

Community Facilities

Public Protection

Natural and manmade disasters affect every jurisdiction in the United States. The key ingredients necessary to transform natural hazards into natural disasters are inappropriately placed or poorly constructed development. Community leaders and planners should educate their constituents on how informed decisions and choices can affect the development process and yield a safer, more sustainable community.

Emergency Operations Plan

KRS 39B.010(1), KRS 39B.030(3), KRS 39C.050(3), and applicable Kentucky Administrative Regulations require the development and maintenance of a **local emergency operations plan**, which sets forth the local government organizational structure, policies, procedures and guidelines for the management and coordination of all disaster and emergency response in Daviess County, City of Owensboro and City of Whitesville. Such a plan has been adopted by the City of Owensboro, the City of Whitesville and Daviess County that defines the responsibilities of local government and other agencies in the event of a natural, technological or war related crisis.

The complete ***Emergency Operations Plan*** is accessible at the Daviess County Emergency Management Agency. The ***Plan*** identifies the line of succession for directing or modifying planned actions for the city and county. The mission is to define the responsibilities of local government in the event of a natural, technological or war related crisis; to provide broad guidance to local agencies as to responsibilities during these events; to provide procedures to determine the severity and magnitude of these disasters; to direct recovery operations, assist in hazard mitigation and comply with the provisions of Public Law 93-288 and other related laws when federal disaster assistance is made available.

Earthquakes and Flooding

According to the Emergency Management Agency, based on the intensity of the 1811 New Madrid quake, scientists have determined the effects of an earthquake on Kentucky. The Owensboro-Daviess County area would be considered in a ruinous state in the event of a quake, meaning some housing collapse where the ground begins to crack and pipes break open.

Daviess County and the City of Owensboro participate in the National Flood Insurance Program (NFIP), which is backed by the federal government. This program makes flood insurance available to all residents of participating communities. As of October 1, 2003 city and county residents have been receiving a ten percent (10%) reduction in flood insurance premiums due to participation in the Community Rating System as a result of the work of a committee organized by Emergency Management and consisting of representatives from the Owensboro Metropolitan Planning Commission, County Engineering, City

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Engineering, Regional Water Resource Agency and the Geographic Information System Consortium. Owensboro and Daviess County are rated by activities relating to public information, mapping and regulations, flood damage reduction and flood preparedness.

Community Shelters Plan

An essential element of any disaster relief effort is the assistance provided by private relief organizations in the distribution of food, medicine and supplies, in the provision of emergency shelter and in the restoration of community services. The American Red Cross provides shelter, feeding and basic emergency needs immediately following a disaster and certain types of emergencies. The Salvation Army, Mennonite Disaster Service, other charitable organizations and local church groups also provide significant assistance.

Three fixed shelter sites have been stocked with supplies to shelter 200 people each. There is one mobile shelter that accommodates 200 people. Additionally, there is also a trailer with supplies for special needs to accommodate 100 people as well as a trailer with shelter supplies for 200 people that can be moved to any site. For a listing of approved shelters, see Exhibit 6-T1.

Exhibit 6-T1: American Red Cross Approved Shelter Facilities

SHELTERS		
1	Century Christian Church	
2	Central Presbyterian Church	
3	Immaculate Church	
4	Trinity School, Knottsville	
5	St. Martin Catholic Parish Church	
6	First Baptist, Owensboro	STOCKED
7	First Presbyterian Church	
8	Masonville United Methodist Church	
9	St. Alphonsus Parish Hall	
10	Good Shepherd Church	STOCKED
11	St Mary Magdalene Church	
12	Seventh Day Adventist Church	
13	Blessed Mother Parish	
14	Christ Presbyterian Church	
15	Diocese of Owensboro	
16	Faith Lutheran Church	
17	First Christian Church	
18	Owensboro Church of Christ	
19	Peace Lutheran Church	
20	St. Joseph & Paul Church	
21	Brushy Fork Baptist Church	
22	Trinity United Methodist Church	
23	Wesleyan Heights United Methodist Church	
24	Zion United Church of Christ	
25	St. Mary of the Woods Church, Whitesville	
26	Lewis Lane Baptist Church	
27	Owensboro Christian Church	STOCKED

