CHAPTER 8. COUNTY FACILITIES AND SERVICES

This chapter contains information on Muscatine County's water supply systems, sanitary sewer and wastewater treatment systems, gas and electric utilities, communications, public safety and emergency services, health and human services, planning and development, and the library system.

Water Supply Systems

Muscatine Power and Water is the largest water supply system in Muscatine County and is the primary provider in the City of Muscatine. They serve over 9,500 households and business and pump an average of 10 billion gallons of water per year. Treatment capacity is 35 million gallons of water per day, with an average demand of 26 million gallons per day in the City of Muscatine. The water distributed by Muscatine Power and Water originates in the Muscatine Island Aquifer and is located along the west bank of the Mississippi River flood plain. Its coverage expands through both Louisa and Muscatine Counties for about 50 square miles. Muscatine's water is compliant with all state and federal regulations all of the time, with approximately 60 water quality tests performed each day in Muscatine's laboratories.

The cities of Atalissa, Blue Grass, Durant, Fruitland, Walcott, West Liberty, and Wilton all have municipal water supply systems.

Sanitary Sewer Systems and Waste Water Treatment

Table 8.1 outlines the publicly owned wastewater treatment facilities in operation that are found in Muscatine County.

Table 8.1 – Wastewater Treatment Facilities In Operation in Muscatine County, Iowa 2014

Facility Name	Treatment Type
Atalissa City of STP	Activated Sludge
Central Iowa Power Cooperative - Fair Station	No Treatment
Clearview Mobile Home Park-Ripley's Inc.	Other
Conesville City of STP	Waste Stabilization Lagoon
Durant City of STP	Trickling Filter
Gerdau Ameristeel Wilton	Other
Grain Processing Corporation	Activated Sludge
H.J. Heinz Company, L.P.	No Treatment
Maplewood Estates	Aerated Lagoon
Monsanto Company	Activated Sludge
Montpelier Sanitary District, Village of	Aerated Lagoon
Muscatine City of STP	Activated Sludge
Muscatine Power & Water CCR Landfill	No Treatment
Muscatine Power and Water	Other
Nichols City of STP	Waste Stabilization Lagoon
SSAB Iowa Inc.	Other

Facility Name	Treatment Type
Stockton City of STP	Waste Stabilization Lagoon
Walcott City of STP (South)	Activated Sludge
Wendling Quarries – Moscow Quarry	Other
West Liberty City of STP	Activated Sludge
Wilton City of STP	Trickling Filter

Source: Iowa DNR, 2014

According to the United States Environmental Protection Agency (EPA), the following types of water treatment are defined as:

- **Activated Sludge** Product that results when primary effluent is mixed with bacterialaden sludge and then agitated and aerated to promote biological treatment, speeding the breakdown of organic matter in raw sewage undergoing secondary waste treatment
- **Aerated Lagoon** A holding and/or treatment pond that speeds up the natural process of biological decomposition of organic waste by stimulating the growth and activity of bacteria that degrade organic waste
- **Trickling Filter** A coarse treatment system in which wastewater is trickled over a bed of stones or other material covered with bacteria that break down the organic waste and produce clean water
- Waste Stabilization Lagoon Large, manmade water bodies filled with wastewater that are then treated by naturally occurring processes

According to the Iowa DNR, a properly designed, sized, installed, and maintained on-site wastewater treatment system should safely remove and treat wastewater from a home. Untreated or improperly treated wastewater is a disease risk to people through direct contact with sewage or animals (flies, dogs, cats, etc.) that have been in direct contact with sewage. Also, untreated or improperly treated wastewater is a threat to human health and the environment when it pollutes surface water or groundwater.

After determining where the on-site wastewater treatment system and reserve area will be located, the area should be marked and fenced so it will not be disturbed during building construction. This is especially important for an effluent treatment system such as a drain field or mound, since compaction can seriously impair the soil's ability to treat wastewater. It is wise to determine where to place the on-site wastewater treatment system, as well as the future replacement system, prior to building a home. Consider increased lot sizes and reduction in number of lots in a rural subdivision where private septic systems will be installed. New developments already may have designated areas for the system and reserve system.

