Community Facilities Plan Chapter 6

Central functions of local government are to ensure the health, safety, and welfare of its residents and to provide adequate levels of public service and infrastructure.

The extent, availability and adequacy of public infrastructure, facilities, and services have a significant effect on future growth and development of a community, and vice versa. The availability of public sanitary sewer may allow for higher density development in a more efficient compact pattern; however, scattered and unplanned growth may result in efficient services or exceed available capacities.

Future land use decisions must ensure that developments are served by available and adequate public infrastructure and services. A thorough development review process will evaluate the availability and adequacy of existing and proposed infrastructure and services. Growth and development must be directed to locate in areas served by public infrastructure and services. Existing community facilities must be maintained, used, and improved in a logical and cost-effective manner to serve existing and future developments, and new facilities should only be constructed when needed to accommodate land use needs.

This Community Facilities Plan provides summaries of the following community facilities and outlines land use policies and regulatory implications of each community facility:

Parks & Recreation

Airport •

Educational Facilities

Healthcare & Social Services

Jail . Libraries

•

- Public Safety
- Solid Waste
- Utilities

Airport

Samuels Field (BRY) Airport is a municipal airport and is located at 1924 Boston Road, approximately 2 miles southwest of Bardstown on Boston Road (US 62). The airport is administered by the Bardstown-Nelson County Air Board, comprised of 3 members appointed by the Mayor and with approval by the Bardstown City Council and 3 members appointed by the Judge/Executive and with approval by the Nelson County Fiscal Court. A Secretary-Treasurer is assigned by the Mayor and is the first point of contact for all airport administration. The airport has a single 5000' x 75' paved runway with a 5000-foot parallel taxiway and a connecting taxiway to the aircraft parking apron. Land facilities include a 1,600 square foot terminal and administration building, 12,200 square yards of apron, 10-unit T-Hangar, 9-unit T-Hangar, 3 conventional storage hangars, and vehicular parking. The airport also has 100LL Avgas and Jet A fuel system with a 24-hour self-serve credit card system.

Land uses within and around the facilities of Samuels Field Airport are regulated by the Kentucky Airport Zoning Commission. The purpose of this state regulatory agency is to promote the public interest and protect and encourage the proper use of the airports and their facilities. In addition to the regulations and standards promulgated by the Federal Aviation Administration, the Kentucky Airport Zoning Commission has established criteria for evaluating the zoning of land and structures within and adjoining public-use airports, including but not limited to the following:

- Safety of airport users and surface persons and property;
- Character of flying operations conducted at the airport;
- Nature of the terrain, height of existing structures and trees above the level of the airport; •
- Views of officials of the Federal Aviation Administration as to the safe approaches required for • operations at the airport;
- Future development of the airport, including runway extensions;
- Density of dwellings that may safely be permitted in the area; •
- Protection of the public investment in the airport and its facilities; •
- Public Interest in developing a sound public air transportation system within the state: and.
- Views and opinions of those owning land in such area.

With additional airport storage and ramp space, the airport is adequate to serve the short-term general aviation needs of the community. Nonetheless, future improvements and expansion of Samuels Field must be anticipated and recognized as an important element of the community's overall long-term development strategy.

<u>Policy & Regulatory Implications</u>: Samuels Field serves as an important element of Nelson County's growth and development strategy, and its expansion must be accommodated to ensure adequate air and freight service. The Comprehensive Plan Future Land Use Maps (Maps #4-1 and 4-2) identifies growth areas immediately surrounding the existing airport property. These areas support the airport's efforts for expansion over the next 25-year planning period. Any review of future land uses within and surrounding the airport should promote the public interest, protect and encourage the proper use of the airport and its facilities and any expansion, and ensure safe maneuvering of aircraft and proper use of the airport.

Educational Facilities

Elementary and Secondary Education

Three education systems serve Nelson County – Bardstown Independent Schools, Nelson County Schools, and local private and parochial schools. Over the last 20 years, both public and private school systems have experienced significant enrollment growth. Between 1990 and 2010, public school enrollment increased 37.7 percent. Table #6-1 shows the public school enrollment between 1990 and 2010.

# Students	% Change				
5,491					
6,892	25.5%				
7,376	6.6%				
	# Students 5,491 6,892				

Table #6-1: Public School Enrollment, 1990 – 2010

Sources: U.S. Bureau of the Census, Kentucky State Data Center, Bardstown City Schools, Nelson County Schools, and private school

Bardstown City Schools

Bardstown City Schools has 5 schools located on 2 campuses and its total enrollment during the 2010-2011 school year was 2,760 students -- 2,420 students enrolled in kindergarten through 12th grade and 340 preschool students enrolled in the Early Childhood program. Bardstown City Schools has a total of 393 employees -- 202 certified employees and 191 support staff. Table #6-2 lists the schools and facilities, location, grades, and 2010-2011 enrollment of Bardstown City Schools.

School / Facility	Address	Grades	2010-2011 Enrollment
Bardstown Early Childhood Education Center	510 North Fifth Street	Р	340
Bardstown Primary School	1000 Templin Avenue (KY 1430)	K – 2	702
Bardstown Elementary School	420 North Fifth Street	3 – 5	568
Bardstown Middle School	410 North Fifth Street	6 – 8	550
Bardstown High School	400 North Fifth Street	9 – 12	600

Sources: Bardstown City Schools.

Bardstown City Schools also has an Alternative School at 6855 Louisville Road (US 31E) and provides an Adult Learning Center at 407 South Third Street for adult and community education courses.

Between 1998 and 2011, Bardstown City Schools' enrollment increased from 1,670 students in 1996 to 2,760 students in 2010, representing a 65 percent increase. Bardstown Early Childhood Education Center, Bardstown Primary School, and Bardstown Middle School are at or over capacity. To minimize overcrowding and provide for future growth and development, Bardstown City Schools' Facilities Plan

includes the siting and construction of a new high school and primary schools and expansion of the middle school.

Nelson County Schools

The Nelson County School District served 4,616 children in pre-kindergarten through 12th grade in 9 schools and approximately 500 students in the Technology Center and on 6 campuses throughout the county in 2010-2011. Nelson County Schools employs more than 300 support personnel and about 350 certified teachers and staff. Table #6-3 lists the schools and facilities, location, grades, and 2010-2011 enrollment of the Nelson County Schools.

			2010-2011
School / Facility	Address	Grades	Enrollment
Bloomfield Elementary School	360 Arnold Lane	P - 5	387
Bloomfield Middle School	96 Arnold Lane	6 – 8	436
Boston School	130 Wilson Creek Road	P – 8	302
Cox's Creek Elementary School	5635 Louisville Road (US 31E)	P – 5	434
Foster Heights Elementary School	211 East Muir Avenue	P - 3	669
Horizons Academy	304 Wildcat Lane (US 62)		71
Nelson County High School	1070 Bloomfield Road (US 62)	9 – 12	1,465
Nelson County Area Technology Center	1060 Bloomfield Road		
New Haven School	489 High Street	P – 5	439
Old Kentucky Home Middle School	301 Wildcat Lane	6 - 8	413
Thomas Nelson High School	2885 New Shepherdsville Road (KY 245)	9 – 12	N/A
(under construction, opening 2012)			
Sources Nelson County Schools			

Sources: Nelson County Schools

The Nelson County School District also includes the Nelson County Area Technology Center at 1060 Bloomfield Road (US 62) and on the Nelson County High School campus. The Center provides has 500 students and offers short-term classes in industrial and technical skill fields and short-term classes for industry upgrades and license renewals.