Source: Daviess County Emergency Management Agency

The Big Rivers Chapter of the American Red Cross must select and approve any location that is to be used as a Red Cross shelter site in the event of any disaster. In addition to the shelters listed in the exhibit, all Daviess County and Owensboro school sites and the Owensboro Sports Center are approved sites.

Owensboro Police Department

The Owensboro Police Department (OPD) provides police protection for Owensboro City residents. The OPD presently has countywide jurisdiction, but only exercises that authority in emergency situations.

In February 2008, the OPD was reorganized into two major divisions to increase operating efficiency. The divisions are: **Field Services**, which includes Patrol, Investigations, a Traffic Unit and a Crime Analysis Unit; **Support Services**, which includes a Records Unit, a Property and Evidence Unit, Accreditation/Policy Unit, a Training Unit, a Crime Prevention Unit and oversees building maintenance.

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A Professional Standards Unit, which conducts internal investigations, is attached to the Office of the Chief of Police.

The OPD retained its "Certificate of Accreditation" in April of 2008. The number of available police officers in the city per 1,000 persons is about 1.96, which is slightly less than the state average of 2.10 for municipalities within 25,000 to 100,000 in population. The OPD has instituted a six-sector scheme for assigning first responders. Two K-9 Officers supplement the beat officers.

As outline in state stature, the OPD utilizes the Department of Criminal Justice Training, located in Richmond, Kentucky, for the first 16 weeks of basic training. Once recruits return to Owensboro, an additional four weeks of training is required, before entering into a "Patrol Training Officer Program", which lasts an additional 14 weeks. Recruit officers serve a probationary period of 18 months.

In December of 1999, the OPD occupied a new facility, which is designed to be user friendly. This fits with OPD's focus on "Community Oriented Policing Concepts." The facility is bounded on the north by East 9th Street, on the south by the CSX Transportation railroad, on the east by J.R. Miller Boulevard, and on the west by Daviess Street.

Public Safety Communications (Daviess County Consolidated 911 Center), is now located in the police administrations building. All 911 calls originating within Daviess County are received at this location. Owensboro City Police and Fire, and Daviess County Sheriff and County Fire service calls are dispatched from this location. Ambulance service calls are transferred to Yellow Ambulance Service of dispatch.

Daviess County Sheriff's Department

The Daviess County Sheriff's Office (DCSO) is responsible for the prevention of crime outside the Owensboro corporate limits, and inside the county line. The DCSO is also responsible for the collection of property taxes, civil process service, warrant service, court security, and inmate transportation.

The Daviess County Sheriff's Department participates in a relatively new policing concept; Community Oriented Policing (COPS). It is a style and philosophy of police service delivery, designed to accomplish a law enforcement mission. COPS allows the community and law enforcement agencies to work closely together to enhance crime control.

The DCSO patrols approximately 483 square miles of county roads. Daviess County is the most populated county in the state without a county police force.

All DSCO deputies are certified peace officers under Kentucky's Peace Officer Professional Standards. All deputies are required to complete a 16 week training course at the Department of Criminal Justice training center in Richmond, Kentucky, as well as a 12 week field training program upon completion of the academy.

Law enforcement needs for the most part consume most of the agency's time and budget. DSCO added a narcotics division to its criminal investigation unit that concentrates on drug activity outside the Owensboro corporate limits.

Detention Facilities

Daviess County Detention Center is certified to operate by the Kentucky Department of Corrections. Juveniles are not housed at this facility, which is located at 3337 U.S. Highway 60 East. The facility houses federal, state, Daviess County inmates as well as inmates for other counties in Indiana and Kentucky. The facility is currently certified to house 699 inmates.