Poorly functioning on-site wastewater treatment systems also can affect the surrounding environment. On-site systems can release nitrogen from human waste into groundwater and surface water. They also can release phosphorous, found in some household detergents and water conditioners, as well as human waste, into surface water. These nutrients promote algae and weed growth in lakes and streams. These plants eventually die and settle to the bottom where they decompose. This decomposition process depletes oxygen that fish and other aquatic animals need to survive, which may result in the death of fish and other aquatic organisms.

Cleaning products, pharmaceuticals, and other chemicals dumped down the household drain also enter the wastewater treatment system. Some of these materials can be dangerous to humans, pets, and wildlife. If allowed to enter a system, many of these chemicals will pass through without degrading and may contaminate groundwater, surface water, and/or soil.

The rural areas of Muscatine County rely on private, on-site septic systems for sewage disposal. In Iowa, it is the County Board's responsibility to provide regulation of sewer systems serving 4 homes or less than 15 people. The Muscatine County Health Department regulates the design, construction, and installation of all private, on-site treatment systems; samples private, on-site treatment systems; and provides assistance with complaints relating to sewage treatment and disposal systems.

Waste Management

Sanitary Landfills

The Muscatine County Landfill is the only active landfill in Muscatine County. It is located near rural Stockton right off of Highway 61. The site is composed of approximately 150 acres of landfill that have been or could be developed for landfill areas in the future. Residents are not allowed to transport waste directly to the Muscatine County Landfill. The Muscatine Recycling Center and Transfer Station receive waste from residents and businesses located within the service area, followed by transfer trailers hauling waste to the landfill.

Recycling

Many municipalities in Muscatine County provide on-site recycling that allows drop-offs from citizens. Some of the larger jurisdictions do provide curb-side pickups with delegated collection days.

Utilities

Electricity and Natural Gas

Muscatine County is served primarily by six utility companies; Muscatine Power and Water, MidAmerican Energy, Alliant Energy, Durant Municipal Electric, Wilton Municipal Light and Power System, and Eastern Iowa Light and Power Coop (REC), located in Wilton.

Muscatine Power and Water (MPW) serves the majority of the City of Muscatine. The electricity utility serves approximately 11,225 customers and three coal-fired burners and four electric generators. MPW has become the largest municipal electric utility in Iowa based on sales and generation. Some of the outlying areas of the City of Muscatine are not in MPW's electric service area. As a result, the remaining areas are primarily serviced by Eastern Iowa Light and Power Cooperative.

MidAmerican Energy provides electric and natural gas service to other parts of Muscatine County. MidAmerican Energy recently instituted an energy-efficiency program in its Iowa service area. This program helps commercial and industrial customers reduce energy consumption. Programs include new building construction services and rebates or financing options on high-efficiency equipment.

Alliant Energy Corporation is a public utility-holding company serving electricity and natural gas to more than one quarter million customers. Their service area expands throughout Muscatine County. Providing its customers in the Midwest with regulated electricity and natural gas service is the company's primary focus.

Durant Municipal Electric is located in Durant and provides electoral services to those residing in the Durant area.

Wilton Municipal Light and Power System is governed by a Board of Trustees and provides services to the City of Wilton. Offices are located at 220 West 3rd Street.

