



# **Community Facilities and Services**



Bethlehem's City Hall



## **Community Facilities and Services**

## ■ Community Facilities and Services Vision

The City of Bethlehem provides or assists in providing many important community facilities and services to residents and businesses. City government plans and delivers some of these services directly. Others are the responsibility of public and semi-public entities that work in concert with the City.

This chapter focuses on the City's involvement in three specific types of community facilities and services:

- **Public Infrastructure** - public water supply, public wastewater treatment, and recycling.
- **Public Safety** - police, fire, and emergency medical services.
- **Education** - the Bethlehem Area School District and other educational institutions.

Bethlehem's goals for maintaining and improving its community facilities and services include the following:

- Continue providing an adequate supply of safe water to local residents and businesses.
- Create a financially sustainable water utility.
- Continue providing cost effective and reliable wastewater treatment services in full compliance with applicable environmental safeguards.
- Fund and implement capital improvements needed to the water supply system and the wastewater treatment system.
- Maximize local recycling and promote use of products made with recycled materials.
- Provide high quality police, fire protection and emergency medical services.
- Coordinate efforts with local schools to provide high quality public education.



## ■ Community Facilities and Services Overview

### Public Water Supply

Bethlehem's public water system is owned by the Bethlehem Authority. The City leases the system from this public authority and is responsible for all operational aspects. The City's water system, which is regulated by the Pennsylvania Utility Commission, serves approximately 111,000 people in ten municipalities.

This service area includes all of the City of Bethlehem, Fountain Hill Borough, and Freemansburg Borough. The service area also includes portions of Allen Township, Bethlehem Township, East Allen Township, Hanover Township (Lehigh County), Hanover Township (Northampton County), Lower Saucon Township, Salisbury Township, and Upper Saucon Township.

Bethlehem's water comes from two man-made reservoirs in the Poconos: the Wild Creek Reservoir and the Penn Forest Reservoir. The Tunkhannock Creek is a supplementary source of supply. All water is treated at a filtration plant and conveyed by gravity to the City. The water is then distributed to users through 500 miles of water lines. Water quality from the system is regularly monitored and exceeds all federal and state safe drinking water standards.

Challenges the City faces related to its water supply system include the following:

- Large Debt - The City's water business is strapped with substantial debt service payments incurred from money borrowed to rebuild the Penn Forest Reservoir dam and build the water filtration plant. Ways that have been discussed to address this problem include rate increases, increasing the sales volume in nearby municipalities and restructuring of the debt. The Bethlehem Authority owns extensive acreage in the watersheds surrounding its Pocono area reservoirs.

The Bethlehem Authority and the City of Bethlehem have actively considered selling some of this land and/or selling conservation easements to some of this land to raise money to help retire the water debt. The Bethlehem Authority recently sold land it considers surplus.

- Capacity Constraints - Bethlehem's public water system has an abundance of high-quality water. However, filtration and water transmission systems cause capacity constraints. Improvements to the filters backwash process and transmission mains are underway.
- Age of In-Ground Infrastructure - As with most large water systems, aged water lines and other in-ground infrastructure needs to be renewed. The City recognizes this is an important part of the water system achieving financial sustainability and hopes to fund necessary upgrades in the future.

### **Public Wastewater Treatment**

Like its water assets, most of Bethlehem's wastewater treatment facilities are owned by the Bethlehem Authority and managed by the City. Bethlehem's sewer service area includes the City of Bethlehem, Fountain Hill Borough, Freemansburg Borough, Hanover Township (Northampton County), and Hellertown Borough. The service area also includes portions of Bethlehem Township, Hanover Township (Lehigh County), Lower Saucon Township, Salisbury Township and the City of Allentown. The City operates a wastewater treatment plant on Shimersville Road that discharges into the Lehigh River and Saucon Creek. Wastewater is conveyed to the plant for treatment via approximately 200 miles of sewer lines and six pumping stations.

