may wish to work with the County Recycling Coordinator to arrange for the collection of additional recyclable materials at the Borough's igloo drop-off center.

ENVIRONMENTAL PROGRAMS

Delaware River Coastal Zone

Existing Conditions

The Coastal Zone Management Act (P.L. 92-583, passed by Congress in 1972) establishes a national policy to preserve, protect, develop, and restore coastal resources and to encourage states to develop appropriate coastal management programs. Pennsylvania's Coastal Zone Management (CZM) Program is coordinated by DEP, with technical assistance from the Delaware Valley Regional Planning Commission (DVRPC). Competitive funding is available for projects within or directly affecting the coastal zone.

Marcus Hook lies completely within the coastal zone. State permits for activities in this area are reviewed by DEP for consistency with Pennsylvania's CZM plan. To date,

the Borough has actively participated in regional coastal zone programs, served on the regional CZM Steering Committee, and has sought and successfully received regional funding.

Marcus Hook participates in the Delaware County CZM Task Force. The mission statement of this advisory body is:

To heighten awareness of the coastal zone's importance by informing and educating the stakeholders about their connection to the Delaware River and to facilitate the redevelopment of the waterfront with a regional perspective by fostering cooperation and coordination among coastal zone communities.

Membership on the Task Force includes representatives from the CZM municipalities, various branches of Delaware County government, as well as business, industrial, environmental, transportation, and citizen bodies.

Recommendations

The Borough should continue to participate in all regional and local CZM activities and should continue to pursue CZM funding that furthers the Borough's goals.

Environmental Advisory Councils

In December 1973, the Pennsylvania General Assembly adopted Act 148, the Environmental Advisory Council Law. This legislation empowers the governing bodies of all municipalities to establish an EAC. The principal purpose of an EAC is to advise other branches of local government on issues concerning the conservation of natural resources. An EAC is empowered to:

- 1. Identify problems related to air, water, and land resources;
- 2. Recommend appropriate courses of action, such as the adoption of local regulations or the use of state or federal regulatory personnel, and;
- 3. Maintain records that define the boundaries and the character of sensitive environmental areas (e.g., open space, floodplains, woodlands, natural animal habitats, bodies of water, etc.).

Municipal EACs can be an important vehicle for implementing many of the recommendations made in this document pertaining to air quality, water quality, stormwater management, and parks and recreation. Typically, the purpose of these councils is to advise the local planning commission, park and recreation board, and elected officials on matters dealing with the protection, conservation, management, promotion, and use of natural resources within a municipality's boundaries. Under Pennsylvania law, EACs are provided with the above listed framework rather than a list of specific programs to undertake.

Existing Conditions

The Borough participates in a joint EAC that includes the Borough of Trainer and Lower Chichester Township. The EAC rotates the location of its monthly meetings among the three municipalities. To date, the EAC has provided the opportunity for regular information exchange among residents, local industries, and state government on air quality. As a result, local awareness and understanding of industrial processes and their impact on air quality has increased significantly.

In October 1997, DEP awarded the joint EAC a Southeast Regional Community Environmental Excellence Award for providing an important communications link among the municipalities, local industries, businesses, the general public, and DEP.

Recommendations

The EAC should continue to function as the communication link among municipalities, businesses, the general public, and DEP. In addition, it is recommended that the joint EAC expand its role to provide more emphasis on water quality improvements. As mentioned above, a watershed-based approach is necessary to address the water quality of Marcus Hook Creek and the Delaware River. Programs such as storm drain stenciling and citizen monitoring will be effective educational tools and will encourage residents to take an active role in improving water quality.

CHAPTER 5

DEMOGRAPHIC CHARACTERISTICS

INTRODUCTION

In order to plan effectively for a desirable physical environment, knowledge of past and present population levels and housing characteristics, as well as accurate forecasts of the future population, are extremely helpful. Anticipated population levels will suggest the amount and types of services and facilities, such as schools, police and fire protection, trash collection, and sewage disposal that will be required to adequately respond to future needs.

The initial preparation of this chapter compared census data from 1980 and 1990. However, because only limited data from the Census 2000 was made available when this chapter was being updated (late spring of 2001), DCPD changed the format of this chapter by including only the categories for which 2000 data is available and comparing them to the 1990 figures. The categories for which 2000 data has not yet been released are discussed in Appendix C. When the Census Bureau releases the figures for these latter categories, the Borough should update this plan accordingly.

CENSUS 2000 DATA

Population Trends

As shown in Table 5-1, the population of Marcus Hook reached its zenith in 1920 with over 5,300 residents. Since that time, the Borough has experienced a continuous decline, highlighted by a 14.2% decline during the 1950s. In the recent past, the rate of decline has slowed, as evidenced by a decrease of only 3.5% during the 1980s, 9.1% during the 1990s, and settling at 2,314 persons in 2000. During this period, Delaware County showed a steady increase until 1970. This pattern reversed during the 1970s, when the County's population declined by 8.0%. Fortunately, population stabilized during the 1980s (-1.3%) and 1990s (+0.6%).

Between 1990 and 2000, Marcus Hook's total population declined by 9.1%, while that of the County remained stable. However, it should be noted that the Borough's decrease was consistent with that for many boroughs in the County.

Population Estimates and Forecasts

DVRPC prepares population estimates and forecasts for all counties and municipalities in the region. Its forecasts in February 2002 indicated that Marcus Hook's population is expected to decline 4.9% between 2000 and 2010 and 5.4% between 2010 and 2020. During this time period, the forecasts suggest that the County population will remain stable. See Table 5-1. However, it is important to caution that these long-term forecasts are

subject to a substantial margin of error due to a variety of political, social, and economic forces that can bring about population changes which are markedly different from those anticipated many years earlier.

TABLE 5-1
POPULATION TRENDS, 1900 - 2000, AND FORECASTS, 2010 AND 2020

Year	Borough	% Change	County	% Change
1900	1,209		94,762	
1910	1,573	+ 30.1	117,906	+ 24.4
1920	5,324	+ 238.5	123,084	+ 4.4
1930	4,867	- 8.6	280,264	+ 127.7
1940	4,123	- 15.3	310,756	+ 10.9
1950	3,843	- 6.8	414,234	+ 33.3
1960	3,299	- 14.2	553,154	+ 33.5
1970	3,041	- 7.8	603,456	+ 9.1
1980	2,638	- 13.2	555,023	- 8.0
1990	2,546	- 3.5	547,651	- 1.3
2000	2,314	- 9.1	550,864	+ 0.6
2010	2,200	- 4.9	550,970	0.0
2020	2,080	- 5.4	546,972	- 0.7

SOURCES: U.S. Department of Commerce, Bureau of the Census, 1900 - 2000; DVRPC Population Forecasts, February 2002

Age Distribution

The age distribution of a community can suggest the levels of service and infrastructure necessary to meet the future needs of the various age groups. It can forecast future school, recreational, and elderly facilities that may be needed. Table 5-2 compares the age distribution for the Borough and the County between 1990 and 2000, while Figure 5-1 graphically depicts this information for 2000.

The Borough's fastest growing age groups during this decade were the 35-44 group, which increased by 23.1%, and the 45-54 age group, which grew by 23.5% between 1990 and 2000. The 35-44 group includes persons who are in or approaching their most productive years. Therefore, the 23.1% growth of this group provides a pool of potential home buyers and productive employees.

The Borough reflected the County's loss of population in the 25-34 age group (26.1% loss in the Borough, 25.3% in the County), which suggests a loss of families with school-aged children. This group includes persons likely to have recently entered the work force as well as first-time or second-time home buyers, whom the Borough is seeking to attract. Finally, this group consists of persons who are likely to supplement the Borough's overall level of activity and vitality, making it a more livable and desirable community.

TABLE 5-2 AGE DISTRIBUTION, 1990 AND 2000

		N	Iarcus Hook			
		% of		% of		
Age Group	1990	Total	2000	Total	Ch	ange
0-4	232	9.1	171	7.4	- 61	- 26.3%
5-14	359	14.1	372	16.1	13	3.6%
15-24	390	15.3	312	13.5	- 78	- 20.0%
25-34	444	17.4	328	14.2	- 116	- 26.1%
35-44	325	12.8	400	17.3	75	23.1%
45-54	230	9.0	284	12.3	54	23.5%
55-64	229	9.0	189	8.2	- 40	- 17.5%
65+	337	13.2	258	11.1	- 79	- 23.4%
Median Age	31.3	-	34.5	1	+ 3.2	2 years
TOTAL	2,546		2,314		-258	- 9.1%
		Del	aware County			
		% of		% of		
		/ U UI		, 0 01		
Age Group	1990	Total	2000	Total	Ch	ange
Age Group 0-4	1990 38,266		2000 34,394		C h	ange - 10.1%
		Total		Total		•
0-4	38,266	Total 7.0	34,394	Total 6.2	- 3,872	- 10.1%
0-4 5-14	38,266 68,833	7.0 12.6	34,394 78,836	Total 6.2 14.3	- 3,872 10,003	- 10.1% 14.5%
0-4 5-14 15-24	38,266 68,833 78,062	7.0 12.6 14.2	34,394 78,836 72,696	Total 6.2 14.3 13.2	- 3,872 10,003 - 5,366	- 10.1% 14.5% - 6.9%
0-4 5-14 15-24 25-34	38,266 68,833 78,062 92,520	7.0 12.6 14.2 16.9 14.2 9.7	34,394 78,836 72,696 69,089	Total 6.2 14.3 13.2 12.5	- 3,872 10,003 - 5,366 - 23,431	- 10.1% 14.5% - 6.9% - 25.3%
0-4 5-14 15-24 25-34 35-44	38,266 68,833 78,062 92,520 77,835	7.0 12.6 14.2 16.9 14.2	34,394 78,836 72,696 69,089 89,511	Total 6.2 14.3 13.2 12.5 16.2	- 3,872 10,003 - 5,366 - 23,431 11,676	- 10.1% 14.5% - 6.9% - 25.3% 15.0%
0-4 5-14 15-24 25-34 35-44 45-54	38,266 68,833 78,062 92,520 77,835 53,302	7.0 12.6 14.2 16.9 14.2 9.7	34,394 78,836 72,696 69,089 89,511 74,079	Total 6.2 14.3 13.2 12.5 16.2 13.4	- 3,872 10,003 - 5,366 - 23,431 11,676 20,777	- 10.1% 14.5% - 6.9% - 25.3% 15.0% 39.0%
0-4 5-14 15-24 25-34 35-44 45-54 55-64	38,266 68,833 78,062 92,520 77,835 53,302 53,901	7.0 12.6 14.2 16.9 14.2 9.7 9.8	34,394 78,836 72,696 69,089 89,511 74,079 46,590	Total 6.2 14.3 13.2 12.5 16.2 13.4 8.5	- 3,872 10,003 - 5,366 - 23,431 11,676 20,777 - 7,311 737	- 10.1% 14.5% - 6.9% - 25.3% 15.0% 39.0% - 13.6%

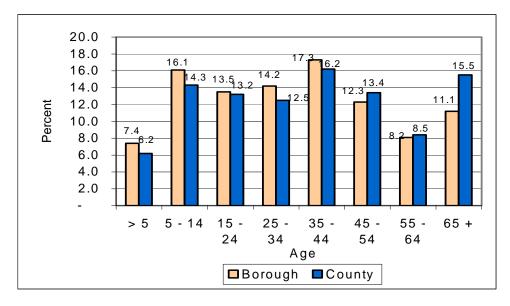
SOURCE: U.S. Department of Commerce, Bureau of the Census, 1990 and 2000

By improving amenities, supporting the school district, and providing additional new housing, the Borough can attract additional persons in this age group. These efforts are needed because the simple aging of the 15-24 group will produce further decline in the 24-35 group.

Marcus Hook experienced a decline of 79 persons (-23.4%) in its elderly (65+) population, and the number of dwelling units occupied by this age group increased by 185 households from 1990 to 2000. This would indicate that more elderly people are living alone. Because of this trend, the Borough should begin thinking now about which services might be needed or augmented and what housing options are available to its older residents. Also of note, the median age for Marcus Hook rose to 34.5 (+3.2 years from 1990) but remained slightly lower than that of the County (37.4 years, a 2.8-year increase).

AGE DISTRIBUTION
MARCUS HOOK AND DELAWARE COUNTY, 2000

FIGURE 5-1



SOURCE: U.S. Department of Commerce, Bureau of the Census, 2000

Racial Composition

Although the Borough's population was overwhelmingly White in 2000, there was a decrease of 290 persons (-12.0%) in this racial group between 1990 and 2000. During this decade, Whites decreased from 94.5% to 91.4% as a percentage of total population. The Black population remained nearly unchanged during this decade, increasing by only 3 persons, but rising 0.6% as a percentage of the total, reflecting a 2.5% change overall. Although most of the remaining racial groups listed in Table 5-3 have experienced an increase since 1990, when combined they comprise only 3.2% of the Borough's population. The Census 2000 provided additional racial and ethnic classifications, including a "multiracial" category. Due to these changes, some ambiguity exists when making comparisons with previous census categories.

Historically, racial and ethnic diversity was considered a negative aspect of a community, but today it is recognized as a strength and asset. Although still relatively small in number, the Borough's minority population is growing. Marcus Hook's diversity should be embraced and, should this growth continue, be reflected in the community's programs, services, and composition of local government. Several communities in the County have included minority representatives on their governing body or other local boards to reflect the growth of those groups in the community.

TABLE 5-3

RACIAL COMPOSITION, 1900 AND 2000

		% of		% of		
Marcus Hook	1990	Total	2000	Total	Ch	ange
White	2,406	94.5	2,116	91.4	- 290	- 12.0%
Black	120	4.7	123	5.3	3	2.5%
Asian/PI	9	0.3	-	-		-
Asian	-	-	14	0.6		-
American Indian/	4	0.2	2	0.1	- 2	- 50.0%
Alaska Native						
Multi-racial	-	-	43	1.9		-
Other	7	0.3	16	0.7	9	- 128.6%
Total Population	2,546	100.0	2,314	100.0	- 232	- 9.1%
		% of		% of		
Delaware County	1990	Total	2000	Total	Ch	ange
White	473,741	86.5	442,449	80.3	- 31,292	- 6.6%
Black	61,394	11.2	79,981	14.5	18,587	30.3%
4 · /DI						
Asian/PI	10,002	1.8	-	-	,	-
Asian/PI Asian	10,002	1.8	18,103			•
	10,002			-		-
Asian	-	-	18,103	3.3	,	-
Asian American Indian/	-	-	18,103	3.3		-
Asian American Indian/ Alaska Native	-	-	18,103 609	3.3 0.1	,	-
Asian American Indian/ Alaska Native Native Hawaiian/	-	-	18,103 609	3.3 0.1	1,161	-
Asian American Indian/ Alaska Native Native Hawaiian/ Other Pacific Islander	609	0.1	18,103 609 100	3.3 0.1 NS		-

NS - Denotes data that is statistically not significant

SOURCE: U.S. Dept. of Commerce, Bureau of the Census, 1990 and 2000

Housing Occupancy

Notwithstanding its high percentage of industrial land (roughly 70%), Marcus Hook is a strong residential community. In 2000, housing units numbered 1,025, of which 89.7% were occupied. Of these occupied units, only 49.5% were owner occupied, significantly lower than the County's 71.9% owner occupancy rate. Furthermore, nearly all municipalities in the County had a higher percentage of owner-occupied units than the Borough.

In contrast to renters, homeowners tend to be more permanent residents, more involved in civic and community life, and generally take better care of their properties. For these reasons, the Borough is seeking to increase its percentage of owner-occupied housing by providing additional units of this type. This issue is addressed in more detail in Chapter 6, Housing.

An indication of the ability of a housing market to meet demand is its vacancy rate. Table 5-4 shows an increase in the vacancy rate from 6.6% to 10.3% between 1990 and 2000. This 10.3% rate is substantially higher than the 3% to 5% that is frequently considered optimum. This rate appears to suggest that there is more than sufficient housing to meet demand and that too many houses remain vacant, thus depressing the community. However, based on discussions and several field surveys, DCPD could not find evidence of this alarming increase in vacancies. DCPD will continue checking these figures.

TABLE 5-4
HOUSING OCCUPANCY, 1990 AND 2000

Housing Units 1990	Borough	%	County	%
Total	987	100.0	211,024	100.0
Occupied	922	93.4	201,374	95.4
Owner-occupied	530	57.5	146,281	72.6
Renter-occupied	392	42.5	55,093	27.4
Vacant	65	6.6	9,650	4.6
2000	Borough	%	County	%
Total	1,025	100.0	216,978	100.0
Occupied	919	89.7	206,320	95.1
Owner-occupied	455	49.5	148,384	71.9
Renter-occupied	464	50.5	57,936	28.1
Vacant	106	10.3	10,658	4.9

SOURCE: U.S. Department of Commerce, Bureau of the Census, 1990 and 2000

The loss of about 3,000 people since 1920 has resulted in a number of vacant parcels. This offers the Borough and its residents a challenge to redesign their community. Because of the extremely compact nature of the Borough, particularly the residential areas, careful planning of new development will be necessary. The MHCDC, in cooperation with the Borough, purchases, repairs, and then resells houses in the community. This program reduces the number of vacant properties and increases the number of owner-occupied houses, in accordance with the Borough's goals and objectives.

Household Median Income

As a partial indicator of societal and community health, income levels must be viewed in relation to the local and regional cost of living. The difference in household median income between the County as a whole and the Borough is growing. Marcus Hook's household median income represented 60.9% of the County average in 1989 and dropped to 56.3% in 1999. When considering the standard rise in inflation (multiplier*), the County average outpaces that of the Borough, posting a positive change (\$1,634 or 3.37% increase) while the Borough did not keep up with inflation, posting a deficit (\$1,272 or -4.31%)

decrease). Despite these widening gaps, Borough residents enjoy a high level of municipal services, affordable housing, and a true community spirit absent in many Delaware County municipalities. Table 5-5 shows the change between 1989 and 1999 in household median income, while Figure 5-2 graphically displays the discrepancies by income ranges.

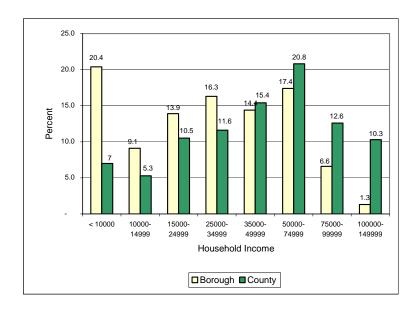
TABLE 5-5
HOUSEHOLD MEDIAN INCOME, 1990 AND 2000

	Actual 1989 Household Median Income	Multiplier* (1989 x 1.297861 = 1999 dollars)	Actual 1999 Household Median Income	Change
Delaware County	\$37,337	\$48,458	\$50,092	+ 1,634 or + 3.37%
Marcus Hook	\$22,723 (60.9% of County)	\$29,491	\$28,219 (56.3% of County)	- 1,272 or - 4.31%

^{*}Bureau of Labor Statistics

SOURCE: U.S. Department of Commerce, Bureau of the Census, 1990 and 2000

FIGURE 5-2
INCOME DISTRIBUTION, 1999



SOURCE: U.S. Department of Commerce, Bureau of the Census, 1999

CHAPTER 6

HOUSING

INTRODUCTION

Because a strong residential community is fundamental to keeping the overall community healthy and stable, Marcus Hook has had the foresight to place a strong focus on maintaining and improving housing conditions throughout the Borough. This chapter examines the existing conditions in the Borough and offers recommendations and strategies for improving the housing stock, increasing homeownership, and strengthening the residential community.

CONTEXT OF HOUSING

Marcus Hook can be broken down into four distinct residential areas as described and delineated below.

- The first area is bounded by 10th Street on the south, the railroad spur on the west, the Amtrak Northeast Corridor rail line on the north, and Marcus Hook Creek on the east. Viscose Village, a planned community constructed in 1912-13, comprises most of this sector. Former industrial sites across 10th Street reinforce the residential feeling and boundary of the area.
- The second area is located north of 10th Street, west of Market Street, east of the refineries, and south of the Amtrak line. Consisting mostly of twins and rowhouses, this neighborhood provides a visually harmonious and distinct residential area. The municipal building and some transit parking are located here, and the commercial part of town is just a block away.
- The third residential area is bounded by 10th Street on the north and Green Street on the west. The eastern boundary is formed by Church Street, between 8th and 10th Streets, and Market Street between 5th and 8th Streets. This area contains a portion of the CBD and many different housing types. This sector is also the site of most of the apartments in the Borough.
- The fourth sector lies south of 5th Street and is bounded by industry on the east and west and the Delaware River waterfront on the south. There are many vacant lots here with the potential for future residential in-fill. Market Street, which acts as the neighborhood spine, has a wide median planted with mature trees. This island separates the lanes of traffic for three blocks and creates an attractive entrance to Market Square Memorial Park and the waterfront area.

Rowhouses and twins dominate the residential options throughout the town in all of the different sections. Marcus Hook has very few single-family detached structures, but those that exist are grouped along West 9th Street (Market to Green Streets), Market Street (west side between 6th and 7th Streets), and then scattered south of 4th Street. Apartments in the Borough are heavily clustered along Market and 10th Streets and in the central area from 7th to 10th Streets and Church to Green Streets.

FIELD SURVEYS

Housing Condition Survey, 1998

In the fall of 1998, the Delaware County Office of Housing and Community Development (OHCD) and DCPD performed a drive-by assessment of the housing stock in Marcus Hook. The survey evaluated the quality of the housing stock from five perspectives. These included rating of the 1) foundation and structural condition, 2) exterior walls, 3) roof, 4) windows, and 5) yards and sidewalks.

Rather than do an evaluation of each house within the Borough, the survey analyzed housing by block or street, and the overall condition and appearance of the area was noted.

Overall, Marcus Hook has a sound housing stock which is generally well maintained. However, our survey noted that some houses and blocks could use some more attention – a little extra paint and attention to the exterior – but few pervasive exterior structural problems were observed. However, the survey did not cover interior conditions. Only six houses were noticeably abandoned or derelict. Several others were in obvious need of attention.

Many rental units in the northeastern corner of town appeared quite good while other homeowner units along East 4^{th} Street needed repair and cosmetic work. Rental properties were distributed throughout the town, though clearly there is a concentration between 8^{th} and 10^{th} Streets and along 10^{th} Street in general.

Housing Condition Survey, 2000

DCPD conducted another survey of housing conditions on May 11, 2000. This survey involved walking through areas of the Borough that were noted as having problems in the above-noted previous 1998 windshield survey. The text below summarizes the findings of the survey.

The Borough was divided into five sections, as described below:

Section 1 Entire residential portion of the Borough south of 4th Street

This section contained one house in very poor condition that was posted for Sheriff's sale. Another house in poor condition was boarded up.

In addition to those two houses, the survey group found nine houses having notable defects such as broken windows, boarded up windows, cracks in exterior walls, missing gutters, etc.

Section 2 Between 4th and 8th Streets from Market Street to Green Street

One house on Market Street had numerous problem areas, but repairs to steps and a retaining wall were in progress.

The majority of defects in this section consisted of cracked porch steps, peeling floorboards, and rotting/warping roofs as well as broken windows, lack of paint, and missing soffit/fascia boards.

Section 3 Between 8th Street and the rear lot lines of properties on the south side of 10th Street from Green Street to Church Street

One building on Market Street had wall, roof, and step deficiencies but was undergoing some level of rehabilitation. Also, one house on Green Street had poor paint, rotting windows, and no gutters.

Several buildings were observed with chipping paint, soffit/fascia/gutter deterioration, and unkempt porches.

Section 4 Both sides of Green Street north of 10th Street

This block of row homes consists of approximately sixty units, but because of their connected nature, deterioration can spread from the problem dwelling to surrounding units. The survey group observed seven units having deficiencies relating to condition of roofs and porches as well as a need for painting.

Section 5 Entire block of McClenachan Terrace, the homes fronting on Plaza Street, and several multi-family and single-family semi-detached units on Pine Street in Viscose Village.

The survey group found peeling and cracking paint, deteriorated brick, and roof defects in about eight dwellings in this section.

Viscose Village appears to be the most well maintained neighborhood in the Borough, but modifications such as vinyl siding, fences, and enclosed porches have detracted from the original architectural character. Also see Chapter 3, Historic Preservation.

RECENTLY SOLD HOUSING AND SECTION 8 HOUSING

The Section 8 housing assistance program is funded by HUD and operated by local housing authorities to assist needy families in covering the cost of rental housing. Families who earn less than 50% of an area's median income are eligible for assistance vouchers. Eligible families use the money to rent private housing, and they pay not more than 30% of their monthly income in rent to a private landlord, with the government (HUD) making up the difference.

Mapping the various rental, Section 8, and recently sold properties provides a visual display of the housing activity that is occurring throughout the Borough. While these activities are fairly well distributed throughout, one can see an obvious clustering of rental and Section 8 activity in the areas between Church and Green Streets and 10th and 8th Streets. The 42 Section 8 units amount to 10% of the Borough's rental stock. See Map 6-1. Greater sales activity is occurring in the other areas of the Borough, especially north of 10th Street. However, some of this sales activity appears to be for investment and subsequent rental purposes.

The neighborhoods north of 10th Street appear to consist of a relatively solid homeowner community, with limited encroachment by investors and/or existing landlords. This area presents a fairly stable market base whereby the MHCDC may be more able to acquire and resell properties to new home buyers than in other parts of the community. Further, this kind of activity may be necessary to prevent any future landlords or investors from acquiring more properties and potentially destabilizing the homeowner base. Any foreclosures or sales activity in these neighborhoods should be watched closely over the next several years and acquired for resale whenever possible.

The areas with greater numbers of rental properties may be prime neighborhoods to focus on tenant and landlord organizing as well as efforts to transfer ownership from landlords to their tenants through lease-purchase procedures, relatively deep subsidies, or other applicable arrangements. However, because of the small size of Marcus Hook, marketing for homeownership programming should most likely be targeted throughout the entire community.

HOUSING DISADVANTAGES

Owner/Renter Ratio

A strong indicator of neighborhood stability is the percentage of homeowners versus that of renters in a community. While the supply of affordable rental housing is an important resource for every community, homeowners do tend to take greater stock in their neighborhoods and place a higher priority on maintaining and improving their homes. It is noteworthy that, over the past twenty years, the number of homeowners, especially new homeowners, in the Borough has been declining, a trend that can often gain momentum if not addressed effectively. This trend can often depress housing values,

add additional stress to an older housing stock, and reduce the quality of life in neighborhoods.

Recommendations

In order to increase the percentage of homeowners in the Borough, the Borough should take the following steps:

- 1. Publicize the County's Homeownership First Program, with particular emphasis on targeting existing renters to purchase the properties that they are presently renting. Marketing efforts could include a mail-out of the Homeownership First Program brochures to all renters in the Borough, accompanied by an invitation to a public meeting where they could have their questions answered.
- 2. Continue and intensify efforts to promote the Borough as an attractive community for first-time home buyers.
- 3. Employ owner held mortgages as a means to encourage renters to purchase homes in the Borough.
- 4. Pursue the development of an employer-sponsored homeownership program with Sunoco, ConocoPhillips, and other local companies.
- 5. Encourage the MHCDC to acquire properties in the worst condition, rehabilitate them, and then sell them to first-time home buyers. The Borough and MHCDC could market these properties locally through employers and local news media. To prevent speculators from acquiring the properties, deed restrictions could require occupancy by owners for at least fifteen years.
- 6. Use federal CDBG funds for infrastructure work to underwrite the cost of new housing.
- 7. Encourage the MHCDC to acquire row homes and combine two units into one, thereby creating larger units with amenities previously not available. (In fact, the Philadelphia Housing Development Corporation has recently completed a project where it converted 36 vacant City-owned rowhouses into 21 renovated units for sale to first-time home buyers.)

Maintenance Concerns and Lack of Amenities in Existing Properties

Because of the age of the existing housing stock, maintenance of these structures is an important and ongoing concern. The age of the housing stock also presents issues with respect to staying competitive with the overall housing market. Contemporary trends in housing construction and demand show that larger homes with upgraded kitchens and bathrooms, for example, are more desired than many of the smaller homes in Marcus

Hook. An important reason for this is that they were built in a time when the wide range of present-day amenities was not available. Further, because the resale value of most of the homes in Marcus Hook is low, there is little incentive for owners to make large investments in these homes to upgrade them. Finally, the low incomes of many families and the high number of elderly households present a significant limitation on their ability to afford the high costs of maintaining and/or upgrading their properties.

Recommendations

- 1. Continue the vigilant regulation and inspection of rental units in the Borough by strict enforcement of the BOCA Property Maintenance Code.
- 2. Partner with a local lending institution to offer a lower-interest revolving loan program that can finance improvements on rental properties.
- 3. Partner with a local lending institution to offer a low-interest home equity loan program to rehabilitate owner-occupied properties whose owners have incomes greater than 80% of MFI, which would allow existing owners to add amenities not present.
- 4. Pursue marketing efforts to increase the use of the County's Owner-occupied Rehabilitation Program for households with less than 80% of MFI.
- 5. Develop a home improvement educational program for Borough residents.
- 6. Allow property tax relief on the value of the improvements for property owners who rehabilitate their properties.
- 7. Encourage the MHCDC to acquire properties in the worst condition, rehabilitate them, and then sell them to first-time home buyers. MHCDC could market these properties locally through employers and local news media. To prevent speculators from acquiring the properties, deed restrictions could require occupancy by owners for at least fifteen years.
- 8. Conduct periodic clean-up, spruce-up, fix-up drives in targeted blocks or areas to perform minor repairs and maintenance as well as intensive cleaning in order to improve the appearance of residential areas and perform needed minor improvements. These drives can take the form of a well-publicized competition in which the winner or the first, second, and third place finishers would be rewarded by recognition from Council, an article in the local newspaper, etc. These efforts could, in addition to involving the residents, also enlist the volunteer services of Boy and Girl Scouts, students from Marcus Hook Elementary School, a volunteer group of employees from the refineries and other employers, local athletic teams, and service organizations.

Population Loss and Elderly Households

The loss in population as well as the significant number of elderly households in the Borough also presents the possibility of an increase in vacancies over the next several years. The existing housing market in Marcus Hook could experience difficulty in absorbing many more vacancies in the community. An increase in the vacancy rate could further reduce property values as well as encourage an increase in rental properties and blighting influences in certain neighborhoods.

Population loss is usually a regional problem that cannot be effectively addressed on a local level. Among the many factors that influence population growth are regional economic prosperity that includes high levels of employment, good schools, and the availability of housing or open areas where housing may be built. However, the Borough can take some actions that may, to a limited extent, stimulate population growth.

Recommendations

- 1. Pursue marketing efforts to increase the use of the County's Owner-occupied Rehabilitation Program for households with less than 80% of MFI.
- 2. Encourage economic development projects that create employment opportunities.
- 3. Review the zoning ordinance to assure that the regulations provide for a wide variety of commercial and industrial uses and, at the same time, contain provisions to safeguard the environment.

Absentee Landlords

The Borough and its residents have expressed concern over the high number of absentee landlords who own properties in the Borough. These landlords tend to demonstrate less concern for the maintenance of their properties and the monitoring of their tenants than on-site landlords do. Increasing the percentage of owner-occupied properties will of course reduce the magnitude of the owner problems that stem from absentee ownership.

Recommendations

- 1. Partner with a local lending institution to offer a low-interest home equity loan program to rehabilitate owner-occupied properties whose owners have incomes greater than 80% of MFI, which would allow existing owners to add amenities not present.
- 2. Allow property tax relief on the value of the improvements for property owners who rehabilitate their properties.

Lack of Housing Type Variety

Marcus Hook possesses a relatively homogeneous housing stock composed overwhelmingly of twins and rowhouses with very few single-family detached homes. In general, home buyers today are looking for a larger variety of housing types to suit their needs. Current housing demand also tends to favor neighborhoods that exhibit lower density levels than those that exist in the Borough.

Recommendations

- 1. Pursue marketing efforts to increase the use of the County's Owner-occupied Rehabilitation Program for households with less than 80% of MFI.
- 2. Pursue in-fill development where possible as a strategy. Utilize the redevelopment area adjacent to the Delaware River as a venue for detached single-family development as well as a senior housing development.

HOUSING ADVANTAGES

Structural Conditions

The exterior building condition survey made clear a very positive feature in Marcus Hook – that the housing stock of the Borough is generally in good condition. The survey noted that some houses and blocks could use some more attention – extra paint and attention to the exterior – but few buildings have pervasive exterior structural problems. However, the survey did not consider interior conditions.

Recommendations

- 1. In order to preserve the fundamentally good condition of housing and prevent deterioration, the Borough should employ the applicable recommendations under the Maintenance Concerns and Lack of Amenities section above. Recommendation No. 8 regarding establishment of regular clean-up/fix-up efforts may be particularly useful in helping to preserve the basically sound condition of most structures.
- 2. In concert with the rehabilitation and fix-up initiatives noted above, the Borough should establish a comprehensive beautification program, with particular emphasis on the residential areas. This recommendation is more fully discussed in Chapter 11, A Livable Community.

Affordable Housing Stock

The housing value information from the Census 2000 reveals the affordable nature of the Borough's housing stock, where the vast majority of homes sold for less than \$100,000. In October 2002, the multiple listing service noted that the average listing

price for a property in Marcus Hook was \$64,300. Using this listing price, even a family of four earning an annual income of \$23,000 could afford that property.