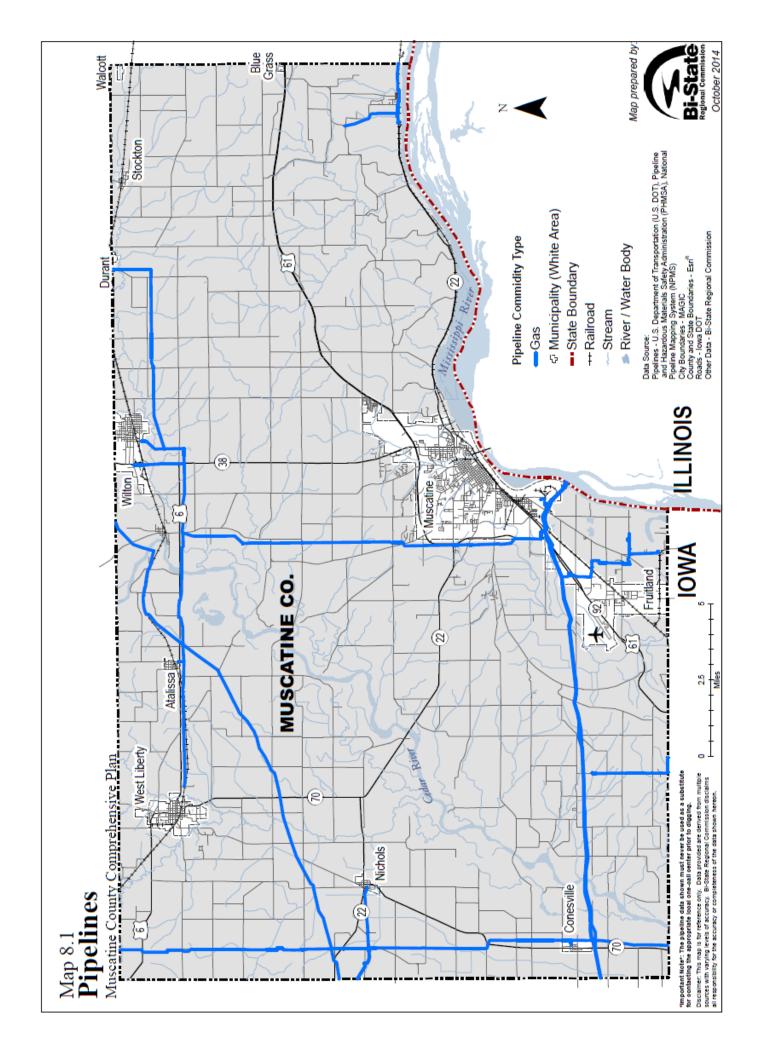
As Iowa's largest distribution electric cooperative, Eastern Iowa Light and Power Cooperative serves a diverse membership that includes traditional farm operations, rural housing areas, industrial and commercial developments, and recreational facilities. The Eastern Iowa rural service area covers all or portions of 12 counties, stretching along the Mississippi River, from Sabula in the north to Burlington in the south and west to Iowa City. Eastern Iowa has offices in DeWitt, Lone Tree, and Wapello. The headquarters office complex is located in Wilton.

Propane is used in rural areas of Muscatine County not served by natural gas. The propane is used for heating and drying of farm products. Propane is stored in above or below-ground tanks.

Pipelines

Pipelines provide a relatively low-cost method of transporting bulk commodities that are often classified as hazardous materials. These facilities commonly bisect urban areas across a variety of land uses, from agricultural to residential. The relationship between land use and transportation is particularly critical for pipelines. Distribution of energy fuels by pipeline is widespread across the United States. As urban areas grow and develop, the need for fuels and access to pipelines also increases. Land use around pipelines then becomes important for public safety and the environment. Large diameter, high-pressure transmission pipelines, although benefiting an urban area economically, can pose significant public safety and environmental consequences without knowledge of their location and the risks associated with them.

The U.S. Department of Transportation (DOT), Office of Pipeline Safety, regulates pipeline safety. The Pipeline Safety Improvement Act of 2002 required the DOT and Federal Energy Regulatory Commission (FERC) to conduct a study of population encroachment on rights-of-way. Ultimately, a report was published called the 2004 Transportation Research Board Transportation Pipelines and Land Use: a Risk-Informed Approach Special Report 281. The report concludes that judicious land use decisions can reduce the risks associated with transmission pipelines through land use policies affecting siting, width, and other characteristics of new pipeline corridors and new development areas encroaching on existing corridors. See Map 8.1 for general locations of major pipelines found in Muscatine County.