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The Daviess County Detention Center has four separate buildings with a total space of over 110,000 square feet. All are located inside of a perimeter razor-wire security fence. Closed circuit surveillance cameras are positioned inside and outside of the buildings.

Court Facilities

Court facilities in Daviess County are presently located in the Judicial Center or Federal Building. Development of the Judicial Center by the Daviess County Fiscal Court consolidated several court-related offices previously located in the County Court House and State Building into a single building. Within the Judicial Center are located the Daviess County District Courts and the Daviess County Circuit Courts. The Court of Appeals office is located in the Corporate Center, with court facilities in Frankfort, KY. The Kentucky Supreme Court is also located in Frankfort. The Federal District Courts for the Western District are located in the Federal Building in downtown Owensboro.

Fire Protection

The most important location standards established by the Owensboro Fire Department (OFD), the Daviess County Fire Department (DCFD), and the Insurance Services Office (ISO) apply to fire station service areas and equipment, hydrant location, and water mains. Communities are graded by ISO and given fire insurance ratings between 1 and 10. Class 1 is superior, with Class 10 considered unprotected. These ratings are used to calculate insurance rates. The OFD has an ISO rating of Class 2.

The goal in the National Standard for Fire Station Placement is to have the ability to respond to 90% of all emergency calls for service in 5 minutes or less (or 4 minutes or less travel time). Estimating that it takes 1 minute to take and dispatch the call, this means a travel time of 4 minutes or less.

ISO recommends that Engine Companies have boundary of 1 ½ mile, which may be close to the 4 minute travel time depending on actual road conditions, speed, etc; and the Truck Companies have a boundary of 2 ½ miles, or a travel time of less than 8 minutes.

In 2010, the average response time for OFD was 4.19 minutes. The average response time for the 10 largest cities in Kentucky averaged 6 minutes. In 2010, OFD responded to 81.6% of all calls in 5 minutes or less, and 90.3% of all calls in 6 minutes or less. In 2011, the OFD had thirteen emergency districts, and responds to 5,000 calls for service per year.

The Owensboro Fire Department has its own training center that serves as a regional training facility for the Green River region. Available testing facilities include a training classroom, fire burn room, standpipe training area, smoke room, two 10,000-gallon-pumper test pits, burn pit, and a four story fire tower. The Daviess County Fire Department also utilizes the training facility, and the Kentucky Tech Fire Rescue Training facilities. The training facility will be in need of update and or complete replacement prior to 2020.

The City of Owensboro has grown out of the recommended service areas to the Northwest, Southwest, Southeast and East. However, there is not currently sufficient tax base in these areas to pay for the cost of an additional station. Moving Stations 3 and 4 will alleviate some of the problem if such moves can be accomplished in the next 5 years. Due to the flood plain, it is not likely that the City of Owensboro will expand much more to the Southwest. Planning should include consideration to the West, and to the East Northeast as the area around the new hospital fills in. Plans may need to include a 6 station scenario that will include moving current stations and adding one additional station by 2020. OFD is currently researching and planning for current and future growth and expects to have a plan in place by late 2012 or early 2013. Exhibits 6-M1 and 6-M2 shows the 1 ½ mile, 4 minute response areas and the current response ESNs with unit response per area, respectively.

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In the county fire protection districts, residential and commercial/industrial development is within five miles of a fire station. All of Daviess County outside the corporate limits of Owensboro is rated at least Class 9, with some areas rated as high as Class 4.

Daviess County is served by 14 fire stations located within 10 fire protection areas. Twelve of the 14 stations are volunteer fire units. The Daviess County Fire Chief coordinates the work of the local units, supported by a paid full time professional staff and volunteers.

E-911 Emergency Service

In January 1987, a "911" emergency response telephone system was brought online throughout Daviess County. The system directs "911" calls to the consolidated dispatch center for response to police, fire and ambulance emergencies.