Challenges the City faces related to its wastewater treatment system include the following:

- The Treatment Plant - Bethlehem built its wastewater treatment plant in 1955 and expanded it in the early 1970's. Periodic reconditioning and replacement of certain systems at the plant have helped the City keep up with current technology and stay in compliance with environmental regulations. However, the treatment plant needs more organic capacity and major upgrades to fully meet projected demand and help recapitalize the asset.



- Combined System - Bethlehem's sewer system is a permitted combined system that conveys both wastewater and stormwater runoff.
- Infiltration and Inflow - Infiltration of groundwater into the system through cracked sewer lines (infiltration) and extra flows from unauthorized connections (inflow) each contribute to high wet-weather flows.
- Landfilling of Solids - Bethlehem sends biosolids to area landfills. The City is evaluating more cost effective and more environmentally friendly alternatives to this practice.

Periodic rate increases, the sale of wastewater treatment services in areas not now served by the City, and cost reduction are three ways to raise the funds needed to address these wastewater treatment needs.

### Recycling



Recycling removes approximately 58% of all materials from Bethlehem's waste stream

The Bethlehem Bureau of Recycling operates the Theis/Cornfeld Recycling Center on Illick's Mill Road. Approximately 1,400 businesses use the recycling center each month and 4,500 cars visit each week. Under current Bethlehem law, offices in the City are required to recycle mixed paper, cardboard and aluminum cans. Businesses such as restaurants must recycle these same items plus cans and glass. Households are required to recycle cans, glass and plastic. In addition to these items, the Recycling Center accepts yard waste (except grass) from residents of the City of Bethlehem and Hanover Township, Northampton County. This yard waste is processed separately into mulch and compost, which anyone is free to take.

City officials estimate that recycling removes approximately 58% of all materials from Bethlehem's waste stream - materials that would otherwise be deposited at landfills. This total exceeds the State's goal for municipalities, which calls for removing 30% of all materials.

Other than yard waste, and certain minor items such as textiles, everything deposited at the Recycling Center is sold for eventual use in making recycled products. Each year, these sales add revenue to the City's general fund above and beyond the Recycling Bureau's annual operating cost.

Bethlehem benefits financially from recycling in two other ways. The City receives a “performance grant” each year from the State based on how much material its recycling removes from the waste stream. Secondly, a portion of all tipping fees that waste haulers pay at landfills goes back to municipalities in the form of State grants to help fund recycling equipment and related capital improvements.

The City is planning or considering several new initiatives related to recycling. Preparations are underway to propose a new recycling ordinance. This ordinance would add new items to what households and businesses are required to recycle, including paper, newspapers, magazines and cardboard. In 2009, the City will also begin picking up yard waste at the curbside two times per year, along with an annual Christmas tree pickup.

Periodically, Bethlehem evaluates the possibility of contracting directly with one or more companies to handle all trash pickup within City boundaries. Households and businesses now hire trash collectors themselves. Twenty-six trash haulers are authorized to operate in Bethlehem.

A variety of trash haulers means trash pickups occur at different times. Consequently, full trash receptacles are set out somewhere in the City every business day. While this approach promotes small business and consumer choice, it can sometimes reflect poorly on the City’s appearance and complicate traffic flow on narrower streets. One approach suggested in the past would be to create zones so that all trash pickup in a specific sector of the City occurs on the same day of the week. Bethlehem will continue to consider this and other options.



Waste cardboard baler located at the Theis/Cornfeld Recycling Center

Yard waste is processed into mulch and compost at the Bethlehem Compost Center





## Police Protection

As of 2007, the Bethlehem Police Department included 154 sworn officers and 48 civilian employees (including the communications center staff). In addition, there were 60 crossing guards. The Department holds appropriate accreditation and is organized into 6 divisions:

- Community Patrol
- Traffic
- Investigations (including a Crime Scene Unit and Vice)
- Staff (including training, accreditation and other staff functions)
- Communications (with a full phase 2 compliant emergency 911 center)
- Records



Community police substation on Linden Street

When the Sands BethWorks casino opens in 2009, additional traffic and visitors in the City will increase demands upon the Police. The City will continue to assess these impacts. General needs for additional training, investigative, anti-gang and vice staff and emergency medical capacities will also continue to be assessed regularly. Bethlehem is initiating a study of space needs for all City departments. Police needs will be assessed as part of that analysis.