Recommendations

Because of the affordability of the housing, there are no recommendations at this time.

Neighborhood Resources

The Borough's neighborhoods offer a safe environment, convenient access to major transportation routes, and valuable recreational resources to its residential population. These features are also discussed in Chapter 11, A Livable Community.

REDEVELOPMENT EFFORTS

The Borough and the MHCDC have been looking to redevelop one of the few vacant areas in the Borough – land located adjacent to the riverfront Market Square Memorial Park. In previous discussions, the Borough was advocating development in phases:

- Phase I: During the fall of 2000, the MHCDC built three pre-sold single-family homes at the corner of Market Lane and Market Street. In order to assist home buyers, the MHCDC has designed a Homeowners Assistance Program which is intended to help home buyers who can handle the mortgage but need assistance with closing costs and down payment. These homes sold for approximately \$95,000, and home buyers were offered a zero-interest loan with a \$5,000 down payment. If the buyer lives in the new residence for at least five years, the loan may be forgiven. The Homeowners Assistance Program will also provide a maximum of \$5,000 to be used for closing costs. This assistance is being provided in order to bring more homeowners into the community. Another purpose of the program is to encourage existing renters in the Borough to become homeowners.
- Phase II: On Market Street across from the Phase I homes, the Delaware County Redevelopment Authority owns three lots along a two-block section. These lots would receive three two-story Victorian homes equipped with front porches, two bathrooms, three bedrooms, full basements, and brick fronts. As with Phase I, the Borough and MHCDC need to obtain subsidy money to reduce the development cost to the *current* market purchase price in the Borough.
- Phase III: In the open parcels located between Market Lane and Delaware Avenue and along Church Street in this area, the Borough is considering single-family detached homes or possibly a senior assisted living building.

AVAILABLE HOUSING PROGRAMS

Local

The local programs available consist of efforts by the MHCDC to acquire vacant or blighted properties and then to rehabilitate and resell those properties to interested home buyers. This program also offers lease-purchase as an option to home buyers with limited savings. Also, the Borough owns property that it intends to redevelop for both senior and for-sale housing.

Countywide

There are two Countywide housing programs. The first, the Owner-occupied Rehabilitation Program, provides up to a \$25,000, 0% deferred payment loan. This includes technical assistance for qualified homeowners to have emergency repairs made, to create barrier-free environments for persons with disabilities, and to provide sewer and water connections. Since July 1, 1997, only four Marcus Hook households utilized the Rehabilitation Program, a significant underutilization of the program considering the age of the housing stock.

The second program is the Homeownership First Program, which provides up to \$5,000 in down payment and closing costs to qualifying first-time home buyer households who are purchasing a property in Delaware County (excluding Chester City and Haverford and Upper Darby Townships). The assistance takes the form of a loan that is repayable upon sale or transfer of the property. Since July 1, 1997, only two home buyers utilized this assistance to purchase homes in Marcus Hook, an underutilization of the program considering the median family income in Marcus Hook of \$29,183.

CONCLUSION

Marcus Hook is an old residential area, and the housing patterns reflect that history. Small, narrow lots with either twins or rowhouses, alleys, little off-street parking, mixed uses in close proximity, and high densities describe the town's character and physical attributes. While these qualities provide the town with a human scale and allow people to walk less than one half mile to shops and parks, these same assets also negatively impact the town because many of these old, small dwellings and other buildings do not reflect the life-style of many families.

Because of the extremely compact nature of the Borough, careful planning of new development will be necessary to ensure the sustainability of the town's quality of life, its housing options, and its ability to retain current residents and attract new ones.

CHAPTER 7

LAND USE

INTRODUCTION

The character of an established community like Marcus Hook is determined to a large extent by the uses to which land is devoted. The fact that Marcus Hook is almost fully developed serves as a limitation on new planning proposals. The emphasis of land use planning should, therefore, be 1) to preserve existing development which is generally considered good, 2) to ensure that new development is compatible with the existing, 3) to enhance existing development through the establishment of effective controls concerning landscaping, screening, signage, access, environment, walkability, and code enforcement, and 4) to recommend appropriate and realistic development of vacant or underdeveloped parcels. It is the purpose of this study to offer guidelines and recommendations within the context of these four planning purposes.

This chapter will provide both an inventory of existing land uses and offer proposals for future land use arrangements. To accomplish this, progressive but realistic planning steps must be taken towards achieving these goals. Recommendations for land use and suggestions for the upcoming zoning code revision are identified in the Future Land Use section. This chapter also includes discussions of the relationship between a future land use map and a zoning map, an explanation of the relationship of this plan to plans of adjacent communities, and an outline of the consistency mandates in the 2000 amendments to the Pennsylvania MPC.

EXISTING LAND USE DESCRIPTION AND INVENTORY

Existing land use data is an important component of land use analysis. The sections below describe the current status of land uses in the Borough and their interaction with one another. Map 7-1 in the back pocket shows the uses as they were recorded during a site survey performed by DCPD in the summer of 2000. Table 7-1 lists the acreage and percentage of the Borough's land devoted to each of these uses.

Residential

The residential uses consist of 43.7 acres or 6.2% of the Borough's total area. The pattern of housing, some of which dates back well over a century, represents the history of the Borough, be it as a fishing community, resort getaway, or a planned neighborhood for local industries.

TABLE 7-1
EXISTING LAND USE, 2000

Land Use	Acres	% of Land
Single-family detached	5.3	0.7
Single-family attached/semi-detached	33.3	4.7
Multi-family	5.1	0.7
Institutional	6.2	0.9
Commercial	6.3	0.9
Mixed use	4.1	0.6
Industrial	40.1	5.7
Heavy industrial	451.7	64.1
Open space/recreation	17.6	2.5
Utility/RR/parking	41.0	5.8
Vacant	35.8	5.1
Roads/alleys	57.9	8.2
Borough	32.6	
Private	12.1	
State	13.2	
TOTAL*	704.4	100.0

^{*} Does not include the area within the Borough that is stream or river, which totals about 340 acres.

SOURCE: DCPD field survey, June 2000; calculations derived from Delaware County Board of Assessments parcel data, last revised January 2001

Although all major types of housing are represented, medium to high densities, consisting mainly of single-family semi-detached (twin) and attached (row) houses, define the town's residential character. There are very few single-family detached homes. Most units are situated on small and narrow lots that provide little or no room for off-street parking. Mixed uses containing residential and commercial uses are found mainly along the $10^{\rm th}$ Street corridor. This mixture of housing types is distributed throughout the Borough in such a way that most of them appear to be appropriate forms of housing in their areas and generally do not stand out as an unwanted or inappropriate housing option.

Most of the houses are in good structural condition, except for those identified in the housing survey in Chapter 6, Housing. The substandard structures are scattered throughout the Borough and not concentrated in one area. However, due to the compact character and relatively high overall density, one eyesore can impact an entire block. Therefore, general maintenance of properties becomes a high priority.

The current regional housing demand is for larger dwellings that have more floor space and amenities than those generally found in the Borough. This situation contributes to the low percentage of homeowners and may inhibit population growth. Chapter 6, Housing, examines this issue in more detail.

Institutional

Institutional uses total less than 1% of the Borough's land area (6.2 acres or 0.9%), yet are among the most established and well-maintained uses. They include the elementary school, churches, fire companies, and municipal properties but not park areas. These uses constitute the meeting places for community, political, and religious gatherings and help shape the physical and social fabric of the Borough.

Commercial

Generally concentrated along 10th Street and along the northern portion of Market Street, commercial uses occupy only 6.3 acres or 0.9% of the Borough's land. Their number has been decreasing since the completion of I-95 in 1968, which greatly reduced the through-traffic along 10th Street, thereby decreasing the volume of customers. These reductions resulted in the decline of a vibrant downtown to the point where service-oriented commercial outlets now outnumber retail establishments. Retail stores are generally recognized as the use that should constitute most of the establishments in the CBD because they contribute to the overall activity and success of downtown areas.

The 1980 Revitalization Plan for the Business District: Blueprint for Action made recommendations based on the economic and physical aspects of the CBD. Although the Borough has implemented many of these recommendations, some still apply in present-day Marcus Hook. Some of the recommendations of this 1980 study that should be revisited include:

- removal of commercial signs in disrepair and those that no longer identify the nature of the business and replacement with appropriate signs;
- appropriate treatment of façades to restore original architectural styles and materials;
- addition of awnings in selected areas to create the sense of entrance and provide shelter;
- addition of plantings at many buildings to soften building appearance;
- provision of normal maintenance and repairs.

Additional discussion of these improvements is noted in Chapter 11, A Livable Community, and in the section below entitled Construction of Common Features.

Mixed Use

Buildings in the mixed use category are located primarily in the CBD along 10th Street and occupy 4.1 acres or 0.6% of the Borough. For this report, the mixed use

category includes a mix of residential, commercial, and institutional uses. The primary type of mixed use arrangement in the business district is that of a commercial use with street frontage on the ground floor and apartments on the second floor. The largest mixed use holding in the Borough is the former FMC research and development building, which has served as home to a variety of uses in the recent past. This building is located a short distance east of the area normally considered the CBD.

Industrial

The role of local industries goes beyond their physical boundaries and influences many aspects of life in the Borough. Since the first petroleum refining operation began in the early 1900s, the blue-collar work ethic has helped define Borough residents and their sense of community. Initially, many Borough residents worked in the refineries, but that trend has since diminished, where today less than 5% of refinery employees reside in the Borough. Nonetheless, Marcus Hook is now known as a regional petroleum-refining center, and, in 1998, ranked 28th among all ports in the United States in freight tonnage handled.*

Table 7-1 identifies two levels of industrial uses in the Borough. The oil refineries and chemical plants represent the highest intensity of industrial use and receive the "heavy industrial" designation, while less intensive uses are termed "industrial." Combined, the industrial uses cover 491.8 acres or 69.8% of the Borough's land area.

Open Space and Recreation

Increased by the development of Market Square Memorial Park and Memorial Field, the Borough's open space and recreational areas now occupy 17.6 acres or 2.5% of total acreage. The riverfront Market Square Memorial Park is a popular lunchtime destination that offers passive recreation in the form of benches and walkways with a view of the Delaware River and contains a pavilion, memorials, and a band platform. The park hosts year-round events of local and regional interest, such as the replica of the Vietnam Veterans War Memorial that visited in the fall of 1999, the Summer Music Festival, etc.

Utility, Railroad, and Parking

These uses cover 41.0 acres or 5.8% of the Borough. Active railroad tracks that constitute most of this category extend in an east-west direction from Trainer Borough to the State of Delaware, and north-south along the Conrail Linwood Spur line between 5th Street and the Amtrak/SEPTA tracks. The Philadelphia Electric Company (PECO) electric substation on 10th Street is the primary utility in the community.

^{*} U.S. Bureau of Census database. Although the port of Marcus Hook includes that of the City of Chester, the majority of the tonnage is handled by Marcus Hook.

Borough parking lots, as discussed in Chapter 9, Community Facilities and Chapter 8, Transportation, are displayed on Map 8-1 in the Transportation chapter and contain 344 off-street public parking spaces. On-street parking, provided on nearly every street, is not included in this figure.

Vacant

The areas in the Borough that are currently categorized as vacant consist of 35.8 acres or 5.1% of the Borough's land area. Much of this area is located on the Viscose property and along the Amtrak R-2 line. As noted later in this chapter, the nature of future development on the Viscose property will be determined to a great extent by the level of hazardous waste remediation that will take place.

Water

Areas occupied by the Delaware River and Marcus Hook Creek were not included in the calculation of land uses as referenced in Table 7-1. However, for mapping purposes, Marcus Hook Creek and the portion of the Delaware River within the Borough boundary are shown in their entirety or in part on all maps in this document.

FUTURE LAND USE

This plan and the Future Land Use Map are intended to provide the framework for guiding decisions of Borough Council concerning land use and community development. Although the plan itself is not legally binding, any future revision of the zoning ordinance or proposed rezoning of property should be implemented in accordance with this plan. Doing so strengthens the validity of local zoning regulations that are based on this plan in cases of a legal challenge.

Recommendations for future land use, as shown on Map 7-2 in the back pocket, constitute one of the fundamental components of this comprehensive plan. Table 7-2 identifies the proposed uses by acreage and percentage of the land they occupy in the Borough. Borough Council and other local officials, together with recommendations from DCPD and comments from residents, have determined these uses to be the most appropriate ones for their particular sites. These recommendations are based on several factors, which may include existing land use patterns; size, shape, and slope of parcel; floodplain; traffic volume; accessibility; and other considerations. In some cases, most of the above factors were considered before determining the most appropriate future use. In other cases, one or two factors were sufficiently compelling to determine the future use designation.

The proposals in this plan encompass the general time period between the years 2002 and 2012. Although plan recommendations have been formulated for this time frame, parts of this study should be revised and updated if and when conditions dictate. Also, the Borough should implement the recommendations in Chapter 13, Three-year Action Plan, within three years of the completion of this study.

TABLE 7-2
FUTURE LAND USE, 2002

Land Use	Acres	% of Land
Medium-density residential	10.2	1.4
Medium-high-density residential	39.9	5.6
High-density residential	1.7	0.2
Commercial	1.8	0.2
Industrial	48.7	6.9
Heavy industrial	450.7	63.8
Town center	1.2	0.2
Institutional	5.9	0.8
Utility/RR/parking	39.1	5.5
Open/recreation	30.2	4.3
Waterfront/activity	4.0	0.6
Mixed industrial/commercial	2.2	0.3
Mixed commercial/residential	13.3	1.9
Roads/alleys	57.9	8.2
Borough	32.6	
Private	12.1	
State	13.2	
TOTAL*	706.8	100.0

^{*} Does not include the area within the Borough that is stream or river, which totals about 340 acres.

SOURCE: DCPD field survey, June 2000; calculations derived from Delaware County Board of Assessment parcel data, last revised January 2001

Residential Densities

The densities for residential development shown on the Future Land Use Map and indicated under the Proposed Future Use heading in Table 7-3 are not intended to be precise densities for future residential development. They are intended as guidelines or ranges for appropriate future residential densities. For this report, these density range guidelines are defined as follows:

Medium density - up to 8 units per acre

Medium-high density - 9 to 18 units per acre

High density - more than 18 units per acre

The lot sizes corresponding to the above densities are:

Medium density - 5,000 sq. ft. or larger

Medium-high density - Between 2,500 and 5,000 sq. ft.

High density - Smaller than 2,500 sq. ft.

Major Future Land Use Recommendations

Table 7-3 below lists recommendations for future use of particularly important areas in terms of their impact on the Borough.

The type and scope of development in these areas is likely to shape the social and economic future as well as the overall quality of life in the community. Table 7-3 is intended to convey major land use designations for several "critical" parcels; it is not intended to describe proposed land uses on a specific lot-by-lot basis. Only the Future Land Use Map (Map 7-2) addresses land use proposals at that level of specificity.

TABLE 7 -3

LAND USE RECOMMENDATIONS FOR SELECTED AREAS, 2001

Area	Location	Proposed Future Use
Market Square	Open lots between 4 th Street	Medium-density single-family homes
Redevelopment	and Delaware Avenue	and possible senior assisted-living
Area		home.
Waterfront	Between Delaware Avenue	Small-scale commercial, marina,
Activity Area	and the river, east of Sunoco	possible museum. Passive recreation
		and event parking.
Former Viscose	South of 10 th Street between	Reuse of existing office buildings as
Properties	ConocoPhillips refinery and	commercial, institutional, or
	Conrail Spur railroad line	residential. Light industrial, open
		space, or parking for remainder of
		property.
Land-banked	Between Market Street,	Commercial or mixed use with
Area	Conrail Spur, SEPTA/	commercial, high-density residential
	Amtrak, and rear of 10 th	(apt./condo), and parking.
	Street businesses	
Conrail Spur	Railroad ROW running	Public open space/trail for walking,
Line Area	north and south from	biking, and connecting community
	SEPTA / Amtrak to 5 th	facilities. Include with East Coast
	Street	Greenway/Rts. 291/13 Beautification
		Plan.

SOURCE: DCPD, 2001

Market Square Redevelopment Area

The Borough and the Delaware County Redevelopment Authority have designated three housing project areas in the historic portion of town between 4th Street and Delaware Avenue, on both sides of Market Street. Phase I of this development activity was completed in the fall of 2000 with the construction of three single-family detached dwellings at the corner of Market Street and Market Lane. Phase II, proposed to be located on the west side of Market Street across from Phase I, will consist of three single-family detached dwellings. Phase III, to be located at Church Street and Market Lane, could be developed with more single-family dwellings or possibly with a multi-unit senior residence, as demand and need dictate. Also see Chapter 6, Housing, the section on Redevelopment Efforts.

In addition to the housing needs, the condition of the Market Street median between 4th and 2nd Streets should be addressed. The aesthetic and calming effects of this green space called "market green" cannot be underestimated, and all effort should be made to maintain its integrity. Also see, Chapter 10, Parks, Recreation, and Greenways.

As noted below in the Waterfront Activity Area proposal, these redevelopment areas should include linkages, via walkways, connecting the waterfront and nearby areas that either are or are proposed to evolve into activity areas/destinations. The future land use recommendations of this plan are in agreement with the redevelopment proposals noted above.

Waterfront Activity Area

For the purposes of this report, the waterfront activity area, located at the southern end of Market Street at the Delaware River, includes Market Square Memorial Park, the adjacent former Army Reserve facility property that the Borough acquired in the fall of 2000, and a small portion of adjacent Sunoco property. The area totals about 8 acres. The park is now the focal point for passive recreation, viewing the river, and various civic and recreational activities/events. Except for the 2-acre portion of the Sunoco property, the vast remaining waterfront holdings of the Sunoco and ConocoPhillips refineries are not included in this waterfront activity area.

As envisioned, the waterfront activity area would consist of a mix of recreational, amusement, limited commercial, boat docking/marina, cultural, and parking uses. This accommodation of a variety of uses will contribute to an increase in overall activity and interest in this area and the Borough in general. See Map 7-2.

The recommended boat docking facilities should accommodate only boaters who launch their vessels at another location and temporarily dock at this location. The reason for this limitation is that presently there is not sufficient parking to accommodate the vehicles and trailers carrying the boats.

The existing pier on the property could be used as a fishing pier and for the docking of private recreational vessels. The pier presently accommodates the annual docking of the tall sailing ship "Pioneer," which was constructed in Marcus Hook in 1885 and visits the Borough for several days each year. During this time it offers sailing along the river to the public.

One benefit of providing the recommended mix of uses would be the continued evolution of this area as a destination. Currently, Market Square Memorial Park is the sole destination here. By providing food, drink, shops, a marina, and other attractions, products, and services, additional people would be attracted to the area.

To further advance the development of the waterfront as an attraction, it should be connected or linked with other destinations by means of walkways and/or trails. Some of the other points in the linkage system would include the nearby historic areas, Memorial Field, the CBD, and the proposed multi-purpose trail. Methods for accomplishing these linkages include distinctive sidewalks and trails, uniform interpretive and directional signage at the waterfront and historical district, uniform benches, trash receptacles, crosswalk materials, and decorative and functional landscaping that would further unite the area. These actions, together with the recreational, commercial, and restaurant uses on the waterfront, would, if properly executed, shape the waterfront as a destination that offers a desirable range of activity, amusement, education, and relaxation. This evolution of the waterfront would attract additional events, activities, and visitors and upgrade the Borough as an active and livable community. The *Market Square Memorial Park Expansion Study* that was completed in November 2001 also offers recommendations for the appropriate development of the waterfront.

It should be noted that, as of the summer of 2002, the most immediate uses that the Borough is considering here include further expansion of Market Square Memorial Park to encompass a portion of the former Army Reserve facility as well as the adaptive reuse of that property for a community center. Nevertheless, the Borough should keep in mind the entirety of uses and activities recommended above. Clearly, the ambitious scenario of uses and activities described here cannot occur quickly; it can only be realized through a patient, sustained, and incremental effort.

Viscose Properties

As noted previously in this chapter, this area was the site of the former American Viscose properties. It contains several buildings along 10th Street as well as several buildings to the south. Some of these may need to be demolished given their condition, the amount of hazardous materials that may be found in, under, or around these buildings, or because some of these buildings may be obsolete in view of the proposed uses.

As noted in Chapter 4, Environment, DEP is in the process of evaluating and determining the required extent of clean-up of hazardous waste on this property. Following the clean-up of the site, the Borough should work with the owners to more

fully develop the property. At present, the property is underutilized, and substantial portions, particularly those between Penn Avenue and Marcus Hook Creek, are vacant.

The former Viscose research and development building on 10th Street, across from Yates Avenue, is designated on the Future Land Use Map (Map 7-2) for a mixed industrial/commercial future use. This designation includes light industrial uses, small-scale commercial/service operations, or institutional tenants. The former Viscose administrative buildings on 10th Street, opposite Plaza Street, are proposed for a mix of commercial, residential, or institutional uses and are designated as mixed commercial/residential. The factory buildings and parcels south of the two buildings noted above are designated as industrial uses and could include limited industrial, warehouse, office, or possibly some medical/research facilities.

The properties on the east side of Penn Avenue are designated for open space and recreation. An emphasis should be placed on restoring the creek corridor along this property, including riparian vegetation and tree plantings, benches, picnic tables, and the like. Also see Chapter 10, Parks, Recreation, and Greenways. The plan also recommends that the southern portion of the site, between the Conrail right-of-way and Penn Avenue, be used as open space and recreation.

Because this portion of the site is recommended for open space and recreation, the level of site clean-up here should be particularly thorough. The reason for this is that areas proposed for future uses such as open space, parks, tot lots, and similar uses should be more thoroughly remediated than those proposed for most industrial and similar high impact uses, in order to function properly and not pose a safety hazard to their users. Accordingly, since this plan and its Future Land Use Map recommend open space and recreational use here, it is recommended that the area be remediated in accordance with those PA Act 2 remediation standards that will assure clean-up to the degree that will render the area safe for the recommended uses. See Appendix B.

Land Banked Area at the Market Street Bridge

This predominantly Borough-owned area, located on the east side of the Market Street Bridge south of the SEPTA regional rail line, contains 6.8 acres and currently contains a church, a small automotive business, baseball fields, a Borough parking lot, and vacant land. No permanent structures or improvements exist in conjunction with the ball fields, since the Borough has long envisioned this area for future commercial or mixed use development. See Map 7-2.

The development of this area should be wider in scope than simply constructing new commercial or mixed use establishments. Future development here should include the following components:

* Relocation of the Train Station

The Borough has long desired the relocation and construction of a permanent train station on the east side of Market Street. Previous studies and this report recommend the relocation of the existing train station from the west to the east side of Market Street. This move should include construction of a permanent station with all amenities in place of the current trailer that presently serves as the train station. This action would attract more commuters and customers to the Borough and to businesses in the CBD. Relocation should also include the moving of all or most of the station related parking to the east side of Market Street. The new parking area would serve not only the commuters and CBD patrons, but its new location on the east side of Market Street would make it more convenient for northbound workers of the refineries and other establishments to stop there after work and do some shopping. Also see Chapter 8, Transportation.

* Mixed Uses

Given the location of this site, a TOD would be appropriate here. This type of development is characterized by a variety of retail and service establishments and high-density apartments/condominiums, with walkways connecting the residential and commercial development with the train station and other areas. The Borough should attempt to attract these types of uses to this area.

Construction of Common Features and Connection to the CBD

In order to successfully connect the relocated train station and adjacent future development parcels with the CBD, a distinctively paved pedestrian walkway network should be designed. This area should contain shade trees, benches, trash receptacles, a small plaza or park, lighting fixtures, directional and other signage, and other features having a common theme, design, and color. The directional signs should point the way to the business district, the SEPTA station, and other destinations in the Borough. The common theme would provide a unity and identity for this area as an important Borough location. Some of these features were proposed in the 1980 revitalization plan for the business district.

Conrail Spur Line Conversion to Multi-use Trail

As noted on Map 7-2, part of the Conrail right-of-way is proposed to serve as the location of a Borough-wide multi-use trail intended to provide a variety of recreational activities such as walking, jogging, bicycling, in-line skating, and similar modes of exercise and recreation. Since this right-of-way is still used by trains, its use as a pedestrian trail is not certain at present. However, if Conrail ceases its train operations and abandons the right-of-way or if joint use between Conrail and the pedestrian trail can be worked out, the multi-use trail can then be constructed. The trail could provide a link among places such as the Marcus Hook Creek corridor, Marcus Hook Elementary School, Market Square Memorial Park, the train station, and residential areas. The

successful development of this facility would represent an important component to further improve the Borough as a walkable, livable community. See Chapter 8, Transportation, Chapter 10, Parks, Recreation, and Greenways, and Chapter 11, A Livable Community.

Viscose Village

Viscose Village is a planned housing community created for the workers of the American Viscose Company in 1912-13. It consists of about 265 attached houses and two apartment buildings. Its creative design and outstanding architectural features make it an important asset that needs to be protected and preserved. Residents should be encouraged to avoid destruction or alteration of architectural components on the individual buildings and to maintain the buildings to prevent deterioration. The general design pattern of the community as a whole, such as the streets radiating from a central plaza, should be protected.

The Viscose Village Historic Resource Assessment & Preservation Plan, prepared by DCPD in 1992, proposed a series of recommendations that the Borough should consider. For example, the initiation of a stay of demolition procedure, which has been implemented by the Borough, may prevent the loss of valuable structural and other components within the Village. While historically significant, the creation of an historic district may be too restrictive, but a conservation district with monetary incentives and an educational component could be successful in maintaining the character of the Village. The study also provides specific recommendations relating to the structural repair of houses by enumerating and suggesting sound and effective methods and materials for repair of the units without or with only minimal disturbance of the original design. Some of the components addressed include walls, masonry, siding, porches, awnings, windows, and roofs. Also see Chapter 3, Historic Preservation.

Town Center

Presently, municipal functions are held in the Municipal Building at 10th and Green Streets. This single building is not sufficient to accommodate the wide range of activities associated with a modern municipal complex or town center. In order to remedy this situation, this plan recommends a town center land use category, which includes municipal and other institutional uses, parks and open space, as well as commercial or mixed uses.

The purposes for creating the town center category are to provide additional space for community meetings and events and additional open space area, perhaps in the form of a vest pocket park or tot lot. The addition of facilities, open areas, landscaping, and signage would also define and beautify the entranceway to the residential part of the Borough. This town center should of course be linked to the CBD, the land banked area, as well as the residential neighborhoods by attractive and well-maintained sidewalks, signs, and other connecting and unifying features.

The Borough should keep the town center concept in mind and how the uses it contains can be partially incorporated as part of the East Coast Greenway and the Route 13/291 Beautification Project. Finally, the addition of the municipal and other uses of the town center would intensify and enhance this area as a focal point of the Borough, both in the visual sense and as a multi-purpose municipal complex or town center. This would be consistent with the characteristic features of "new urbanism" and "traditional neighborhood development" (TND) where a public building or node of buildings serves as the visual and functional focal point of the community. It would also comply with our recommendations to enhance the Borough as a livable community, as discussed in Chapter 11.

REVISION OF THE ZONING ORDINANCE

Marcus Hook has entered into a contract with DCPD to undertake a comprehensive revision of the Borough's zoning ordinance after this plan is completed. This revision would be one of the principal methods for implementing the recommendations of this plan. The new code would also be the first zoning code prepared by DCPD that must comply with the 2000 amendments to the MPC, specifically Section 603, which requires that zoning ordinances "shall be consistent with the municipal or multi-municipal comprehensive plan."

Noted below are some proposals and directions for the proposed new zoning ordinance, focusing on the areas where future development is expected to have a particularly significant impact on the Borough.

Waterfront Activity Area

This area may require a separate zoning district to allow the mixed uses recommended above in this chapter. The existing Conservation district, which covers the same area as the waterfront activity area, proposes to conserve and protect the area's natural resources and allows for publicly owned parks and single-family dwellings. The new zoning code should allow for a variety of uses that includes some mix of recreational, cultural, and retail uses. Provisions guiding mixed use arrangements should be considered.

Market Square Redevelopment Area

The current R-1 zoning for this area between Delaware Avenue and 4th Street allows single-family detached, semi-detached, and attached dwellings as the principal permitted uses. The Borough's desire for this area is for medium-density residential development, mainly in the form of single-family detached dwellings. Assisted living facilities, especially for seniors, could be permitted by conditional use, provided that they are consistent with the predominantly residential character of the area. The zoning district for this area should also provide for single-family homes on lots that are large in relation to the size of other lots in the community. As previously noted, this area is the location of

all areas designated for redevelopment as well as the most noteworthy historic resources in Marcus Hook.

Former Viscose Properties

Hopefully, the level of remediation of this site will reflect the kinds of uses recommended for the various parts of the property. The area east of Penn Avenue should receive a zoning classification that allows open space use. The present I-2 and I-4 zoning districts for this area do not allow recreational use. The zoning classification along 10th Street could remain PCI Planned Commercial/Industrial, as this designation is generally consistent with the Future Land Use Map (Map 7-2) which recommends mixed uses. The intent of the PCI district and the permitted uses appears to be generally consistent with Map 7-2. The majority of the site is zoned I-2 Planned Industrial and I-4 Planned Industrial. The only difference between the two districts is that I-4 allows resource recovery and/or waste treatment facilities as a conditional use, and I-2 does not. Possible future zoning for the area covered by both of these zoning classifications could be similar to the I-2 district, which permits offices, laboratories, light manufacturing and assembly, storage and warehousing, and similar industrial uses. The new district should not allow resource recovery and waste treatment facilities, particularly after the clean-up of hazardous material that will be occurring here.

Land Banked Area

This area, located east of the Market Street Bridge, is being proposed for a TOD consisting of commercial and residential uses as well as parking for patrons of the R-2 SEPTA commuter train. These proposed uses are similar to those now permitted in the current C-1 Central Retail district, which covers both this area and the CBD along 10th Street. The C-1 category permits most types of retail establishments; recreation centers; personal service establishments; financial, insurance, and real estate establishments; a community center; and single- and multi-family residential dwelling units. The C-1 district includes the acknowledged CBD along 10th Street. However, the controls and regulations that are appropriate and suitable for this area are very different from those in the CBD. For example, zoning provisions for this area should include different setbacks, areas, height limitations, lot coverage standards, and buffering/landscaping requirements and sign regulations that are substantially different from those in the C-1 district. For this reason, serious consideration should be given to the creation of a new zoning classification in addition to that for the CBD.

Refinery Properties

Although not likely, it is possible that one or both refineries may choose to relocate, sell, or lease all or a significant portion of their holdings to other industrial users. In preparation for this possibility, the Borough should be prepared to rezone all or portions of the refinery properties to accommodate an industrial user having different external impacts on the nearby area. One possible scheme of rezoning would be to change the zoning of the industrial areas closest to the residential neighborhoods to a

"lighter" or more restricted industrial classification that would be more compatible with the nearby residential neighborhoods. This classification should include comprehensive provisions that require a buffer area of perhaps 75 to 100 feet between the industrial district boundary with the residential district and the nearest industrial building. This district should also contain extensive landscaping and screening provisions to further protect adjacent residential areas. These provisions should strike a balance between protecting the nearby residences and allowing reasonable development of the light to medium impact industrial establishments.

However, the two refineries are anticipated to remain as viable operations and remain as heavy industrial zones (currently I-3 Industrial) or similar districts. Nevertheless, safeguards such as appropriate screening, landscaping, and buffering requirements should be prepared and applied, particularly adjacent to the residential areas.

High-density Residential Use

High-density residential development in the form of apartments is recommended to be concentrated along Market Street just south of 10th Street. This concentration is intended to prevent the encroachment of apartments, especially by way of conversions of the larger twins and detached dwellings to apartments, thereby introducing a variety of impacts created by the higher densities. This limitation of the area designated for apartments is further intended to increase the percentage of homeowners in Marcus Hook.

For these reasons, it is recommended that the new ordinance limit the number and size of areas where new apartments would be permitted. The code should also include standards to protect the nearby residential areas from parking, noise, undesirable views, and other negative impacts that multi-family dwellings, particularly in the form of conversions, have had on adjacent lower density housing. In many cases, these impacts have been serious, especially since many conversions occurred on undersized lots that are inadequate to accommodate needed off-street parking. Conversions were also not accompanied by appropriate screening and landscaping and other safeguards.

LAND USE MAP AND ZONING MAP RELATIONSHIP

Frequently, discussions of planning and zoning reveal confusion between a future land use map and a zoning map. It is, therefore, important to emphasize that the future land use map is not a zoning map; it is a generalized statement of reasonable and appropriate future uses. For example, while the future land use map may propose one general use, commercial for example, the zoning map may divide this same area into several different commercial districts that allow very different types of commercial establishments with very different dimensional requirements.

The future land use map and text also serve as the basis for any zoning ordinance and zoning map amendments prepared after this plan. Zoning maps are very specific;

land use maps are more general. The zoning map is, of course, part of the zoning code and is not part of this plan.