Between 1998 and 2011, Nelson County School District's total enrollment increased 0.4 percent, from 4,589 in 1998 to 4,616 students in 2010. Nelson County High School, Cox's Creek Elementary School, and New Haven Elementary School are over capacity, and Bloomfield Elementary School and Horizons Academy are near capacity.

In addition to the construction and opening of Thomas Nelson High School in 2012, Nelson County School District's Facilities Plan includes the renovation of former Central Office as centralized early childcare facility, construction of new classrooms at New Haven Elementary School and Horizon's Academy, siting and construction of new middle school and bus garage, and other renovation and improvement projects.

Private and Parochial Schools

Nelson County has numerous private and parochial schools throughout the county. Between 1990 and 2000, private school enrollment increased 60 percent. The average enrollment for the private and parochial schools listed in Table #6-4 is 1,304 students.

School / Facility	Address	Grades	Average Enrollment
Bethlehem High School	309 West Stephen Foster Avenue (US 62)	9 – 12	300
St. Ann Elementary School	7500 Howardstown Road (KY 247)	1 – 8	24
St. Catherine of Alexandria Academy	413 First Street, New Haven	K – 8	100
St. Gregory Elementary	350 Samuels Loop (KY 3207)	P – 8	146
St. Joseph School	310 West Stephen Foster Avenue (US 62)	P – 8	400
Nelson County Baptist Church School	55 Lutheran Church Road	K – 12	37
St. Joseph Montessori Children's Center	161 West Drive, Nazareth	Р	49
Nelson County Head Start	865 St. Thomas Lane	Р	80
New Haven Head Start	413A First Street, New Haven	Р	20
Bardstown Christian Academy	101 West Brashear	7 – 12	33
Bluegrass Christian Academy	2580 Springfield Road (US 150	K – 11	115

Table #6-4: Average Enrollment, Private and Parochial Schools

Sources: Private and parochial schools.

Post-Secondary Education

Nelson County residents have numerous opportunities for post-secondary education. The colleges and universities within 60 miles of the County include, but are not limited to:

- St. Catharine College Springfield
- Elizabethtown Community & Technical College Springfield & Elizabethtown Campuses
- Western Kentucky University Elizabethtown Center
- McKendree College Radcliff & Louisville Campus
- Jefferson Community & Technical College Shelby County Campus
- Bellarmine University
- Campbellsville University Louisville & Main Campuses
- Daymar College
- Galen College of Nursing Louisville Extended Classroom
- Indiana Wesleyan University Louisville Education Center
- ITT Technical Institute Louisville Area Campus
- Jefferson Community & Technical College Main & Technical Campuses
- Louisville Bible College
- Louisville Presbyterian Theological Seminary
- Louisville Technical Institute
- National College
- Northwood University
- Southern Baptist Theological Seminary
- Spalding University
- Spencerian College
- Strayer University
- Sullivan University
- University of Louisville
- Webster University

<u>Policy & Regulatory Implications</u>: Nelson County's significant growth and development has resulted in increased school enrollments and has presented challenges for the schools systems to provide quality education and facilities for the community's school-age children. Both private and public school systems have developed proactive capital improvements programs to improve existing facilities and to plan for and construct new facilities. The Comprehensive Plan Future Land Use Maps (Maps #4-1 through #4-23) identify existing and proposed school facilities throughout the county. School planning, including the siting of new school facilities and expansion of existing facilities, affects land use, transportation, and infrastructure planning, and vice versa. For example, the approval and development of a 100-lot residential subdivision will result in enrollment beyond the capacity of the nearby elementary school, or

the siting of a new school will result in unanticipated changes in land use and increased traffic congestion in the surrounding area. The school systems, Planning Commission, legislative bodies, and other appropriate agencies and organizations must work closely and cooperate to coordinate school, land use, transportation, and infrastructure planning. Development proposals, such as new major residential subdivisions, should be evaluated to determine the impact on existing facilities and minimize capacity and transportation issues of existing school facilities. New school sitings and existing school improvements and expansions should be evaluated to determine the impact on existing land uses and to minimize untimely or unanticipated future land uses and infrastructure and transportation capacity issues in the surrounding area. Accordingly, the school systems should coordinate with the Planning Commission on the closing and sale of existing schools in order to identify alternatives for the future use of the existing facility or redevelopment of the site.

Healthcare & Social Services

Healthcare

Flaget Memorial Hospital

Flaget Memorial Hospital is a non-profit medical facility and is part of the Saint Joseph Health System, a member of the Catholic Health Initiatives. In 2005, Flaget Memorial Hospital opened its new 52-bed facility at 4305 New Shepherdsville Road in the Hunters Village. Flaget's on-site facilities include the Birth Center, Pain Management Center, Sleep Disorders Center, Wound Center, and Cancer Center, and its on-site services include radiation cancer therapy, oncology, pulmonary rehabilitation, and surgical services. Flaget's off-site facilities and services include Flaget Immediate Care Clinic, Flaget Health Connection, Hospice of Nelson County, and Bardstown Rehabilitation Services. The Immediate Care Clinic is located at 110 South Salem Drive in Bardstown. The facility is open 7 days a week to treat minor illnesses and injuries and provide occupational medicine services to employers.

Hardin Memorial Hospital

Hardin Memorial Hospital is a non-profit medical facility owned by Hardin County Fiscal Court and managed by Baptist Healthcare System. It operates a Bardstown Diagnostic Center at 201 South Fifth Street and an Express Care facility in the Wal-Mart Supercenter at 3795 East John Rowan Boulevard (KY 245). The Diagnostic Center offers imaging services, including bone densitometry, CT, routine digital radiography (x-ray), and ultrasound. The Express Care Clinic provides treatment of common illnesses, basic checkups, counseling, and diagnostic testing.

Nelson County Community Clinic

Nelson County Community Clinic is a charitable healthcare organization that provides basic medical, dental, laboratory, and pharmaceutical services, free of charge, to the unemployed and underemployed persons of Nelson County. The Clinic is located at 300 West John Fitch in Bardstown and is operated by an 18-member Board of Directors.

Nelson County Health Department

The Nelson County Health Center is located at 325 South Third Street in Bardstown. The Nelson County Health Department offers medical, environmental, and health education services to protect the public health and environment. Clinic services include adult immunization, prenatal care, family planning, infectious and chronic disease prevention. The Health Department is also responsible for bioterrorism and disaster preparedness and environmental hazard prevention.