Communications

Major local service providers include CenturyLink, Mediacom, TV Service Now, Louis Communication, DIRECTV, Comcast Communication, among others.

Other forms of communication in Muscatine County include:

Newspapers: 3 – Muscatine Journal, West Liberty Index, and the Wilton-Durant Advocate News

Radio Stations: 24

Television Stations: ABC, CBS, NBC, FOX, PBS, plus educational & digital cable

Cellular Service: Sprint, US Cellular, T-Mobile, AT&T, and Verizon.

Public Safety and Emergency Services

The Muscatine County Emergency Management Agency is located at 312 East Fifth Street, Muscatine, Iowa 52761. An agency coordinator works for a local commission and coordinates emergency management services for the county. Although primarily responsible to the Commission, the EMA coordinator also works with the Iowa Homeland Security & Emergency Management Division, FEMA Region VII, and the Department of Homeland Security.

Law Enforcement

The County Sheriff's Department provides 24-hour police patrols throughout the county. A reserve unit provides protection to Stockton through a contractual agreement. Atalissa, Conesville, and Fruitland have part-time officers in addition to the county patrols. The Cities of West Liberty and Wilton have a police chief and officers. The Cities of Durant and Walcott also have a police chief and officers, but they are both only partially located in Muscatine County. The City of Muscatine has a Police Department, in addition to the authority by the Sheriff's Department within city limits.

Muscatine County Jail

The county jail is located in the City of Muscatine. The first jail was built in 1857 and is now listed on the National Register of Historic Places. In 1907, the original jail was replaced, and in 1990, an 8.5 million dollar bond was issued to construct a new jail. It was built just west of the courthouse and old jail, located at 400 Walnut Street, Muscatine, Iowa 52761. The most recent upgrade to the jail entailed the addition of 136 beds, in exchange for the closing of the Minimum Security/Work Release building, which held 36 beds. Administration office hours are 8:00 a.m. to 3:30 p.m. Monday through Friday. Visiting hours have been scheduled by the jail.

There is not a county juvenile detention center located in Muscatine County; however, there is one nearby in Scott County. The Muscatine County Juvenile Detention Center offers more than short-term security. In compliance with laws and standards established by the State of Iowa, the program is designed to define limits on behaviors and hold youth accountable for their behaviors. The facility has 16 beds and houses both males and females.

Criminal Investigations

The Muscatine County Sheriff's Office Investigations Division is assigned to the task of investigating all felony level crimes, amongst a range of other duties including: property and evidence room management, regulations of the Sex Offender Registry and investigation of registry violations, intelligence gathering and dissemination of critical information, and assisting the other divisions of the Sheriff's Office as directed. Often times, crimes investigated by the County Investigation Division cross county lines, resulting in investigators working directly with many outside agencies.

Specialized Teams

The Muscatine County Sheriff's Office has a number of specialized teams including; a Special Response Team, Domestic Violence Team, K-9 Unit Team, Drug Task Force Team, and Water and Ice Rescue Team. The Muscatine County Sheriff's Office has been called upon to assist in water-related rescues as far as Floyd County to the north and Lee County to the south. Muscatine Firefighters and Paramedics have the knowledge and ability to operate the Muscatine County Sheriff's Office boats and equipment, resulting in decreased response times to emergency medical services.

Emergency Medical Services

Muscatine County EMS is the coordination of ambulance service providers, fire departments, health care, and government to better prepare the volunteer and paid service providers in the county. Scott County EMS has contracted with Bluegrass Fire Department and services approximately 10 square miles of Muscatine County. Within close proximity of Muscatine County, Scott County also has Med Force (air evacuation services) located in Colona, Illinois. Burlington, Iowa Med Force also serves the area if needed. Map 8.3 illustrates the location of the ambulance districts and the EMS providers.