CONSISTENCY MANDATE

The year 2000 amendments to the MPC (PA House Bill 14 and Senate Bill 300) place strong emphasis on coordinated, countywide planning. In Section 301.a(5), the MPC requires local comprehensive plans to be generally consistent with the county comprehensive plan. Since there is presently no adopted County comprehensive plan, there are no official or adopted Countywide planning goals or policies with which the Borough needs to achieve consistency. The MPC also requires municipal zoning ordinances to be consistent with municipal comprehensive plans.

The MPC also strongly emphasizes the importance of contiguous municipalities joining together to prepare joint or multi-municipal comprehensive plans. Funding agencies such as the State DCED are inclined to give priority to joint planning efforts. The requirements for consistency between municipal and county plans and encouragement for municipalities to prepare joint plans represent steps toward a more coordinated planning process. It is particularly important in Pennsylvania and Delaware County, where planning and zoning efforts have often been fragmented and contradictory.

The degree to which these efforts at consistency and coordination will be successful remains to be seen. It appears that the preparation of realistic and well-crafted consistency standards by county planning commissions as required by the MPC and the degree to which municipalities adhere to these standards will be important factors in determining the success of efforts to improve the planning process in Pennsylvania. Also, the extent to which the courts define and support the MPC's provisions requiring consistency will have a strong bearing on the success of planning efforts in the Commonwealth.

REGIONAL RELATIONSHIPS

Marcus Hook Borough has a common boundary with Lower Chichester Township, Trainer Borough, and the State of Delaware. Also, the Delaware River abuts the southeasterly side of the Borough. Similar classes of land uses are found along the Borough's boundaries with abutting communities. None of the proposals of this plan creates a negative impact on uses in adjacent communities, and the uses and proposals along the boundaries are, therefore, compatible with the existing and proposed development in surrounding communities. Although the County comprehensive plan has not been adopted to date, DCPD, which is preparing that plan, expects adoption in 2003. Since the major proposals of the County plan are in place, it appears that the existing and proposed development of the Borough is generally consistent with the objectives and proposals of the County comprehensive plan.

CHAPTER 8

TRANSPORTATION

INTRODUCTION

The transportation system is an essential element of the infrastructure of a modern community. Improvements made to the transportation system represent one of the most important investments a municipality can make towards enhancing its attractiveness as a location for residential and nonresidential development.

The transportation needs of the Borough's residents, businesses, and industries are served by Delaware River ports, major highways, and commuter as well as freight railroads. In addition, Philadelphia International Airport is only nine miles from Marcus Hook via I-95. Map 8-1 shows all forms of transportation within the Borough.

The first section of this chapter will outline the Borough's existing road system. This will include a review of principal roads, functional road classifications, traffic volumes, hazardous intersections, parking, and traffic signals. Public transit, bicycling, walking, and rail freight issues will then be discussed. The possible form of the East Coast Greenway and the Routes 291/13 Beautification Project within the Borough will be examined. Recommendations designed to alleviate existing problems are offered throughout.

ROAD SYSTEM

Principal Local Roads

There are three major roads in Marcus Hook which carry traffic through the Borough and into surrounding municipalities and the State of Delaware. They are 10^{th} Street (U.S. Route 13), Market Street (PA Route 452 north of 10^{th} Street), and Blueball Avenue. These roads also connect with major intercity and interstate routes such as I-95, I-495, and U.S. Route 322. These three roads are the only state-owned and maintained roads in the Borough.

10th Street serves as U.S. Route 13, an interstate highway extending from Morrisville, Pennsylvania to Virginia. It traverses the Borough in a northeast to southwest direction from Trainer Borough to the Delaware State line. I-95, the major East Coast interstate highway, parallels Route 13 and is accessible less than one mile from Marcus Hook. Its completion removed the vast majority of interstate traffic from roads like Routes 13 and 1. Nevertheless, Route 13 still serves a significant role in local, regional, and interstate commuting and movement of goods. Through the eastern part of the Borough – the business district and residential area – Route 13 is a two-lane road with parking lanes. In the western part of the Borough – bounded by the Sunoco refinery – it is a four-lane roadway with no parking permitted.

PA Route 452, known as Market Street in the Borough, extends from Middletown Township in Delaware County to Route 13 in the heart of Marcus Hook's business district. It traverses the Borough in a northwest to southeast direction. South of 10th Street, Market Street does not serve as Route 452 and is owned and maintained by the Borough. Nevertheless, it serves as the major thoroughfare connecting the residential areas and providing access to the riverfront. It terminates at Market Square Memorial Park on Delaware Avenue. It is a two-lane road throughout the Borough with parking lanes in most areas.

Blueball Avenue is the final major road in Marcus Hook. It runs in a northwest to southeast direction, connecting Upper and Lower Chichester Townships with Route 13. It is also a two-lane road throughout the Borough.

Functional Classifications

The road system in Marcus Hook provides for the access and mobility needs of residents and those conducting business in the Borough. Some roadways also serve as components of the regional transportation system, linking Marcus Hook with neighboring municipalities and states. Specific types of roads accommodate various trip purposes, lengths, and speeds. Three classifications describe the functions of roads in Marcus Hook: principal arterial, urban collector, and local roads.

Principal Arterials

Arterial roads typically serve as "feeders" to the expressway system. Principal arterials are generally designed for limited access and medium and long distance travel at relatively high speeds. They often serve major employment and shopping centers.

There are two principal arterials in Marcus Hook. The first is 10th Street (Route 13) from the Delaware State line to the Trainer Borough line. The other is the segment of Market Street (Route 452) from the Lower Chichester Township border to Route 13. Because these two roads intersect in the middle of the business district, they serve the additional purpose of providing direct access to businesses in downtown Marcus Hook.

Route 13 south of the business district functions as a typical principal arterial with high speed limits and few access points, but from the Borough Hall north it functions more like a minor arterial. Local streets empty directly onto it. Stop signs on intersecting streets, low speed limits, relatively narrow widths, and lack of convenient through routes deter through traffic.

Urban Collector

Collector roads generally provide access from residential areas to the arterial roads. Moderate to low numbers of motorists utilize the collector streets to get into and out of their neighborhoods. Stop signs and low speed limits control collector street traffic,

consisting primarily of local residents. A typical collector street provides the motorist with a high degree of access but a low degree of mobility. Blueball Avenue is the lone collector street in Marcus Hook even though it does not provide access to residential areas in the Borough (it does so in Upper and Lower Chichester Townships).

Local Roads

Local streets are designed to carry low traffic volumes and to serve the individual residential property owners whose homes abut the street. Access to adjacent properties is very convenient while mobility is purposely restricted; through traffic is discouraged. Stop signs and low speed limits help control local traffic. All roadways consistent with this description are local streets. Roads not listed under one of the above classifications are local streets. In Marcus Hook, all streets other than 10th Street, Market Street (north of 10th Street), and Blueball Avenue are classified as local roads.

Traffic Volumes

DVRPC performs traffic counts in southeastern Pennsylvania. The average daily traffic (ADT) is determined by counting vehicles at a given location for a period of three or four days (usually Tuesday through Thursday) and then computing the average of those counts.

Table 8-1 presents traffic volume data for selected sites in the Borough. Unfortunately, the table does have some limitations. Some of the counts are not recent, and counts were not available for the same or nearby location for two different years in the recent past. Because of this limitation, it is not possible to accurately determine traffic volume changes over time for some locations. Based on the data in Table 8-1, it is difficult to draw definitive conclusions about traffic volume trends, but it appears that traffic volume is not increasing over time.

Table 8-1 shows that locations #2 and #3 are very close to one another and that there was a slight drop in traffic on that segment of U.S. 13 between 1985 and 1991. Locations #7 and #8 are also fairly close, but due to a major driveway located between the two points, the volumes may differ significantly. Nonetheless, the traffic volume for 1997 is 40% lower than that for 1985 at a nearby location. Traffic counts taken along the stretch of U.S. 13 between the Borough Hall and the state line indicate that volumes either fell or were stable between 1985 and 1997.

Comparing Marcus Hook's traffic volumes with other Delaware County roadways provides a context for understanding road usage within the Borough. I-95 in Upper Chichester Township carries 104,000 vehicles daily, U.S. 1 in Concord Township - 39,000, U.S. 322 in Upper Chichester Township - 29,000, Route 452 in Upper Chichester Township - 26,000, Baltimore Pike in Media - 22,000, and Lansdowne Avenue in Lansdowne - 16,000.

TABLE 8-1
TRAFFIC VOLUMES IN MARCUS HOOK

#	Municipality	Street	Location	Year	ADT
1	Marcus Hook	U.S. 13	Near the state line	1985	8,913
2	Marcus Hook	U.S. 13	North of Hewes Avenue	1985	6,044
3	Marcus Hook	U.S. 13	Just south of Green Street	1991	5,999
4	Marcus Hook	U.S. 13	At Church Street	1991	7,302
5	Marcus Hook	U.S. 13	At Yates Avenue	1995	10,871
6	Marcus Hook	U.S. 13	South of Blueball Avenue	1995	6,520
7	Marcus Hook	U.S. 13	Between Blueball Avenue	1997	5,352
			and the Delaware State line		
8	Marcus Hook	PA 452	At 11 th Street	1991	10,603

SOURCE: DVRPC

Occasionally, an accident on I-95 results in a closure of that highway, causing a detour onto Route 13 through Marcus Hook. Because Route 13 has only two lanes through the Borough's business district, a detour over this route causes severe congestion. Alternatively, Ridge Road through Lower Chichester Township and Trainer Borough has four lanes and connects directly with Route 13 – 9th Street in Chester City. In Lower Chichester Township, Ridge Road carries only 6,000 vehicles per day on four lanes. A detour route using Ridge Road avoids the need for trucks to cross over or under Amtrak's Northeast Corridor line on weight-restricted bridges or height-restricted underpasses. Ridge Road appears to be a more logical emergency detour route for I-95 traffic, since it has four lanes and avoids the sharp corner in downtown Marcus Hook. It would also be a logical route for truck traffic coming from the Chester City waterfront once the Route 291 widening and Flower Street improvements are completed (see Route 291 Improvements in Chester City section below).

Recommendations

- 1. The Borough should contact PennDOT and elected state officials to establish a policy for a Ridge Road, rather than 10th Street/Route 13, detour route for I-95. Contact the DCPD Transportation section for assistance.
- 2. The Borough should contact PennDOT and elected officials to establish a signed and publicized truck route using Ridge Road, not 10th Street, to access the west end of Chester City. This route could also be used to direct trucks once the Route 291 project in Chester City is completed. Contact the DCPD Transportation section for assistance.

Hazardous Intersections and Road Segments

The Marcus Hook Police Department provided DCPD with a list of accidents taking place in Marcus Hook between 1994 and 1998. Overall accident numbers are listed in Table 8-2 below.

TABLE 8-2
TRAFFIC ACCIDENTS IN MARCUS HOOK, 1994 -1998

Year	1994	1995	1996	1997	1998	Total
Reportable	16	12	8	18	11	65
Non-reportable	21	23	21	20	23	108
Total	37	35	29	38	34	173

SOURCE: Marcus Hook Police Department

Table 8-2 shows that the overall level of accidents varies only slightly from year to year. Reportable accidents are more serious than non-reportable. No further breakdown of crashes by type was provided. Information from PennDOT concerning accidents from 1991-1995 indicates that only two pedestrian injury accidents occurred on 10th Street. However, PennDOT data only covers PennDOT roads, so pedestrian crashes on other Borough streets were not included.

The top ten hazardous intersections are listed in Table 8-3 below:

TABLE 8-3
TOP 10 HAZARDOUS INTERSECTIONS, 1994-1998

Rank	Intersection	# of Accidents, 1994-1998
1	10 th and Market Streets	35
2	10 th and Green Streets	10
3	U.S. 13 and Blueball Avenue	9
4	10 th Street and Yates Avenue	7
5	10 th and Church Streets	6
6	10 th Street and McClure Lane	5
7	9 th Street and McClure Lane	4
8	4 th and Market Streets	3
9	11 th and Washington Streets	3
10	Delaware Avenue and Market Street	3

SOURCE: Marcus Hook Police Department

The 10th and Market Streets intersection dominates the accident count with 35 accidents between 1994 and 1998. However, four other intersections on 10th Street – at

Green Street, Church Street, McClure Lane, and Yates Avenue – accounted for another 28 accidents. The Route 13 and Blueball Avenue intersection had the largest concentration of accidents in the industrial zone.

Recommendations

The recommendations below address the 10th and Market Streets intersection where most of the accidents occurred. In order to minimize accidents, the Borough should:

- 1. Repaint the stop lines more frequently, especially that on southbound Market Street, which is wearing off.
- 2. Move the stop line at eastbound 10th Street farther back to provide more turning room for trucks.
- 3. Install pedestrian signals to more clearly indicate when they can and cannot cross. It is difficult for pedestrians to see if the light is green or red because the lights are placed over the street pointed towards the middle of the street for vehicles. There are no regular or pedestrian signals on posts at the corners where pedestrians can easily see them. There is sufficient pedestrian movement at this intersection to warrant installation of this safety measure.

Parking

Based on a survey taken on a Friday afternoon in late winter of 1999, Marcus Hook has plenty of parking, both on-street and in municipal lots. Street parking is available in all sections of the Borough, and none of the municipal lots surveyed was more than half full. All four blocks surrounding the intersection of 10th and Market Streets had empty on-street parking spaces at the time of the survey. Municipal parking lot #2, located on Market Street, provides 20 spaces, and lot #5 at Centennial Park, on the southwest corner of 10th and Green Streets, offers another 21 spaces. 10th Street has metered street parking on both sides, and Market Street has parking on the west side. Combined with municipal lot #1 at 11th and Market Streets – but not counting parking on residential streets, back alleys, private lots, and the SEPTA parking lot – there are 150 parking spaces within easy walking distance of the intersection of 10th and Market Streets. See Table 9-3 in the Community Facilities chapter for a description and numbering of the Borough's parking lots.

The only location that needed more parking in 1999 was the Market Square Memorial Park area, which had only 20 spaces. Although some spillover parking spaces exist on Market Street and nearby residential streets, additional spaces are needed for major events such as summer concerts and the Holiday Festival of Lights.

Recommendations

- 1. The Borough should retain on-street parking. It is essential to the kind of storefront commercial businesses and row homes that exist in the residential areas. Pedestrians need the insulation from traffic, and on-street parking is the most convenient type for motorists, one that promotes impulse shopping. Given modest and stable traffic volumes, there is no compelling reason for mass removal of street parking. Existing off-street lots are more than adequate. During the 1999 survey, the Centennial Park lot (#5) was half full, the Market Street lot (#2) was completely empty, and lot #1 was only one quarter full. The SEPTA lot, on the other hand, was completely full.
- 2. The Borough should renew efforts to relocate the SEPTA train station to the eastern side of Market Street. In conjunction with this move, the Borough should consider opening municipal lot #1 to SEPTA commuters, thus increasing the number of spaces used by train commuters. This could lead to more people riding the train from Marcus Hook and possibly staying to shop. As noted, municipal lot #1 is underused, and there is room for expansion. Providing more conspicuous signs might lead to greater use of the Market Street parking lot (#2). See the Public Transit section for more information on this proposal.
- 3. The Borough should provide additional parking for Market Square Memorial Park. Parking should be provided inland from the park, rather than in the park, to avoid paving too large a proportion of the parkland near the water. A popular destination like a waterfront park does not need on-site parking, just adequate parking nearby.

IMPACT OF TRUCK FREIGHT ON MARCUS HOOK STREETS

Marcus Hook has two major truck generators – the ConocoPhillips and Sunoco refineries. Since the two refineries utilize a combination of ship, pipeline, trains, and trucks to ship and receive products, they may be referred to as intermodal facilities.

The use of trucks by these two facilities has a major impact on the Borough's streets and bridges. Not only is traffic flow affected, but the roadways' physical condition can be negatively impacted as well.

The National Highway System (NHS) is the nation's primary network of roads and expressways (including I-95 and U.S. 322) that serve critical national and regional transportation needs. The Transportation Equity Act for the 21st Century (TEA-21), the federal authorization bill that provides funding for the nation's transportation system, includes a sizable pot of funds for the NHS. A unique aspect of the NHS recognizes the importance of intermodal facilities and the highways that connect to them. These roads can become components of the NHS and, as such, are eligible for funds to assure adequate design features and improved highway access. The following criteria are used to determine the eligibility of roads to be incorporated into the NHS:

Airports - 100 trucks/day, or 100,000 tons/year

Ports - 100 trucks/day, or 50,000 20-foot equivalent units (TEU),

or 500,000 tons/year

Rail - 100 trucks/day, or 50,000 TEUs, or 500,000 tons/year

The two refineries apparently meet these criteria. If the Borough seeks to have a street(s) designated a connector to the NHS, this street would need to connect with I-95 or U.S. 322, the two NHS roads closest to Marcus Hook. Such connection must be made by way of a roadway for which designation as a component of the NHS must be obtained from PennDOT.

Recommendations

Marcus Hook Borough should explore the possibility of having streets designated as NHS connectors. If the above criteria are met, perhaps Market Street, 10th Street, and other streets would qualify for NHS funding. DCPD, PennDOT, and DVRPC could assist in this effort.

RAIL FREIGHT*

One major rail freight line, the Chester Industrial Track, traverses the Borough and provides rail access to various industries, primarily the Sunoco and ConocoPhillips refineries. This line is owned, operated, and maintained by Conrail.

The Chester Industrial Track has a one-track main line running between Eddystone and the State of Delaware; it runs through Marcus Hook in the corridor along 4th Street. It is essentially a feeder line with a ten mile per hour speed limit. It carries two trains each day hauling about 10 million gross tons of freight per year, although these numbers are subject to change.

Beginning in June 1999, the Chester Industrial Track and connecting tracks became part of the Philadelphia-South Jersey Shared Assets Area that the CSX and Norfolk Southern companies have created. This area, created by these two companies as a result of their acquisition of the Conrail system, encompasses Philadelphia, southern New Jersey, and the waterfront areas of Bucks and Delaware Counties. The Shared Assets Area is one of three in the country where companies will have access to more than one Class I (interstate) railroad to ship their goods. Marcus Hook businesses, having access to these tracks, can request shipping rates from CSX and Norfolk Southern. Because of this competition, Marcus Hook businesses might obtain a better rate than businesses located outside of the Shared Assets Area.

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Much of this section is drawn from the *Delaware Valley Rail Freight Plan*, prepared by DVRPC in 1999.

Conrail, in its new role as a terminal railroad in the shared area, will not market services to customers, set rates, or derive revenue. Conrail will provide and supervise switching and dispatching services solely within the shared area. For long-term capital improvements and track maintenance expenditures, CSX and Norfolk Southern will have ultimate responsibility, with costs being apportioned based on use.

The Stoney Creek yard is a 26-track facility located on the Chester Industrial Track in Trainer. It serves as a support facility for refineries as well as chemical and paper customers in the South Philadelphia/Delaware County area. The yard is supported by a light car repair facility, and locomotives are fueled by trucks provided by an outside fuel vendor.*

There are several sidings and connector tracks that connect the Chester Industrial Track with individual businesses and Amtrak's Northeast Corridor line. These tracks cross public streets in a number of locations and, where motor vehicle traffic volumes warrant, warning devices such as crossing gates and flashing signals are provided.

Conrail has scheduled one of these road crossings for improvement. The crossing at 10th Street between Church Street and McClenachan Terrace is scheduled to be upgraded in late 2002. A new cantilever structure with flashing signals and gates will be installed at a cost of approximately \$168,000. PennDOT will provide federal and state funds for this project.

State financial assistance for freight railroad improvements is available through PennDOT's Bureau of Rail Freight, Ports, and Waterways. This program is designed to protect the integrity of existing rail infrastructure, with a heavy emphasis on maintenance and preservation (although new construction projects are also possible). Beneficiaries are often smaller railroad operators (i.e., short lines) and shippers. While partial funding by the applicant is generally required, candidate projects compete for limited, statewide funds and, thus, their need and merit must by demonstrable.

Recommendations

The Borough should obtain information on PennDOT's rail freight financial assistance program and disseminate it to appropriate local businesses.

MARITIME FREIGHT

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The majority of tonnage going into and out of the Borough is handled by way of ship through the Port of Marcus Hook. According to the Bureau of the Census database, the combined ports of Chester/Marcus Hook handled 9.3 million tons of cargo in 1998

^{*} Railroad Control Application, Volume 3A of 8, Finance Docket No. 33388, Surface Transportation Board

and ranked 28th among all U.S. ports in freight tonnage handled. This was an increase from 4.9 million tons in 1997.

Most of this increase was due mainly to an increase in tonnage through Marcus Hook. The tonnage handled in Marcus Hook consisted solely of petroleum from the Sunoco and ConocoPhillips refineries.

ROUTE 291 IMPROVEMENTS IN CHESTER CITY

For decades, Chester City officials and businesses have requested that PennDOT widen and straighten Route 291 within the Chester City limits. Construction of the eastern third of this project began in 1997 and was completed in the fall of 1999. The western portion of this project, from the Trainer Borough/Chester City line to Franklin Street, has funding and is scheduled to go to construction in 2002 and be completed in 2004. This project will result in widening Route 291 from two to four through lanes and a center left-turn lane. The City hopes that this will improve access for trucks and assist in the economic development of the riverfront.

Once the Route 291 project is completed, traffic patterns and volumes resulting from this improvement may impact Marcus Hook. In particular, will the fact that the new four-lane section of Route 291 ends at the Chester/Trainer border mean that more traffic, particularly truck traffic, will go through Marcus Hook on Route 13 and Route 452 to access I-95? The answer may be "yes" if complementary projects in Chester to improve access between I-95 and Route 291 are not implemented.

Delaware County was successful in obtaining funding for a study to determine what improvements are needed in Chester to improve access between I-95 and Route 291. DVRPC has completed the *I-95 Access Study in the Chester City Area*, which recommends roadway, signing, and bridge clearance improvements to provide more direct, obstacle-free connections for trucks between I-95 and Route 291 in the eastern and western ends of Chester. In the western end, near Marcus Hook, improvements to Highland Avenue and Flower Street (including the clearance under the Amtrak Bridge) and the interchange for Routes 322, 13, and I-95 are recommended. The result will be to program and fund physical improvements that will allow trucks to use Highland Avenue and Flower Street to travel between Route 291 and I-95, rather than using Route 452 which would take them through Marcus Hook. Map 8-2 shows the proposed connection and truck routing between Routes I-95 and 291.

Recommendations

Marcus Hook Borough should support the recommendations emanating from the *I-95 Access Study in the Chester City Area*, which will improve truck access between I-95 and Route 291 in Chester City. These improvements will likely reduce truck traffic traveling between the Chester riverfront and I-95 via Marcus Hook (Routes 13 and 452). The DCPD Transportation section could provide information on this study.

MARKET STREET BRIDGE PROJECT

The Market Street Bridge over the Amtrak railroad tracks between Marcus Hook and Lower Chichester Township is 75 years old and in a state of serious disrepair. The replacement of the bridge with a new span is on the regional Transportation Improvement Program, thus guaranteeing funding of the expected \$6 million project. Final design for the project was completed in the summer of 2002. Construction is slated to begin in late 2004 and be completed in late 2006. This main Borough access point will be closed during demolition and reconstruction, with traffic being diverted to Blueball Avenue.

TRANSPORTATION CAPACITY

Current conditions in Marcus Hook do not require new roads. Marcus Hook has plenty of roadway capacity, and it is not likely to need even what it has at any point in the foreseeable future. The sole location with any notable congestion, the intersection of 10th and Market Streets, has no room for physical improvements such as widening. Marcus Hook's surplus of transportation capacity originates from the construction of I-95, which substantially reduced the volume of traffic passing through the Borough and contributed to the reduction in population and employment.

Under these conditions, some shrinkage of excess highway capacity in the interest of beautification is acceptable. The excess capacity on U.S. 13 south of Borough Hall offers the opportunity to narrow the road to two lanes and create landscaping and a bicycle corridor. Narrowing the four-lane wide section of U.S. 13 will not worsen conditions at the bottleneck at 10th and Market Streets. If anything, it will improve them by making U.S. 13 look less like a "main highway," thus encouraging through traffic to take an alternate route.

If the Route 291 improvements in Chester generate more traffic for Marcus Hook, the Ridge Road corridor and I-95 provide good alternatives. Those alternate routes are more likely to be used if U.S. 13 becomes a narrower road complemented by trees, vegetation, and a bicycle lane.

TRAFFIC SIGNALS

In recent years, the Borough has upgraded traffic signals along Route 13 by converting to solid state lights. The Borough also actuated the signals at Hewes and Blueball Avenues and at Plaza Street. Actuation means that the traffic light will not turn green unless there is someone waiting at the intersection.

At present, it appears that no additional traffic lights are needed. Also, because of the small size of the Borough and the relatively low traffic volume along Route 13, there appears to be no need to synchronize the existing lights by installation of a closed-loop system that employs a central computer and specialized software.

Recommendation

The Borough should re-evaluate its traffic signals along Route 13 in two or three years. This review will indicate if there is a need at that time to actuate additional intersections or make improvements to local traffic signals.

TRAVEL DEMAND MANAGEMENT

Because population growth and sprawl development in most areas of the country have created higher traffic volumes and vehicle miles traveled, many regions and communities are approaching a fully developed condition. For this reason, building new roads is being considered less frequently as a viable course of action to improve access and reduce congestion. By contrast, planners and officials are encouraging other methods to improve traffic flow and mobility in developed areas. In addition, providing additional mobility options is desirable so that individuals do not feel obligated to own a car or multiple cars, employers have the option of reducing their parking lot costs by providing fewer spaces, and employees have better access to jobs.

For the above reasons, the following methods are being encouraged: (1) improving mass transit and paratransit service, (2) encouraging employees to car pool or van pool, (3) constructing park and ride lots, (4) building pedestrian and bicycle facilities, and (5) providing tax and financial incentives to employers and employees so that employees will use transit or car pool, van pool, bicycle, or walk.

In this area, there are several organizations engaged in implementing some of the strategies noted above. The Delaware County Transportation Management Association (TMA) assists County employers and municipalities in reducing the number of solo vehicle trips to work sites with a variety of programs. DVRPC operates the Share-a-Ride car pool matching program. It also administers the TransitChek® program, an employer-provided, tax-free fringe benefit that subsidizes employees' transit and van pooling costs. SEPTA, which operates the regional public transit system, seeks to assist communities by meeting with local officials and businesses to discuss creating new bus routes or improving existing bus and rail routes to provide better service and access to jobs.

Recommendations

The Borough should pursue the above travel demand management strategies. This is because little if any land is available in Marcus Hook or surrounding municipalities for new roadways or new parking lots in the event that traffic congestion increases or parking needs increase. In addition, the broadest spectrum of mobility options should be available for the Borough's residents and businesses. Finally, these strategies will help to improve access to jobs for both Marcus Hook residents and existing and potential employees commuting to Marcus Hook. Ensuring dependable access to jobs will favorably impact the Borough's economy. The following actions should be considered:

- 1. The Borough should contact the Delaware County TMA, DVRPC, SEPTA, and Borough employers to arrange a meeting or meetings to discuss transit service, car pool and van pool programs, and the TransitChek® program so as to make these modes of travel more attractive and make work sites more accessible to existing and potential employees.
- 2. The Borough should evaluate the routing and service frequency of SEPTA bus and rail routes through Marcus Hook as well as passenger amenities (the train station, bus shelters, and signs) and contact SEPTA and the DCPD Transportation section to discuss possible revisions to routes or amenities.
- 3. The Borough should work with DCPD, DVRPC, SEPTA, PennDOT, and employers to improve bicycle and pedestrian facilities.

PUBLIC TRANSIT

Bus and Train Service

One SEPTA bus route, the 113, serves Marcus Hook. Another route, the 114, is nearby (two blocks north) in neighboring Lower Chichester Township on Ridge Road. The Marcus Hook train station provides SEPTA commuter rail service on its R-2 line. The station is located at 12th and Market Streets at the northern edge of the Borough.

The 113 bus, which connects 69th Street and Marcus Hook, enters the Borough along 10th Street and turns left onto Market Street towards the Delaware River down to Delaware Avenue, turns right back to 10th Street along Green Street, and right again along 10th Street out of the Borough. Bus stops are well marked with signs along the route. There are also two bus shelters along the south side of 10th Street, one at the corner of Market Street and the other between Yates and Plaza Streets. There are connections at the Darby Terminal with the 11 trolley and the 114 and 115 buses. There are also connections at the Chester Transportation Center with the 37, 109, 113, 116, 117, 118, 119, and 122 buses, and at the Collingdale station with the 102 trolley line.

The Granite Run Mall is a popular destination that can be reached via the 113 by connecting with the 117 and 119 buses. Total trip time is approximately 75 minutes, which includes a 20-minute wait at the Chester Transportation Center. The Eddystone Crossings commercial development on Route 13 in Eddystone will likely become another choice destination and can be reached via the 114 bus with a much shorter 30-minute commute.

The 114 bus, which connects Darby Terminal and Larkin's Corner Shopping Center, parallels the 113 along Ridge Road north of the R-2 commuter rail line. The terminus of the 114 is at Larkin's Corner, where the route now connects with the new Route 314 bus. Route 314 operates nine total trips during weekday peak hours and provides service to employment and retail centers in Concordville, Painters Crossroads,

and the West Chester area. Schedules are coordinated between both routes to ensure timely connections.

Frequency of service for both bus routes is shown on Table 8-4 below. During the weekday peaks (from 6:00-9:00 a.m. and 3:30-6:30 p.m.), both the 113 and the 114 have twelve runs. It should be noted again that the 114 bus does not go to Marcus Hook. The average headway, the time interval between passing vehicles, of approximately 30 minutes is not too different between peak and off-peak times for either route. It is also worth noting that the 113 has the best operating ratio in SEPTA's Victory District–63% (full costs divided by fare recovery), with the routing successfully matched to the mobility needs of the residents.

TABLE 8-4
SERVICE FREQUENCY FOR INDIVIDUAL BUS ROUTES
1998

Route	Number of Runs (69 th Street to Marcus Hook)			1	Average He (In Minu	•	
	Weekdays	Saturday	Sunday	Weekdays		Sat	Sun
				Peak	Off-peak		
113	33 (12 peak)	28	15	30.0	30.3	36.3	60.0
114	30 (12 peak)	11	7	30.0	31.6	60.0	60.0

SOURCE: Derived from SEPTA Bus Schedules; Delaware County Annual Transit Report

The R-2 commuter train line connects Wilmington and Philadelphia and passes through the Borough in an east-west direction. The Marcus Hook station is located just west of the Market Street Bridge. The 113 bus stops at 10th and Market Streets, only two blocks south of the station. The 114 bus route also stops two blocks north of the station; however, pedestrian access to Route 114 is somewhat impeded since one must cross the Market Street Bridge in order to walk from the 114 bus stop to the inbound (going *to* Philadelphia) train station platform.

Tables 8-5 and 8-6 show the service times and headways* of the R-2 Marcus Hook/Wilmington to Philadelphia train. This route serves the coastal zone and industrial areas near the Delaware River in southern Delaware County. The R-2 has 27 inbound (Table 8-5) and 26 outbound (Table 8-6) weekday trips from Marcus Hook. This line runs with peak weekday headway about half the weekend time. This route also serves as a commuter line into Wilmington and Newark, Delaware. This may account for the more frequent "reverse commute" outbound (coming *from* Philadelphia) headway time of 22.9 minutes, five minutes less than the most frequent inbound time.

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The term "headway" indicates the time elapsed between buses, trains, or similar public transit vehicles passing a given location along the same route.

TABLE 8-5
INBOUND: R-2 MARCUS HOOK TO SUBURBAN STATION*

Inbound	# of Runs	Times of Service	Average Headway (in Minutes)
Weekdays	27	5:49 a.m 1:14 a.m.	41.8
Peak Hours	8	5:49 a.m 9:23 a.m.	27.4
Saturday	15	7:47 a.m10:06 p.m.	57.5
Sunday	12		58.6

^{*} Only Delaware County service is included

SOURCE: SEPTA Regional Rail Schedules

TABLE 8-6
OUTBOUND: R-2 SUBURBAN STATION TO MARCUS HOOK

Outbound	# of Runs	Times of Service	Average Headway (in Minutes)
Weekdays	26	4:52 a.m12:10 a.m.	43.0
Peak Hours	8	4:13 p.m 7:11 p.m.	22.9
Saturday	15	6:25 a.m 9:01 p.m.	58.7
Sunday	12	8:25 a.m 8:02 p.m.	58.5

SOURCE: SEPTA Regional Rail Schedules

Marcus Hook Station Regional Rail Boarding Data

Regional rail ridership is analyzed in this section at the station level. It is measured by the number of boardings at each station along the R-2 regional rail line. SEPTA collects this data every other year with the latest counts taken in 1999. Table 8-7 describes the boardings per station in the years 1993, 1995, 1997, and 1999 and the percent change between 1993 and 1999. It also includes the rank within the R-2 line itself.

Marcus Hook station on the R-2 line has the largest absolute increase with 52 boardings over the last six-year period. The increases are due in part to commuters coming from Delaware to take the train into Center City Philadelphia. The Claymont station, over the border in Delaware, is typically at or beyond capacity. An informal license plate survey at the Marcus Hook station confirmed a large proportion of Delaware license plates. The boarding numbers are closely related to the availability of adjacent parking at a station. There are 205 spaces at Marcus Hook.