Social Services

Central Kentucky Community Action Council

The Central Kentucky Community Action Council has a local office at 864 West Stephen Foster Avenue (US 62), and this social service organization provides services to individuals with low and moderate incomes in Nelson County: housing assistance for elderly and disabled persons, energy assistance, family day care homes, family preservation/reunification programs, FEMA assistance, Head Start programs, homeless assistance, senior citizens and general transportation, weatherization and winter care assistance.

Community Prevention Center (CPC)

The *Community Prevention Center (CPC)* was established in 1998 and became a Kentucky Agency for Substance Abuse Policy (KY-ASAP) site in 2002. The CPC is a grant funded department of the City of Bardstown. CPC's purpose is to reduce alcohol, tobacco, and other drug use among the community's youth. The CPC is assisted and supported by public and private agencies, faith-based organizations, businesses, schools, health professionals and organizations, law enforcement, judiciary, and parent and civic organizations.

Nelson County & New Haven Senior Centers

Two senior centers offer educational, health promotion, outreach services, socialization, and meals. The Nelson County Senior Center is located at 509 North Fourth Street, Bardstown, and the New Haven Senior Center is located at Hometown Apartments, 101 Locust Street, New Haven. Nelson County Fiscal Court has approved plans to relocate the Nelson County Senior Center to the Nelson County Plaza within the planning period.

Transit Authority of Central Kentucky (TACK)

The Transit Authority of Central Kentucky (TACK) provides transportation to senior citizens and Medicaideligible passengers. TACK provides transportation along pre-set routes in Nelson County for medical appointments, grocery trips, educational programs, and other social services. The transportation services are available Monday through Friday between 6:00 a.m. and 8:00 p.m. and on Saturday from 8:00 a.m. to 1:00 p.m. TACK is administered through the Central Kentucky Community Action Council.

New Hope Food Bank

The New Hope Food Bank is located at 880 J.T. Riggs Road in New Hope. The Food Bank provides food and other provisions for families and operates a thrift store on site.

<u>Policy & Regulatory Implications</u>: The availability and quality of healthcare and social services in Nelson County is improving and expanding. Nelson County should continue to encourage the development of these services and facilities to further enhance the quality of life for residents in Nelson County and within central Kentucky. The Comprehensive Plan Future Land Use Map (Maps #4-1 through #4-23) identifies the location of major health and social service facilities, specifically Flaget Memorial Hospital. Any new facilities or expansions should be strategically located to provide optimal level of services for all Nelson County.

Jail

Nelson County operates a 102-bed detention facility at 810 West Stephen Foster Avenue (US 62). The jail is administered and operated by the Jailer, 14 full-time deputies, and 9 part-time deputies. The facility is funded through general fund revenue and minimal subsidies and reimbursements for housing state prisoners. Although the number of inmates varies from day-to-day, the facility often meets or exceeds the maximum capacity. Previous jail expansion projects included the construction of a 7,200 square foot restricted custody addition on the current site; however, this project was not funded and completed.

<u>Policy & Regulatory Implications</u>: To minimize over-crowding and provide adequate detention facilities, future improvements and expansion of the jail must be anticipated and recognized in the future land use plan. The Comprehensive Plan Future Land Use Map (Maps #4-1) identifies the existing jail, and the Plan supports the planning and construction of an addition onto the existing jail or the construction of a new facility to accommodate the long-term needs of the community. Any new facilities should be located within close proximity to the Nelson County Justice Center to provide optimal level of services.

Libraries

The Nelson County Public Library includes the main library and 2 branch libraries. The Nelson County Public Library is administered and operated by a 5-member Board of Trustees and is funded by an ad valorem tax through the Nelson County Public Library Taxing District. The main library is located in the former Flaget Memorial Hospital building at 201 Cathedral Manor in Bardstown. The 2 branches are located at 144 Fairfield Hill Road in downtown Bloomfield and at 141 South Main Street in downtown New Haven. However, in 2001, the Board of Trustees acquired properties in Bloomfield and New Haven for the relocation and construction of new branch facilities. The new Bloomfield branch will be located at 34 Arnold Lane, and the new New Haven branch will be located at 318 Center Street (KY 52).

<u>Policy & Regulatory Implications</u>: The Comprehensive Plan supports the planning and development of additional branch library facilities in other areas of the County to serve the long-term needs of the community.

Public Safety & Protection

Nelson County Dispatch Center

In 2007, the Bardstown Police Department dispatch and Nelson County Dispatch Center merged to form the new Nelson County Dispatch Center. The Center is located at 210 Nelson County Plaza in Bardstown and provides the 911 and dispatch services for police, fire, and EMS for the entire County.

Nelson County Emergency Management Agency

The Nelson County Emergency Management Agency is an agency of Nelson County Fiscal Court, and it coordinates a system of mitigation, preparedness, response, and recovery to protect the lives, environment, and property of Nelson County residents. Nelson County's EMA is headquartered at 214 Nelson County Plaza.

Emergency Medical Services (EMS)

Nelson County Emergency Medical Services is headquartered at 1301 Atkinson Hill Avenue in Bardstown and is owned and operated by Nelson County Fiscal Court. Nelson County EMS operates 9 advanced life support ambulances and 4 first response vehicles and provides emergency, non-emergency, and transport services throughout the County. It is staffed with 10 full-time EMTs, 15 part-time EMTs, 4 paramedic students/EMTs, 13 paramedics, 3 administrative managers, and local medical director. The EMS service is funded primarily through user fees and subsidies from the occupational license fees.

Fire Protection

Nelson County has 2 municipal fire departments and 5 volunteer fire departments. Adequacy of fire protection varies throughout the County. The Insurance Services Office (ISO) has a rating system of a community's fire protection capabilities and is used by most insurance companies to set rates. For each fire district, ISO analyzes the relevant data using its Fire Suppression Rating Schedule (FSRS) and then assigns a Public Protection Classification (PPC) from 1 to 10. Class 1 (best) generally represents superior property fire protection, and Class 10 (worst) indicates that the area's fire-suppression program doesn't meet ISO's minimum criteria. While improvement in rank usually drops residential insurance rates, improvement from 10 to 9 is generally the most significant reduction. Where communities have split ratings, the first number applies to all properties within 1000 feet of a hydrant and within 5 miles of a fire station, and the second number refers to all remaining properties within 5 miles of a fire station. The following ISO ratings have been assigned to Nelson County's fire districts:

Table 6-5: ISO Ratings for Nelson County Fire Depar	oartments
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Fire Department	Class / Rating
Bardstown Fire Department (city limits only)	6
Bardstown-Nelson County Volunteer Fire Department	6/9
Boston Volunteer Fire Department	6/9
New Haven Fire Department (city limits only)	6
New Hope Volunteer Fire Department	9
Northeast Nelson Volunteer Fire Department	6/9
Rolling Fork Volunteer Fire Department	6 / 9

Sources: Insurance Services Office (ISO)

Bardstown Fire Department

The City of Bardstown's first fire department was established in 1805 and is the second oldest fire department in Kentucky. The Bardstown municipal fire department provides fire protection and rescue services in the Bardstown corporate limits during workdays (8:00 a.m. to 4:00 p.m., Monday through Friday) and is manned by 10 full-time employees and 3 part-time employees. Evenings and weekends are covered by volunteers of the Bardstown-Nelson County Volunteer Fire Department. The City fire station is located at 220 North Fifth Street in Bardstown.