The OMPC and the U.S. Postal Service completed assignment of street address numbers throughout Daviess County as part of the establishment of this system. The "enhanced" system includes display screens in the dispatch centers that show the name, address, and telephone number of the caller, plus the appropriate police, fire, and ambulance units that should respond to the call. Monthly fees fund system maintenance. The fees are included in local telephone bills.

In June of 2010 the City of Owensboro and Daviess County Fiscal Court signed a memo of understanding between the governments to consolidate the two separate 9-1-1 Public Safety Answering Points (Dispatch Centers) into one and obligated funding to create the Owensboro-Daviess County Dispatch Center with a completion date of August 2011. The consolidated center required merger of ten years of 9-1-1 Computer Aided Dispatch data, connecting police, sheriff, city and county fire into a radio system that could function across frequencies, consensus among fifteen agencies to agree upon selecting call types, developing a new standard operating procedure, installing an IP based NG911 phone system and installing backup systems for all of the above.

A partnership was forged between the 9-1-1 board, the two legislative bodies, ten volunteer county departments, two paid county departments, the Daviess County Sheriff's Department, the Owensboro Police Department and the Owensboro Fire Department. The advantages of this partnership and the new consolidated center can be seen in increased effectiveness of communication. Frequencies can now be patched to each other, observations given and emergency calls to both law and fire agencies can occur simultaneously without delay. This increases the safety for officers and firefighters and assists in quicker responses to citizens. Equipment costs and upgrades can be consolidated for savings and costs associated with the duplication of services are reduced.

Dispatch for the Daviess County Sheriff's office has improved by 45 second. Radio transmissions are now simulcast to ambulance and fire departments resulting in ambulance response times improved by an estimated 90 seconds. The consolidated Owensboro-Daviess County Dispatch Center has provided better service; faster response times and has improved communication among all involved.

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Education

In the 2010-2011 school year, over 27,000 people attended educational programs in Owensboro-Daviess County -- ranging from the public school system to the college level. The major concern of this report will be the local public school systems serving the majority of educational enrollments in Daviess County and 88% of all K-12 enrollments.

Exhibit 6-T2: 2010-2011 Countywide Education Enrollments

Name of Program	Enrollment
Owensboro Public Schools (K-12)	4,381
Daviess County Public Schools (K-12)	10,787
Owensboro Catholic Schools (K-12)	1,288
Heritage Christian School	188
Maximillian Montessori School (K-12)	100
Majesty Academy (K-12)	91
Mary Carrico Elementary (K-8)	85
St Mary of the Woods (K-8)	161
Trinity High School	118
Daymar College	369
Brescia University	800
Kentucky Wesleyan College (Fall 2010)	773
Owensboro Community College (Fall 2010)	7,061
WKU Owensboro Regional Campus (Fall 2010)	1,228
Total	27,430

Source: School records 2010-2011

*Since 1975, the Owensboro Public School System has experienced a gradual decline in enrollment with occasional slight increases from one school year to the next. Enrollment levels have fluctuated from 6,356 in 1975 to 3,961 in 2005. However, from 2005 to the 2010-2011 school year, enrollment has increased, adding **420** students within that time period.*

The Daviess County public school system experienced a decrease in enrollment from 1975 to 1984, but then began increasing enrollment. According to Student Services at Daviess County Public Schools, enrollment has remained relatively stable since 2006 fluctuating from 39 to 110 students difference in that time period. In 2005, Daviess County Public Schools reported an enrollment of 12,225 students, which significantly exceeds the 2010-2011 enrollment.

Owensboro Public Schools Master Educational Plan / District Facility Plan

The Owensboro Independent Schools District Facilities Plan was approved by the Kentucky Department of Education in June 2011.