TABLE 8-7
BOARDING CHANGES FOR THE R-2 RAIL LINE
1993, 1995, 1997, 1999

	1993	1995	1997	1999	93-99%	R-2 Line
Station	Boards	Boards	Boards	Boards	Change	Rank
Marcus Hook	256	277	270	308	20%	1
Highland Ave.	93	89	81	61	-34%	11
Lamokin St.	66	50	42	41	-38%	14
Chester	288	239	265	215	-25%	5
Eddystone	48	38	34	53	10%	13
Crum Lynne	70	67	80	61	-13%	11
Ridley Park	196	219	209	240	22%	3
Prospect Park	221	202	193	261	18%	2
Norwood	201	184	185	199	- 1%	6
Glenolden	171	187	202	218	27%	4
Folcroft	170	170	148	155	- 9%	7
Sharon Hill	175	152	137	141	-19%	8
Curtis Park	118	101	87	121	3%	9
Darby	133	117	102	89	-33%	10
Total	2,206	2,092	2,035	2,163	- 2%	

SOURCE: SEPTA Regional Rail Ridership Census, 1993, 1995, 1997, 1999

Parking at the Train Station

It is noted in the Parking section that parking spaces at the station are filled to capacity, implying that there are only about 65 daily "kiss and ride" drop-offs per day (based on the station capacity of 205 spaces). It was also noted from the DCPD survey that a large portion of these cars had State of Delaware license plates. It is possible that relocating the station to the east side of Market Street would permit parking expansion and bring about a consequent increase in boardings. Marcus Hook station would then have a stronger potential to expand its base as an interstate commuter park and ride location.

Parking capacity at regional rail stations is related to boardings and ridership. Station parking, as shown in Table 8-8, is at 93% capacity at Marcus Hook, a percentage labeled "full" given variances in lot use. This percentage exceeds the R-2 average of 83% parking utilization. The field view, which showed near capacity condition of the 205 parking spaces, also validated the figures in Table 8-8. The unused spaces occurred under the bridge where there is no curb cut opening into the lot and access to spaces is impeded. Full parking would require either better access to all the spaces in the lot or reconfiguring the number of usable spaces.

TABLE 8-8

R-2 PARKING AVAILABILITY AND UTILIZATION AT MARCUS HOOK STATION

Station	Parking	Utilization %
Marcus Hook	205	93%
R-2 Average %		83%

SOURCE: Delaware County Regional Rail Station Study, DCPD, 1997; Regional Rail Division/City Transit Division Stations Inventory, SEPTA, October 1998

Conditions at Marcus Hook Train Station

During March 1999, DCPD staff conducted a survey of conditions at the Marcus Hook train station. The survey's findings were as follows.

Favorable Findings:

- 1. Of the 205 parking spaces at the station, 147 were slot boxes (the commuter pays on a daily basis), and 58 were permit spaces purchased on a monthly basis. Only 7% or 14 of the spaces were unoccupied when SEPTA surveyed, indicating a high percentage of utilization. The DCPD survey found similar results. The lot was at capacity, if the few impeded parking spaces are not counted. There was metered municipal parking adjacent to the station.
- 2. The parking area appeared to be well lighted and generally free of trash.
- 3. There was a ticket office with waiting room open from 5:35 a.m. to 12:05 p.m. Monday through Friday.
- 4. Newspaper dispensers and a public phone were available at the station.
- 5. There was an inter-track fence to prevent trespassing on the tracks and train/person accidents.
- 6. Both the 113 and 114 bus routes pass within two blocks of the station.
- 7. The station was observed to be pedestrian-accessible (also see #5 of Unfavorable Findings below).
- 8. The 113 bus provides direct access to Market Square Memorial Park at the waterfront, the site of many events, including the summertime concerts and the Holiday light show.

Unfavorable Findings:

- 1. There were no signs for the station at Routes 13 or 452 or from the station towards the Marcus Hook CBD.
- 2. Not all of the designated parking spaces in the lot were accessible from the street.
- 3. There was no bicycle parking.
- 4. There was no ticket machine, SEPTA transit map, or snack machines at this location. When the station is not open, no train schedules are available.
- 5. The station was not wheelchair accessible, and there were no public restrooms.
- 6. There was no at-grade access to the 114 bus from the station building, which is on the inbound side of the tracks.
- 7. The station is housed in an unattractive trailer on the edge of a residential neighborhood.

Recommendations

- 1. Access to the 114/314 bus service originating two blocks away in Lower Chichester Township needs to be enhanced. While the Market Street Bridge has stairways and sidewalks, better signage and rerouting the 114 bus to bring it closer than Ridge Road to downtown Marcus Hook is needed. This would provide a better connection with the West Chester area and the proximate industrial parks and employment/commercial centers. Bringing the 114 bus closer to Marcus Hook would also connect with the Eddystone Crossing development 30 minutes away. This would provide quicker access and greater commercial options to Marcus Hook residents who had previously taken about 75 minutes to access Granite Run Mall for many of the same amenities. Contact the DCPD Transportation section and SEPTA to discuss these possible changes.
- 2. The Borough should arrange for a better map and directional signing from the station and the two major bus stops to other local destinations. This might help riders find the CBD, Municipal Building, police station, or the waterfront park or even direct them to the bicycle route proposed through the Borough.
- 3. The Borough, Lower Chichester Township, and SEPTA should improve access to SEPTA parking spaces located under the Market Street Bridge. There are several

spaces located adjacent to Market and Morton Streets that do not have curb cuts and are not accessible if cars are parked in adjacent spaces.

Relocating the Station to the East Side of the Market Street Overpass

The Borough has long supported moving the Marcus Hook train station to the east side of Market Street, an action that could stimulate the revitalization of the business district by providing an improved connection to it. This action has some positive aspects, particularly the possibility of expanding the parking area. This move could also create joint station and business district parking and increase pedestrian traffic through the commercial district. It is an opportunity to build a permanent station and in the process unite transportation and commercial nodes into a reinforcing whole. The DCPD Transportation section could assist in obtaining funding and including the project in SEPTA's Capital Program. Also see Chapter 7, Land Use.

Recommendation

Relocate the Marcus Hook station to the northeastern corner of the CBD. This would involve building a new permanent station structure complete with ticket machine, bicycle racks, accessibility ramps, and public restrooms. Train station improvements can best be implemented through a cooperative effort involving the Borough, DCPD, SEPTA, and Amtrak to facilitate and finance this proposal. Also see Chapter 7, Land Use.

PARATRANSIT

Existing Conditions

The Americans with Disabilities Act (ADA) of 1990 prohibits discrimination on the basis of disability in both the public and private sectors. A major ADA feature is the requirement that any operator of fixed route transit service (in this case, SEPTA) must provide paratransit or other special services to persons with disabilities. Paratransit is the comparable transportation service required for individuals who are unable to use fixed route transportation systems. This includes seniors, the handicapped, welfare recipients, or those with severe medical conditions. Community Transit of Delaware County (CTDC) currently provides this service in Delaware County. Vans are typically the mode employed to transport these persons. The ADA regulations require the following:

- 1. Service be provided to all origins and destinations along the fixed route corridor
- 2. Service be operated the same days and hours as fixed route service
- 3. Riders register for a trip at least 24 hours in advance
- 4. Fares be comparable to the fixed route base fare

Full fares for a one-way ride range from \$12.10 to \$23.10 based on a system of zones throughout Delaware County. SEPTA's ADA Paratransit Program provides separate fare structures and service hours from the other described programs. Seniors may qualify for an 85% discount under Pennsylvania's Senior Citizen Shared-Ride Program, paying from \$1.85 to \$4.95 for one-way travel in Delaware County. Individuals may be eligible for free rides to approved medical facilities and treatments under the Medical Assistance Transportation Program.

In addition to the four ADA regulations listed above, Community Transit has a no-step rule which requires that all wheelchair users must have a ramp or other device which allows them to be at or helped to street level without negotiating any steps except a curb. It is estimated that the average trip duration is 1.5 times that of fixed-route service (including transfers and wait time). ADA regulations allow 50% standing orders for rides at a specified time to a specified place and 50% random rides or on-demand rides at any hour.

SEPTA contracts out service to private vendors in order to contain costs and meet the program guidelines. In June 1999, King Paratransit, a subsidiary of King Limousine and Transportation Service, Inc., began providing ADA paratransit service in Delaware County under contract with SEPTA. Previously, this service was provided by CTDC. However, after King provided paratransit for two years, SEPTA decided to return the service back to CTDC. This transition took place on July 1, 2001.

CTDC has a fleet of about 115 vehicles in active service; of these, 60 are wheelchair accessible. The fleet is used to service all paratransit programs, and riders are integrated in order to produce the desired efficiencies and assure timeliness of service. Reservations for all services may be made between 7:30 a.m. and 3:30 p.m. seven days a week and require only one day's notice. SEPTA ADA riders may reserve rides only one to three days in advance. All calls to Community Transit by riders may be made to 610-490-3960, and calls will be routed to appropriate departments.

Recommendations

- 1. ADA and other paratransit operations need to be monitored regularly to assure proper contract fulfillment.
- 2. The Borough should assure that residents are properly enrolled and apprised of all available paratransit services, particularly in view of the return of ADA service from King back to Community Transit in July 2001.

BICYCLE TRANSPORTATION

Due to its small size, trips within the Borough are within easy bicycling distance. Better bicycling facilities may induce more residents to bicycle, thus reducing noise and air pollution. For example, lockers at the SEPTA station would permit residents who do not live within convenient walking distance to park their bicycles at the station.

While relatively few Marcus Hook residents work at the refineries, bicycle lanes on U.S. 13 would make it possible for workers living along or near SEPTA's R-2 regional rail line to bicycle to their station. They could then take their bikes on the train and then bicycle from the Marcus Hook station to work. SEPTA permits bikes on its trains during off-peak hours, and folding bikes are permitted at any time. People working in Marcus Hook and living in Claymont, for example, could then commute to Marcus Hook by bicycle. Bicycle lanes are recommended only on Route 13/10th Street. Market Street is too narrow to accommodate bicycle lanes, and lanes are not necessary on residential streets.

Parking meters in the business district currently allow bicyclists to park their bicycles. A regional program administered by DVRPC is being proposed to provide bicycle racks in front of businesses upon request. It will be funded with federal transportation funds.

Recommendations

- 1. The Borough should install bicycle lanes on sections of 10th Street (see discussion in East Coast Greenway section below).
- 2. The Borough should ask SEPTA to install bicycle parking at the train station.
- 3. The Borough should notify businesses about the availability of bicycle parking devices for the business district and major employers through the DVRPC program. Contact the DCPD Transportation section for more information.

THE EAST COAST GREENWAY AND THE ROUTES 291/13 BEAUTIFICATION PROJECT

The East Coast Greenway is a proposed bicycle/pedestrian trail that will link the major cities of the eastern seaboard. Ultimately, it is expected to run from Maine to Florida, but the core segment will extend from Boston to Washington, D.C. While it will inevitably include substantial on-street segments, the goal is for it to be an 80% off-road trail, using such facilities as rail-trails, canal towpaths, and parkways. It will also be available to pedestrians and designed to be handicapped accessible. The on-street segments should consist, at a minimum, of painted bicycle lanes and sidewalks. The East Coast Greenway is intended to serve long-distance bicycle tourists, but its individual segments will serve mainly local populations.

The East Coast Greenway Alliance, the proponent organization, will not own or operate anything; each segment of the trail will be owned and maintained locally. The organizational model is the same as that for the Appalachian Trail, which is owned and maintained locally. Designation as a part of the East Coast Greenway requires compliance with East Coast Greenway standards. The Greenway has won designation as a National Millennium Trail, which improves its chances of receiving federal funds.

After some debate, the East Coast Greenway Alliance has decided that it wants the trail to run through Delaware County. The other option, the Schuylkill River Trail, would have resulted in a lengthy detour and entirely by-passed the State of Delaware. Delaware has been actively pursuing the Greenway and has a plausible route mapped out from the Pennsylvania State line to and across the Susquehanna River, so bypassing Delaware was not acceptable. Within Delaware County, the Delaware River route is the straightest and flattest. Planned and existing trails extend from downtown Philadelphia to Tinicum, and from there to the Delaware State line is only eight miles of flat riding.

The interest of the East Coast Greenway Alliance in a route through Delaware County coincides neatly with interest by the Delaware County Chamber of Commerce and other organizations in the beautification of the Routes 291/13 corridor. Landscaping along the corridor can be combined with a path. By including a path, the beautification project becomes eligible for federal transportation enhancement funds as well as other federal transportation funds.

The County has submitted an application for enhancements funding, of which Phase I has been designated high priority at the regional level. Phase I is the segment from the Philadelphia City line to Ridley Creek. Phase II includes the City of Chester, and Phase III could include Trainer and Marcus Hook Boroughs. Delaware County voluntarily withdrew the application for this round because the County would not have been able to use the construction funds within the time limits the program imposes. However, the County can re-submit the application in the next funding round with a high probability of success, especially if it can point to progress toward a design.

The East Coast Greenway is worth pursuing both for Marcus Hook and for Delaware County. Not only does it improve the chances of funding for beautification; it will also enhance tourism. Long distance bicycle tourists eat more than 7,000 calories per day and spend more than \$100 per day. While few are likely to spend the night in Marcus Hook, many are likely to stop and get something to eat and drink. A long-distance bicycle route also provides a unique form of publicity. The speed at which bicyclists move enhances their awareness of their surroundings. The Schuylkill Valley Trail through Manayunk helped put Manayunk on the map and revitalize its business district. The Greenway will put Marcus Hook on the mental map of many people.

A separate study concerning the beautification of the Route 13 corridor through Marcus Hook is being prepared by the firm Campbell Thomas and Company in 2002. This study will analyze existing physical conditions, land ownership patterns, existing landscaping requiring improvements or replacements, traffic volumes and demand approximations, historic and cultural linkages and educational opportunities, and linkages and coordination with East Coast Greenway segments in New Castle County, Trainer Borough, and the remaining Delaware County Routes 291/13 corridor.

East Coast Greenway Design Options

Since Marcus Hook is heavily developed and lacks an obvious off-street corridor such as a canal towpath or an abandoned rail line, the Greenway will probably have to be on-street through the nonindustrial sections of the Borough. The existing sidewalks, which meet ADA standards, could accommodate pedestrian movement. Measurements at Viscose Village revealed a 40-foot cartway with two travel lanes and parking on one side of the street. Subtracting 8 feet for a parking lane and 22 feet for the two travel lanes leaves 10 feet of surplus pavement, which is sufficient for two 5-foot bicycle lanes. In certain areas, trees should be planted on both sides of the street to shade bicyclists and pedestrians.

Three blocks of downtown Marcus Hook along U.S. 13 have street parking on both sides of the 40-foot cartway, and the needs of local businesses do not permit removal of street parking. However, traffic moves very slowly through this segment, so it may be acceptable to have bicyclists share the road. Posted limits should be dropped to 20-mph, and "Share the Road" signs should be installed. The prevalence of parallel parkers and jaywalkers in the downtown would make a 20-mph speed limit prudent in any event.

West of the Municipal Building, a number of configurations appear to be possible, depending on the willingness and ability of the refineries to participate. In the narrowest segment U.S. 13 has a 40-foot wide cartway (curb to curb) plus sidewalks on both sides, with refinery fences abutting the sidewalks. Traffic is light for a four-lane highway at approximately 6,500 vehicles per day, but it includes a heavy proportion of trucks. By way of contrast, it is common for two-lane roads to carry traffic volumes of 20,000 per day, and four-lane roads to carry up to 40,000 vehicles. Lanes are substandard at 10 feet, especially given the amount of heavy truck traffic, which would normally warrant 12-foot wide travel lanes. Ridge Road, which runs parallel to U.S. 13, is also underused with 6,000 vehicles per day on four lanes.

The cheapest solution would be to restripe the cartway from four lanes to three, including two travel lanes and a left-turn lane. Two 10½-foot travel lanes, one 11-foot left-turn lane, and two 4-foot bicycle lanes could be provided. Lane width of 10½ feet is better than 10 feet but still substandard, and a 4-foot bike lane is the minimum standard; 5 or even 6 feet is desirable. The travel lanes will still be slightly substandard, but the presence of a usually empty bicycle lane and left-turn lane will provide some maneuvering room and insulation from oncoming traffic. Adding a left-turn lane will improve safety by reducing rear-end collisions and side-on collisions related to premature left turns.

Four travel lanes are not necessary with existing traffic volumes, and as we have seen, there is no reason to expect that traffic volumes will ever again be large enough to justify four lanes. Even if traffic grew sufficiently to justify four through lanes, the business district would still be a bottleneck. Ridge Road could absorb additional through traffic.

In the above case, most of the left-turn lane will be unneeded, since driveways and cross streets are not numerous in this segment of U.S. 13. Only thirteen driveways and cross streets, some directly opposite one another, exist between the railroad crossing near the Municipal Building and the Delaware State line, a distance of about one mile. The appearance of the corridor would be greatly enhanced by installing a curbed, landscaped median in all those areas where the left-turn lane is unneeded.

To further enhance the appearance of the corridor, trees should be planted in this proposed landscaped median so that when fully grown they will provide a cooling canopy over the entire street. The absence of on-street parking and the distance between the median and refinery property mean that the chance of damage to the refinery from falling tree limbs is minimal. The distance from the proposed trees to underground utilities should be checked to avoid future root-related damage. A tree canopy will improve the appearance of the corridor, induce drivers to slow down because of the perceived reduction of operating room, and shade summertime bicyclists in a corridor that might otherwise be quite unpleasant for them. The effect will be similar to that of the trees on the park blocks of Market Street. While overhead cover is desirable, the view of the refineries should not be blocked. For good or ill, refineries define Marcus Hook. Long-distance tourists who may never have seen a refinery before will want to see them.

Another option that would provide wider travel lanes and bicycle lanes would be to restripe the road from four lanes to two. Two 14-foot travel lanes and two 6-foot bicycle lanes could be provided. Traffic on this segment is light enough that two lanes may be sufficient. However, peak hour traffic patterns should be analyzed before such a solution is adopted. Excess capacity on Ridge Road could absorb any future increase in through, non-local traffic. Street trees should be planted in the sidewalk right-of-way. The sidewalks are wide enough to provide the minimum clearance around the trees required by the ADA.

To provide a separated path and a greener corridor, the road could be narrowed from four 10-foot to two 12-foot lanes. The curb and drainage would be moved in, providing an additional 8 feet of right-of-way on each side. That space could be used to provide a landscaped buffer with trees, and the existing sidewalk could be widened to an 8-foot separated path on each side of the road. This solution is more expensive but much greener and provides a separated path which is preferable to an on-street bike lane.

The most ambitious option would involve the refineries pulling their fences back and providing room for a separated multi-use path on one or both sides of the road. A separated path should have at least a 5-foot grassy buffer between it and the curb, and the path should be at least 8 feet wide. Trees could be planted in the grassy buffer, which, together with trees in the center median, would ultimately form a full canopy over the roadway and paths. A minimum 2-foot buffer is needed between the path and any fence or wall. Two 13-foot travel lanes could be provided, along with one 14-foot left-turn lane/landscaped curbed median. The existing curbs and storm sewers would not have to be moved under either this or the other two scenarios. The existing sidewalks would be

replaced with grass on at least one and preferably both sides of the road. An additional 10 feet of right-of-way would be needed on at least one and preferably both sides of the road. This option might prove very costly because of some pipelines and utilities that currently run close to the road.

None of the above is meant to preclude other possible configurations that may be thought of during the study phase.

The Routes 291/13 Beautification Project is also intended to include items such as directional signs and interpretive signs. Signs directing users to the regional rail station and the waterfront park will certainly be included, and interpretive signs might include the refineries, Viscose Village, the waterfront, and other points of interest.

Recommendations

- 1. The Borough should participate in and support the Routes 291/13 beautification and East Coast Greenway efforts.
- 2. The Borough should enlist the support, including the financial support, of property owners along the corridor for the Routes 291/13 beautification and East Coast Greenway efforts.
- 3. The Borough should pursue a design option that involves narrowing the U.S. 13 cartway west of the Municipal Building in favor of green space.
- 4. The Borough should lower the speed limit in the business district, stripe bike lanes where they are feasible, and support the creation of a separated path where feasible.

Funding Sources

The federal transportation bill, TEA-21, is a major source of funding for transportation projects. Of the various funding pots in TEA-21, Transportation Enhancements is most suitable for a beautification project. Enhancements applications must have a substantial relation to transportation. Bicycle and pedestrian facilities and landscaping and scenic beautification of a transportation corridor qualify.

In April 2002, the Borough received a Transportation Enhancements grant in the amount of \$1.5 million for streetscape improvements on U.S. 13 and PA Route 452. The proposal includes East Coast Greenway facilities, landscaping, interpretive signs, and street trees. An additional \$420,000 will be provided by local and private funds as the required local match.

Enhancements is not the only funding pot within TEA-21 that could be used to pay for the East Coast Greenway. Bicycle and pedestrian projects are broadly eligible for nearly all TEA-21 funding categories. Congestion Mitigation and Air Quality (CMAQ)

funding is often used for bicycle and pedestrian projects. Safety funds can also be spent on bicycle projects and items like adding left-turn lanes, if it can be shown that there have been accidents related to the absence of a left-turn lane. General highway dollars (STP) and NHS dollars can also be used for bicycle and pedestrian projects. Most elements of the Routes 291/13 Beautification Project would be eligible for nearly all categories of highway funding. The Regional Transportation Committee, a body on which Delaware County has representation, programs transportation projects every two years.

All TEA-21 funding sources require a local match. That match can be raised from other grant programs as well as private contributions and municipal dollars. Coastal zone funds are available from the U.S. Department of Commerce via the State to finance coastal area redevelopment projects. The Pennsylvania Department of Conservation and Natural Resources (DCNR) administers the Keystone grant program, which can fund the entire local share of a bicycle project. The William Penn Foundation is a good source of seed money for this type of project, as is the Pennsylvania DCED. In-kind matches in the form of right-of-way donations also count towards the local match requirement.

CHAPTER 9

COMMUNITY FACILITIES

INTRODUCTION

The various public services and facilities provided by the Borough have an enormous impact on the lives of local residents. This chapter discusses the existing community services and facilities such as police, fire protection, library service, trash collection, and others and offers recommendations for their improvement.

Citizen involvement in providing modern community services and facilities can help create an environment that attracts increased investment from private sources. A municipality whose residents support these superior services is more attractive to both private investors and prospective residents.

EMERGENCY SERVICES

Existing Conditions

The Delaware County Emergency Services Department operates its communications and management divisions from Lima, Middletown Township. This enhanced 911 system, regarded as one of the nation's best, reported 391,129 computer aided dispatch (CAD) calls Countywide in 2001. All requests for Marcus Hook police, fire, and ambulance assistance are received here and routed to the proper local agency. According to 911 statistics, in 2001 there were 4,212 responses for the Borough Police Department and 661 for the Fire Department (481 were combined emergency medical services (EMS) calls). In extreme cases, surrounding municipalities or even those outside of the County can be reached via a common radio frequency.

As noted in the Fire Protection section of this chapter, the two major oil refineries, Sunoco and ConocoPhillips, maintain their own fire-fighting equipment on their properties. Both companies have emergency response plans for dealing with any number of potential large-scale emergencies. The Borough and County maintain emergency response plans as well, working in conjunction with the refineries. Marcus Hook's Emergency Management Director coordinates the local response with all other entities and has authority to initiate actions such as evacuations. The refineries also maintain an "Oil Spill and Pollution Prevention Plan" in cooperation with the United States Coast Guard.

Recommendations

The Borough should continue to support the high level of service provided by the Emergency Services Department and should support the utilization of the GIS database at the Department. The "spatial" component and extensive information storage of GIS increases the speed and efficiency of responses.

The introduction of a GIS to local municipalities would aid in keeping municipal data current and active, but it would require a substantial monetary and educational investment. The usefulness of a GIS goes beyond emergency responses – the capability to track and update information on particular parcels has countless benefits to the local government, such as property assessments, ownership or rental status, and zoning variance history.

As a related action toward aiding emergency services in locating particular addresses, the Borough should undertake an initiative of uniform house numbering and/or curb painting of street addresses to improve visibility of address numbers.

POLICE PROTECTION

Existing Conditions

The Marcus Hook Police Department, which consisted of six full-time and eleven part-time officers in 2001, provides police protection for the community. The Department is located on the first floor of the Municipal Building, where it maintains three jail cells equipped with video surveillance. Civilian staff members include a full-time clerk, seasonal crossing guards (four permanent, with two alternates), and police cell "turnkeys." The Department operates three marked and one unmarked police cars. Bulletproof vests are provided for each officer and are replaced every five to seven years.

According to the Census 2000, the Borough's population was 2,314. Based on the FBI suggested officer-to-citizen ratio of 1.9 full-time officers per 1,000 residents, the Borough would require 4.4 officers.* The Borough currently exceeds this standard with six officers (2.6 full-time officers per 1,000 residents). This is a marked improvement over the 1977 ratio of 1.6 officers, due to both the decline in population and the rise in number of full-time officers.

Candidates for the police force are required to complete 760 hours of Act 120 certification instruction at an approved police academy or school that offers the required courses. An additional 16 hours of instruction are to be completed each year, according to Pennsylvania State Act 180. Delaware County Community College is the principal institution that offers training for local police officers. Finally, patrolmen attend many additional seminars/courses related to specialized aspects of police work. This emphasis on education reflects the Department's policy of requiring advanced training to ensure a highly qualified police force.

Mutual aid agreements exist between the Borough and its surrounding neighbors in much the same manner as with the fire and ambulance services. In addition, State Police officers, based locally in Media, offer support and routine patrols.

^{*} Federal Bureau of Investigation. "Uniform Crime Reports for the United States," 1993.

Recommendations

The Borough should re-institute a Neighborhood Crime Task Force or similar organization, creating a visible and active group in which residents could get involved in assuring the safety of their community. According to Borough sources, all levels of criminal activity have been declining steadily, indicating that police service has been effective and that the residents as a whole have taken an increased responsibility in making Marcus Hook a safer, more livable community. Since criminal behavior often forms in early years, the Youth Aid Panel created in 1999 should be continued as a support group to help educate and guide young people to respect and embrace a law-abiding life-style.

As with most service offices, space is at a premium in the Municipal Building. Although the current Department location is centralized and presently sufficient for the force, the Borough should reevaluate this situation when this plan is next updated. Since this plan recommends the creation of a municipal hub called the town center in the area of the Municipal Building, a possible relocation of the Police Department to other quarters should be considered if the Borough is successful in creating this municipal complex. See the Future Land Use section of Chapter 7.

Additionally, technology and equipment upgrades should be pursued within budgetary limits.

FIRE PROTECTION

Existing Conditions

Marcus Hook has had organized fire protection since 1903, when the Marcus Hook Fire Company was formed. The American Viscose Company, as it developed its manufacturing plant and residential village on the east side of the Borough, established its own Viscose Fire Company in the early 1900s. In 1924, these two independent companies joined forces to form the Marcus Hook Fire Department to provide more effective fire fighting operations. See Map 9-1. These two organizations operated separately until 2002 when they were consolidated. The station of the Marcus Hook Fire Company at 8th and Market Streets will be closed, and the entire consolidated Department will move to an expanded facility presently under construction at the site of the former Viscose Fire Company at 10th Street and Penn Avenue. The cost of the new addition is over \$1.5 million.

The purposes of consolidating the companies were to improve and streamline fire-fighting operations, lower costs of providing effective fire protection, and more efficiently utilize the steadily decreasing numbers of volunteers.

According to statistics from the County Emergency Services Department (911), there were 277 response calls for fire protection services in Marcus Hook in 1998. During weekdays, a typical response consists of between 10 and 15 firefighters, but increases to between 20 and 30 in the evenings and on weekends. In contrast to the increasing national

trend of paid emergency employees, the Marcus Hook Fire Department is fully staffed by volunteers.

Training of fire personnel is an ongoing effort designed to enhance safety and improve performance levels by acquainting firefighters with the latest knowledge and techniques in fire fighting methods and procedures. Members must successfully complete an initial basic training program, "Essentials of Firefighting," and attain advanced levels of competency in order to rise in rank. This training assures that those in command positions have the most up-to-date knowledge available. The recently opened Delaware County Training Center in Darby Township is a 20-acre facility complete with a 5-story drill tower and training simulators. Advanced fire science courses were previously taught at Delaware County Community College.

The viability of the Fire Department lies in the continued commitment of its volunteers. The Borough supports the Fire Department by providing workers compensation and purchasing vehicles for fire fighting. State financial support is minor, providing grant money to the Borough which is dispensed to the Fire Department. These funds go toward purchasing insurance and safety equipment.

The Fire Department has long operated a "junior firefighters" program. This is an excellent step designed to raise the awareness and appreciation of the importance of fire protection and volunteerism.

The ConocoPhillips refinery, located primarily in Trainer Borough but occupying a portion of the southeastern corner of Marcus Hook, performs wholesale refining of a number of petroleum and related products. Fixed monitors, water spray system hose reels, and hydrants are located throughout the plant. Water supply is derived entirely from the Delaware River (150 pounds per square inch (psi) at 12,000 gallons per minute (gpm)) and is independent of the municipal fire water system. The equipment utilized by ConocoPhillips is listed in Appendix D.

The Sunoco refinery has operated in Marcus Hook since 1902. The refinery, which occupies about 350 acres in the Borough and smaller tracts in both Lower Chichester Township and Claymont, Delaware, employs over 900 people. Its fire safety department, maintains an industrialized emergency response team. This unit consists of two full-time employees and seven "first-response" on-site supervisors per shift. These personnel, plus an additional forty volunteers from the community, are accessible twenty-four hours a day, seven days a week. As with the ConocoPhillips refinery, the fire water system is river fed, utilizing six pumps that can draw 17,000 gpm from the river. Additionally, a reservoir located upgrade in Lower Chichester Township is accessible in emergencies, providing a 2,500-gpm flow. Other measures include a large quantity of chemical abating "foam" and 5,000 feet of oil containment boom that can be deployed to protect designated shorelines downstream.

The Borough's large land area devoted to industrial uses requires specialized training and equipment in order to protect the residents and properties. In addition to the public services provided, each of the two oil refineries maintains complete fire fighting capabilities and infrastructure as required by their industry standards. The Borough Fire Department conducts training with the Sunoco and ConocoPhillips refineries to prepare its members to deal with fires on their grounds. The Borough maintains state of the art fire fighting capabilities thanks to the efforts of both of these entities and supportive mutual aid agreements.

Recommendations

Fundraising efforts are already a top priority within the Fire Department and must continue to be in order to offset rising operating costs and increase efficiencies. A regional approach to all aspects, including intermunicipal purchasing of equipment, supplies, and training programs, should be attempted for cost saving as well as efficiency purposes. A greater emphasis on regional service and joint efforts with surrounding companies should be sought to help offset rising operating costs while increasing the level of service.

The Fire Department should maintain or increase its youth programs. The communities that comprise the Chichester School District, or the District itself, should develop a program for high school students to volunteer part-time and begin training to become firefighters. The possibility of earning high school elective credits for students participating in a program of this type should also be investigated with the School District and the State Department of Education.

AMBULANCE SERVICE

Existing Conditions

Two emergency units provide ambulance service in Marcus Hook. The Marcus Hook Fire Department provides basic life support (BLS)* and is licensed by the Pennsylvania Department of Health at the BLS level. The Viscose E-1 vehicle and Marcus Hook Company ambulance both contain automated external defibrillators (AED), a major advancement in emergency scene care. Crozer-Chester Medical Center provides advanced life support (ALS)** with units stationed at satellite locations in Lower Chichester and the City of Chester. The use of these two levels of service is known as a layered response system and is used throughout the County and the state.

As with police and fire services, mutual aid, or "backup," agreements are in place with neighboring fire companies, hospitals, and municipalities. Crozer-Chester Medical Center has sufficient resources and capabilities for multiple ALS responses. A "dual

^{**} Basic life support (BLS) service does not include invasive emergency techniques.

** Advanced life support (ALS) includes the most sophisticated service and the capability to use and administer invasive emergency techniques.

dispatch" BLS system exists with the Trainer Fire Company from 6 a.m. to 6 p.m. each day. This ensures that if the primary responder is unable to make the call, the Trainer unit will already be en-route. The response threshold time of 10 minutes is currently being met.

The EMS of Marcus Hook has evolved into an award-winning group. The number of EMS staff and emergency medical technicians (EMT) has been steadily increasing, reflecting the importance placed on safety and service. Because Act 45 requires that each ambulance dispatched have an EMT on board, efforts to get personnel certified to this level have continued.

Recommendations

The present ambulance service is of very high quality, and there are no further recommendations at this time.

LIBRARY SERVICE

Existing Conditions

The Mary M. Campbell Marcus Hook Public Library, located on the second floor of the Municipal Building, serves all residents of Marcus Hook. The history of the library is as much an account of the character of the Borough as any portion of this plan. During the post-World War I era, Marcus Hook was combining its industrial affluence with an increasing sense of culture, resulting in the need for a library.