Bardstown-Nelson County Volunteer Fire Department

Incorporated in 1965, the Bardstown-Nelson County Volunteer Fire Department, Inc. covers 224 square miles outside of the Bardstown corporate limits, including Hunters, Deatsville, Samuels, Cox's Creek, Botland, and Woodlawn areas. This department also covers the Bardstown corporate limits during the evenings and on the weekends. The Department is funded through an annual fire fee and has approximately 50 volunteers. The Department has stations at 9920 Louisville Road (US 31E) in Cox's Creek area and 6249 New Shepherdsville Road (KY 245) in Deatsville and has property located on Poplar Flat Road (KY 605) for a future fire station to serve the Woodlawn and Botland areas.

Boston Volunteer Fire Department

Organized in 1985, the Boston Volunteer Fire Department is an all volunteer department and serves a 46 square mile area in western Nelson County, including Boston and Nelsonville. The Boston VFD is funded through annual dues. Its station is located on Lebanon Junction Road (KY 61) in Boston. The Boston VFD has a First Responders Program and has 7 first responders trained to assist EMS. The Department has an average of 17 volunteers.

New Haven Fire Department

The New Haven Fire Department is a municipal fire department operated by the City of New Haven. The Fire Department was established in the 1930s and was reorganized as an official department in 1957. It shares volunteers, equipment, and station with the Rolling Fork Volunteer Fire Department. The station is located at 362 Center Street (KY 52) in New Haven. The Department averages 30 volunteers.

New Hope Volunteer Fire Department

Established in 1976, the New Hope Volunteer Fire Department averages 23 volunteers and serves New Hope and parts of Marion and Larue Counties. The Fire Department is funded through annual dues. Its station is located at 900 Holy Cross Road (KY 457).

Northeast Nelson Volunteer Fire Department

The Northeast Nelson Fire Protection Area covers a 100 square mile area in northeast Nelson County, including Bloomfield, Chaplin, and Fairfield. The Northeast Nelson Volunteer Fire Department averages 22 volunteers and is funded through an ad valorem tax. The Department's stations are at 130 Perry Avenue in Bloomfield and on Broadway Avenue in Chaplin.

Rolling Fork Volunteer Fire Department

The Rolling Fork Volunteer Fire Department was formed in 1976 and covers a 40 square mile area in the New Haven and southern Nelson County area. The Fire Department averages 30 volunteers and is funded through annual dues. It shares volunteers, equipment, and station with the New Haven Fire Department. The station is located at 362 Center Street (KY 52) in New Haven. The Department also has a substation at 7500 Howardstown Road (KY 247).

Police Protection

The Cities of Bardstown, Bloomfield, and New Haven each maintain municipal police departments. The County is also served by the Nelson County Sheriff's Department and Kentucky State Police.

Bardstown Police Department

The Bardstown Police Department has 25 full-time employees, including 23 sworn personnel and 2 nonsworn personnel. The Bardstown Police Department is an agency of the City of Bardstown and provides police protection within the Bardstown corporate limits. Its station is located at 212 Nelson County Plaza. The Criminal Investigations Division has 3 detectives who conduct all investigations and works with the Greater Hardin County Drug Task Force. The Patrol Division has 16 officers conducting such duties as traffic enforcement, investigating injury and non-injury accidents, responding to calls for service, domestic situations, assaults, etc. The K9 Officer conducts all searches. Its DARE Officer provides drug prevention education. Its Explore Program is a career education program for young men and women between the ages of 14 and 20 who are interested in learning about or possibly becoming a police officer.

Bloomfield Police Department

The Bloomfield Police Department has one full-time Police Chief and is an agency of the City of Bloomfield. It provides police protection within the Bloomfield corporate limits.

New Haven Police Department

The New Haven Police Department has one full-time Police Chief and is an agency of the City of New Haven. It provides police protection within the New Haven corporate limits.

Nelson County Sheriff's Department

The Nelson County Sheriff's Department provides police protection to all of Nelson County. The Sheriff's Department is located at 210 Nelson County Plaza. The Nelson County Sheriff's Department merged with the Nelson County Police Department and has 23 sworn deputies.

<u>Policy & Regulatory Implications</u>: While public safety and protection services are adequate to serve the current needs of the community, the adequacy and availability of emergency services and fire and police protection to existing and developing areas should be reviewed and factored into future land use decisions. Specifically, ISO (Insurance Services Office) ratings indicate that Bardstown, Bloomfield, and New Haven provide reasonably adequate protection for its residents; however, fire protection service elsewhere in the County should be significantly improved in key population centers in the rural areas. As the community continues to develop, the adequacy and availability of public safety and protection, such as equipment and infrastructure improvements, response times, station siting, staffing, etc., should be reviewed and factored into future land use decisions. It is recommended that a study be conducted to evaluate the overall public safety and protection during the 25-year planning period.

Parks and Recreation

Public Parks & Recreation Facilities

The Cities of Bardstown, Bloomfield, New Haven, and Nelson County Fiscal Court have public parks and recreational facilities. Table 6-6 provides a listing and description of the public parks and recreational facilities.

The Bardstown-Nelson County Parks and Recreation Department is responsible for the development, coordination, and promotion of the recreational programs and development and maintenance of 5 parks and recreational facilities throughout the City of Bardstown and unincorporated Nelson County. The City of Bardstown also owns and maintains 3 mini-parks in downtown Bardstown, and Nelson County Fiscal Court owns and maintains 2 neighborhood parks in Balltown and Culvertown. The Bardstown-Nelson County Recreation Advisory Board includes both elected and citizen members and advises the Department on the immediate and long-range plans for park and recreational facilities and programming. The Department has 5 full-time employees and about 14 seasonal part-time employees.

The City of Bloomfield owns and maintains a neighborhood and community park and has a community center at 155 Arnold Lane. The City of New Haven owns and maintains one community park and municipal pool. My Old Kentucky Home State Park is a regional park owned and operated by the Commonwealth of Kentucky.