Bethlehem is committed to community policing, which emphasizes partnerships between police and the community. There are 22 organized block watch groups in the City. In addition to police headquarters at City Hall, police officers are stationed at 11 substations located throughout Bethlehem and Bethlehem Housing Authority properties. The City is divided into four police precincts with a major substation in each precinct.

Bethlehem has lower crime rates than many cities. In 2005, the City's violent crime rate was lower than any other city in the state with more than 30,000 residents. However, there have been increases in drug-related crime and gang activity. Unfortunately, many Federal funding programs that assisted police have been eliminated.

### Emergency Medical Services (EMS)

Bethlehem currently has an EMS staff of 24 full-time paramedics and 16 part-time paramedics. The City's EMS responds to many different types of calls, including calls for mutual aid in adjoining municipalities and from hospitals to nursing homes, in addition to its regular duties. The EMS operates as a part of the Bethlehem Fire Department.

As part of a Statewide trend, Bethlehem's EMS has experienced a tremendous increase in service calls—a 33% increase in the last seven years. This demand has necessitated more staffing and vehicles. Consequently, the City will also look closely at EMS space needs in the upcoming Citywide space needs analysis.

The City is completing a new electronic system that will provide preference to emergency vehicles at traffic signals. The greatest congestion problem for emergency vehicles is around the Hill-to-Hill bridge, particularly for ambulances heading towards St. Luke's Hospital.

### Fire Protection

As of 2007, the Fire Department included 113 firefighters and 2 support staff-persons. The firefighters include 104 line firefighters and 5 inspectors. All new firefighters are also trained as emergency medical technicians. Primary fire apparatus includes 2 aerial ladder trucks and six engines (pumpers). The Department replaces equipment on a regular basis. Their intent is to purchase a new aerial ladder truck in 2009 that would allow one of the current aerials to be placed in a reserve.

All five existing fire stations are well-located, except in the future it may be desirable to re-establish a fire station in the southeastern part of the City as new development continues. As with police and fire services, the City is now evaluating current and future space requirements for the Fire Department.

Bethlehem has a very active program of inspections to avoid fire hazards. The fire inspectors are available to respond to serious emergency calls. The Fire Department does not have a facility for training. There have been discussions about a possible regional fire/police/EMS training facility that could be associated with Northampton Community College at a location on the South Side.



South Side Bethlehem's Schweder Fire Station



## Education

The Bethlehem Area School District includes the City, Fountain Hill, Bethlehem Township, Hanover Township (Northampton) and Freemansburg. There are two high schools, four middle schools, and 16 elementary schools. Many students also attend the Bethlehem Area Vocational-Technical School, the Lehigh Valley Charter High School for the Performing Arts or the District's alternative schools. In addition, many students attend private, charter and religious schools or are home-schooled.

The following are the enrollments as of February 1, 2008, and projections provided by the School District staff for the 2012-3 school year.

Schools	2007 - 2008 Enrollment	2012 - 2013 Enrollment Projection
<b>High Schools (9 to 12)</b>		
Freedom	2,057	1,849
Liberty*	3,058	2,888
<b>Total for High Schools</b>	<b>5,115</b>	<b>4,737</b>
<b>Middle Schools (6 to 8)</b>		
Broughal*	640	697
East Hills*	1,229	1,172
Nitschmann*	883	868
Northeast*	817	831
<b>Total for Middle Schools</b>	<b>3,569</b>	<b>3,568</b>
<b>Elementary Schools (K to 5)</b>		
Asa Packer	432	465
Calypso*	271	269
Clearview*	381	516
Donegan*	591	593
Farmersville	541	506
Fountain Hill	698	724
Freemansburg	397	383
Governor Wolf*	451	440
Hanover	269	263
James Buchanan*	287	323
Lincoln*	393	446
Marvine*	325	335
Miller Heights	481	452
Spring Garden*	563	623
Thomas Jefferson*	295	278
William Penn*	250	208
<b>Total for Elementary Schools</b>	<b>6,625</b>	<b>6,824</b>
<b>Total Enrollment</b>	<b>15,309</b>	<b>15,129</b>

\* Schools located within the City of Bethlehem

The District expects total enrollment to be stable over the next few years because housing construction rates in the townships have decreased in recent years.