Officially opened on October 22, 1923, and helped by the dedicated efforts of Mabel Talley, the library took shape in the former Bell Building at 17 East Post Road. Within a few years, the popularity and civic importance of the library led to its operations being assumed by the Borough, thus helping to ensure its sustained growth and prosperity. Mary M. Campbell, who served the library in various roles for nearly fifty years, was honored as the library namesake in 1981.

The library staff includes a full-time librarian and four part-time employees. Staff members presently do the shelving and conduct the reading programs and children's story time. The 1999 budget totaled approximately \$68,000, the majority of which covers salaries. The Borough, with some state aid, is the primary source of library funding, with nominal income coming from donations and fines. It should be noted that, according to the County Library System, Marcus Hook spends more on library services per capita than any other municipality in Delaware County. Since it is the only public library located within the Chichester School District, it ultimately/indirectly serves the four communities of the District.

The book inventory has steadily grown to a 1998 total of 23,460. In addition to books and periodicals, the library has a variety of tapes and videocassettes to offer for lending. Items of local historical interest are also housed at the library. Table 9-1 details the 1999 hours of operation. Renovations and improvements to the library during the

1990s have included a general increase in space due to a building addition and the installation of a high-density mobile storage system in the new work room. An outdoor ramp and chair lift allow access for those with disabilities.

TABLE 9-1

MARY M. CAMPBELL PUBLIC LIBRARY HOURS OF OPERATION, 2002

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Hours:	10:00 a.m	2:30 -	10:00 a.m	2:30 -	10:00 a.m	10:00 a.m	
	5:30 p.m.	8:00 p.m.	5:30 p.m.	8:00 p.m.	5:30 p.m.	5:00 p.m.	
Total:	7.5 hrs.	5.5 hrs.	7.5 hrs.	5.5 hrs.	7.5 hrs.	7 hrs.	

SOURCE: Mary M. Campbell Library

As a member of the Delaware County Library System since 1981, the library has access to the County system's reference databases. By 2001, electronic barcoding throughout the system will result in an automated circulation. All Marcus Hook citizens with a valid library card can access resources from the twenty-six public and four associate member libraries throughout the County system.

According to the American Library Association's publication, *Planning the Small Public Library Building*, a library should contain a minimum gross floor area of 12,089 square feet per 12,000 people. The 2000 population of 2,314 persons equates to a 2,331 square foot spatial requirement. In the annual reports filed by the library staff, the library occupies 2,651 square feet, and thus continues to meet this standard.

Organized in 1994 as a tax-exempt, nonprofit corporation, the "Friends of the Mary M. Campbell Library" serves to advocate the library as an educational, cultural, and informational resource. Composed of private citizens, this group performs fundraising and publicity for the library.

Recommendations

- 1. The library board should actively seek volunteers to aid in daily functions.
- 2. The library should seek more interaction with private groups. In the past, outside entities have contributed sponsored programs such as the "Science in the Summer" exercises. The existing summer reading programs (for ages 3 to 5 years old, first and second grades, and third and fourth grades) should be fully supported and continued.
- 3. The library should continue its fundraising efforts and seek advice from the County Library System on further ways to expand fundraising capabilities.

MUNICIPAL PROPERTIES

Existing Conditions

Being a small (1.14 square miles) and highly industrialized municipality, the Borough holds a limited amount of land in public ownership. Except for state-owned Route 13 (10th Street), Blueball Avenue, and the portion of PA Route 452 (Market Street) north of 10th Street, all streets and alleys are Borough property. Parking and recreational facilities, noted here due to their Borough ownership, are also discussed in Chapter 8, Transportation, and Chapter 10, Parks, Recreation, and Greenways. Table 9-2 notes the name, location, size, and function of these properties.

TABLE 9-2
MARCUS HOOK BOROUGH-OWNED PROPERTIES, 2002

Name	Location	Size	Function
Municipal Building	10 th & Green Streets	0.3 ac.	Borough offices,
			library, police
			station
Former highway garage	7 th Street & Maiden Lane	0.2 ac.	Currently leased
Pump station	10 th & Walnut Streets	0.2 ac.	Sewage pump
			station
Redevelopment parcel	1 - 3 West 4 th Street	0.2 ac.	As per redev.
			plan
Redevelopment parcel	1/2 West 3 rd Street	0.1 ac.	As per redev.
			plan
Memorial Field	7th & Market Streets	4.4 ac.	Public ball fields
Market Square Memorial	Market Street and Delaware	3.9 ac.	Passive recreation
Park	Avenue		
Viscose Plaza	Plaza & 10 th Streets	0.5 ac.	Passive
			recreation
Williamson Field	McClenachan Terrace	2.4 ac.	Public ball fields
Maiden Lane Playground	11 th Street & Maiden Lane	0.3 ac.	Public
			playground
Market Green median	Market Street between	median	Public open
	2 nd & 4 th Streets	strips	space
Market Street Field	11 th and Market Streets	2.5 ac.	Public ball fields

SOURCE: Borough of Marcus Hook

Municipal Building

The Marcus Hook Municipal Building is located on the northeastern corner of 10th and Green Streets. It was constructed in 1939 as a post-depression Public Works Administration project, featuring Beaux Arts architecture and classical Egyptian-Greek Revival styling with a limestone façade. As the center of local government, it currently

houses the mayor's office, administrative offices, meeting rooms, police department, and library.

Renovations have occurred periodically over its 60-year life. In the mid-1980s, replacement windows and central heating and air conditioning were installed, as well as improved signage, lighting, and a stairwell lift for handicapped access to the second floor. In 1992, a "Municipal Building Facility Study" was completed which resulted in substantial facility upgrades. Phase One consisted of a reconfigured first floor office space, an expanded library workspace, and a Green Street entrance with handicap ramp. Refurbishments to the police station lock-up and conference areas were also completed. Phase Two included renovations of the first floor administrative offices, entry windows, ceilings, lighting, and carpeting. Finally, in 1998, a new roof and library ceiling were installed.

Municipal Parking Lots

Table 9-3 details the extent of municipally owned parking lots, not including street parking, throughout Marcus Hook. As indicated, there are a total of 344 public parking spaces. It should be noted that parking has been improved as a result of implementing the recommendations in the Borough's 1978 comprehensive plan and a 1980 business district study.

TABLE 9-3
MUNICIPAL PARKING LOTS, 2003

Name	Location	Size	Acquired / Leased	Spaces
Lot #1	11 th & Market Streets	1.04 ac.	June 30, 1980	76
Lot #2	915-919 Market Street	0.14 ac.	Sept. 28, 1984	20
Lot #3	10 th / Linwood R.R. spur		Oct. 1, 1954 (yrto-yr.)	19
Lot #4	3 West 3 rd Street	2,938 sq. ft.	June 8, 1995	12
Lot #5	10 th & Green Streets		Sept. 8, 1992 (20 years)	21
Lot #6	Church Street at 9 th Street		July 13, 1896	11
Community Center No. 1	300/302 East 10 th Street (NE corner of 10 th /Yates)	4,200 sq. ft.	Aug. 11, 1989	13
Community Center No. 2	218/220/226 East 10 th	7,200 sq. ft.	Oct. 29, 1991	Not
	Street (NW corner 10 th /			defined
	Yates)			
Williamson Field No. 1	Yates Avenue at Chestnut Street		Oct. 3, 1958	10
Williamson Field No. 2	McClenachan Terrace		Oct. 19, 1990	11
Memorial Field No.1	8 th & Church Streets		Feb. 27, 1989 (15 years)	84
Market Square	Delaware Avenue		1984 & 1985	20
Memorial Park No. 1				
Market Square	Delaware Avenue			68
Memorial Park No. 2				
Parking Area	12 th Street	0.14 ac.	Nov. 21, 1967	17
Parking Area	Walnut & Pine Streets		Aug. 1, 1983 (99 years)	30

SOURCE: Borough of Marcus Hook

Street Lights

In an effort to reduce its operating costs and after conducting a cost analysis, the Borough purchased roughly 300 street lights in 1990 from PECO. By eliminating the PECO rental fee, the Borough was able to recoup its \$21,651 purchase price in the first year. Now the Borough only pays for the energy used and repairs to the network. In October of 1994, the Borough adopted a "Street Lighting Code and Plan," intended to establish a program of consistency in maintenance and upgrading. The Borough is now in the process of converting the entire stock of its luminaries to high-pressure sodium vapor bulbs that are less expensive, longer lasting, and give off a brighter "yellow" glow. The Borough also owns the traffic lights in the community.

Recommendations

The Borough should investigate the feasibility of acquiring parcels in the vicinity of the Municipal Building in order to establish a municipal community complex that could include additional land and buildings for Borough and community uses, small open space and recreational areas, landscaping, benches, and entranceway signage. See the Town Center section in Chapter 7, Land Use.

EDUCATION

Existing Conditions

Marcus Hook has a long and dynamic academic history that has included some form of schooling since 1688. During these early times, the location of schools changed frequently, but the option for education was always there. Of note, in 1876 two schools, Cedar Grove and Rockland, existed, both of which were two-story, two-room brick structures. Cedar Grove, on Penn Avenue, eventually gave way to the American Viscose Company operations.

In 1966, the Borough ceased operation of its own public school district, which at the time included kindergarten through the eighth grade, and joined the larger Chichester School District. This District currently serves the students of Upper and Lower Chichester Townships and Trainer and Marcus Hook Boroughs. Prior to this, middle and high school students could attend public schools in Media or at nearby parochial schools. These private options have included St. James and Notre Dame High Schools for boys and girls, respectively. Presently, Archmere Academy, located just across the Delaware State line, serves grades one through twelve and is regarded as one of the best private schools in the area. Holy Savior School in Linwood, Lower Chichester Township, offers a Catholic education for kindergarten through eighth grade. The Immaculate Conception of Lourdes Catholic Church in Marcus Hook houses a County-run Head Start preschool program.

Marcus Hook Elementary School

The Marcus Hook Elementary School was constructed in 1917 and is the only operating public school in the Borough. The original name of "Marcus Hook Grammar School" still greets visitors over the doors facing Market Street. In those early days, the building housed kindergarten through ninth grade, but it has been gradually scaled back as enrollments have increased, providing instruction to grades kindergarten through four since 1991. During the 1940s and 1950s, substantial additions were made to the existing structure. Major renovations occurred again in 1986, when new windows and other modern amenities were added. This \$2.5 million upgrade, which required closing the school for a year and a half, was to give it 25 to 30 years of future use, extending its utility until roughly 2015. Each classroom is now "wired" to the Internet, and computer applications are increasingly being incorporated into the curriculum.

Racially, the student population is overwhelmingly White, with perhaps 5% Black and a very small number of Indian and Asian children. Within the School District, Marcus Hook students have the highest incidence of lower-income status as determined by federal standards. In 1997-98, this level represented 58.0% of the student body, a much larger percentage than both the District (30.5%) and State (32.3%). Due to these economic factors, these students are eligible for a free or reduced lunch program funded by the U.S.D.A Subsidized Child Nutrition Program. Participation in this program is increasing at all levels throughout the District.

Enrollment for 2002 was 269 in grades kindergarten through four, comprising students from Marcus Hook and Trainer Boroughs. This total represented a small decrease over the recent past, with enrollment expected to remain steady into the foreseeable future. According to the State Department of Education, during the 1997-98 school year, the attendance rate was 95.0%, higher than the 93.5% and 93.3% found throughout the District and State, respectively. During this period, 52.9% of classroom sizes were between 21-23 students, while 35.3% of classrooms had 20 or fewer pupils. These figures compare favorably to state averages of 30.8% and 23.1%, respectively.

Among the programs initiated by special education funding is the development of an Individual Educational Program (IEP) for each student, where their strengths and weaknesses are assessed and coursework designed to achieve a balance. In instances where the student would be better served elsewhere, individuals can be sent to any school in the County, depending upon the needs of the child. The District sends about 20 students each year to the Delaware County Intermediate Unit for special educational services.

The school has gained recognition in the past for being one of the first in the County to participate in the Mainstream Model, which incorporates special needs children into the regular classroom environment. Five teachers provide instruction to special education children. Additionally, the school has taken part in the Instructional Support Team program in coordination with Boothwyn Elementary. This pilot program works to provide more individual education to children through a team approach of

instruction to meet the needs of children at risk. Recent academic highlights have included increasingly high scores on yearly California Achievement Tests, a national barometer of scholastic aptitude.

The school library has a computerized card catalog system, and each student has a personal identification number, allowing instructors to monitor and encourage their reading habits. According to the Pennsylvania Department of Education, in 1997-98, the school library had an estimated 5,200 titles of books, periodicals, pamphlets, maps, videotapes, films, software, and other electronic media. During this period, there were 5,900 individual titles checked out. In 2002, there were 54 computers available for student use, thanks in large part to contributions from the ConocoPhillips refinery.

As the future adult citizens of Marcus Hook, community involvement is stressed at the elementary school. Students participate in most annual festivities in the Borough, such as the visit of the schooner "Pioneer" and events at Market Square Memorial Park. The Cokesbury Methodist Church operates an "Outreach" program that provides tutoring for students two days each week. "Junior firefighter" and cadet programs run by the fire companies help to raise awareness of fire safety and foster the importance of volunteering and community involvement.

Chichester School District

The Chichester School District serves Upper and Lower Chichester Townships and Marcus Hook and Trainer Boroughs. The District operates six schools and had a 2001-02 enrollment of just under 3,800 students, as detailed in Table 9-4. Much of the following information comes from the 2000 and 2002 "Philadelphia Inquirer Report Card on the Schools," based on surveys distributed to school district officials, and the State Department of Education through its website (www.pde.psu.edu).

District wide, enrollment has been on a steady but slow decline over the past decade, but the forecast is for a return to a total student body of over 4,000. Capacity has not been met at any of the current facilities, and the expected increases should not surpass these levels, indicating that no large-scale infrastructure improvements are necessary in the coming decade. Administrative offices are housed in a separate building on the Hilltop Elementary School grounds in Twin Oaks, Upper Chichester Township.

According to the 1990 Census, District-wide resident population was 93% White, 6% Black, and 1% Hispanic. Median household income was \$35,960, and 6.3% of the residents had incomes that ranked below poverty status. Educationally, 74.1% of the residents obtained a high school degree or higher, and median housing value was \$90,685. Additional demographic information for the District is contained in Tables 9-4 and 9-5 below.

TABLE 9-4
CHICHESTER SCHOOL DISTRICT ENROLLMENT, 2002

Year	K-6	7 - 12	Total
1992 – 1993	2,156	1,688	3,844
1995 – 1996	2,207	1,759	3,966
1998 – 1999	2,056	1,794	3,850
1999 – 2000	1,997	1,810	3,807
2000 – 2001	1,941	1,787	3,728
2001 – 2002	1,880	1,879	3,759
2002 – 2003 (projected)	1,881	1,813	3,694

SOURCE: Chichester School District

TABLE 9-5
STUDENT DEMOGRAPHIC COMPARISON
BY SCHOOL DISTRICT, 2000

School District	White (%)	Black (%)	Asian (%)	Hispanic (%)	1998-99 Enrollment
Chichester	88	11	<1	<1	3,812
Garnet Valley	96	2	2	<1	3,003
Penn-Delco	97	1	1	<1	3,336
Chester-Upland	5	88	<1	6	6,582
COUNTY	79	17	3	1	69,802
High Schools Only					
Chichester	88	10	<1	<1	1,156
Garnet Valley	97	2	2	0	865
Sun Valley	97	1	1		1,070
Chester-Upland	3	93	0	4	1,600
COUNTY	79	17	3	1	20,622

SOURCE: Inquirer Report Card on the Schools, 2000

Beyond the standard educational curriculum provided and mandated by the State, Chichester High School offers a wide variety of extracurricular activities meant to broaden the scope of development of its students. These include a myriad of clubs, interscholastic sports, music, theater, and community service opportunities. Academic programs include accelerated and enrichment programs, foreign languages, career exploration, and environmental education. Also offered are art and music "clusters" and tracks for consumer/homemaking and industrial arts/technology instruction. The District has out-of-class educational partnerships with such entities as the Pennsylvania Institute of Technology and Allied Health Programs. An "Adopt-a-Stream Model Project" has been ongoing at the high school level. The fifth grade has participated in a "Lightspan

Partnership," a curriculum-based educational software and Internet product and service that helps increase student interest in learning, parental involvement in their children's education, and productive interaction among teachers, parents, and students.

For further information concerning the School District, refer to its website at www.chichesterschools.net

Recommendations

The District should closely monitor the population changes within its borders so as to ensure cost-efficient operations in the future. According to DVRPC forecasts of November 1999, overall population within the District is expected to increase by approximately 2,200 students by 2010. Regardless of this projected increase and the forecasted enrollments provided by the District, the stated capacity of facilities is sufficient to handle this growth in the near future.

The District should conduct another "Futures Conference" as it did in May of 1993. The goal of this three-day forum was to provide an analysis of the internal and external needs of the District and develop a shared vision for the future. Existing conditions were first identified, the problems assessed, and a mission statement developed. This was performed in compliance with the Requirements for Strategic Planning set forth by the Pennsylvania Department of Education.

CHURCHES

Existing Conditions

There were four church congregations in Marcus Hook in 2001, but at one time there were no less than six different congregations with roots in the Borough. The St. Martin's Church building located on Church Street has the longest history. Believed to be the second oldest church site in the state (1699) and fourth in the nation, its near-river location has served as a central meeting place and focal point for centuries. The current structure, built in 1845, is the third to stand on that spot and the last of its genre in the Borough's Market Square district. The congregation moved in 1967 to a new house of worship in Boothwyn. In 1985, the MHCDC took over control of the property and instituted a comprehensive historic preservation program. The building is currently being leased to the Bible Presbyterian Church until the year 2006.

The Cokesbury Methodist Church was named for the first two American Bishops and dates back to 1835. In 1837, the first house of worship was constructed, and as the congregation grew, it moved into the still-standing structure at Market and Plum Streets in 1871. That year, it was renamed St. George's but eventually changed back to Cokesbury.

Immaculate Conception of Lourdes Catholic Church was established in 1917 at 8th and Green Streets. In 1924 it separated from St. Anthony's parish in Chester to form

its own parish. The Union Gospel Missionary Church was organized and chartered in 1930 and remains today in its original location and building at 1117 Market Street.

Recommendations

There are no recommendations, as religious congregations operate privately and independently.

UTILITIES

Existing Conditions

Sanitary Sewers

Marcus Hook is serviced by a sanitary sewer system, composed primarily of terracotta pipe, owned and operated by DELCORA (Delaware County Regional Water Quality Control Authority). There are, however, a number of cast iron pipes that service the intersection of Delaware Avenue and Market Street. A 15-inch reinforced concrete pipe, paralleling the Maryland division of the Philadelphia/Baltimore/Washington Railroad, serves the Linwood area of Lower Chichester, while an 8-inch PVC pipe serves Market Lane. The Borough also owns a force main that parallels Marcus Hook Creek from the abandoned sewage treatment plant, near the ConocoPhillips refinery and Chester Industrial Track rail line, to the Borough-owned sewage pump station located north of the intersection of 10th Street and Marcus Hook Creek.

Wastewater that flows through the Borough system comes from three major areas: the Linwood area (southern portion of Lower Chichester), Viscose Village, and the remainder of the Borough. Flows from the Viscose Village and Linwood areas converge at the sewage pump station. DELCORA meters the wastewater discharged from the Linwood area before it enters the pump station. All flows leaving Marcus Hook pass through DELCORA's Marcus Hook pump station where they are metered separately. The Borough is then billed by DELCORA for this treatment.

According to DELCORA, average daily flows for Marcus Hook's two metered areas have not experienced any significant fluctuations between 1997 and 1998, registering .86 million gallons/day (mgd) and .81 mgd, respectively. Variations in flows can be attributed to lower levels of wet weather discharges entering the system through inflow and infiltration. Inflow is defined as any surface runoff that enters a sewer system through faulty manhole covers, cross-connections between storm and sanitary sewers, and illegal connections of roof leaders, foundation drains, cellar and yard drains, or catch basins. Infiltration occurs when groundwater enters a sewer system through exposed broken pipe and defective pipe joints or deteriorated manhole walls.

Wastewater generated from Marcus Hook is collected in two 10-inch lines that run the length of Green and Market Streets and intersect with a 15-inch interceptor at 4th Street. The flow is then conveyed to a DELCORA sewage pump station at the site of the

former Marcus Hook Treatment Plant and is pumped to the DELCORA Western Regional Treatment Plant (WRTP) in Chester City via a 36-inch force main.

The industries located west of Green Street are serviced with 12- and 15-inch reinforced concrete pipes. Sunoco has a private line that conveys pretreated wastewater to the DELCORA WRTP. The ConocoPhillips refinery treats and disposes of all of its own wastewater. A primary treatment plant was also in operation at the FMC plant prior to its closing. This property will be connected to the DELCORA force main once new tenants are found.

The Borough Manager has indicated that substantial portions of the Borough's sewer lines were installed prior to the 1930s. The aged sewers may be equated with a progressive deterioration of the system. However, the Borough's sewer maintenance and monitoring program has deferred and/or corrected many problems characteristic of an aging conveyance system.

Act 537 Planning

Marcus Hook recognizes the County's 1972 Act 537 Sewage Facilities Plan as its Official Municipal Act 537 Sewer Plan. The County is currently revising this plan to include updated information for sewage planning in each municipality. If the Borough does not adopt the County's plan, DEP may request that the Borough complete its own.

Water Service

Chester Water Authority (CWA) is responsible for providing Marcus Hook's water supply. CWA is supplied with raw water from the 2.8-billion gallon Octoraro Reservoir located on the Octoraro Creek in Lancaster County, with an auxiliary source provided by the Susquehanna River. The Authority has an allocation permit for the withdrawal of 60 mgd from these two sources. The Authority's daily demand is approximately 34 mgd for all customers in the CWA service area. This authority serves approximately 35,909 customers, diverting approximately 29 mgd (85%) of its flow to Delaware County and approximately 5 mgd (15%) to Marcus Hook.

CWA has one treatment facility located in Little Britain Township, Lancaster County. The Authority's treatment process complies with all federal and state drinking water regulations and consists of a system of disinfection, coagulation, flocculation, sedimentation, and filtration. Water is pumped from this point via a 48-inch transmission line to an 88-million gallon storage facility at Village Green in Aston Township. Gravity lines distribute the water from this point to Marcus Hook's approximately 900 residential and commercial customers. CWA has anticipated meeting future demands by recently increasing the capacity of the treatment and pumping capacity from 45 mgd to 60 mgd.

Electrical and Gas

PECO provides electrical power to the Borough. Industries requiring high power sources are attracted to the Borough because of its proximity to the high power generating station in Eddystone. PECO transmits power to designated drop-off points at each industrial property where it is then the responsibility of the industry to distribute the power appropriately.

As of spring 2002, Florida Power & Light Energy, Inc., of Juno Beach, Florida, is in the process of constructing a natural gas-fired 750-megawatt co-generation facility within the part of the Sunoco property along the riverfront near the Delaware State line. This plant will supply electricity to the Pennsylvania/New Jersey/Maryland power grid. Local benefits will include a more efficient source of steam for Sunoco and larger environmental benefits in energy production due to the state-of-the-art technology. Completion is expected in spring 2004.

Recommendations

1. The Borough should initiate a municipal-wide inspection of sanitary sewers to identify potential problem areas and support corrective actions. Two particular areas of interest are:

Marcus Hook Creek Interceptor: In order to alleviate maintenance responsibilities and potential liabilities attached to the ownership of sewage pump stations and lines paralleling waterways, the Borough should urge DELCORA to appropriate the Walnut Street Pump Station and the associated force main along the Marcus Hook Creek.

Second Street Industrial Collector: Aside from the industrial wastewater that is independently treated and/or conveyed to the DELCORA WRTP, industrial activities west of Green Street convey wastewater via a 15-inch collector that discharges to an 8-inch municipal collector. This reduction in carrying capacity may create a condition where the 8-inch pipe is insufficient to handle the flow. The municipal Engineer should ascertain the flow level at this location to determine whether the 8-inch pipe should be replaced with a larger one or if monitoring flow levels is sufficient.

- 2. The Borough should consider adopting the County's Act 537 Plan Update and implement its recommendations. DELCORA's WRTP is expected to have the capacity to handle the future treatment needs of any development anticipated within the Borough.
- 3. The Borough should seek financing from the State's PENNVEST Program and the County's CDBG Program for any needed rehabilitation of the system.

- 4. The water distribution system described above adequately serves the needs of the Borough. To maintain this level of service, the Borough should encourage CWA to routinely clean and reconstruct the water lines as needed.
- 5. In coordination with other issues, the Borough should investigate the option of burying electric and all other utility lines in an effort to improve the aesthetic look and feel of the Borough, as it is in Viscose Village.
- 6. The Borough should consider changing its street lighting fixtures from standard street lighting to a scheme of "period" lighting to signify the historic heritage and thus add to the charm and atmosphere of the downtown and residential districts. This action would help to improve the livability of the community, as discussed in Chapter 11.

COOPERATIVE ARRANGEMENTS

Council of Governments

One means of implementing larger goals is the establishment of a Council of Governments (COG) of all participating entities. As defined by state law, a COG is a voluntary association of municipalities, joined together by a written agreement. The COG should address policy issues which can be resolved only by the elected representatives of the communities and which affect decisions which must be made in the short run (e.g., within twelve months). The central focus of the COG usually is to serve as a forum for discussion of area-wide (regional) problems but does not require actual consolidation of local municipal governments.

The Borough became a member of the Crum and Ridley Creeks COG in 1993. The COG itself does not have the power to implement decisions or to finance them. Nevertheless, by its formation, local governments commit themselves to the principle of joint action wherever it can be demonstrated to be beneficial for the participating communities. Action could take the form of the individual municipalities agreeing on joint furnishing of services, sharing in purchases of expensive equipment, splitting the salary of an area-wide employee, or resolving to take parallel and coordinated steps to resolve a problem. Monthly meetings are held and attended by the municipal managers, and typically programs are held to educate local officials. The following municipalities comprise the Crum and Ridley Creeks COG: Concord, Edgmont, Middletown, Nether Providence, Newtown, Thornbury, and Upper Providence Townships and the Boroughs of Media, Rose Valley, Rutledge, Swarthmore, and Marcus Hook.

Environmental Advisory Councils

Existing Conditions

The Borough has participated since 1991 in an EAC with Trainer Borough and Lower Chichester Township. This group works to foster communication among the three

municipalities, local industries, businesses, and all other interested parties and individuals. Forums on various topics have been held periodically in the past. This item is further detailed in Chapter 4, Environment.

Recommendations

The Borough should attempt to find new ventures in which to take advantage of the COG and EAC alliances. Issues such as stormwater management, economic development, and resident services are all topics that could be impacted regionally through these groups.

MEMORIALS AND HISTORIC MARKERS

Existing Conditions

Although small in size, Marcus Hook is a community proud of its long history and many accomplishments. This relationship is exemplified by the presence of the memorials and monuments mentioned here and those described in Chapter 3, Historic Preservation.

Market Square Memorial Park along the waterfront is in itself the largest and most visible commemoration in the Borough and contains two Vietnam War monuments. The first is a time capsule of charcoal rubbings of the names of all Delaware County residents listed on the National Vietnam Veterans Memorial in Washington D.C. The other, dedicated on May 30, 1983, stands in the park as a remembrance of Marcus Hook residents and all Americans who served in this war effort. Of note is the fact that a visiting replica of this memorial was staged in the park in October of 1999. Sunoco erected the "Sun Seamen" Memorial statue on October 8, 1949, to honor the men who died while serving aboard their tankers. It is located at Delaware Avenue and Green Street, facing the Delaware River.

In 1998, a commemoration project was begun for all veterans buried in the cemetery of old St. Martin's Church on Church Street, where many of the original headstones are damaged or weathered beyond recognition. This effort, located within the existing cemetery, consists of 72 engraved flat marble stones identifying each veteran buried there. Interred in this cemetery are veterans from the Revolutionary War, War of 1812, Mexican War, Civil War, Spanish-American War, World Wars I and II, and the Korean Conflict. In May 2002, the MHCDC dedicated this Soldiers and Sailors Memorial Walk.

Additional war memorials dot the Borough's landscape. A monument to all 4th Ward residents who served in World War II and the Korean Conflict is located in the Robert F. Haebel Plaza at 10th and Plaza Streets. Across the street from this, in a shelter outside of the American Viscose Company Building, is a plaque commemorating its former employees who served in the military. The lawn in front of the Marcus Hook Elementary School houses two memorials. The first, a World War I memorial, is located

at the corner of 8th and Market Streets, while a World War II memorial sits directly on Market Street. A First Ward memorial, at Market and 3rd Streets, honors those who fought to preserve the "four essential human freedoms."

Recommendations

The Borough should encourage maintenance of existing memorials by the groups that created them. The Soldiers and Sailors Memorial Walk is an excellent project and should be promoted once complete. A comprehensive document of all war memorials should be produced using input from local historians and surviving veterans.

COMMUNITY EVENTS AND ORGANIZATIONS

Existing Conditions

A keen sense of community is bolstered throughout the year by Memorial Day and Holiday parades and other holiday celebrations. Market Square Memorial Park is a central stage for various gatherings and events including the annual Summer Music Festival, Fall Festival, visits of the schooner "Pioneer," and the Holiday Festival of Lights display. Regional social and cultural points of interest in Philadelphia and surrounding counties are easily accessible via I-95 and other nearby roadways.

The primary social halls in the Borough are those run by the fire services. These are used for functions of the fire companies, public occasions, and fundraisers as well as for private rentals. In addition, the Fraternal Order of Eagles maintains a chapter located at Market and 6th Streets. The Borough participates in the "Tree City USA" and annual Arbor Day programs, does tree planting and maintenance year-round, and holds an "environmental week" each year. A listing of annual special events is given in Table 9-6 below. Other events in the late 1990s have included a circus and a traveling replica of the Vietnam Veterans Memorial.

As mentioned in Chapter 6, Housing, the purpose of the MHCDC is to foster activities and facilities that will promote the civic, educational, social, and economic improvement of all citizens, especially those of low and moderate incomes. Operating since 1979, its tax-exempt status allows it to perform many much-needed functions for community improvement. One such endeavor is the reuse efforts within the former FMC building on 10th Street. The Community Center is presently located on the first floor, and it currently or has previously housed a day care facility, a senior area, a recreation hall, and meeting spaces for community groups and organizations. As of 1999, the day care center had moved out and is being privately run as the Marcus Hook Children's Learning Center. The senior center and recreation hall both operate independently of the MHCDC but are still housed within the building.

Recommendations

The Borough should seek joint ventures with neighboring municipalities to bring seasonal activities to the area. Examples could include a summer 3-on-3 basketball tournament that major companies like Pepsi, Gatorade, and Nike sponsor. Corporate/industrial support in this region is very strong and could be used to financially aid such efforts.

TABLE 9-6
MARCUS HOOK COMMUNITY EVENTS, 2001

Event	Date/Time of Year	Location
Breakfast w/ Easter Bunny	Saturday before Easter Sunday	Various locations
Annual visit of historic	Last weekend in April	Market Square
schooner "Pioneer"		Memorial Park
Arbor Day Program	Week of Arbor Day (late April)	Various locations
Memorial Day Parade	Saturday before holiday	10 th /Market Sts.
Mayor's Cup Golf	Third Saturday in June	Various courses
Tournament		
Summer Music Festival	Tuesdays @ 7 p.m. in July and August	Market Square
		Memorial Park
Fall Festival	First Saturday in October	Market Square
		Memorial Park
Halloween Program	October 30 th	Market Square
		Memorial Park
Holiday Parade & Festival of	Saturday after Thanksgiving	Market Square
Lights Display		Memorial Park
Children's Holiday Party	2 nd or 3 rd Saturday in December	Recreation hall

SOURCE: Marcus Hook Borough officials

CHAPTER 10

PARKS, RECREATION, AND GREENWAYS

INTRODUCTION

The Borough of Marcus Hook has an extensive and well-maintained park and recreational system. This is in keeping with the Borough's goal to make the community as livable as possible, particularly given the limited amount of land available for open space and recreation. To that end, Borough officials have worked hard to create recreational areas and establish recreational programs and activities to serve the local population and the County of Delaware. The proposals in this chapter are intended to maximize the effective uses of land and create connections or linkages among walkways, trails, and bikeways to further advance the Borough as a livable and walkable community.

The good condition and adequate supply of recreational facilities is due, in large measure, to implementation of the recommendations made in the 1978 Joint Comprehensive Plan. These actions included the construction and addition of many new facilities and improvements to local parks.

Map 10-1 shows the location of all park and recreational facilities, and Table 10-1 provides a corresponding inventory that includes information regarding their location, acreage, and facilities/amenities.

PRINCIPAL PARK AND RECREATIONAL FACILITIES

Market Square Memorial Park

The pride of the Borough's park system is Market Square Memorial Park, located at the foot of Market Street at the Delaware River. Formerly known as McClure Park, this facility has grown from less than ½ acre to its present size of 5.0 acres since preparation of the 1980 *McClure Park Expansion Study*, which set a goal of 8.8 acres for the park. This park is host to many Borough events including the annual visit of the historic schooner "Pioneer," the Summer Music Festival, the Halloween Program, and the Holiday Parade and Festival of Lights display.