Park / Facility	able 6-6: Public Parks & Recreational Facilities						
(Ownership)	Address	Size (acres)	Туре	Amenities			
Balltown Park (Nelson County Fiscal Court)	Southwest corner of Balltown Road (KY 46) & Robert Taylor Lane	2	Neighborhood	Basketball court, playground, pavilion, picnic areas			
Bardstown Community Park (City of Bardstown)	End of East Halstead Avenue	20	Community	Pavilion, sand volleyball court, basketball court, horseshoe pits, playground, pavilion, picnic areas, 3.2 miles unpaved trail			
Bloomfield Memorial Park (City of Bloomfield)	Fairfield Hill Road (KY 48)	7	Community	2 baseball/softball fields, T-ball field, basketball court, 2-acre lake, picnic areas, pavilion, playground, tennis courts, 1/3- mile paved walking path, concession stand/restrooms			
Bloomfield Soccer Park (City of Bloomfield)	Conley Avenue	4	Neighborhood	2 soccer fields			
Court Square (Nelson County Fiscal Court)	Southeast corner of Court Square	0.06	Mini	Open space, historical markers			
Culvertown Park (Nelson County Fiscal Court)	Monks Road (KY 247)	10+	Community	Baseball/softball field, concession stand, playground, picnic areas			
Dean Watts Park (Nelson County Fiscal Court)	320 Spencer Mattingly Lane	35	Large Community	14 soccer fields, 4 football fields, 6 baseball/softball fields, 2 miles paved walking/running trail, playground equipment, 3 concession stands, 3 pavilions, picnic areas.			
John Fitch Monument Park (Nelson County Fiscal Court)	Northeast corner of Court Square	0.06	Mini	Open space, historical monument			
Jones Avenue Park (City of Bardstown)	300 West Broadway Avenue	5	Community	Olympic-size pool, diving pool, wading pool, bathhouse and restrooms, 2 tennis courts, skateboard park, sand volleyball court, ¼-mile gravel walking path, lighted baseball/softball field, scorer's building/storage, concession stand and restrooms, pavilion and gymnasium			
Jones Avenue Park (City of Bardstown)	330 South Fourth Street	0.25	Neighborhood	Basketball court, playground equipment			
Mayor's Park (City of Bardstown)	Northwest corner of West Broadway & North Third Street (US 31E)	0.14	Mini	Park benches			
My Old Kentucky Home State Park	501 East Stephen Foster Avenue (US 150)	235	Regional	Visitor's center, 2 tennis courts, 18-hole golf course and pro shop, campground with shower house and restrooms, playground, pavilion, picnic areas, amphitheater			
Nelson County Fairgrounds	2391 New Haven Road (US 31E)	70	Special Use	Track & grandstand, indoor pavilion, show arena and barns			

 Table 6-6:
 Public Parks & Recreational Facilities

Park / Facility (Ownership)	Address	Size (acres)	Туре	Amenities
Optimist Park (City of New Haven)	529 Maxie Court	22	Community	2 baseball/softball fields, 2 basketball courts, 25-meter pool, baby pool, tennis court, 2 playgrounds, concession stand & restrooms, pavilion, 2-acre lake
Park Billom (Nelson County Fiscal Court)	Northwest corner of Court Square	0.07	Mini	Park benches, historical markers
Sportsman Club Park (City of Bardstown – lease)	829 Loretto Road (KY 49)	7.35	Neighborhood	Baseball/softball field
Wickland	510 Bloomfield Road (US 62)	60	Natural Resource Area	Open space

Table 6-6: Public Parks & Recreational Facilities (continued)

Sources: City of Bardstown, Nelson County.

Schools & Private Parks and Recreational Facilities

Nelson County also has a multitude of parks and recreational facilities owned and operated by public and private schools and non-profit and private organizations. Many of these facilities are not open to the public. Table 6-7 provides a listing and description of these facilities. This listing is a partial listing and is not inclusive.

Park / Facility	Address	Amenities
Bardstown City Schools	Various locations	Football, baseball, soccer, and softball
		fields, running track, tennis courts,
		gymnasiums, and playgrounds
Bardstown Country Club	130 Maywood Avenue	18-hole golf course, lighted golf course, pro
(Maywood)		shop, clubhouse/restaurant, exercise room,
		swimming pool, 2 tennis courts, sand
		volleyball court
Bardstown United Methodist	Louisville Road (US 31E)	¹ / ₂ mile paved walking path, playground,
Church – 2 nd Campus		pavilion, basketball court, baseball/softball
Dereheim Ferent	Herrisen Ferk Deed	fields
Bernheim Forest	Harrison Fork Road	Natural resource area, open space
		(4,365 acres in Nelson County; 14,000 acres total)
Cedar-Fil Golf Course	2330 New Shepherdsville Road	18-hole golf course, pro shop
	(KY 245)	
Flaget Memorial Hospital	4305 New Shepherdsville Road	1/2 mile paved walking path
	(KY 245)	
Nelson County Schools	Various locations	Football, baseball, soccer, and softball
		fields, running tracks, tennis courts,
		gymnasiums, and playgrounds
New Hope Park	J.T. Riggs Road (KY 457)	Baseball/softball field, community center,
(New Hope Athletic Club)		and concession stand and restroom
Old Kentucky Home Country	529 East Stephen Foster	Swimming pool, clubhouse
Club	Avenue (US 150)	
Sisters of Charity of Nazareth &	Louisville Road (US 31E)	¹ / ₂ mile paved walking path, playground,
Montessori		pavilion
St. Joseph & Bethlehem High	Various locations	Football, baseball, and soccer fields,
Schools		gymnasiums, and playground
Woodlawn Springs Golf Course	103 Woodhill Road	18-hole golf course, driving range, pro shop
Woodlawn Springs		Swimming pool, 2 tennis courts, sand
Neighborhood Association		volleyball court, playground, clubhouse

Table 6-7: Schools & Private Park & Recreational Facilities

Parks and Recreational Facility Classification System & Analysis

The National Recreation and Parks Association (NRPA) has established recommended standards and classification system for parks and recreation areas based on the number of residents serviced. The classification system is generally based on the size of the facility but is also influenced by the number and type of amenities on the site. It offers a classification system of the following types of recreational facilities:

- A mini-park or playground is the smallest park classification and addresses limited or isolated • recreational needs, such as concentrated or limited populations, isolated development areas, or unique recreational opportunities. Examples of mini-parks are pocket parks and tot lots. Miniparks may have active and/or passive recreation, should be easily accessible from the surrounding area, and have linkage to a community pathway system.
- A *neighborhood park* serves as a recreational and social focus of a neighborhood. This park may have informal active and passive recreation and should accommodate a wide variety of age and user groups. A neighborhood park should be centrally located within its service area and should be easily accessible and within walking distance by interconnecting trails, sidewalks, or low-volume residential streets.
- A community park focuses on meeting community-based recreation needs and preserve unique landscapes and open spaces. A community park serves the recreational needs of 2 or more neighborhoods or large sections of the community. This park allows for group activities and both active and passive recreation. The park should be serviced by arterial and collector streets and be strategically located and easily accessible from throughout the service area.
- A large urban park or sports complex consolidates heavily programmed athletic fields and associated facilities at a larger site strategically located in the community. This park complex should include both active and passive recreation and have fields and courts for softball, soccer, football, baseball/softball, tennis, and volleyball. A regional park or sports complex should be located within reasonable and equal driving distance from the population served. These facilities should not be located adjacent to residential land uses.