The expected impacts are unclear from thousands of proposed new townhouses, condominiums and loft apartments in the City at Martin Tower and Sands BethWorks and in Bethlehem Township at Route 33. However, the school impact may be minimal if the dwelling types constructed have a low per unit average of school age children.

Actual enrollments could vary greatly depending upon trends in home-schooling, charter schools, birth rates, mortgage rates, immigration and other patterns. Some variations in enrollments can be handled by adjustments in service boundaries for each school. School buildings expected by the District to see the largest increases in enrollment are Clearview Elementary (in northwest Bethlehem) and Spring Garden and Lincoln Elementaries (in northeast Bethlehem).

The existing Broughal Middle School is being replaced by a new adjacent school. The School Board has discussed the potential of replacing or renovating Nitschmann Middle School on Union Boulevard. The original Northeast Middle School is being demolished, after being replaced by a new Northeast Middle School.

Almost all school buildings in the District have been replaced, renovated and/or expanded in recent years, except Nitschmann Middle School. The most extensive renovation project was Liberty High School.

In addition to schools associated with Bethlehem Area School Districts, the City features a variety of other educational institutions. These include parochial schools associated with the Allentown Diocese, and private schools such as Moravian Academy. At the post secondary level, Bethlehem is well-noted as home to Lehigh University and Moravian College.