Recommendations

The *Market Square Redevelopment Area Plan* of 1985 set forth directions for development in this entire area, of which the park is only a part. The study noted that the park should be retained for its present uses. Many of the changes in this area will most likely occur at the adjacent former Army Reserve facility.

TABLE 10-1
PARK AND RECREATIONAL FACILITIES, 2002

	NAME	LOCATION	AREA	FACILITIES/ AMENITIES	SUGGESTED IMPROVE- MENTS
1	Memorial Field	7 th & Market Streets	4.4 acres	Basketball, baseball/softball diamond, water fountain, picnic tables, tot lot, pavilion, restrooms, playground, street hockey court, parking lot	Maintain as is
2	Market Square Memorial Park	Market Street & Delaware Avenue	5.0 acres	Fishing area, playground, picnic tables/pavilion, parking lot	Maintain as is
3	Robert Haebel Plaza	Plaza & 10th Streets	0.5 acre	Benches, walkways, trees	Maintain as is
4	Williamson Field	McClenachan Terrace	2.4 acres	Baseball/softball diamond, basketball, tennis courts, playground, parking lot, picnic tables, pavilion, tot lot	Replace basketball rims and nets
5	Maiden Lane Playground	11th Street & Maiden Lane	0.3 acre	Tot lot, including jungle gym and swings	Maintain as is
6	Market Green	Market Street between 2nd & 4th Streets	median strip	Canopy of trees, memorial	See Market Green section below
7	Market Street Field	11th & Market Streets	2.5 acres	Baseball/softball diamond, parking lot	Maintain as is
8	Tindall Park	10th Street	0.4 acre	Benches, trees, walkways	Replace benches
9	Centennial Park	10 th & Green Streets	0.5 acre	Benches, trees, parking lot	Maintain as is

SOURCE: Borough of Marcus Hook

The Waterfront Activity Area sections in Chapter 7, Land Use, and Chapter 11, A Livable Community, discuss proposals for this area in more detail. The waterfront activity area includes Market Square Memorial Park, the former Army Reserve facility, and the adjacent small lots now owned by Sunoco that the Borough would like to acquire and make an integral part of this waterfront area. This entire area totals slightly less than 8 acres.

The Market Square Memorial Park Expansion Study was completed in November 2001. The purpose of the study was to identify alternative uses and associated costs for the reuse of the 1.7-acre former Army Reserve property situated next to Market Square Memorial Park. The Borough had obtained an \$8,000 grant from the federal CZM Program to offset half of the planning contract cost.

Based on this comprehensive plan and the above study, the Borough is proceeding with preparing final plans to convert the former U.S. Army Reserve building into a multipurpose community center including a gymnasium addition to the building. Future plans call for the rehabilitation of the river pier at the stie, the extension of the riverfront promenade, and other site amenities to integrate the new site with the existing Market Square Memorial Park.

Army Reserve Facility

For many years, the Army operations here were very minimal. The property has been grossly underutilized, and the Borough has been trying to acquire this site for some time. It is only through long, persistent efforts that the Borough finally acquired the property in the fall of 2000. The Borough's goal is to develop this area in ways that will complement the adjacent Market Square Memorial Park and contribute toward expanding the role of the waterfront as an important recreational/commercial destination.

Recommendations

Possible uses here may include a small restaurant, shops, a small marina, an amphitheater, and a riverfront promenade. This plan also recommends the revision of the local zoning code to allow for this variety of uses in order to make this area a more desirable destination. Walkways are also recommended to connect this area with other destinations in the Borough. Also see Chapter 7, Land Use.

Memorial Field

As noted in Table 10-1, Memorial Field, located at 7th and Market Streets, contains a variety of active and passive recreational facilities. It is the site of numerous softball games and tournaments each year and has helped the Borough become a center for softball activity in Delaware County. An event that received major interest and broad media coverage was the hosting of the United States Women's Olympic softball team, which played two games against a local women's all-star team in the summer of 2000.

In the past few years, a number of improvements were made here, including the addition of lights for evening ball games and the construction of a recreational service building to house restrooms, a concession room with serving counters, and field and recreational supply storage rooms.

Recommendations

The Borough should continue to attract softball tournaments to this facility and maintain the current, excellent record of high maintenance and repair.

Market Green

The Market Green is the narrow median along Market Street, between 2nd and 4th Streets. Currently, the London Plane trees situated along the sides of the median are in poor condition due to their location abutting the road. This proximity has created high soil alkalinity from the buildup of road salts and other nutrient imbalances. The 1996 *Market Green Master Plan* details the existing condition of the entire median and makes two separate recommendations. Both call for curb reconstruction, decorative walkway and street paving, soil nutrient therapies, and either a complete replanting of new trees or careful in-fill among those that exist.

It should be noted that in the summer of 2001, the Borough obtained \$50,000 from the CDBG Program for Phase 1 of the Market Street Greenway Enhancement Project. This phase, presently underway, encompasses the grassy median between 3rd and 4th Streets and focuses on the passive attributes of the Market Green. It promotes replacing the existing trees with new ones having a caliper of 5½ inches. As of October 2001, tree removal in this section had been completed. The report also recommends a crosswalk at Plum Street to improve pedestrian safety, reconditioning the soil where new trees will be planted, and the placement of these new plantings farther from the road. Phase 2 of this project will include the median area between 2nd and 3rd Streets.

Recommendations

- 1. The Borough should hire an arborist or similar professional to examine the trees here and recommend or perform appropriate measures to preserve them in order to maintain the cathedral-like canopy that enhances the waterfront vista. Consistent with the efforts to establish the waterfront as an important destination, the Borough should further investigate the expansion or creation of an additional planting strip along the center of Market Street between 2nd Street and Delaware Avenue, improving this important vista and entryway from the park.
- 2. The Borough should also investigate the feasibility of reestablishing an open-air market adjoining the Market Green strip. Improvements to Market Green could highlight the historic value of the area while providing for an attractive and dramatic entranceway to the waterfront. This type of market would continue the traditional use of this area, enhance the waterfront as a destination, and raise the Borough's standing as a livable community.

Williamson Field

Williamson Field, located at the northern end of McClenachan Terrace, contains a wide variety of active and passive recreational facilities, including ball fields, picnic tables, and a pavilion. See Table 10-1. Its location makes it particularly convenient to residents of Viscose Village. The wide variety of facilities here serves residents from all age groups.

Recommendations

The Borough should replace basketball rims and nets.

Market Street Field

This field, at 11th and Market Streets east of the Market Street Bridge, is a temporary facility that contains a softball field. There are no permanent concession or equipment buildings here because this area is proposed for a mix of commercial and residential uses. See Chapter 7, Land Use.

Recommendations

Marcus Hook should continue to use and maintain this parcel as a ball field until the Borough obtains proposals for development of the property.

GREENWAY OPPORTUNITIES

Marcus Hook should continue to develop a cooperative network of both active and passive recreational facilities that includes existing areas and takes advantage of new opportunities, including natural resource areas. A greenway system that includes biking and walking paths to link the parks and other destinations in the community would provide for additional recreational areas and devote land to the preservation of natural resources, remnant landscapes, open space, and visual aesthetics. This network would enhance the Borough as a walkable community and would promote a sense of place and community.

Routes 291/13 Beautification and the East Coast Greenway

The Routes 291/13 Greenway Project includes the construction of a walking and bicycling trail along the East Coast. The apparent route would take the Greenway along Routes 291/13, locally called 10th Street. The proposal includes landscaping, directional and interpretive signage, a multi-use path, and bicycle lanes. See Chapter 8, Transportation.

Plans for the Greenway route should include the restoration of an abandoned railroad station walkway running the length of Chestnut Street. The trail might then extend through Williamson Field to connect with the Conrail Spur line right-of-way that runs parallel to Market Street. The Borough has acquired a 15-foot right-of-way along the eastern portion of the triangle of land at the junction of the Conrail Spur line and the former Conrail line running along 5th Street. This right-of-way also connects Penn Avenue and Memorial Field. An alternative or complementary route to the Conrail Spur line would be along Penn Avenue; the Borough owns about 11 feet of land on each side of the roadway that would allow adequate space to create a bicycle/pedestrian trail.

Recommendations

It is recommended that a Greenway feasibility study be conducted for the trail. The project could be considered an urban trail linkage to the bikeway project that is currently being planned as part of the Routes 291/13 Beautification Project and further encompassed within the East Coast Greenway, discussed in detail in Chapter 8, Transportation. The Borough could obtain funding for a study by applying for a grant from the Community Conservation Partnership Program administered by the Pennsylvania DCNR. The Borough should actively participate in public meetings for the project and assign representatives to any committees that are part of this project.

Trail projects are eligible for state finding from DCNR and federal funding from TEA-21 and other programs.

Marcus Hook Creek Greenway

Marcus Hook Creek is bordered mainly by industrial uses as it forms the boundary between Marcus Hook and Trainer Boroughs. There is little useable public access to the creek and at present no reason for anyone to try to go there. The stream is a natural feature that has not been utilized for the use and enjoyment of the residents of the abutting Boroughs. However, it presents the opportunity to create a passive linear park that would elevate the livability of Marcus Hook and Trainer Boroughs.

Recommendations

Marcus Hook should enter into a cooperative project with the Borough of Trainer to perform a feasibility study and develop a joint plan for recreational opportunities and riparian restoration along the publicly accessible sections of Marcus Hook Creek. Access to the privately occupied portions for this purpose should also be sought. The greenway park would provide additional recreational and open space land and a link to the bicycle/pedestrian trail, expanding the network of municipal parks while protecting the environmentally sensitive stream corridor area.

EVENTS AND PROGRAMS

The Borough conducts a number of programs and events of a recreational and civic nature to create a sense of community pride. As noted above, some of these annual events include band concerts, visits from historic ships, and various holiday programs. The Borough also sponsors the Fall Festival and a summer playground program. Community events are detailed in Chapter 9, Community Facilities.

ADDITIONAL RECOMMENDATIONS

It is recommended that the Borough continue to promote the efficient and appropriate reuse of vacant properties and encourage new uses that enhance community character. Preserving space for community interaction dates back to 1701 when William

Penn designated the area between Market and Church Streets as a public marketplace. Buildings such as Blackbeard's Mistress's house and Saint Martin's Church still stand today in the area that once was a weekly farmers' exchange.

Marcus Hook has done a good job of publicizing and acquainting its citizens, as well as those of the County and surrounding areas, with its recreational facilities and programs; however, the Borough could go one step further by developing programs to promote the community itself as a park. Active and passive recreational spaces provide psychological, social, economic, and ecological benefits. Because of Marcus Hook's fully developed, primarily industrial nature, it is important to utilize not only the open spaces and parks but also the downtown and residential neighborhoods to create a sense of community. Providing a pedestrian-friendly downtown with links to the school, parks, community center, and train station would afford residents many of the same benefits they would gain from passive and active recreational areas (see Town Center section in Chapter 7, Land Use).

The Borough should continue to maintain its recreational facilities in good condition and repair equipment that has been broken or has fallen into disrepair. Over the years, the Borough has devoted itself to meticulous care of these facilities. These efforts are to be commended.

CHAPTER 11

A LIVABLE COMMUNITY

INTRODUCTION

In the late 1980s, a new approach emerged to the creation, design, and revitalization of regions, communities, and neighborhoods. Originally, this movement was called "neotraditional" development. Several years later, the ideas and principles of this movement were further refined and renamed "new urbanism." The main purposes of new urbanism were to change modern development patterns by forming more compact, walkable communities characterized by a mix of different uses and housing types built at different densities around a focal point consisting of well-defined civic buildings, green areas, and/or commercial mixed use centers. The goal here was to create a community where residences are located a short distance from and connected to shopping, employment, schools, churches, recreation, and civic and cultural buildings and facilities. Designing communities in this fashion will help to remedy the many problems of suburban sprawl that were created by the prevailing development trends after World War II.

Two other terms are related to, and in some cases stem from, the concepts of new urbanism. These are traditional neighborhood development (TND) and transit oriented development (TOD). TND emphasizes the design and development of a community based on a master plan supported by codes rooted in new urbanist principles. TOD is based on the presence of a major transit route (bus or train) and a major highway that (a) provides good access to rail stations near the roadway and/or (b) serves as a road carrying an important bus route(s). Typical uses encouraged in TODs include high-density apartments or mixed use developments located near public transit stops.

More general terms often used to convey the ideas and concepts of or related to those described above for new urbanism include "smart development," "sustainable development," and "livable communities." In this report we will refer to Marcus Hook in terms of the extent to which it contains, or should introduce, certain components of a livable community.

The purpose of this chapter is to list and describe the features that make a community "livable," note those components that exist in Marcus Hook, and discuss those that can be added or enhanced to make the Borough an even more livable community.

SPRAWL AND LIVABILITY CONTRAST

The term "sprawl" identifies the prevailing present-day suburban development pattern consisting of lots radiating great distances from the town or city center. Development is usually characterized by single use projects where land is devoted to isolated bedroom suburbs, business and industrial parks, or stores and shops spread out along a single highway corridor stretching for miles and isolated from their users or customers. Similarly, schools

and recreational areas are located miles away from the housing subdivisions, forcing parents to drive children to schools, parks, sporting events, practices, and many other activities. This pattern removes independence from those too young or too old to drive and greatly erodes everyone's time by requiring that inordinate blocks of time be devoted to driving to nearly all destinations. Development in this manner accommodates the automobile but deemphasizes the person and creates isolation from others in the community.

The post-World War II building boom initiated the suburban sprawl that engulfed land with large residential lots, strip commercial centers, and highways connecting them all together. In the year 2001, cookie-cutter housing developments and "big-box" retail are still favored, but a return to new urbanist principles is coming back in vogue as communities, citizens, planners, architects, real estate professionals, and others realize the virtues of the communities in which their parents and grandparents grew up.

Based on concepts of new urbanism, "livability" is a combination of physical and psychological factors that create an environment where people interact with their neighbors, children play together in nearby parks, and daily destination points are within walking distance.

PRINCIPAL COMPONENTS OF LIVABLE COMMUNITIES

The main elements of a model "livable" community designed along the lines of a TND are listed here. There should be a town center, with an open space or an institutional use such as a government building, library, or post office. The approximate width of the traditional development should be no greater than ¼ mile from the center to all edges. There should be mixed uses throughout and buildings designed by their type and not function, which allows for future change. Efforts should be made to build on a "human scale" rather than one for the automobile. Trees should be established to benefit pedestrians by providing a canopy of shade and an established feel to the neighborhood. Infrastructure, such as street lamps, hedges, fences, walls, and benches that create a structured feeling while providing pedestrian amenities should also be provided. Some additional components of livable communities are listed below:

Residential

- Shallow setbacks and yards, especially the front yard.
- Front porches creating a transition from and connection between the house and the street.
- Garages accessed by mutual alleyways placed in the rear of properties.
- A mix of housing types such as single-family dwellings, two-family dwellings, and apartments.
- Differences in housing size, amenities, and materials to accommodate different income groups.

Commercial

- Mixed uses such as the corner grocery store on or near the town center or in residential areas.
- Façade improvements, often involving restoration and preservation of original architectural features.
- Street furniture such as distinctive benches and trash receptacles.
- Plazas and small green spaces where possible.
- Parking areas on the street in front of stores, shops, and offices or behind establishments.

Pedestrian

- Sidewalks, crosswalks, walkways, trails.
- Benches, street lamps, bus shelters.
- Multiple destinations within walking distance.

Streets, Alleys, Parking

- A grid street system, with multiple options for ingress and egress.
- Alleys and service lanes.
- On-street parking.
- Narrow streets, tight corners, no cul-de-sacs.

Recreational

- Parks, play fields, and preservation of natural open space areas.
- Scenic views.
- Concerts, festivals, picnics, sports leagues, team contests, dramatic plays, and other presentations.

Psychological/Intangible

- Sense of place.
- Pride in community/neighborhood/home evidenced by providing needed maintenance and repairs.
- Neighborliness.
- Appreciation and celebration of local history.
- Provision of civic events and cultural and recreational programs.

Where possible, the Borough should require or encourage developers of new building projects to incorporate as many of the above features as appropriate for the development in question.

COMPONENTS OF LIVABLE COMMUNITIES PRESENT IN MARCUS HOOK

Small Scale

The total area of Marcus Hook is 704 acres or slightly more than one square mile, making it one of the smallest communities in the County. However, in a very real sense the Borough is even much smaller than that if we do not count the nearly 500 acres occupied by the two refineries on both sides of the town and other industrial uses. After this reduction, the houses, stores, schools, churches, and recreational areas combined cover only about 200 acres, or about one third of a square mile. Therefore, having subtracted the industries, the everyday activities of the residents occur on a very small land area.

Because stores, residential neighborhoods, community facilities, and recreational areas are within a short distance of one another, it is possible for residents to walk or bicycle to most of these places in less than ten minutes – making the automobile unnecessary for many local trips. This accessibility is further emphasized by the fact that there are sidewalks along streets throughout nearly all of the nonindustrial parts of the Borough. The only significant exceptions to this are Penn Avenue and Church Street, between 4th Street and Delaware Avenue. This report recommends sidewalks along these streets later in this chapter.

Distinct Neighborhoods

Another feature of livable communities in the Borough is the existence of several distinct neighborhoods, some of which have a mix of homes, stores, and mixed uses.

Marcus Hook's beginnings can be traced to the Delaware River waterfront. Most of the historic houses and other buildings are located in this area generally bounded by the Delaware River, 4th Street, Green Street, and Church Street. This is one of the two neighborhoods that contain single-family detached dwellings (the other is a short distance north, on the west side of Market Street between 6th and 9th Streets). This neighborhood is also the site of the residential infill housing development projects of the MHCDC that have been responsible for three new single-family detached houses built in 2000 and one constructed in the latter part of 2002. These homes have been built on lots larger than normally found in Marcus Hook. Additional residential redevelopment has been proposed for this neighborhood which contains Market Square Memorial Park and the historic St. Martin's Church. Also see Chapter 3, Historic Preservation.

Another very distinct neighborhood is Viscose Village, located north of 10th Street between Walnut and Spruce Streets. As discussed in more detail in the Historic Preservation chapter, this neighborhood consists of small, attached single-family houses built by the American Viscose Company in 1912 and 1913 as housing for its workers. Both the individual houses and the neighborhood contain a variety of distinctive design and architectural features that should be preserved.

The neighborhood north of 10th Street between Green and Washington Streets consists of attached dwellings that are generally newer than those in most other areas of town. The properties on the west side of Green Street abut the lands of the Sunoco refinery. The Borough Municipal Building, which includes its administrative offices, library, and police department, is located in this neighborhood.

The area between 5th and 10th Streets, Green Street, and the Linwood Spur railroad line contains a wider variety of uses than any other neighborhood in the Borough. It includes single-family detached and single-family attached dwellings, stores and other commercial uses, apartments, mixed uses where apartments are located above commercial uses, an elementary school, playground and ball fields, and a lumber yard.

In addition to its residential neighborhoods, the Borough contains a small business district, large industrial areas, parks, civic buildings, other community facilities, and both recreational and industrial areas fronting on the Delaware River.

The presence of these different neighborhoods with different housing types, buildings built at different times, and a variety of nonresidential uses imparts a richness and small town intimacy and charm to the Borough. This diversity serves to enhance the livability and overall quality of life in the Borough.

Variety of Uses

Unlike many newer bedroom communities, the Borough houses a variety of uses and activities. People can live, shop, work, play, worship, study, create, and play here. Long car trips are needed much less frequently than in communities where only one or two different uses are found. This assortment of uses enables Borough residents to find and partake in various facets of human experience without having to travel beyond the town. For activities and services not available locally, I-95, located less than ½ mile north of the Borough, provides direct access to the major metropolitan centers of Wilmington and Philadelphia.

Houses Located Near Streets/ Small Setbacks/ Front Porches

Nearly all dwellings and commercial uses in the Borough are located on relatively small lots with small setbacks and front yards at the street with the depth of setbacks usually not more than 10 or 15 feet. Also, a large percentage of the houses have front porches. These local features promote interaction between the residents on the porch and neighbors and other pedestrians passing along the sidewalks. This interaction fosters familiarity with neighbors and a sense of neighborhood security and cohesiveness.

This characteristic is in contrast to the prevailing suburban development pattern, where houses are commonly located some 50 feet or more from the street and there is no public sidewalk. The garage and the driveway often occupy a significant and prominent part of the property, and side yards are also large. It is apparent that this type of

development, although it accommodates automobiles very well, works against interaction among residents and in many cases contributes to feelings of personal isolation.

It is evident from the above text that Marcus Hook's layout has important qualities that contribute to the community's livability. However, as previously noted in other chapters, these qualities can also have a negative impact on the neighborhood. Where houses are located close to one another and close to the street, it becomes particularly important to maintain them in good repair. The lack of repair and maintenance becomes more visible and is thus a greater blighting impact on the neighborhood than in cases where houses are constructed at lower densities with larger setbacks. This, together with the fact that a large percentage of the houses are more than 60 years old, underscores the importance of making necessary repairs and maintenance. The positive features of the neighborhoods can be negated by not taking proper care of the dwellings. Also see Chapter 6, Housing, and Chapter 7, Land Use.

Pedestrian Facilities

Marcus Hook is already pedestrian friendly. It has short blocks with good pedestrian connectivity, low vehicle speeds and volumes on most streets outside of the industrial area, and narrow streets that are fairly easy to cross. The business district has shop fronts directly on the street rather than front parking lots. Street parking is present to buffer pedestrians from traffic and contribute to business district vitality.

There are sidewalks and curb cuts on nearly all streets in residential, institutional, and business areas, with the main exceptions being along Church Street between 4th Street and Delaware Avenue in the vicinity of St. Martins Church and along Penn Avenue.

Benches are provided in several places along 10^{th} Street in the central business area. Although there is an abundance of trees, planting additional trees would further enhance the walking experience. In short, the Borough contains many of the components that make a community walkable.

Trees

Trees serve a number of important functions. A tree canopy cools the entire community. Buildings shaded by trees require less energy to cool. People walking along a street shaded by trees stay cooler and enjoy the experience more, as do bicyclists. Deciduous trees are preferable to evergreens, since the latter darken the street on winter days when more light would be welcome. Trees are also an important traffic-calming tool. Research shows that drivers on otherwise comparable streets drive slower on streets with a tree canopy than those on treeless streets. Slower traffic saves lives. Trees do not need a great deal of land; they can be planted in the sidewalk area, a median buffer, or in the parking lane. There are maintenance costs associated with trees, including trimming, leaves and debris, and repairing damage from fallen trees and the buckling of streets and sidewalks. But the amenity and property value benefits of trees are worth the expense. It

should be noted that because of its interest and efforts relating to trees, the Borough has been designated a "Tree City USA."

Based on the recommendations in the 1980 study on the revitalization of the business area, the Borough planted Honey Locust and Bradford Pear trees along 10th Street in two phases during 1981 and 1982. This effort improved the appearance and atmosphere of the shopping experience.

Programs and Events

As noted in Chapter 9, Community Facilities, and Chapter 10, Parks, Recreation, and Greenways, the Borough has a wide range of events and programs for the civic, cultural, and recreational benefit and enrichment of its residents. These include the Summer Music Festival, the Fall Festival, visit of the schooner "Pioneer," Holiday Parade and Festival of Lights display, and a variety of others. It is interesting to note that the Borough, which is the site of numerous softball games and tournaments, hosted an exhibition game of the U.S. Women's Olympic softball team in the summer of 2000.

COMPONENTS OF LIVABLE COMMUNITIES THAT MARCUS HOOK SHOULD PROVIDE, EXTEND, OR IMPROVE

East Coast Greenway Improvements

The proposed East Coast Greenway is a bicycle/pedestrian trail proposed to traverse Marcus Hook on its way through Delaware County. Although it would probably be located along 10th Street, the route may include a diversion to the waterfront and Market Square Memorial Park.

Regardless of separate municipal studies or actions, the Borough should follow and participate in the various aspects of this project. By doing so, it will be in a position to take advantage of this extensive effort and obtain funding and other resources to further develop the Borough as a walkable, livable community. Also see Chapter 8, Transportation.

Marcus Hook Bicycle and Pedestrian Path

A new bicycle and pedestrian trail/path connecting Viscose Village, the Marcus Hook Elementary School, Market Square Memorial Park, and other areas of the Borough is a real possibility. If realized, it would serve an unmet need for off-road exercise paths, where people can jog, walk, and bicycle. Providing this path would represent an important step toward improving local recreational facilities and would significantly enhance the Borough as a livable and walkable community. Also see Chapter 10, Parks, Recreation, and Greenways.

The proposed route would run along the west bank of Marcus Hook Creek on the east, Conrail's Chester Industrial Track on the south, the Linwood Spur line (connecting

the Chester Industrial Track with Amtrak's Northeast Corridor line) on the west, and Amtrak's Northeast Corridor line on the north. Presently, these areas appear to have enough right-of-way to permit a pathway. However, a more detailed review would be required to confirm this.

To connect this route with Market Square Memorial Park, sidewalks should be constructed on at least one side of Penn Avenue and Church Street. These streets have very low traffic volumes and would be safe for on-street bicycling.

Finally, the Borough should fund a feasibility study for a path along this route. Federal funds are available for the construction of such paths once the feasibility has been adequately explored. Contact DCPD's Transportation section for further information.

Pedestrian Facilities

Sidewalks should also be maintained and, where necessary, extended in areas that lead to community facilities and institutions, such as Market Square Memorial Park, the SEPTA train station, churches, and in areas that lead to neighboring communities, such as Trainer and the Linwood portion of Lower Chichester Township. Curb cuts to provide access for disabled persons should also be provided, particularly at corners and entrances to major facilities, such as schools and parks. Painted crosswalks should be maintained to alert drivers of the expected pedestrian crossing points.

To make walking in Marcus Hook more enjoyable and safer, more and larger street trees can be planted to shade residential streets, and certain crosswalks could be upgraded. The Borough should adopt a tree planting and maintenance plan with a special focus on Route 13 to complement the Routes 291/13 beautification and East Coast Greenway efforts. See the Trees section above for a discussion of street trees.

Through its Shade Tree Commission, the Borough should continue its on-going program of shade tree planting, removal, pruning, etc.

Mixed Use Buildings and Developments

Waterfront Activity Area

As discussed in Chapter 7, Land Use, this area is proposed for a mixed use development that could include recreation, amusement, retail, museums, other cultural uses, and parking. The purpose here is to develop this popular waterfront park area to its full potential by adding these other uses to the existing Market Square Memorial Park, creating an area that generates far greater interest and activity than at present. Important aspects of development here would be the introduction of identifying materials and common features creating a specific area identity. Such common features include signage, distinctive walkways, benches, street lamps, and trash receptacles having common designs and colors. Another important element to maximize the positive impact of this waterfront development would be the connection of this area to other important destinations in the Borough through

the use of well signed and marked roads and walkways. Combined, these features would represent a significant enhancement of the Borough as a livable community.

Area Next to the Market Street Bridge

The development of this area with a relocated train station, new commercial and residential uses in a mixed use fashion, and the provision of off-street parking would improve the livability as well as the business climate of the community. It could also create another important destination in town, particularly if development here is carried out in a comprehensive manner that includes the provision of plazas, green areas, and walkways connecting the station and commercial area with the Borough's business district. Also see Chapter 7, Land Use.

Former Viscose Properties

As recommended on the Future Land Use Map, the two former Viscose administrative buildings fronting on 10th Street are recommended for mixed use occupancy in the future. The building opposite Yates Avenue is recommended for mixed and the one opposite Plaza Street for mixed industrial/commercial uses commercial/residential uses. The area east of Penn Avenue is recommended for open space and recreation. Providing these uses, particularly in the form of a linear park along Marcus Hook Creek as recommended in Chapters 7 and 10, will make this location significantly more desirable to future industrial users. This action would also beautify this presently unsightly area and allow public use of the area. The interior of the property is recommended for industrial use. The inclusion of a variety of uses, particularly the two existing buildings proposed for mixed use arrangements and new industrial uses on the interior of the property, will increase the activity in this area and benefit existing and future businesses in the 10th Street and Market Street Bridge areas. These properties, particularly the two existing buildings on 10th Street, should be connected via sidewalks to the train station area and the waterfront activity area. As previously noted, providing these connections will further advance the livability of the Borough.

Programs and Events

The existence of a wide variety of programs and events that reflect the interests and needs of all residents helps make a community desirable and livable. A town can provide a wide range of programs and sponsor or support numerous events, but these will not have the intended benefits on the community if they are not designed for the age, ethnicity, and makeup of other groups having a significant presence in the community. These programs should not generally be skewed for small, special interest groups having minimal representation in the community. In general, Marcus Hook has provided programs and arranged events that generate interest throughout the community. These offerings are discussed in Chapter 10, Parks, Recreation, and Greenways, and Chapter 9, Community Facilities.

The Borough should investigate the possibility of further increasing its role as a venue for softball tournaments and other sporting events. Several softball tournaments are now held in the Borough. Marcus Hook has further established itself as a town capable of holding major sporting events by having successfully hosted an exhibition of the U. S. Women's Olympic softball team in 2000. The Borough should also consider having other sporting events sponsored by companies such as Pepsi-Cola, Gatorade, Nike, or local concerns such as Sunoco, ConocoPhillips, Crozer-Keystone Health System, and similar companies or institutions.

Beautification Efforts

In order to approach its potential as a truly livable place, a community must have a good appearance. Poorly maintained neighborhoods, commercial areas, and entrances to a community prevent the cultivation of a sense of pride in the town. They also send a message to visitors, commuters, and others passing through the Borough that the residents do not have the commitment to take good care of their community, keep it clean, and project a positive image to outsiders. Some actions that would beautify Marcus Hook are discussed below.

Residential Areas

As noted in Chapter 6, Housing, because of the older housing stock, maintenance is an important and ongoing concern. Although most housing units are in good structural condition, many have minor to moderate defects such as chipped or peeling paint or stucco, cracked front steps, weathered window frames, etc. Relatively minor cosmetic work would significantly improve the appearance of many of these properties. Chapter 6 describes rehabilitation programs and available low-interest loans that would assist homeowners in making such repairs/improvements.

In addition to official programs and actions, the Borough should establish periodic clean-up or "fix-up" days in targeted areas of the Borough. Areas in greatest need of such cosmetic improvements, as well as those that are most visible, should be given priority in these efforts. Participants could include property owners, fire company members, scouts, service clubs, and personnel available via the County's Alternative Sentencing Program. The Borough should determine what groups would be most effective in carrying out these efforts. To generate friendly competition and provide an inducement to participate, the Borough and MHCDC could offer an official "best," "most improved," or similar award to the block, area, or neighborhood that does the best job of cleaning, painting, and, in general, improving its appearance.

One of the purposes of this effort would be to establish or nurture an attitude and awareness that emphasizes the good appearance of neighborhoods and enhances community pride. It would also be a good way to get neighbors together in a common mission, strengthen the feeling of community and connection among residents, and emphasize the importance of good maintenance and aesthetic appearance of neighborhoods.

Views Along Market Street and 10th Street

Most traffic moving through the Borough, and certainly that of visitors, follows the 10th and Market Street corridors. The appearance of structures from these main roads should be of special concern to the Borough. A site survey in spring 2001 revealed the following ratings (good or poor):

Intersection of 10th and Market Streets

- Virtually all views from this intersection ranked as "good," except for the southeastern side of 10th Street. The appearance of the commercial buildings here is perhaps the poorest in the CBD.
- The southwestern corner is currently an open lot, creating a "visual hole" backdropped by the sides of the adjacent buildings. The SEPTA bus shelter is at the tip of this parcel on the sidewalk. Filling this void by building a small park or plaza would improve the appearance of this corner.

Intersection of 10th and Green Streets

• "Poor" views here are the deteriorating service stations at the southeastern and northeastern corners and the deteriorating diner on the northwestern corner, adjacent to the Municipal Building.

Intersection of 10th and Church Streets

- The Conrail Linwood Spur railroad line crosses 10th Street just east of this intersection, creating a "poor" north/south view. An electric substation is also directly across from Church Street.
- Remaining views of the CBD and residential area are "good."

10th Street, exiting Borough

- When exiting the Borough to the east, toward Trainer, the views are generally "good," except for the condition of the former Viscose office buildings and the industrial area behind them. Viscose Village provides a nice view to the north. The ConocoPhillips refinery faces the traveler immediately after crossing Marcus Hook Creek.
- Exiting to the west, once past Green Street, the Sunoco refinery parallels 10th Street (on both sides) for the entire distance to the state line. The spectacular views of this complex in this setting are acceptable. Some landscaping has been done along the corridor, and more is suggested in this plan and in larger projects like the Routes 291/13 Beautification Project and the Borough's Route 13 Streetscape Improvement Plan.

Market Street, south of 10th Street

- Views along the length of Market Street toward the Delaware River are generally "good," with a mixture of residential, institutional, and some mixed uses (commercial/residential).
- From 10th Street to 8th Street, there are mixed uses and higher-density residential uses rated "good."
- From 8th Street to 6th Street on the east is the elementary school and Memorial Park and on the west, residential rated "good."
- From 6th Street to 4th Street on the east is a lumber operation and on the west, residential rated "good."
- From 4th Street to Delaware Avenue and Market Square Memorial Park is the best segment of the corridor. The planted median between 4th and 2nd Streets provides a shaded tree canopy rated "good." The structures on the eastern side are generally in better condition than those on the west, but both sides are fairly well maintained. This area has already received three in-fill homes as a redevelopment project, with more to follow.
- The reuse of the former Army Reserve facility will transform a fenced-in and unattractive area and structure to a mixed use waterfront activity area having good appearance.