Tables #6-8 and #6-9 provides the comparison of Nelson County's current public park facilities with the national recommended standards for number, size, and type of recreational facilities.

Table 6-8: Recommended Park Standards		Recommended Park # & Size				Current Public		
			# Acreage		# Acreage F		P	Parks
Park Type	Optimal Size (in acres)	Service Area Radius	Acres / 1,000 Population	2010 Population 43,437	2035 Population 63,171 (est.)	Total #	Total Acreage	
Mini or Playground	1 or less	½ mile	0.2 – 0.3	8 – 13	13 – 19	4	0.33	
Neighborhood	1 – 15	½ - 1 mile	1 – 2	43 – 86	63 – 126	5	23.6	
Community	10 – 40	2 miles	1 – 2	43 – 86	63 – 126	4	54.0	
Large Community	50+	3 mile service	2-4	86 – 174	126 – 253	1	35.0	
Regional Park	50+	30 minute drive	4 – 8	174 – 348	253 – 505	1	235*	

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Source: National Recreation & Park Association

*Needs met in Bullitt, Hardin, and surrounding counties.

		2010	2035	Current #	Current #
	# Units per	Population	Population	Public	Private
Facility Type	Population	43,437	63,171 (est.)	Facilities	Facilities*
Baseball/Softball – Unlighted	1 per 2,000	22	32	13	1
Basketball Courts	1 per 2,000	22	32	4	1
Community Center	1 per 20,000	2	3	3	3
Football	1 per 5,000	9	13	4	0
Golf – 18 hole	1 per 50,000	0	1	1	3
Golf – 9 hole	1 per 25,000	2	3	0	0
Golf - Driving Range	1 per 50,000	0	1	0	2
Gymnasium	1 per 10,000	4	6	1	0
Local trails (jogging, bike, & nature)	1 mile / 5,000	9	13	5.8 miles	3 (1.5 mile)
Outdoor Theatre	1 per 50,000	1	1	1	0
Picnic Shelter	1 per 5,000	9	13	10	3
Soccer	1 per 3,500	12	18	16	0
Swimming Pool - indoor	1 per 20,000	2	3	0	0
Swimming Pool – large outdoor	1 per 50,000	0	1	1	0
Swimming Pool – small outdoor	1 per 30,000	1	2	2	2
Tennis	1 per 2,000	22	32	5	4

 Table 6-9: Recommended Recreational Facilities

*The current private facilities are those listed in Table 6-7. This listing is not inclusive and does not include those facilities owned by public and private schools.

Source: National Recreation & Park Association.

<u>Policy & Regulatory Implications</u>: The National Recreation and Parks Association (NRPA) has established recommended standards and classification system for parks and recreation areas based on the number of residents serviced. Both the total acreage for parks and the size of individual parks in Nelson County are below the minimum standards for the current population. Based on the comparison of Nelson County's current public park facilities with the national recommended standards for number, size, and type of recreational facilities, the county is underserved. It is recommended that the legislative bodies develop a long-range plan to improve and provide adequate parks and recreational facilities to serve the existing and projected populations. This long-range plan should identify those growth centers and identify and plan for providing neighborhood and community parks and provide incentives for individual property owners and developers to include public park spaces for both passive and active recreation as part of the development plans as appropriate.

Solid Waste Management

Solid Waste Disposal Facility (Landfill)

In 1994, Nelson County Fiscal Court purchased the municipal landfill from the City of Bardstown, and in 1995, Fiscal Court began construction and operation of a fully-contained solid waste disposal facility at 1025 Airport Road. The existing landfill is a 30.5-acre facility and was constructed in 5 phases. Construction of the original 30.5-acre landfill was completed through the landfill user fees. The landfill provides disposal services for several surrounding counties, commercial solid waste pickup services, and recycling services for Nelson County residents.

The estimated "fill-life" expectancy of the landfill is 30 years from the beginning of the permitted landfill. In 2010, the total current volume is 2,527,397 cubic yards, and after 15 years of operation, approximately 1,233,122 cubic yards – 49 percent of the total landfill volume -- have been used. The remaining volume of the present landfill will extend through Fiscal Year 2024-2025.

Nelson County Fiscal Court currently owns 538.8 acres designated for landfill use and permitted by the Kentucky Department of Waste Management. The next expansion of the landfill will include 11.1 acres and will start approximately 6 to 8 years prior to meeting the capacity of the current landfill. The proposed expansion will result in an additional 750,000 cubic yards of volume for the contained landfill and will provide an additional 10 years of operation through 2034-2035. Tentative construction will occur between

2017 and 2019 and will take approximately 18 to 24 months. The anticipated cost of the expansion will be \$2,500,000 to \$3,000,000.

Solid Waste (Garbage) Collection

Bardstown

The City of Bardstown provides garbage collection for properties located within its corporate limits. These services are funded solely by user fees. **Bloomfield & New Haven**

Waste Management provides the garbage collection for the Cities of Bloomfield and New Haven. These collections services are paid through monthly user fees.

Nelson County

Nelson County Fiscal Court provides garbage collection to all county residents, and these services are funded solely by user fees. Fiscal Court also receives state grant funding for its biennial roadside ("bulky item") cleanup program.

Recycling

The City of Bardstown and Nelson County have limited recycling operations. Nelson County Fiscal Court started a curbside recycling program in February 2006. This free service is provided to selected population areas and currently serves 460 residences. The City of Bardstown and Nelson County initiated mobile and drop-off recycling throughout the county in 2008. This recycling program is funded partially through state grant funds. Six drop-off locations were established in Bardstown, Bloomfield, Samuels, and New Haven for citizens to drop-off #1 and #2 plastics, aluminum cans, mixed paper, cardboard, and newspapers. Recyclable materials are then processed by Nelson County Industries.

<u>Policy & Regulatory Implications</u>: The Comprehensive Plan Future Land Use Map (Map #4-1) identifies the existing landfill and the landfill's future expansion and buffer areas. These areas support the landfill's efforts for expansion over the next 25-year planning period. Any review of future land uses surrounding the landfill should promote the public interest, ensure compatible uses, protect and encourage the proper use and expansion of the landfill and its facilities, and minimize adverse impacts on the airport and surrounding uses.

Utilities

Cable Television

Nelson County is served by several cable television programs. Bardstown Cable TV serves the Cities of Bardstown, Bloomfield, Fairfield, and significant portion of Nelson County. The City of New Haven and surrounding areas are served by Time Warner Cable.

Electric

Three electric providers serve Nelson County. The City of Bardstown is served by its municipal electric service. The Cities of Bloomfield, Fairfield, and New Haven and surrounding areas are served by Kentucky Utilities. Other areas are served by Salt River Electric Cooperative.

Internet

Bardstown Cable, Time Warner Cable, AT&T, and other companies offer high-speed Internet for Nelson County residents.