Fire Protection

Muscatine County is divided into 13 fire protection districts. The districts include: Atalissa, Blue Grass, Conesville, Durant, Fruitland, Letts, Montpelier, Muscatine, Nichols, Walcott, West Liberty, and Wilton. The districts all coordinate efforts under a mutual aid agreement. Map 8.2 shows the location of the fire districts in Muscatine County.

Animal Control

Muscatine Humane Society is located at the Nancy E. Kent Animal Shelter. The shelter building and its contents were donated by Nancy E. Kent, and opened in July of 1996. The shelter works to protect stray, injured, abused, and unwanted animals and has the capacity to house 85 to 100 animals, and runs entirely off of donations.

Health and Human Services

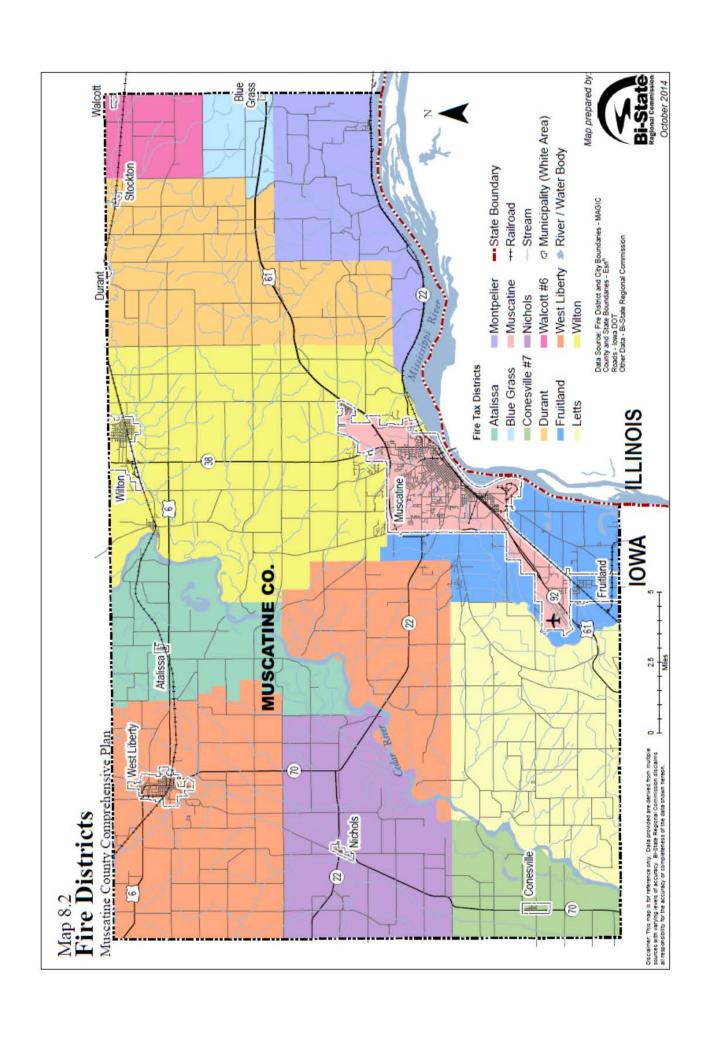
Trinity Muscatine Public Health (TMPH) has been contracted by Muscatine County to provide essential public health services to the citizens of Muscatine County, and additional health-related services to citizens in Cedar and Louisa Counties. Coordination efforts have been established that allow TMPH to work directly with the Muscatine County Board of Health to provide health education, wellness, and outreach activities for individuals within Muscatine County and the surrounding service areas. Services offered by TMPH include but are not limited to child adolescent services, community health education, reproductive health and family planning services, immunizations, certain dental treatments, and community health promotions.