In order to identify additional areas, properties, and structures with poor appearance, the local Code Enforcement Officials (CEO) should conduct periodic surveys to determine the locations of the dwellings, lots, signs, and other structures or features that contribute to the poor appearance of an area. Particular emphasis should be given to areas visible from 10th Street and Market Street.

Recommendations of the 1980 CBD Revitalization Study

The core of the town, the CBD, is currently at a crossroads and needs specific attention if it is to regain its previous vibrancy and economic vitality. In order to assess the present physical and aesthetic conditions of the business area, DCPD conducted a survey in the spring of 2001 to determine the extent to which the recommendations in the 1980 *Revitalization Plan for the Business District: Blueprint for Action* have been implemented. In general, many positive improvements were completed as recommended, but others either still remain or need to be redone due to the 20-year time gap.

The CBD, as designated in the 1980 study, centers on the intersection of Market and $10^{\rm th}$ Streets, bounded by the Market Street Bridge on the north, Marshall Avenue on the south, Green Street to the west, and the FMC building on the east.

The recommendation of the 1980 study to plant street trees throughout the CBD has been accomplished. As previously explained, this action has had a calming and softening effect on the street. Two species were selected and uniformly planted at approximately 25-foot intervals within the sidewalks.

Street furniture has also been installed. Benches were placed in two primary locations, the privately owned Tindall Park (northern side of 10th Street just east of the intersection) and Centennial Park (southwestern corner of Green and 10th Streets). In most areas, the limited sidewalk width and the presence of metered street parking do not create a favorable location for benches. If areas that allow for locating benches deeper within the sidewalk or even abutting the walls of storefronts become available in the future, they should be investigated. A bus shelter, including a bench, is located on the southwestern corner of the intersection, which is currently an open lot. This shelter should be enlarged to create an upgraded transit stop.

The 1980 study also recommended the provision of distinctive street name signs. Although satisfactory and legible, the existing green-with-white-lettering street signs are very basic and not distinctive or characteristic of the Borough or the CBD. The Borough should consider replacing them with more distinctive signs. This effort could be started in the CBD, later extended to Market Street and the waterfront area, and eventually throughout the Borough. The 1980 report also noted that many of the private business signs were in disrepair, creating a run-down image of the business area. The 2001 survey revealed that, although many signs are indeed in disrepair, a condition perhaps even more visible is their poor, nonprofessional quality. One of the worst signs is the "Pepsi/Marcus Hook News and Tobacco" projecting sign. The Borough's revised zoning code should include provisions that encourage or require that permanent commercial signs be professionally prepared and that they include certain unifying characteristics, colors, or other features representative of signs in the CBD or other specific areas such as the waterfront, the Market Street Bridge area, or the Viscose area.

Other recommendations in the 1980 study called for façade improvements, installation of awnings, plantings, and overall repairs and maintenance. Over time, many of the original building façades have been covered over with stucco, thus hiding their cornices, brackets, window treatments, and intricate architectural features. The addition of awnings at selected locations would add interest and a sense of entrance. Plantings along building fronts would improve the overall appearance of the area by adding interest and "softness" to the buildings.

Finally, an improvement in the overall maintenance and repair level of buildings would upgrade the entire CBD. Loose paint, broken gutters and downspouts, and similar problems accelerate deterioration of structures and detract from any other improvements that have been performed.

Gateways/Streetscape

In order to attain a greener, more aesthetically pleasing image of the Borough for both residents and motorists passing through, Borough Council has allocated \$25,000 for a "streetscapes plan" contract to examine Routes 13 (10th Street) and 452 and design more attractive, well-landscaped entranceways and corridors through the town. The Sunoco Marcus Hook refinery has agreed to contribute \$15,000 toward the cost of this contract. This gesture is a good example of the efforts of local industry to improve the community. Both the Borough and Sunoco refinery should be commended for taking this step toward improving the image of the Borough by creating more attractive principal roadways.

On April 25, 2002, Brad L. Mallory, PennDOT Secretary, announced the State Transportation Commission's approval of \$45.4 million in federal funds for 153 projects that will enhance recreational trails, historic transportation properties, and landscaping along streets and highways across Pennsylvania. The largest grant award went to the Borough of Marcus Hook for \$1.5 million to implement the Routes 13 and 452 Streetscape Improvement Plan. This is the third and final round of enhancement projects made possible by the federal TEA-21 legislation.

Borough Council, with funding assistance from Sunoco's Marcus Hook refinery, hired the firm of Campbell Thomas Associates to prepare the Marcus Hook Routes 13 and 452 Streetscape Improvement Plan. The goals of the project are a follows:

- 1. Improve the overall appearance of the Route 13 corridor through the Borough.
- 2. Improve and encourage pedestrian and other nonmotorized access and use along the corridor.
- 3. Rescale the highway through the Borough, in particular the refinery/industrial area, to reflect the lower volume of traffic, thereby discouraging excessive speed.
- 4. Establish and improve links to cultural and recreational resources along the corridor.
- 5. Establish the link through the Borough to the larger East Coast Greenway.

Marcus Hook is laid out in a very traditional manner of TOD that encourages walking, bicycling, and the use of public transit, as well as driving. The project will completely transform the entire length of Route 13, making this road corridor an attractive route for residents, employees, and visitors, whether they are driving, walking, bicycling, or riding public transit.

CONCLUSION

This chapter has examined the principal characteristics of livable communities, identified those features already present in Marcus Hook, and suggested additional components that the Borough should try to establish, extend, or improve. Some of these features present in the Borough are a compact development pattern with small lots, relatively high density housing, and narrow streets lined with sidewalks located next to shallow front yards that lead to houses with front porches. Many of the lots are served by alleys that provide access to rear garages. The community has a wide range of uses and housing types located close to one another, including a small but distinct downtown area. Churches, schools, as well as a variety of cultural, historic, and civic facilities are also present. Recreational facilities, although compact, appear to adequately serve the community, particularly because of the facilities and events at Market Square Memorial Park. In short, the Borough has many of the same features present in communities where our parents and grandparents lived, before widespread sprawl was created by the expansion of suburbanization and the highway system.

This chapter also reviews characteristics that can be established or enhanced to make the Borough an even more livable community and suggests methods and funding sources. Some programs and methods to accomplish this include a bicycle/pedestrian path connecting the waterfront park with several important local facilities, expansion of pedestrian facilities, addition of new programs and events, and beautification efforts, including coordination with the Routes 291/13 Greenway Project and the East Coast Greenway and those undertaken locally. Several mixed use developments, each having the potential to extend significant economic benefits to the Borough, are recommended at the waterfront, near the Market Street Bridge, and at the former Viscose property.

This chapter also cautions that, although the small lots and compact development pattern are characteristics of livable communities, these same features intensify the impact of poor property maintenance and lack of needed repairs. Therefore, local efforts to require and encourage these efforts are critical. Without a concerted effort in this area, the positive impact of other recommended actions would be reduced. Because the Borough has implemented most of the recommendations of its 1978 comprehensive plan and because it has been active in the preparation of this plan, Marcus Hook appears committed to using this plan actively and translating its recommendations into policies and programs. In this fashion, it will move toward becoming a more sustainable, vibrant, and livable community.

CHAPTER 12

IMPLEMENTATION

INTRODUCTION

This Borough comprehensive plan is a policy document that guides the ongoing development of the Borough. It outlines the community's vision and develops goals, objectives, and policies to achieve its vision. However, the plan, not being a regulatory instrument, only serves as a guide for managing growth and development within Marcus Hook. The comprehensive plan should be the foundation for most local plans, programs, and regulations. The subdivision and land development and zoning ordinances should reflect the goals, objectives, and policies contained in this plan.

Furthermore, Borough officials should consult this plan when confronted with new problems and decisions. In particular, decisions regarding land use, transportation, and community facilities should always be made only after consulting this plan. Proposals for amendments to the zoning and subdivision and land development ordinances should also be evaluated in terms of their compliance with this plan.

The comprehensive plan is only one part of a continuous planning process for the Borough. In order for this plan to be effective, it must continually be revised as new information becomes available and new trends and conditions develop. In any case, the local Planning Commission should review the findings and recommendations of this study annually and make any necessary revisions. It should also conduct a comprehensive review and revision of the plan every three years and make the necessary updates and revisions.

ZONING ORDINANCE

The zoning ordinance is the principal tool for implementing the comprehensive plan and for regulating the use of land. As noted in Chapter 7, Land Use, the existing zoning ordinance contains deficiencies in several areas, and a definite need exists for a revised zoning code. The revised ordinance must be prepared in accordance with this plan, modern zoning principles, and the provisions of the MPC. All revisions, as well as proposed zoning changes, must comply with the consistency requirements of the MPC that are discussed in Chapter 7, Land Use.

The advantages of basing a zoning ordinance on a comprehensive plan are that its provisions and districts will tend to be based on a carefully devised map showing the proposed future uses of land, as opposed to being prepared in a haphazard fashion; it will also require fewer amendments, meet general consistency requirements, and be legally more defensible.

The existing zoning code, adopted by Borough Council on December 4, 1978, as Ordinance No. 711, has several districts that no longer reflect the direction in which the Borough wishes to go. Some of the principal areas where zoning changes should be considered are noted below:

- Industrial districts reduce the number of industrial districts from five to fewer districts.
- Industrial districts for properties north of 10th Street and west of Blueball Avenue, provide regulations that provide for and regulate less intensive industrial or manufacturing operations than the existing refineries.
- R-1 district include additional provisions that allow and control the single-family dwellings on small lots, attaining the densities detailed in Chapter 7, Land Use.
- Conservation district rezone to a Mixed Use district that allows and regulates mixed use development in the waterfront activity area as noted in Chapter 7, Land Use.
- C-1 district rezone the area east of the Market Street Bridge from the existing C-1 district to a Mixed Use district. Provide new mixed use provisions to allow the uses outlined in Chapter 7 for this land banked area. The new district could be named and function as a Mixed Commercial-Residential district based on TOD principles.

For these reasons, a revised zoning code should be prepared. The Borough has already contracted with DCPD to undertake this project following completion of this comprehensive plan.

SUBDIVISION AND LAND DEVELOPMENT ORDINANCE

A subdivision and land development ordinance (SLDO), used in concert with the zoning ordinance, ensures that developments are accomplished in a manner that allows for the maximum protection of the environment, adjacent uses, and the public. The SLDO is applicable when dividing land into two or more parcels, developing property, and laying out streets and utilities. The ordinance also applies in cases of improvement of land with a nonresidential building or the division of land or space among two or more prospective occupants. As such, it applies to single office buildings, apartment buildings, and similar structures as well as to multiple-unit structures. This ordinance controls development features such as street widths, grades and curves, driveways, sight distances, lot design, sewage disposal, storm drainage, and recreational areas for new developments or additions/revisions to existing development.

The Borough does not have its own SLDO and uses the County's ordinance to regulate subdivisions and land developments. It must be noted, however, that there is very little subdivision and land development activity in Marcus Hook, as it is nearly fully developed with few vacant or undeveloped parcels. However, the Borough needs to consider the possibility of large-scale, future, nonresidential subdivisions and land developments, particularly on the lands of the existing refineries. One example of this is the recent land

development of Florida Power & Light Energy, Inc. for a co-generation facility on the Sunoco property. In view of these possibilities, is the use of the County's ordinance acceptable or should the Borough prepare its own ordinance? DCPD is presently preparing a new County SLDO.

The Borough should review the County's new SLDO to determine the extent to which the new County ordinance will include provisions that effectively address the subdivision and development of nonresidential land in the Borough.

OFFICIAL MAP

Article IV of the Planning Code enables municipalities to prepare an official map. This map is intended to show public lands and facilities, including:

- Public streets, watercourses, and public grounds, including widenings, extensions, and openings or closing of same.
- Existing and proposed public parks, playgrounds, and open space reservations.
- Pedestrian ways and easements.
- Railroad and transit rights-of-way and easements.
- Flood control basins, floodways and floodplains, stormwater management areas, and drainage easements.
- Support facilities, easements, and other properties.

When a municipality creates an official map showing locations of existing and future streets as well as other public areas, it reserves this land for future public use. The map is, therefore, an important but seldom-used tool that can help municipalities plan the location and layout of future roads and public areas.

When combined and made consistent with a municipal SLDO, zoning ordinance, and comprehensive plan, an official map can give strength and validity to the Borough's wants and needs for future growth.

Although largely developed, the Borough may nevertheless consider the creation of an official map showing the precise locations of existing and future streets and public areas. The map would include future streets, parks, trails, and other public areas on the vast refinery properties, the Viscose property, and other areas of the community. In this manner, the Borough could take proactive measures in shaping important components of its future development, in contrast to simply reacting to developers' proposals.

CAPITAL IMPROVEMENTS PROGRAM

The Capital Improvements Program (CIP) incorporates planning and budgeting to ensure necessary funds for the purchase of equipment, land, buildings, and major renovations for large, relatively expensive items or projects. Examples of capital improvement projects are storm and sanitary sewers, street improvements, recreational projects, construction or substantial building renovations, and the purchase of equipment

such as fire trucks and police vehicles. Once identified, projects must be prioritized by determining when projects would be of greatest benefit to the community. The ranking of a given project should be based upon the following criteria:

- Consistency with the comprehensive plan recommendations;
- Fulfillment of a pressing need;
- Extent of service:
- Scope of the project, i.e., how many citizens would be inconvenienced if the project were not done;
- Savings that will accrue to the Borough as a result of the project;
- Relationship with other projects in the Borough or abutting municipalities;
- Economic impact; and
- Public support.

Capital programming is a process designed to anticipate what community projects are needed over the next five to fifteen years. The priority assigned to projects reflects their need. Projects may even be completed in phases and last for several years. The Borough must determine what projects should be started immediately, those that should begin the following year, and those that may commence in two or three years. In setting these priorities, it is important to remember that many projects take several years to complete. By ranking projects, the Borough can budget money to spread their cost over a number of years or, under other circumstances, make large purchases in advance of actual use to avoid higher costs later. In short, this process lends a large degree of flexibility to purchasing and budgeting.

Another benefit of establishing a formal CIP is that by demonstrating this planning and budgeting process, chances for obtaining federal and state funding are often improved. Funding agencies are more likely to loan or grant money to a community that documents need and carefully plans for improvement.

In order to establish a capital programming process, the Borough should appoint a committee responsible for the evaluation and prioritization of capital projects. Borough Council, appropriate members of other local boards, the Borough Manager, and the Borough Engineer should work together in selecting and prioritizing projects for the CIP.

The operating budgets adopted annually throughout the period covered by the comprehensive plan are not generally considered to be major implementing devices. However, many of the policies established in the comprehensive plan need to be considered in the operating budget. Facility maintenance, code enforcement, housing rehabilitation,

traffic control, zoning administration, and other activities required to achieve the goals and objectives set forth in the plan are funded annually in the Borough's operating budget.

Presently the Borough does not have a formal, documented CIP and budget. It simply considers mid-range and long-range projects during the course of formulating the annual budget. In order to improve local financial conditions, the Borough should take the following steps:

- 1. Implement a formal CIP and budget designed to establish a long-range program to select, schedule, prioritize, and budget major capital projects.
- 2. Form a committee responsible for the planning, evaluation, and prioritization of capital projects. This group should include members of Borough Council and the Planning Commission, the Borough Engineer, the Borough Manager, and other appropriate officials.
- 3. Promote intermunicipal cooperation, coordination, and purchase of services, products, and capital improvements to reduce costs.

CODE ENFORCEMENT PROGRAM

Code enforcement activity represents another method of implementing this plan. The various codes used by the Borough have an important role in assuring that development, rehabilitation, and conversions are constructed with proper materials and appropriate construction methods, do not fall below industry standards, or create a safety hazard.

The primary responsibilities of the local CEO are to inspect all building components of new construction, additions, alterations, and the repair of structures. This includes:

- Reviewing construction plans for conformance with Borough codes and ordinances.
- Explaining building and plumbing code requirements to contractors and homeowners to assist them in complying with the code requirements.
- Issuing a certificate of occupancy on all residential, commercial, and industrial projects once they have satisfactorily met all BOCA codes.

Based on the 1990 Census, approximately 75% of the structures in the Borough were sixty or more years old. These same structures were more than seventy years old in 2001. Because of this significant percentage of older structures, effective code enforcement becomes increasingly important.

As part of the enforcement effort, the Borough should conduct an inventory of local housing stock with particular emphasis on older buildings. This inventory should provide a basis for rehabilitation efforts targeted towards older, deteriorating buildings. Remedial measures to improve these properties should then be implemented.

Another resource that could assist in improving housing conditions is the Delaware County Housing Rehabilitation Program. To qualify for the program, there must be code violations which can be corrected for under \$20,000. The Borough should consider participating in this program.

In addition to official measures, the Borough should give very serious consideration to the establishment of periodic clean-up, fix-up days in targeted blocks or areas. As noted in Chapter 11, A Livable Community, participants could include property owners, scouts, fire company members, or other groups. The Borough needs to determine what groups would be most effective in carrying out this effort. In order to generate friendly competition and an inducement to participate, the Borough could offer a prize or an official "best block award" to the block or area that shows greatest improvement.

One of the purposes of this program would be to establish an attitude and awareness that emphasizes the good appearance of the Borough and enhances pride in the community. It would also be a way of getting neighbors together and reminding them of the importance of keeping neighborhoods clean and well maintained.

In order to improve code enforcement further, it is recommended that the Borough adopt a use and occupancy ordinance that lists items that must be in compliance before a certificate of occupancy is issued. Also, in order to set standards for proper maintenance, the Borough should adopt the new International Building Code of 2000.

INTERGOVERNMENTAL COOPERATION

Often there are times when the finances, personnel, and/or expertise of one municipality are insufficient to deal with problems that either cut across municipal boundaries or can be handled more cost effectively when provided through a joint municipal effort. The Intergovernmental Cooperation Act of 1972 permits the governing body of a municipality to enter into agreements with other municipalities to pursue any recognized municipal activities or functions. Similarly, the MPC provides for the formation and operation of joint planning commissions and encourages the preparation of multi-municipal comprehensive plans and zoning ordinances.

Another method of intergovernmental cooperation is the formation of a COG. As defined by state law, a COG is a voluntary association of municipalities working together under a written agreement toward the solution of a common problem. Although COGs do not have the power to implement or finance their decisions, their formation provides a forum for discussing common problems and issues. By participating in a COG, a municipality makes regional decisions that directly influence the health and well-being of its residents and business community.

Examples of areas in which joint action can be particularly beneficial are joint purchases of capital equipment such as police and fire protection vehicles and joint purchases of materials and supplies. Joint applications for grants and studies can also prove beneficial to all participants. Transportation improvements, such as synchronizing traffic signals along a corridor, can benefit the community and region.

Marcus Hook currently participates in the Crum and Ridley Creeks COG, in the Coastal Zone Task Force, and in the EAC that includes Marcus Hook, Trainer Borough, and Lower Chichester Township. This cooperation with other municipalities should be commended. However, consideration should be given to the formation of a COG or similar group that includes communities adjacent to or near the Borough and is involved with a wide range of municipal matters.

PLANNING

The completion of this comprehensive plan does not conclude the planning process in Marcus Hook. Rather, it is the first step in entering a new phase of planning for future development and the expansion of municipal facilities and services. The Borough Planning Commission, with the aid of other Borough officials, is the custodian of this plan. Commission members must use, at a minimum, the following techniques to broaden support for and to implement this study:

- The Planning Commission should initiate a continuing planning program that is essential for the implementation of the comprehensive plan.
- The Planning Commission should annually publish summaries of its work, emphasizing the positive role it plays in the ongoing development of Marcus Hook and the role of the comprehensive plan in community life.
- A Planning Committee consisting of members of Borough Council, the Planning Commission, the Zoning Hearing Board, and other local officials should be formed and should formally review the comprehensive plan every three years to ensure that developments, events, and conditions are adequately reflected in appropriate amendments.
- The Planning Commission should participate in the work of the County and regional agencies which have an interest in planning for this area.
- Emphasis should be placed on coordinating efforts with those of surrounding communities. Planning for public facilities including sewerage, water, transportation, and recreational areas as well as land use planning should be coordinated among communities to as great a degree as possible.
- The Borough Council should establish a CIP and should recommend specific projects to be part of the program.

CITIZEN INVOLVEMENT

Shaping the growth of a community requires active citizen participation. The administration of Marcus Hook places great importance on the opinions of its residents and business community. The development of this comprehensive plan is a testament to that commitment.

Our system of law today emphasizes private rights. Therefore, it is the duty of private groups and citizens to act constructively in community affairs. Participation in the planning process must be a positive effort as criticism alone is not sufficient. Citizens offering constructive alternatives are vital to the operation of government.

Each person who is concerned with the future of Marcus Hook should educate himself about the problems and challenges facing the Borough. The comprehensive plan should be used in this informational process. It provides background studies that contain important statistical data and makes recommendations for land use, transportation, and community facilities based on the data.

The comprehensive plan is, however, only a tool to guide development. For it to be successfully implemented, this plan must have the support of the residents of Marcus Hook.

CHAPTER 13

THREE-YEAR ACTION PLAN

INTRODUCTION

The recommendations in this report should be implemented within a ten-year period. The recommendations in this chapter are selected from the preceding chapters and identified here as appropriate for implementation within three years after the plan is adopted. The realization of these initial actions will set the tone and momentum for implementing the remaining recommendations.

THREE-YEAR PRIORITIES

This section identifies recommendations of previous chapters that the Borough feels can be accomplished within the next three years. These short-term actions should become priorities for Borough officials, local business owners, and residents alike. The community must pull together and work as one unit to make this plan succeed in reaching its goals.

It may be important for the Borough to include outside actors such as representatives of the refineries and other local industries, the merchants of the CBD, and other appropriate groups in the process of updating the plan.

Historic Preservation

High Priority Action Plan

The first two recommendations are for immediate action to help the Borough preserve its historic and archaeological resources. These suggestions are important in order to develop a prioritized list of recommendations for further steps in the preservation process. Additional information on the tools for historic preservation are listed in Appendix E of this report.

1. Update the Survey

The 1981 survey represents a starting point for evaluating the historic resources of Marcus Hook. However, an historic resource survey should be an ongoing process through which the survey is updated as new information becomes available. This survey should be immediately updated in the following manner:

- a. Notation of demolitions of any historically significant structures.
- b. Addition of historical or architectural information uncovered since 1981.

2. Appoint an Historical Commission

Borough Council should create an Historical Commission either by resolution or by ordinance. Such an ordinance would state purposes, membership, function, and duties as determined by Borough Council. This Commission would be a volunteer group comprised of Borough residents, preferably with an interest and knowledge of the history of Marcus Hook. Their mission should be to advise Council members on various aspects of historic preservation within the community. For example, they would suggest additional resources to add to the survey, review and recommend the best preservation tools for these as well as other resources, and advise on the effects of proposed demolitions or land development on historic resources.

Presently there is a loose group of people from Marcus Hook and nearby communities who meet occasionally to discuss issues relating to historic preservation. The Borough should encourage these individuals to consider the formation of a more formal Historical Commission for several municipalities in the Marcus Hook area.

Three-year Preservation Plan

The following are historic preservation recommendations for a three-year preservation action plan. They would form an appropriate agenda for an Historical Commission.

The Borough should:

1. Make Nominations to the National Register of Historic Places

Marcus Hook does not have any sites listed on the National Register of Historic Places but has three sites and one district that have been determined by PHMC to be eligible for the National Register. These sites are:

- Blackbeard's Mistress's house
 221 Market Street
 Determined eligible on February 18, 1988
- St. Martin's Church and Cemetery 305 Church Street Determined eligible on August 25, 1987
- Old Market Square Historical District
 Bordered by Market, 4th, and Church Streets
 Determined eligible on February 18, 1988

• Philadelphia, Wilmington, and Baltimore Railroad

It is suggested that an application for National Register status be made for these resources. This is usually an extensive process that may require the skills of a consultant. PHMC has information on funding sources and consultants for National Register nominations.

In addition to the above sites, Viscose Village may also be eligible for the National Register. The Borough, together with DCPD, can submit a request to PHMC for a determination of eligibility (DOE) for the Village. If PHMC gives a positive response, the Borough should then hire a consultant to prepare the National Register application. Information needed for such an application could be provided by the *Viscose Village Historic Resource Assessment & Preservation Plan* (DCPD, 1992) as well as research materials now being gathered for a doctoral dissertation.

2. Encourage Reuse and Revitalization of Historic Buildings

Historic buildings are ideal for adaptive reuse situations, and this in turn can contribute to the revitalization of neighborhoods. The incentive of allowing additional use of historic buildings encourages revitalization. Older industrial and commercial buildings can be rehabilitated using federal tax credits if they are to be used as income producing properties. Amendments to the zoning ordinance would allow these incentives to be legally enforceable. The reuse of these buildings could be authorized as special exceptions by the zoning code.

3. Designate the Market Square Area as an Historic District (Act 167)

This area has a concentration of historic resources and has been determined to be eligible for the National Register. The creation of a locally controlled historic district could protect the area from inappropriate new construction or additions to existing structures. The guidelines for regulating the district would be as flexible as determined by the municipality.

4. Establish a Conservation District for Viscose Village

The unique architecture and characteristics of Viscose Village should be retained with the establishment of a conservation district. This designation could include a funding source for low-interest loans for maintaining the homes and providing residents with advice on maintenance techniques and materials to retain architectural and historical features of buildings.

5. Use Historic Building Patterns as a Model for Future Development

Where possible, maintain historic patterns of circulation, building setback, height, architectural building type, materials, etc., as a model for development guidelines for new development in residential, waterfront, and commercial areas. This could

be accomplished by way of zoning or subdivision and land development codes and freestanding ordinances.

6. Expand the Waterfront Potential

Consider expanding waterfront/recreational areas when/if land is available to take full advantage of economic and social benefits of waterfront property. Any revision to the zoning ordinance should allow for a variety of uses compatible with the waterfront locations and having strong historical significance.

7. Educational/Heritage Tourism

Explore ways to interpret Marcus Hook's existing historic contexts, especially the waterfront and industrial, for school programs and local walking tours.

Environment

Protection of the Borough's natural areas, primarily its creek and river frontages, is a key way to bring the people back in touch with the environment. Remediation of contaminated areas could lead to vast possibilities for how Marcus Hook redevelops in the next ten years.

The Borough should:

- 1. Initiate contact with Trainer Borough, ConocoPhillips, and any other entities owning properties adjacent to Marcus Hook Creek. Devise goals and objectives on how this riparian corridor can be brought into a protected and healthier state. Public accessibility should be a high priority for its entire length. This is a suitable action to be undertaken by an EAC.
- 2. Coordinate current or existing streetscape, beautification, and recreational projects with similar regional and corridor efforts to maximize efficiency and develop a continuity and relationship with other coastal zone communities.
- 3. The level of clean-up of the Viscose property should be consistent with the uses recommended for its different sections in Chapter 7 and on the Future land Use Map.

Demographics

Census data can be used in many ways to both gauge the level of services needed by the community and to obtain the necessary funding to implement such practices.

The Borough should:

1. Update this chapter with complete Census 2000 data when it becomes available in 2002 or 2003.

2. Based on complete Census 2000 figures, determine if the Borough meets population criteria for a variety of funding sources and activities, such as infrastructure improvements, low/moderate-income housing, and recreational amenities.

Housing

Residential housing is the second largest land use in the Borough, following only industrial uses. Its variety of styles, compact nature, and amount of renter-occupied units demand that properties be properly maintained.

The Borough should:

- 1. From surveys and findings in this document, identify homes in need of aesthetic or structural improvements, notify owners, and advise them of the options for improvement, as detailed in Chapter 6, Housing.
- 2. Using redevelopment programs, continue new home building in the riverfront area, attracting interest and homeowners to the Borough.
- 3. Through the MHCDC, assist in rehabilitation or purchase of properties in greatest need of improvement.

Land Use

The future land uses indicated on Map 7-2, which were derived from the survey of existing uses, are representative of the natural grouping of like and compatible uses. To accomplish the development or transformation of uses to this future vision, a combination of resident desires, municipal planning initiatives, and zoning changes must be implemented.

- 1. Aggressively lobby SEPTA for movement and replacement of the existing station to the east side of the bridge when development of this area is undertaken. Communication and expression of this desire should be made immediately.
- 2. Actively participate with DEP in the process of completing environmental clean-up at the former American Viscose properties in the vicinity of 10th Street and Penn Avenue.
- 3. Perform a complete revision of the zoning ordinance per the recommendations in Chapter 7, Land Use.

Transportation

There appears to be no need for new road construction in the Borough. Rather, the existing network needs some restrictions and renovations to ensure safety and provide aesthetic relief. Public transit options are well represented, as are pedestrian facilities.

The Borough should:

- 1. Request that SEPTA reroute the 114/314 bus routes to improve access for local residents. Presently these routes are located two blocks from the Borough, across the Market Street Bridge. Rerouting the lines so that Borough residents would not have to walk across the Market Street Bridge to reach them would improve access to the West Chester area, the Eddystone Commons Shopping Center, and other important destinations.
- 2. Work with PennDOT and elected officials to designate Ridge Road rather than 10th Street/Route 13 as a detour route for I-95.
- 3. Work with PennDOT and elected officials to designate Ridge Road, not 10th Street, as the official truck route to the City of Chester.
- 4. Pursue the inclusion of a four-to-three lane conversion of 10th Street/Route 13 west of Green Street to provide bike lanes and greenery in conjunction with the East Coast Greenway, the Routes 291/13 Beautification Project, and Borough initiatives.
- 5. Re-evaluate traffic signals along Route 13 to determine the need to actuate additional intersections or make other improvements to traffic signals.

Community Facilities

The level of service provided to residents by their community facilities directly affects the livability and sense of community. To this end, opportunities for improvements in service should be explored, with initial attention directed to areas of information technology, consolidation of services, and utilities.

- 1. Investigate the feasibility of establishing a Borough website and GIS to provide easy on-line access to information, including current events, pertinent laws and ordinances, and other Borough-related information. This should be a cooperative effort with the County Emergency Services Department and local police and fire companies. Numerous engineering and consulting firms in the region are capable of designing and hosting such a website. More specific on-line GIS capabilities can be included.
- 2. Based on revised population statistics and forecasts, communicate with the Chichester School District to emphasize the importance of planning ahead for

- fluctuations in the number of school-aged children within the municipalities comprising the District.
- 3. Investigate the feasibility of burying overhead electric and other utility lines to improve the appearance of the Borough, particularly on 10th Street and Market Street.

Recreation

Because of the proactive nature of the Borough in providing and maintaining park and recreational facilities, several projects recommended in this plan are already underway or in the planning stages. Recently, great strides were taken in these initiatives:

- * Market Street Greenway Enhancement Project (Phase 1). This project encompasses the Market Green, the tree-lined median between 3rd and 4th Streets on Market Street. This project is slated for \$50,000 in FY 2001 through the County's Consolidated Plan for CDBG funding. The portion from 3rd to 2nd Streets would follow in the same manner.
- * Market Square Memorial Park Expansion Study. The Borough received an \$8,000 grant through the federal CZM Program and has chosen consultants to prepare this study. This study will include recommendations for the layout and design of the site.
- * Routes 13 and 452 Streetscape Plan. With funding assistance from the Sunoco Marcus Hook refinery, the Borough has chosen a consultant to study these roadways and suggest ways to make them both more aesthetically appealing and functional. The study will include an implementation strategy, timeline, and funding source details.

- 1. Release a Request for Proposals (RFP) and seek funding for the multi-use trail, part of which would follow the Linwood Spur railroad line, as recommended in Chapters 7, 8, 10, and 11. Because of its pedestrian transportation aspect, such a project would be eligible for federal TEA-21 funding. Support could also be sought through the Route 13/291 and East Coast Greenway Project, the CZM Program, and federal CDBG grants.
- 2. Evaluate the recommendations of the Market Square Expansion Study as well as those in Chapters 7, 10, and 11 of this report to gain perspectives from both studies as to the best possible uses and design for the park area.
- 3. Identify and map all vacant or potential sites suitable for recreation and prepare a plan for future action.

Livable Community

The Borough currently has many components of a walkable and livable community and should work towards maintaining and enhancing these features, such as its pedestrian- and bicycle-friendly roads and its recreational and open spaces. Thought should be given as to how to reuse the vacant and underused areas in the Borough so that they are developed with the principles described in Chapter 11.

Chapter 11, A Livable Community, includes concepts from nearly all component chapters, such as Transportation, Recreation, Land Use, and Community Facilities. For this reason, the priority steps below include only those actions not included in the action plan recommendations for these other chapters. The steps below represent the most immediate actions that the Borough should take to move towards enhancing the livability of the Borough.

- 1. Attract mixed use developments to the waterfront, next to the Market Street Bridge, and, after remediation efforts are complete, to the Viscose property.
- 2. Continue existing efforts to maintain recreational facilities and support and expand recreational and community programs and events.
- 3. Create a checklist of components of livable communities based on the Principal Components of Livable Communities section at the beginning of Chapter 11. Use this list to evaluate all projects and encourage the developer to provide as many components as are applicable and appropriate for the project being reviewed. In some cases, the Borough may be authorized to require that some of these features be provided, particularly where they are required in the proposed update to the zoning code.