Liberty High School has undergone extensive additions/renovations



Nitschmann Middle School in West Bethlehem

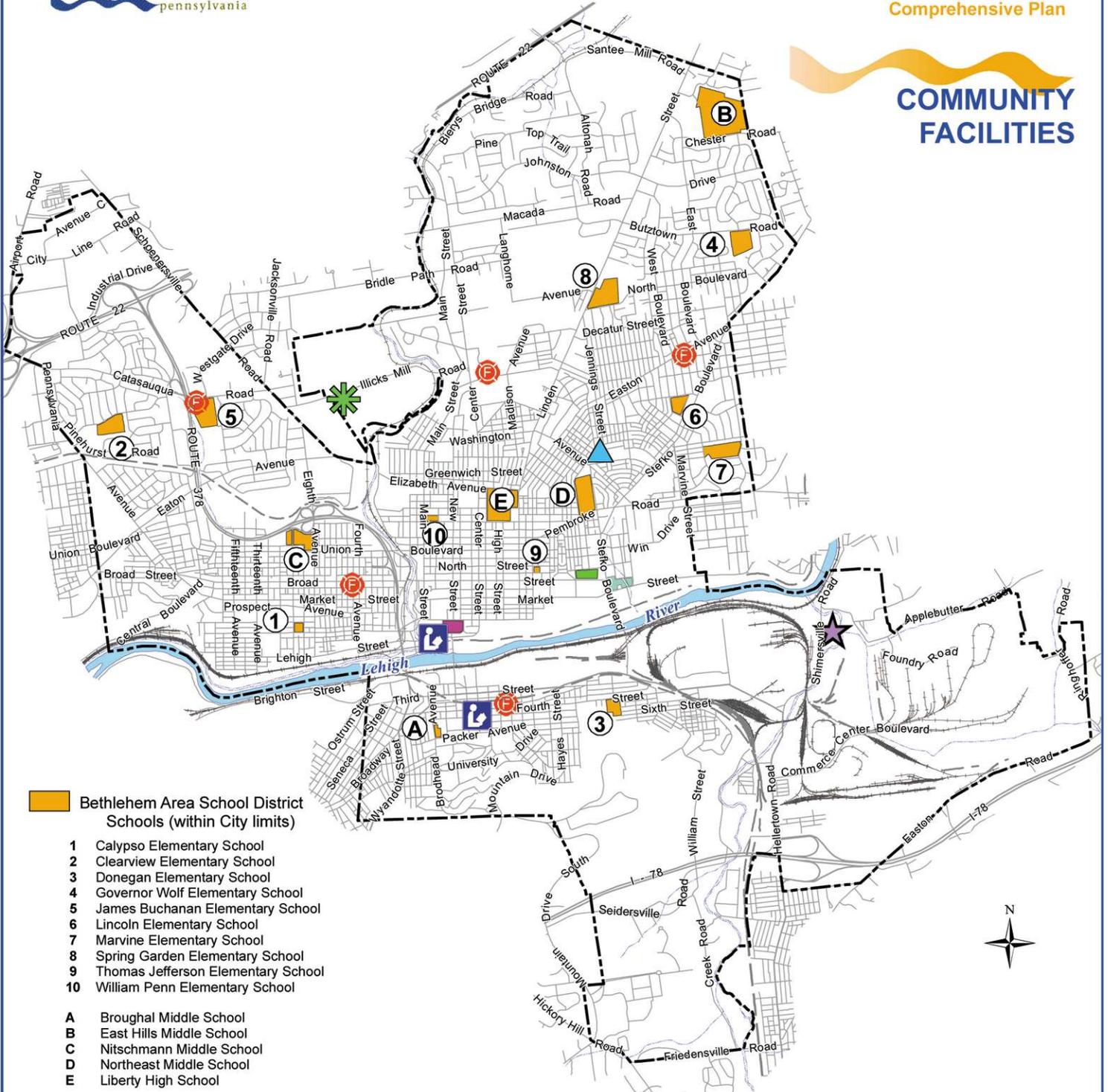




## ■ Community Facilities and Services Strategies

- 1.** Continue examining potential solutions to the Bethlehem Water Authority debt problem, including:
  - Future rate increases.
  - Sale of land or development rights on surplus watershed lands in Monroe County owned by the Authority.
  - Debt restructuring.
  - In-house expense reductions.
  - Bulk sales of more water to other communities.
- 2.** Construct improvements needed to remove constraints on the ability to transmit large volumes of water from the water treatment plant.
- 3.** Complete the expansion of the wastewater treatment plant. In phases, begin to separate storm sewers from sanitary sewers to free up more capacity at the City’s wastewater treatment plant.
- 4.** Carry out and follow up on the recommendations that result from the planned analysis of departmental space needs.
- 5.** Work with the Bethlehem Area School District to address school construction decisions in a way coordinated with neighborhood considerations, traffic issues, and good city planning.
- 6.** Continue to evaluate ways to expand the recycling program for both environmental and economic reasons.

**COMMUNITY FACILITIES**



**Bethlehem Area School District Schools (within City limits)**

- 1 Calypso Elementary School
- 2 Clearview Elementary School
- 3 Donegan Elementary School
- 4 Governor Wolf Elementary School
- 5 James Buchanan Elementary School
- 6 Lincoln Elementary School
- 7 Marvine Elementary School
- 8 Spring Garden Elementary School
- 9 Thomas Jefferson Elementary School
- 10 William Penn Elementary School

- A Broughal Middle School
- B East Hills Middle School
- C Nitschmann Middle School
- D Northeast Middle School
- E Liberty High School

\* The following schools included in the Bethlehem Area School District are located outside the City limits.

- Asa Packer Elementary School
- Farmersville Elementary School
- Fountain Hill Elementary School
- Freemansburg Elementary School
- Hanover Elementary School
- Miller Heights Elementary School
- Freedom High School

- Lehigh Valley Charter High School for the Performing Arts
- Bethlehem Area School District Administration Building
- Bethlehem Area Public Library
- City Hall/Police Headquarters

- Fire Stations
- Theis/Cornfeld Recycling Center
- Sewage Treatment Plant
- Public Works Complex