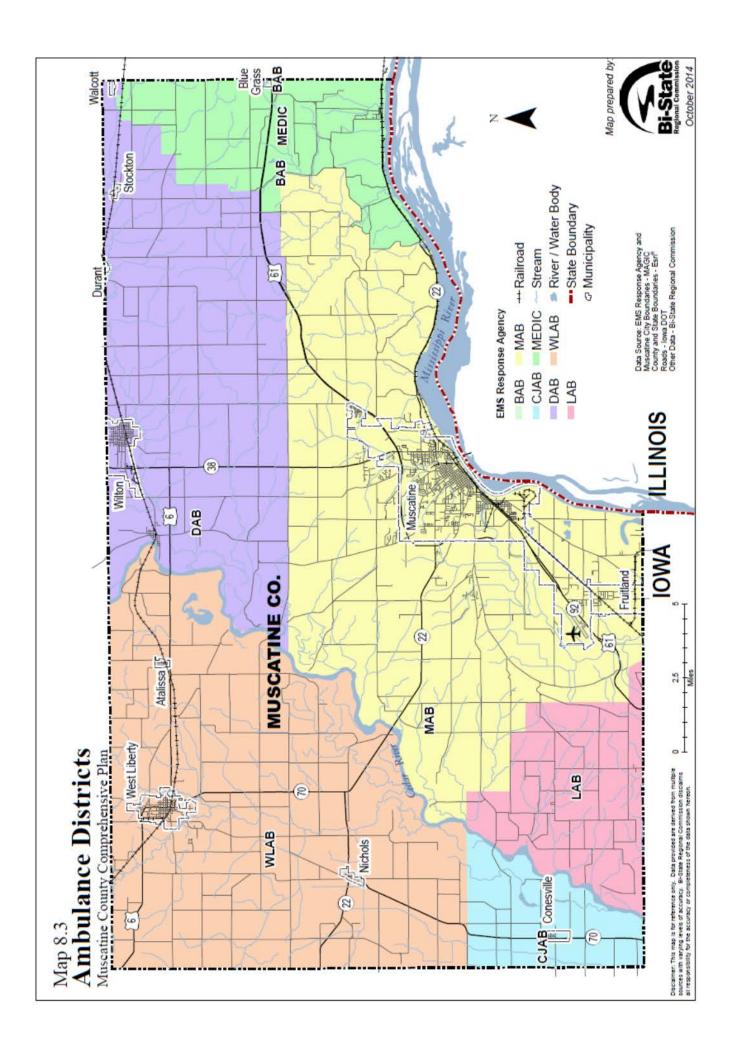
Senior Resources

Senior Resources is a non-profit organization that provide assistance to seniors throughout Muscatine County. Muscatine Senior Resources is located in the City of Muscatine but offers services to all of Muscatine County. Their mission is to "promote and provide programs to enhance the quality of life for seniors ages 60 plus in Muscatine County." Some of the services include an adult day care, chores service, home repair program, Meals on Wheels, amongst other services.

Muscatine County Community Services

Muscatine County Community Services, located at 315 Iowa Avenue, provides general financial assistance to individuals in Muscatine County with services such as shelter, food, utilities, medical care, medical transportation, dental care, prescriptions care, eye care, and burial services. The government ran service provides programs for Veterans assistance and serves as a liaison to the Muscatine County Board of Health. Medicaid Targeted Case Management and County Funded Case Management is also available to persons with mental illness, intellectual, disabilities, brain injury, and developmental disabilities. While participating in the case management process, individuals will receive an assessment, individual program planning, service coordination and facilitation, advocacy, crisis intervention, and Central Point of Coordination gate keeping.





Other Services

Geographic Information System (GIS)

Muscatine Area Geographic Information Consortium (MAGIC) was developed in 1999. MAGIC is a partnership among Muscatine, Muscatine County, and Muscatine Power and Water. Initiation of the Consortium allowed the three local government entities to share costs and resources in an effort to develop a countywide GIS, resulting in Iowa's first local GIS Consortium. With the use of MAGIC, the citizens of Muscatine County now have a method to access property information and maps online, with no service fee.

Staff working with GIS utilize the tool to provide improved methods for collecting, managing, and using location based information to analyze trends, design spatial models, and develop projections to support decision making processes and enhance public access to data in an equitable manner. The use of GIS enables elected officials, department heads, county employees, public and private agencies, and citizens of Muscatine County to graphically view and analyze information and apply GIS technology to Muscatine County issues.