Stormwater Management

Telecommunications Facilities

Multiple provides offer telecommunication services, such as cell phone and wireless internet, for Nelson County residents. Future land use decisions must also take into account the extent, availability and adequacy of private services. As the demand for and accessibility to such services continues to increase, Nelson County will experience the need for telecommunications facilities, such as cellular antenna towers. Existing telecommunication facilities must be used and improved to accommodate co-location. New telecommunication facilities should only be constructed to serve unserved or underserved areas of the County and to provide opportunities for optimal co-location.

Telephone

Telephone service in Nelson County is provided by AT&T.

Wastewater (Sewer)

Nelson County has 3 separate municipal wastewater collection systems owned and operated by the Cities of Bardstown, Bloomfield, and New Haven. Map #6-4 in the Map Appendix shows the wastewater system for the Town and rural areas. Map #6-5 illustrates the wastewater system for the Bardstown area.

Bardstown

The City of Bardstown owns and operates a municipal wastewater collection and treatment system. Maps #6-4 and #6-5 illustrate the city's existing wastewater infrastructure and proposed projects.

Bardstown's collection system consists of 871,704 feet of sewer line ranging from 2-inch force mains to 36-inch gravity lines, 26 pump stations, and 2,762 manholes and serves 7,000 customers.

Bardstown's wastewater treatment system includes 2 wastewater treatment plants. The Town Creek wastewater treatment plants at 894 Gilkey Run Road was originally constructed in 1960 and was upgraded and expanded to a 3 million gallon per day permitted capacity in 1980. The Jerry L. Riley plant at 3095 Sutherland Lane was completed in 2002 and has a permitted capacity of 4.0 million gallons per day. The total permitted capacity for the Bardstown system is 7.0 million gallons per day. During the construction of the Jerry L. Riley plant, new pump stations were also constructed at the Town Creek plant and Withrow Creek pumping station to pump wastewater to the Jerry L. Riley plant through a 24-inch force main. This connection provided for the capability to pump wastewater between treatment plants to utilize the full 7.0 million gallons per day treatment capacity. In 2009, the average flow from Bardstown's two plants was 2.86 million gallons per day.

In 2009, the City of Bardstown completed the Town Creek Interceptor Project, which included a 14,400-foot parallel main sewer line along Town Creek and eliminated overflows along this stream segment.

Bardstown's most recent 201 Facilities Plan Update Amendment was completed in June 2010. The amended facilities plan identifies the area which should be served by the City's wastewater treatment system. The amended plan identifies an expanded planning area to include a total of 7,290 acres. The expanded area will incorporate the entire Mill Creek drainage basin and will serve approximately 365 additional persons within the Botland and Woodlawn area and the Nelson County Industrial Park.

The amended facilities plan establishes that the total permitted wastewater treatment capacity will serve the entire expanded planning area through 2020. The plan further identifies potential interceptor layouts and facility sizing needed to provide sewer service to non-sewered areas in the expanded planning area. The following projects are identified:

- <u>Bloomfield Road Force Main Extension</u>. This project will connect Bloomfield's proposed 12-inch force main to the Bardstown wastewater system. This force main extension will allow for the elimination of Bloomfield's wastewater treatment plant and may also allow for extension of service to Chaplin and Fairfield. Bardstown will construct approximately 12,500 linear feet of 16-inch force main mainly along Bloomfield Road (US 62) from the Town Creek interceptor sewer near Bardstown Reservoir No. 3 to the intersection of Bloomfield Road (US 62) and KY 162. This project is scheduled for construction in Spring 2012.
- <u>Pottershop Road Force Main Replacement</u>. This project will improve the level of service within the Rowan Creek drainage basin. The existing 8-inch force main limits the capacity of the Pottershop pump station and creates a bottleneck in the collection/conveyance system. It will be replaced with approximately 8,000 linear feet of new 12-inch or 14-inch force main from the Pottershop pump station to the Town Creek interceptor sewer. This project is scheduled for construction in Spring 2012.

Bardstown's wastewater collection and treatment system is generally in good condition. With excess treatment capacity and continued improvements to address infiltration and inflows, the City's system will accommodate and facilitate future growth and development.

<u>Bloomfield</u>

The City of Bloomfield owns and operates the County's second largest wastewater system. Bloomfield's system serves 390 customers in and around Bloomfield. Bloomfield's wastewater treatment plant and conveyance lines were constructed in 1970. Map #6-5 shows Bloomfield's wastewater system. Bloomfield's collection system is a gravity sewer system. One pumping station and force main conveys wastewater from users on Highgrove Road (KY 48) to the main gravity system. All gravity sewers flow to the existing wastewater treatment plant. Bloomfield's wastewater treatment plant is located on the west side of the East Fork of Simpson Creek, approximately 1.6 miles northwest of the City. The plant's permitted capacity is 0.15 million gallons per day.

Bloomfield's most recent 201 Facilities Plan Update Amendment was completed in March 2010. The Plan indicated that the existing collection system appears to be properly sized and effective to meet current needs and that while the existing treatment plan is operating effectively and provides reliable treatment, it is showing its age and is need of attention to provide reliable service. The amended facilities plan recommends the following improvements:

- <u>Infiltration and Inflow Reduction</u>. The City should continue efforts to reduce infiltration and inflow into the collection system.
- <u>Interceptor Sewer Replacement</u>. This project will replace a section of the 12-inch interceptor sewer along Simpson Creek with 18-inch sewer and replace a section of 8-inch with 10-inch sewer.
- <u>Bloomfield Road Force Main Extension</u>. This project will connect Bloomfield's proposed 12-inch force main to the Bardstown wastewater system. This force main extension will allow for the elimination of Bloomfield's wastewater treatment plant and may also allow for extension of service to Chaplin and Fairfield. Bardstown will construct approximately 12,500 linear feet of 16-inch force main mainly along Bloomfield Road (US 62) from the Town Creek interceptor sewer near Bardstown Reservoir No. 3 to the intersection of Bloomfield Road (US 62) and KY 162. This project is scheduled for construction in Spring 2012.

New Haven

The City of New Haven owns and operates a municipal wastewater system. In 1973, the City constructed a wastewater treatment plant along New Haven Road (US 31E), north of the corporate limit. The plant has a permitted capacity of 0.16 million gallons per day. New Haven's average daily flow for the New Haven wastewater treatment plant was 0.147 million gallons per day. New Haven maintains a collection system of gravity sewers and force mains ranging in size from 4 to 8 inches in diameter and has 3 pump stations. The *Nelson County Regional Facilities Plan*, dated June 2004, provided an evaluation of the New Haven wastewater treatment plant. The Plan indicated that while all mechanical equipment is well maintained and serviced, the New Haven system exceeds the peak flow allowance with no known bypasses and recommended that the City of New Haven either upgrade its existing wastewater treatment plant or connect to a regional wastewater treatment plant in order to facilitate future growth. The City of New Haven has plans to continue system improvements and construct a new wastewater treatment plant to increase capacity and service. Over the last 2 years, the City has replaced 67 percent of their sewer lines and resolved almost 90 percent of the infiltration and inflow.