APPENDIX A

SITES LISTED IN THE MARCUS HOOK HISTORIC RESOURCES SURVEY OF 1981

1. Sea Captain's home

12 E. Delaware Avenue. Built in the late 18th century, this building is one of the earliest structures lining the waterfront. **INTACT**.

2. Rooming house for sailors

14 E. Delaware Avenue. Built in the latter half of the 18th century, this is one of the oldest remaining buildings in the Borough. **INTACT**.

3. **Riverview Hotel**

40-42 E. Delaware Avenue. Built in the 18th century. **DEMOLISHED**.

4. **Spread Eagle Hotel**

46 E. Delaware Avenue. Built prior to 1782, this structure served as a headquarters for sporting gentry and later a stopover for sailors. **DEMOLISHED**.

5. **Beachfront house**

26-28 W. Delaware Avenue. Built between 1850 and 1880, this structure is a remnant of the Borough's status as a resort town. **INTACT**.

6. St. Martin's Church and Cemetery

305 Church Street. Re-built in 1845 (on the site of the 1702 original), St. Martin's is believed to be the second oldest church in Pennsylvania and the fourth oldest in the nation. **INTACT**.

7. Early 18th century structure

198 Market Street. Built in the early 18th century, this house is one of the oldest structures on Market Street. **INTACT**.

8. **John Larkin residence**

202 Market Street. The Larkin residence was mid-19th century; the original core was built between 1700 and 1750, with additions in 1824 and 1920. **DEMOLISHED**.

9. Blackbeard's Mistress's house

221 Market Street. Built in the late 17th century, this is the oldest remaining structure in Marcus Hook. This house is believed to have been home to the Swedish mistress of the pirate Blackbeard. **INTACT**.

10. Early residence on "Discord Lane"

4-6 W. Second Street. Original section was built in the first half of the 18th century. **INTACT**.

11. Colonial house

205 Green Street. Built in the latter half of the 18th century. **INTACT**, (vinyl siding now).

12. Victorian Gothic residence

30 Market Lane. Built in three sections between 1850 and 1880 on the site of an 18th century building. **DEMOLISHED**.

13. First brick house in the Borough

300-302 Market Street. Built in 1845, it served as a residence and ship chancery run by Henry Huber during the 1930s. **DEMOLISHED**.

14. Stone residence on Market Street

301 Market Street. Built between 1700 and 1750, this is one of the oldest stone residences on Market Street. **INTACT**.

15. Victorian Gothic structure

303-305 Market Street. Victorian Gothic structure attached to Cokesbury Methodist Church, which dates to 1871. Currently serves as the parish home. **INTACT**.

16. Cokesbury Methodist Church

307-309 Market Street. Built in the Victorian/Gothic styles, this structure was constructed in 1871 to replace the original Methodist Church that was too small to accommodate the growing congregation. **INTACT**.

17. Colonial vernacular residence

248 Market Street. Built in the first half of the 18^{th} century. **INTACT**, (it's ½ of a twin, may not be original).

18. **Victorian Gothic residence**

610 Market Street. Built between 1850 and 1880, this structure is outstanding for the architectural integrity of the Victorian style frame porch. **INTACT**.

19. **Italianate residence**

706 Market Street. Built between 1860 and 1880, this is a fine example of the Italianate style. **INTACT**.

20. Marcus Hook Fire Company

8th & Market Streets. Built in 1908 with an addition in 1927, this has been the longtime home of Fire Company No. 1. **INTACT**.

21. Immaculate Conception Roman Catholic Church

8th and Green Streets. Built in 1917, this church was a mission church until 1924, when Cardinal Dougherty established Immaculate Conception as its own parish. **INTACT**.

22. Commercial structure with original store front

809 Market Street. Built between 1880 and 1900. INTACT.

23. Semi-detached residences

1001-1015 McClenachan Terrace. Built between 1880 and 1910. INTACT.

24. Queen Anne residence

1006 Yates Avenue. Built in several sections in the latter part of the 19th century. **INTACT**.

25. American Viscose Administration Building

10th Street opposite Plaza Street. Built in 1910. **INTACT**.

26. **Viscose Village**

Area bounded by 10th, Chestnut, Spruce, and Walnut Streets. Planned housing for industrial workers. Built in 1907-1911. **INTACT**.

27. Early residential structure

327 Market Street. Built between 1750 and 1800 (estimate), this two-story structure features three bay windows and a stucco exterior. **INTACT**.

APPENDIX B – DEP ACT 2 FACT SHEETS

APPENDIX C

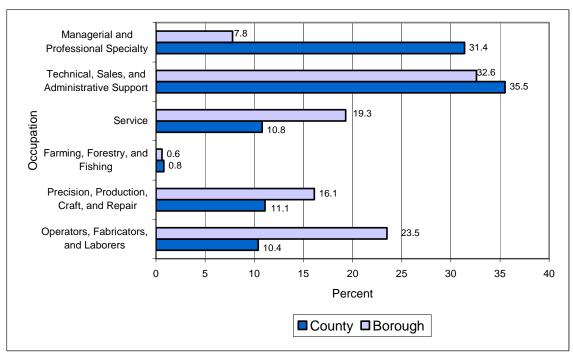
TABLES AND TEXT BASED ON THE 1990 CENSUS

This appendix includes tables and text for selected demographic categories based solely on 1990 Census data. Chapter 5, Demographic Characteristics, contains information for which Census 2000 data was available.

EMPLOYMENT

Although Delaware County still enjoys a relatively large manufacturing base, the majority of the economic activity since the late 1970s in the County and region is service related. It is anticipated that the service sector will provide the greatest job growth for both the region and the Commonwealth. Figure C-1 compares the percentages of Borough and County employees, ages sixteen years and older, by occupation.

FIGURE C-1
EMPLOYED PERSONS BY OCCUPATION, 1990
MARCUS HOOK AND DELAWARE COUNTY



Source: U.S. Department of Commerce, Bureau of the Census

It shows the difference in the composition of the work force of the Borough and that of the County. In 1990, the greatest discrepancy occurred in the managerial and professional category, which accounted for over 31% of County jobs, in contrast to less than 8% for the Borough. Delaware County also employed a slightly larger share of its workers in the

technical, sales, and administrative support areas. Conversely, the Borough led the County in percentage of residents employed in the service (+19%), precision/production/craft/repair (+16%), and operators/fabricators/laborers (+23%) sectors.

In past years, the local refineries provided numerous well-paying jobs for residents of the Borough. However, as these residents were promoted to higher positions, they moved away from the Borough. At this time, a much smaller percentage of Borough residents are employed by the refineries than in previous years. As the Borough implements some of the recommendations in this plan, particularly by providing some new housing and improving those characteristics that make it a more livable community, as outlined in Chapter 11, some additional people who work in the refineries may choose to reside in the Borough.

AGE OF HOUSING

Table C-1 shows the percentage of housing units that, as of 1990, were built during various decades in both Marcus Hook and Delaware County. The most striking figure shows that nearly three quarters of the dwellings in the Borough were built before 1940, making these structures more than 50 years old in 1990 and more than 60 years old in the year 2000. Only about 11% of the housing stock in Marcus Hook was constructed between 1950 and 1990.

In contrast, Table C-1 also shows that the housing stock of the County is newer, with only 28% constructed before 1940. Nearly 55% of the County's housing stock was built between 1950 and 1990.

Although most of these older structures in the Borough appear to be in good structural condition, their advanced age highlights the need for a strong inspection and code enforcement program. It must be noted that the Borough has a good inspection and enforcement program. These initiatives must be continued and further improved. In addition, the Borough needs to improve the appearance of properties and structures through rehabilitation and periodic clean-up, fix-up days in targeted blocks or neighborhoods. Also see Chapter 6, Housing, and Chapter 11, A Livable Community.

HOUSING TYPE AND DENSITY

Figure C-2 below identifies the Borough's housing characteristics by structure type and compares them to those of the County. According to the 1990 Census, a majority (60.2%) of housing in Marcus Hook consisted of single-unit attached dwellings (twin and rowhouse dwellings). This is vastly different from the County, where only 32.3% of the dwellings were listed in that housing category. In contrast, while only 5.9% of the units in the Borough consisted of single-family detached housing, more than 42% of those in the County fell into that category.

Because the Borough has such an uncharacteristically low percentage of single-family detached dwellings (only 5.9%), it cannot offer potential buyers the housing variety

that they seek. Also, as noted above, because the Borough has a large percentage of old housing, it cannot offer buyers the space and amenities that most are seeking today.

TABLE C-1

AGE OF HOUSING STOCK, 1990

MARCUS HOOK AND DELAWARE COUNTY

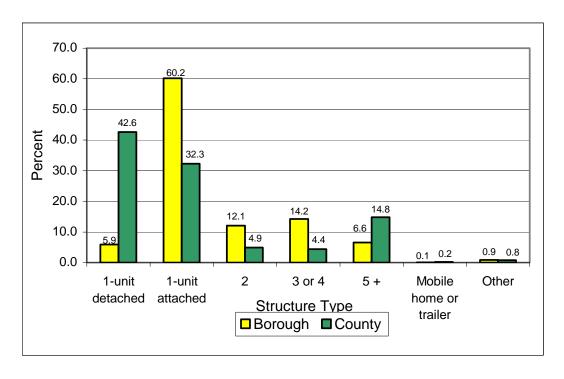
	%					%
Period Built	Borough	%	Cumulative	County	%	Cumulative
Pre 1940	781	74.0	74.0	59,165	28.0	28.0
1940 to 1949	155	14.7	88.7	36,973	17.5	45.5
1950 to 1959	71	6.7	95.4	51,173	24.2	69.7
1960 to 1969	35	3.3	98.7	28,569	13.5	83.2
1970 to 1979	13	1.2	100.0	20,272	9.6	92.8
1980 to 1984	0	0.0	100.0	6,364	3.0	95.8
1985 to 1990	0	0.0	100.0	8,508	4.0	100.0
Total	1,055	100.0		211,024	100.0	

SOURCE: U.S. Department of Commerce, Bureau of the Census

FIGURE C-2

UNITS PER STRUCTURE, 1990

MARCUS HOOK AND DELAWARE COUNTY



SOURCE: U.S. Department of Commerce, Bureau of the Census

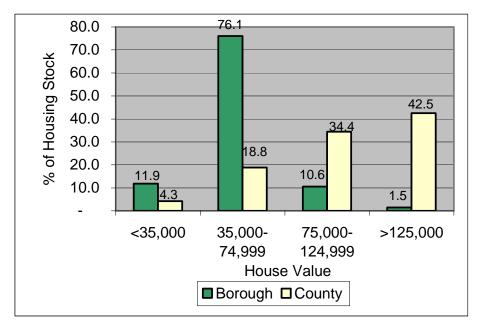
The Borough is taking steps to rectify this situation by encouraging developers to build new single-family detached houses for sale. Several of these were constructed by the MHCDC in 2000 and 2002. See Chapter 6, Housing.

HOUSING VALUE

One particularly significant entry in Figure C-3 below is that, in 1990, more than 76% of the owner-occupied units in Marcus Hook were valued between \$35,000 and \$74,999. This indicates that the predominant portion of the owner-occupied housing stock was in a price range that is affordable for most families. Only about 12% of the units were valued at less than \$35,000, and another 11% were valued between \$75,000 and \$124,999.

In contrast, the County had less than 19% in the \$35,000-\$74,999 bracket. However, the most telling comparison between the two jurisdictions is that the County had a much greater percentage of units in the higher priced ranges, with over 34% valued between \$75,000 and \$124,999 and over 42% valued at more than \$125,000.

FIGURE C-3
HOUSING VALUE, OWNER-OCCUPIED UNITS, 1990
MARCUS HOOK AND DELAWARE COUNTY



SOURCE: U.S. Department of Commerce, Bureau of the Census

HOUSING AFFORDABILITY

One of the strengths of Marcus Hook as a residential community is the affordability of housing. Prospective young residents (ages 25-44) looking to start a

family or career are able to find housing within their budgets. Also see Chapter 6. Table C-2 details the percentage of income spent on housing by renters and homeowners for both the Borough and the County in 1990.

TABLE C-2

PERCENTAGE OF INCOME SPENT ON HOUSING, 1990*

MARCUS HOOK AND DELAWARE COUNTY

	Renter-occupied		Owner-occupied		
% of Income	Borough	County	Borough	County	
Less then 20	23.5%	31.4%	47.8%	55.4%	
20 to 24	11.5%	14.8%	17.9%	14.2%	
25 to 29	6.1%	12.2%	12.5%	10.0%	
30 to 34	8.9%	8.1%	7.2%	6.3%	
35 or more	50.5%	33.5%	14.6%	14.2%	

^{*} Figures calculated without including "not computed" households in Census

SOURCE: U.S. Department of Commerce, Bureau of the Census

Table C-2 could lead one to believe that rental units within Marcus Hook are unaffordable, especially given the large percentage of residents who devote over 1/3 of their income to rent. However, these figures are misleading because Borough residents, on average, earn less than the County average, and thus have less to spend on housing. In 1990, the median gross rent for Marcus Hook residents was over \$100 per month less than the Countywide average. Despite the high percentage of income which rent consumes, Borough housing is a more viable option than residents would likely find in most other parts of the County.

Homeownership is equally viable in Marcus Hook, as a majority of homes cost less than \$75,000 in 1990. Borough residents may spend a large share of their income to purchase a house, but homeownership is available to them in Marcus Hook; outside of the Borough, many of these residents' housing options would be limited.

The Federal Home Loan Bank defines affordable housing as that not exceeding 2½ times the annual family income. Since, the 1990 MFI in the Borough was \$29,183, a family with an MFI that year could pay up to \$72,957 for a home in order to stay within the limit of "affordability" as defined above. Marcus Hook's median home value was \$60,900, well within this limit – thus making the Borough's housing stock affordable to most families. Also see Chapter 6, which mentions affordability of housing as one of the strengths of the Borough.

APPENDIX D

FIRE EQUIPMENT RESOURCES AVAILABLE TO MARCUS HOOK, 2001

MARCUS HOOK FIRE COMPANY

- * <u>1992 Emergency One Pumper</u> (32-1) 1,250 gpm Hose: 1200'-5", 400'- 2" This vehicle carries all of the necessary equipment needed to handle medical emergencies, including an AED.
- * <u>1982 LaFrance Pumper</u> (32-2) 1,750 gpm Hose: 1000' 5", 400' 2" This vehicle carries necessary equipment to handle vehicle rescue, light industrial rescue, and water rescue.
- * <u>1997 Ford/Medtec Ambulance</u>

This ambulance carries the necessary equipment to handle rescue, mass casualty incident operations, light rescue, and CO monitoring. Onboard AED.

* 1993 Ford E-350 Decon/Mass Casualty/Utility Vehicle

This vehicle carries a variety of decontamination and mass casualty equipment as well as some other basic utility type tools. The vehicle is a box truck capable of moving all of this equipment to an incident scene if needed.

VISCOSE FIRE COMPANY

- * <u>1992 Emergency One Pumper</u> E-One Vehicle 46-1 1,250 gpm Hose: 1000' - 5", 400' - 1.75"
- * 1962/1982 Maxim International 75' Aerial Device Vehicle 46-5
 Solid chassis unit with a maximum 75' ladder reach. The truck was originally manufactured in 1962 by Maxim and was fitted with a new International cab and chassis in 1982 with a complement of ground ladders.
- * 1997 Sparten Air Bank and Light Tower

This special purpose vehicle supplies fresh air and lighting to fire personnel at the scene of incidents. Self-contained breathing apparatus (air packs) used by firefighters require periodic filling with fresh air during an incident.

CONOCOPHILLIPS

- * <u>1965 GMC National Foam Tanker</u> (T-86) Stores 1,200 gallons of foam concentrate.
- * <u>1979 International/National Foam Pumper</u> (86-2) Hose: 700' - 5", 700' - 3", 250' - 1¾"

Has a 55-foot squirt tower. Stores 1,000 gallons of foam concentrate, 500 gallon Hydro-Foam portable monitors pump 1,000 gpm.

* <u>1985 GMC/National Foam Pumper</u> - (86-3)

Hose: 1,000' - 5", 500' - 3", (2) 200' - 13/4"

Stores 1,000 gallons of foam concentrate. Pumps 1,250 gpm. 1,000 gpm Hydro-Foam portable monitors.

* 1988 Ford Econovan - (86-8)

Mobile command unit, certified in Quick Response Service (QRS).

* 1989 Ford Utility Truck - (86-5)

Pick-up truck fitted with William's 2,000 gpm Hydro-Foam monitor.

* 1991 GMC/Hackney Rescue - (86-6)

Hazardous materials (HAZMAT)/rescue vehicle. On-board protective clothing, environmental monitoring, decontamination, communication, leak and spill control equipment, EMS and rescue materials.

* 1999 E-One 3500 GPM Pumper - (86-1)

Hose: 1,600' - 5", (5) 250' - 13/4", 500' - 3"

Incident command center, 750 gallons of foam concentrate, 500 gallons of water, 2,000 gpm Hydro-Foam monitor, 1,000 gpm Hydro-Foam portable monitors, assorted rescue and EMS equipment.

- * Williams trailer fire pump (on consignment) Pumps 4,000 gpm
- * Williams Patriot 2 Hydro-Chem trailer monitor (on consignment) 2,000 gpm
- * Hose trailer (3,500' of 5") 1,000 gpm
 With single and dual inlet portable monitors.
- * 14,500 gallons of foam concentrate in tote bins, foam tote manifolds.

SUNOCO

* <u>1984 GMC/Pierce - Pumper</u> - Engine 80-1

Hose: 1,600' - 5", 600' - 134", 400' - 21/2" 1,000 gpm

* <u>1981 National Foam - Pumper Squirt</u> - Engine 80-2

Hose: 500' - 5", 500' - 2½", 100' - 1¾"

1,500 gpm pump, 300 gpm foam pump, 1,000 gallons of foam storage

54' articulating squirt boom

- * <u>1986 Pierce Arrow Pumper</u> Engine 80-3 Hose: 2,300' - 5", 600' - 2½", 400' - 1¾" 2,000 gpm pump, 300 gpm foam pump, 1,000 gallons of foam storage
- * <u>1993 E-1/White GMC Foam Tanker</u> Engine 80-8 Hose: 1,000' - 2½'' 150 gpm foam pump, (2) 1,000 gpm foam cannon, 3,000 gpm foam storage
- * 1989 Ford Grumman Communications/Rehabilitation Unit Command 80
- * <u>1985 Pierce/Dodge Spill Support</u> Support 80-8A
- * <u>1988 Ford 4-door Pick-up</u> Utility 80-4A Hose: 500' - 5", 2,000 gpm foam/water nozzle
- * 1994 Ford Pick-up Utility Body Utility 80-4B
- * <u>Terminator II 2,000 gpm foam/water nozzle on trailer</u>
- * 1991 24' Sea Ark Roustabout Boat/twin 90 hp Johnson engines 80-Marine 1
- * 1994 16' Lund Model wc-16 Adventure Boat / 25 hp Mercury engine 80-Marine 2
- * 1990 24' Sea Ark Transporter / twin 100 hp Evinrude engines 80-Marine 3

APPENDIX E

TOOLS FOR HISTORIC PRESERVATION

The following list and description of various tools that can be used to preserve historic and archaeological resources can be used alone or together, whichever best accomplishes the goals of Marcus Hook Borough. For example, clustered sites can be protected by an historic district around it and scattered sites by a zoning overlay ordinance. Some sites may be placed on the National Register of Historic Places, but there will also be a need to protect those resources which are valuable to the community yet do not meet the criteria for the National Register. The Local Landmark designation such as that given to St. Martin's can be used for the one or two scattered sites, while the core of an historic area is protected by the historic district ordinance.

NATIONAL REGISTER OF HISTORIC PLACES

This Register uses standard criteria to place significant buildings, sites, districts, or objects into a protective state due to the great significance of their history, architecture, archaeology, engineering, or culture. Inclusion on the Register should be actively pursued for the previously mentioned eligible resources. It is important to note that in the National Register process, PHMC makes a DOE decision, which carries with it the same benefits as those resources that are listed. These benefits consist of the following:

- 1. Recognition of the historic significance of the resource
- 2. Special consideration if a federally funded project is found to affect the resource in any way
- 3. Eligibility for federal tax credits
- 4. Qualification for special funding from state or federal sources

Districts or clusters of historic buildings or resources (such as an industrial complex or a village of residences) may also be placed on the National Register as a district. In this case, each building that contributes to the district's historic significance is entitled to the same benefits enjoyed by an individual building on the National Register.

It should also be stressed that the National Register designation places absolutely no obligations on the property owner. The owner is free to do whatever he or she wishes to his property. In extreme cases, the only penalty would be having the National Register designation removed.

Advantages

- A good first step toward recognition of the community's goals for preservation
- Prestige and status is given to the resource and community
- Special consideration is given to the effect of a project funded by state or federal funds

<u>Disadvantages</u>

• It gives no protection from any private or local projects, including alterations by the owner

DEMOLITION ORDINANCE

As a minimum level of protection for historic resources, provisions to control demolition of historic structures can be enacted as part of the local zoning ordinance or as a separate ordinance. Marcus Hook addresses demolition of historic structures in the BOCA building code. A "stay of demolition" provides time for an Historical Commission to seek alternative uses and/or buyers. A required report on the economic feasibility of alternative uses versus demolition may also be required. This would specify that all demolition permit applications for the designated historic resources are reviewed through a specific procedure.

Demolition by neglect is a difficult situation to address and control, as its effects continue gradually over time. The institution of maintenance standards can be enforced to help control this type of "demolition."

If the end result of this stay of demolition is the granting of a demolition permit, then adequate time may be added to the stay period for historical documentation of the building. This would require photographs, measurements, and site plans to be placed with the local historical group or Borough for future reference.

<u>Advantages</u>

- The additional time is very helpful to find another use, another buyer, or to consider alternatives to demolition
- The required documentation is an invaluable historic record if the structure is demolished
- The threat of demolition can bring the community together on historic preservation issues

Disadvantages

• Denial of a demolition permit may be challenged in court

ACT 167 HISTORIC DISTRICT ORDINANCE

Act 167 is the most important legislative tool for protecting clusters of historic resources in a community. It authorizes municipalities to create a district, defined by architectural and historical similarities, in which proposed changes to structures are locally reviewed for consistency with guidelines. It also authorizes additional regulations to the base zoning of the area. The district does not need to be on the National Register to

be eligible for protection under the Act. Act 167 (1961 P.L. 282) authorizes the local government to:

- Delineate an historic district
- Establish an Historical Architectural Review Board (HARB) which is advisory to the municipal governing officials
- Determine guidelines to regulate physical changes within the district
- Create a review process leading to the granting or not granting of a Certificate of Appropriateness for changes within the district

Many misconceptions exist about this type of district. It is true that the design guidelines can be very strict and actually limit the homeowner in many exterior alterations. However, the district's provisions should reflect those characteristics of the district that the community values. The district's provisions can be as strict or lenient as needed to maintain the character of the neighborhood. In some cases, they may only affect new construction or additions. In other instances, they may regulate all changes made, including the color of paint used on a structure. Examples of measures that can be regulated by design guidelines include height, bulk, roof line, proportions, façade openings, compatibility with architectural detail, building materials, color, fences, walls, and exterior lighting. It is strongly advised that the residents of the proposed district be included early on in the planning process in order to elicit their views and opinions.

A HARB is established to review the proposed changes within the district. The Council appoints the HARB membership. The HARB will then recommend to the Council whether or not a Certificate of Appropriateness should be issued after review of the project.

<u>Advantages</u>

- A prescribed process is mandated by the Act
- The guidelines are customized to the neighborhood
- It offers the most effective way to preserve the character as well as the buildings

<u>Disadvantages</u>

- Residents of the district must be involved from the very beginning of the decision-making process to create a district that is acceptable to all
- HARB members must be knowledgeable about architectural styles and interpretation of the guidelines

A possible Act 167 historic district in Marcus Hook Borough could include the Old Market Square district. If this were the case, perhaps guidelines would only affect new construction, setback, height, and bulk requirements in order to retain the smaller scale of the buildings along the square.

HISTORIC ZONING OVERLAY

If the surveyed historic resources in a municipality are widely scattered, a zoning overlay can be added to the underlying zoning district. This overlay has regulations in addition to those of the base zoning. These regulations can address such factors as:

- demolition of historic resources
- design guidelines
- buffering or visual protection
- protection for archaeological sites

Additional incentives can be offered to the property owners of these identified resources. These incentives can include additional uses permitted by special exception or as a conditional use. For instance, an historic house in the overlay zone could be used for a flower shop even though it is in a residential zone on the base zoning map. Strict criteria could be established for these additional overlay uses.

The reviewing body of activities in an historic overlay district is customarily an Historical Commission. This body is an appointed municipal advisory board whose general responsibilities can consist of more than its review function. Like a HARB, the Historical Commission can review proposed plans for appropriate treatment within the overlay zones, but it may also become the "keeper" of the history of the municipality. This would place the Commission in charge of updating the survey, providing information to the citizens, and supervising the National Register nominations.

The historical resources to be protected by a zoning overlay must be included in the survey of historical sites. The survey should be incorporated into the adopted local comprehensive plan. These resources may be classified by their level of significance. Many municipalities use the following three classifications:

- Class I Resources either on the National Register or eligible for the National Register
- Class II Resources significant to local history
- Class III All other resources

In this manner, a greater degree of control can be given to the higher classifications and perhaps minimal control on Class III resources.

Advantages

- May confer additional flexibility of restrictions and incentives
- Areas with a high archaeological potential can be included with protective measures directed toward ground disturbances

Disadvantages

• The criteria for the classification of the historical and archaeological sites must be precise and thorough

LOCAL LANDMARK DESIGNATIONS

Where an important structure is deemed to have special significance to the Borough, a specific ordinance can be enacted for its protection. In Marcus Hook, St. Martin's Church has gained such recognition. This ordinance would generally have two parts. The first section would state the significance of the structure, and the second would establish what actions would not be permitted (such as the removal of an architectural detail) and/or place other limitations on the structure.

<u>Advantages</u>

• Protection of the façade for an outstanding individual structure

<u>Disadvantages</u>

- Must substantiate the significance of the structure
- Must have consent of the owner

HISTORIC CONSERVATION DISTRICTS

Neighborhoods with a special architectural character can be preserved without placing a financial burden on the homeowner through the implementation of a conservation district ordinance. This is similar to an historic district (Act 167) but with less stringent requirements for retaining the authentic historic fabric. For example, homeowners in a conservation district may use aluminum siding, but they may not enclose their front porches because open porches are a defining feature of the neighborhood.

A conservation district ordinance may also offer homeowners a financial incentive by making low-interest revolving loans from the municipality available to them. In addition, the review board established with the district would also serve as an advisory group, offering construction and architectural expertise and advice.

Advantages

- Minimum design control
- Financial incentives
- Expert consultations

<u>Disadvantages</u>

- Destruction of some of the historical fabric of the buildings
- Needs consent of most of the homeowners involved
- Complexity of establishing the financial base for the loans

The defining characteristics of Viscose Village could be preserved by a conservation district ordinance. The Village still retains much of its historical integrity. However, the residents have made numerous alterations that could have been prevented or carried out in a manner in keeping with the architectural character of the area had they been better informed of the alternatives. DCPD can assist the Borough in the preparation of an information package outlining appropriate methods and materials for repairs, alterations, and similar projects. This information could be summarized in the Borough newsletter and distributed along with the applications for building and other permits authorizing work in a conservation district.

LAND DEVELOPMENT AND SUBDIVISION REGULATIONS

An historic preservation section could be adopted into the municipal ordinance regulating land development and subdivisions. The Borough uses the County's SLDO. For example, a developer of a property that contains an historic building can be offered incentives to retain the building and reuse it. One such incentive could provide density and parking bonuses, which is especially valuable in encouraging the reuse of some of the larger late 19th century homes that are now too large for a single family. The historical integrity of entire properties, such as retaining buffering distances and historic landscaping and outbuildings, is important in preserving these resources.

Archaeological sites are especially vulnerable to subdivision and land development projects. The Borough can tailor the County ordinance to add a provision that requires a developer to submit an archaeological assessment plan describing the measures that will be taken to minimize the impact of the project on archaeologically significant areas. An especially important area for Marcus Hook Borough would be the Market Square district. Many historical artifacts relating to the early history of Marcus Hook are quite likely still intact in many areas.

BUILDING CODE EXCEPTIONS

Most building codes, including the BOCA Code, can include exceptions for historic buildings. The BOCA Code allows buildings classified as historic to not meet the mandatory requirements of the code if they are judged to be safe and meet the requirements regarding the public's health, safety, and welfare. That is, historic structures can be held to a less stringent standard for repairs, alterations, and additions. This measure contributes to the preservation of historic uniqueness because modern codes often do not accommodate historic styles and idiosyncrasies.

HISTORICAL COMMISSIONS AND HISTORICAL ARCHITECTURAL REVIEW BOARDS

In the previous paragraphs we have mentioned two different review boards that are possible in a municipality. The following will give a better explanation of how each is used:

The HARB is mandated by the PA Historic District Act, Act 167. The Act specifies that, among other things, this Board will have not less than five members and describes the qualifications of these members. The principal duties of this HARB are to review proposed changes in an historic district and to recommend, either for or against, a Certificate of Appropriateness regarding proposed construction, alterations, or other work in the district.

An Historical Commission is not mandated by law, but, like a HARB, its members are appointed by the municipal officials. The duties of an Historical Commission can vary from overseeing additions to the municipal historic resource survey to serving as a review board for historic overlays, archaeological assessment, or any other advisory functions regarding the historical background of the community.

FAÇADE EASEMENTS/DEDICATIONS

The municipality can create an easement on a building façade or accept dedication of an area or structure. The owner of the property can then claim a federal tax deduction for a charitable donation. This mechanism, which can monitor the future changes to the structure or area, is usually implemented by a nonprofit agency such as the Natural Lands Trust or the Preservation Alliance of Philadelphia. Some municipalities have established their own nonprofit group to accept and monitor the easements.

REUSE AND REVITALIZATION

The appropriate reuse of historic buildings can help revitalize a community. The buildings that are intact can be less expensively rehabilitated in most cases than building new structures. The key to continued preservation is the active and responsible use of a structure. Once a resource is identified as historic and special to the community, its reuse can then be encouraged. Sometimes a change in zoning that allows for a mixed use within one parcel (or even building) can actively promote reuse and rehabilitation.

In most cases, an historic building is adaptable to reuse. However, it is strongly advised and often required that the *Secretary of Interior Standards for Rehabilitation* be used as a guideline for improving and reusing the structure. These guidelines encourage the reuse of original materials or replacement in kind.

TAX INCENTIVES

Sites on the National Register of Historic Places (or those in a National Register historic district) are eligible for federal tax credits for rehabilitation. Although this eligibility applies only to income-producing structures, it can nevertheless serve as an incentive for revitalization of an entire area. The municipality also has the authority to develop its own incentives for preservation. The municipal property tax can be reduced or frozen for a period of time for those historic structures undergoing a rehabilitation or reuse, relieving the property owner of the tax burden, and thus encouraging rehabilitation and reuse of the property.

COMMUNITY DEVELOPMENT BLOCK GRANTS

Another source of funds for the rehabilitation of historic resources is the CDBG Program. These federally sponsored funds are awarded each year for use in low- and moderate-income areas, but there is also a provision for funding rehabilitation of historic buildings.

PUBLIC/PRIVATE COOPERATION

The size and scope of projects sometimes dictate that they must be funded by more than one source. Frequently, large projects that involve more than one building or an extremely large single structure are accomplished using funds from both public and private sources. These could include state or federal preservation grants, foundation and corporate grants, as well as those from local financial institutions.

LEGAL BASIS FOR HISTORIC PRESERVATION

<u>Preservation at the Federal Level</u>

Historic preservation is accomplished through a variety of different tools that are permitted by federal and state law. The National Historic Preservation Act of 1966 created an extensive framework in which preservation could work from the federal government on down to the local level. It expanded the National Register of Historic Places designation, created the State Historical Preservation Offices (SHPO), the Certified Local Government Program (CLG), and the National Trust for Historic Preservation and established funding for historic preservation.

Preservation at the State Level - the SHPO

The state government is mandated by the National Historic Preservation Act of 1966 to have a State Historical Preservation Office. The Pennsylvania Historic Preservation Act of 1978 (Act 273) recognizes the role of PHMC (which is the Pennsylvania SHPO) as having general responsibility for overseeing and advising on historic preservation within the state.

Preservation on the Municipal Level

Preservation efforts are most effective at the local level of regulation. The Pennsylvania State laws which specifically enable local regulation for preservation are the Historic District Act (Act 167) (1961 P. L. 282) and the MPC (Act 247) of 1968, as amended. The MPC amendments of June 2000 state that "zoning ordinances shall provide for protection of natural and historic features and resources" (Article VI, Section 603(g)(2)). The Historic District Act is the specific legislation authorizing municipalities to create historic districts and to oversee construction activity within the district with a HARB.