Zoning, Building, and Environmental Department

The Zoning, Building, and Environmental Department is in charge of providing services related to current and future land uses in all unincorporated areas of Muscatine County and services related to residential building, permitting and inspections in unincorporated areas in the county. Other services include staff assistance to the Zoning Commission, Board of Adjustment, and Building Board of appeals; rural addressing system; flood plain management; and environmental health services such as the permitting, installation, design, and inspection of private sewage disposal. The department also assists with grants to counties in regards to free well testing, reimbursing for well closures and well rehabilitations, and informing individuals of the zoning of their property, uses permitted, and special use permits.

Conservation Board

Muscatine County currently has two patrol officers, soon to be three, that monitor the parks, public hunting, fishing, and camping and recreation found within the county. The Muscatine County Conservation Board is responsible for managing 11 areas encompassing approximately 1,740 acres.

Library Systems

Four library systems provide easy access to resources in Muscatine County:

- The Musser Public Library is Muscatine County's largest library in the county. Musser
 Public Library has been open since 1902 when P.M. Musser donated the funds for the
 public building. Members of the Musser Public Library automatically become eligible to
 use any participating Iowa Open Access Library and any RiverShare Iowa or Illinois
 public library.
- The West Liberty Public Library offers a variety of services to the community and is located at 400 North Spencer Street in West Liberty.

- The Wilton Library shares a building with the Wilton Community Center and was recently founded in 2010.
- A branch location of the Muscatine County Library is located in Durant. The Muscatine County Library System has taxing authority. It determines each jurisdiction's budget and divides that by the population it serves, then levies a per-capita tax.

School Districts

There are three school districts serving Muscatine County, including: Muscatine Community School District, West Liberty School District, and Wilton Community School District. Surrounding school districts that are not located within Muscatine County, such as Durant Community School District and Louisa-Muscatine School District serve portions of the county. Map 8.4 illustrates the school districts that serve Muscatine County.

County Buildings

Muscatine County Administration Building, 414 East Third Street, Suite 101 – The County Administration Building Houses the Muscatine County Administration Office, Treasurer, Recorder, Auditor, and the Assessor. Brief descriptions of each service are provided below:

- Administration Office Duties include responding to citizen questions and complaints, scheduling items on the Board of Supervisors agendas, and processing appointments to various boards and committees.
- Treasurer Services include payments for property taxes, renewal of vehicle plates, and registering of vehicles.
- Recorder Records documents; administers boat, snowmobile, and ATV registrations and titles; provides hunting and fishing licenses; and houses vital records.
- Auditor Oversees absentee voting, election administration, voter registration, alcoholic beverage licenses and cigarette permits for businesses in unincorporated areas, and certification of tax levies; manages the lost and found; and maintains official county records.
- Assessor Assists with homestead credits, military exemptions, and property assessments.

County Attorney's Office, 420 East Third Street – County Attorney prosecutes all violations of state criminal laws and county ordinances.

Community Services Building, 315 Iowa Avenue – Services offered include general assistance, veterans affairs, trust services, funding of services for persons with disabilities, and case management/social work.

County Engineer's Building, 3610 Park Avenue – The County Engineer manages county roads, and the Zoning, Building, and Environmental Department manages building codes, permits, well permits and testing, and administration of zoning and subdivision ordinances.

Muscatine County Jail, 400 Walnut Street – The Muscatine County Jail houses inmates and the Sheriff – Civil Department issues gun permits, processes civil papers, and sheriff's sales.

 $Muscatine\ County\ Sheriff's\ Office,\ 3600\ Park\ Avenue-The\ Sheriff's\ Office\ houses\ patrol\ and\ investigative\ offices.$

Environmental Learning Center/Discovery Park, 3300 Cedar Street – This facility Houses the Conservation Board and staff and administers recreational activities throughout the county.