Unincorporated Areas

Areas outside of the Cities of Bardstown, Bloomfield, and New Haven have limited access to and availability of public sanitary sewer. In June 2004, the *Nelson County Regional Facilities Plan, dated June 2004,* was completed. This plan outlined strategies for providing sanitary sewer collection and treatment for unsewered areas of Nelson County and examined regional wastewater system solutions. Although this regional facilities plan has not been implemented, efforts to continue regionalization continue to be evaluated for feasibility and effectiveness.

<u>Water</u>

About 99 percent of Nelson County households are served by public water. The County is served by 8 water systems – City of Bardstown, City of Bloomfield, City of New Haven, North Nelson Water District, Hardin County Water Districts #1 and #2, LaRue County Water District #1, Marion County Water District, and City of Springfield. Map #6-1 in the Map Appendix shows the districts and service areas of Nelson County's water providers. Map #6-2 illustrates the waterlines and water sources for rural and Town areas. Map #6-3 shows the waterlines and water sources for the Bardstown area.

Bloomfield

The City of Bloomfield's water system is a distribution system. The City purchases water from the City of Bardstown and distributes to 2,048 customers in northeast Nelson County and parts of Spencer and Anderson Counties. The City also has connection to the City of Taylorsville's water system for emergency cases only.

Bardstown

The City of Bardstown initiated water treatment in 1903 when it created a dam across Barber's Hollow, now the Community Park. The lake had a capacity of 29 million gallons, and the City initiated pumping water from its new plant, located on East Broadway (now Civil War Museum), in 1904. During drought months, the City hauled water, by truck, to the treatment plant. The rubble dam was constructed around 1928. In 1944, the City installed 10,000 feet of 8-inch pipe to the Beech Fork River to supplement the water supply. In 1963, the City constructed Sympson Lake to increase the water capacity. Sympson Lake covered more than 135 surface acres and had a capacity of 1.2 billion gallons. In 1965, the City constructed the current water treatment plant below Sympson Lake with a pumping capacity of 1.5 million gallons per day. Since 1965, the City has completed many upgrades to the treatment plant. The City is currently upgrading the water treatment plan to increase the treatment capacity to 8 million gallons per day and is constructing a clear well storage tank to hold one million gallons of treated water. This project will be completed in Fall 2011. The City also has schedule to install 12,232 feet of 16-inch water transmission main to expand flow to Nelson County Industrial Park on Parkway Avenue.

Today Bardstown's water system includes 12 water tanks, 5 booster pump and/or disinfection stations, and 1,598,728 linear feet of waterlines. The system has a capacity to pump 8 million gallons per day, and during months of little rainfall, the City can pump water from the Beech Fork River to holding lagoons at the rate of 6 million gallons per day to supplement the lake. The City's water system serves approximately 11,010 customers – 5,387 customers within Bardstown corporate limits and 5,623 customers outside of the corporate limits.

Over the next 25 years, the City proposes the following system improvements and projects:

- Removal of water tank in the Bardstown Cemetery and construction of new water tank on Pennebaker Avenue;
- Replacement of tanks in Boston and Hardin County;
- Rehabilitation of pump station on Kelley Drive;
- Reconstruction/repair of raw water intake structure and rubble dam at the Beech Fork River; and,
- Identification and development of alternative water source through Salt River supply or other means.

New Haven

In 1936, the City of New Haven began selling processed water to area residents. The City provided water treatment and service for 53 years until the plant fell into disrepair. In 1988, due to lack of funding and facing violations of the Safe Drinking Water Standards, the City closed its water treatment plant and constructed a 4-mile line to connect on and purchase water from the City of Bardstown's system. The City currently has 2 storage tanks. One tank is located on Prices Creek Loop, off of New Haven Road (US 31E) and has a capacity of approximately 150,000 gallons. The second tank, known as the "Downtown Tank," is on Indian Hills, and has a capacity of 209,000 gallons. The City provides water to approximately 600 connections. The City currently has no plans for water improvements projects.

North Nelson Water District

The North Nelson Water District (NNWD) was formed June 10, 1965 to provide an adequate and dependable supply of quality drinking water for rural areas of northern Nelson County. The initial water system was installed in 1971, and additional lines were installed in 1975 and 1978. Since then the NNWD has seen tremendous growth mainly due to residential development, construction of Thomas Nelson High School, and relocation of Flaget Memorial Hospital. The NNWD also serves parts of southwestern Spencer County and southeastern Bullitt County. The district serves 4,073 customers outside city limits and 175 customers within the Bardstown city limits.

The NNWD currently does not treat its water. Until 1998, the NNWD purchased its water solely from the City of Bardstown. Since 1998, the NNWD has purchased 50 percent of its water from Louisville Water Company and 50 percent from the City of Bardstown. The NNWD's current system includes 3 existing storage tanks with total capacity of 1,372,000 gallons, 3 pump stations, 172 miles of 6-inch or less lines, and 45 miles of 8 to 12-inch lines. System improvements currently under construction include a new 673,000 gallon storage tank on Weller Loop, new pump station on Whitesides Road. Future improvements include 21,000 linear feet of 8-inch PVC pipe along Samuels Road (KY 509), 12,000 linear feet of 8-inch PVC pipe along Louisville Road (US 31E), and 4,000 linear feet of ductile iron pipe along Whitesides Road.

<u>Policy & Regulatory Implications</u>: The effects of utility improvements and projects on land use planning cannot be overstated. Capital improvements, particularly water and sewer improvements, affect land use, and vice versa. For example, the approval and development of a major subdivision may result in the "over capacity" of the available water and sewer, or a proposed sewer project may result in unanticipated changes in land use.

The Comprehensive Plan supports the utilization of land in existing developed areas and Potential Development Areas (PDAs) already served by adequate infrastructure and discourages scattered development beyond the availability of urban services. While the adequacy and availability of <u>all</u> public services and infrastructure should be reviewed and factored into future land use decisions, coordination of future land use planning with availability and adequacy of public water and sewer is critical to minimizing over-burdening and ensuring orderly and efficient services. Future land use decision should factor in the adequacy of available public services to accommodate and facilitate future growth and development.

The Comprehensive Plan also supports the coordination of land use planning with capital improvements planning and encourages the improvement and upgrading of public facilities in a logical and cost-effective manner. The Planning Commission, legislative bodies, and utility agencies and organizations must work closely and cooperate to coordinate land use and infrastructure planning. Development proposals should be evaluated to determine the impact on existing utilities and minimize capacity issues of existing systems. The design and plan for infrastructure improvements should be in accordance with the densities, intensities, and locations for future development as described in the Future Land Use Plan (Chapter 4). Further, future developments should be encouraged to connect to public sewer, or in areas where public sewer is inadequate or unavailable, system improvements should be made prior to further development.

To ensure available and adequate public utilities, the Zoning and Subdivision Regulations should implement the Plan's recommendations.