Exhibit 6-T3 provides a facility status of each educational facility within the Owensboro Public School System. A permanent center is a facility that meets state qualifications and will be in operation for years to come. All of Owensboro Public Schools are permanent centers.

Exhibit 6-T3: Owensboro Public School Facilities

Facility Name	Facility Status
Owensboro High School	Permanent Center 9-12
Owensboro Middle School - North	Permanent Center 7-8
Owensboro 5-6 Center-South	Permanent Center 5-6
Cravens Elementary School	Permanent Center K-4
Estes Elementary School	Permanent Center K-4
Foust Elementary School	Permanent Center K-4
Newton Parrish Elementary School	Permanent Center K-4
Sutton Elementary School	Permanent Center K-4
Seven Hills Alternative School	Permanent Center 7-12
Hager Preschool	Permanent Center P

Source: Owensboro Public Schools Master Educational Plan and District Facility Plan

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The ***District Facility Plan*** outlines a priority schedule for capital outlay and other available building funds. Capital construction projects to be scheduled after the 2010 biennium include major renovation projects at the Owensboro High School, Seven Hills Alternative School, Owensboro Middle School North and South Campus, Foust Elementary, Cravens Elementary, Sutton Elementary, Newton Parrish Elementary and Estes Elementary. New additions planned include the construction of four preschool classrooms and a multi-purpose room at Hagar Preschool. There are no discretionary construction projects listed in the 2011 plan.

Daviess County Public Schools Master Educational / District Facility Plan

In October of 2008, the Local Planning Committee of the Daviess County Public Schools prepared a new ***District Facility Plan*** for the Daviess County Public School System. This Plan was approved by the Kentucky Board of education in December of 2008. The formation of a new plan was waived in February of 2011.

Exhibit 6-T4: Daviess County Public School facilities

Facility Name	Facility Status
Apollo High School	Permanent Center
Daviess County High School	Permanent Center
Beacon Central-Alternative School	Transitional Center
Burns Middle School	Permanent Center
College View Middle School	Permanent Center
Daviess County Middle School	Permanent Center
Audubon Elementary School	Permanent Center
Burns Elementary School	Permanent Center
Country Heights Elem. School	Permanent Center
Deer Park Elementary School	Permanent Center
East View Elementary School	Permanent Center
Highland Elementary School	Permanent Center
Meadow Lands Elementary School	Permanent Center
Sorgho Elementary School	Permanent Center
Southern Oaks Elementary School	Permanent Center
Tamarack Elementary School	Permanent Center
West Louisville Elem. School	Transitional Center*
Whitesville Elementary School	Permanent Center
Source: Daviess County Public Schools District Facility Plan – December 2008	

Exhibit 6-T4 provides a facility status of each educational facility within the Daviess County Public Schools system. A functional center is a facility which does not meet the state qualifications required for a permanent center; however, the facility will likely operate for a number years and sustain minor additions. A transitional center is a facility that will continue to operate and receive routine maintenance; however, the facility is subject to closing in the near future.

* West Louisville Elementary is listed as a Transitional Center on the 2008 plan but a new school has been constructed and the school will become a Permanent Center on the next plan.

The ***District Facility Plan*** outlines a priority schedule for capital outlay and other available building funds. Capital construction priorities to be scheduled within the 2010 - 2012 biennium include construction of a new elementary school in the vicinity of Hwy 56 and Hwy 456 (the new West Louisville Elementary School) and minor renovation facilities that increase the energy efficiency of the school buildings.

Adult Education and Workforce Training

A rich assortment of learning experiences for adults exists in the Owensboro area. Besides providing a large number of traditional degree programs, including evening and weekend classes for the adult students, the five local regional colleges and universities offer a variety of non-credit continuing education programs, many on-site at local business and industry locations.

Culture

The cultural activities in Daviess County have increased tremendously over the years through the combined efforts of the former Owensboro Arts Commission and local government.

Owensboro Museum of Fine Art

The Owensboro Museum of Fine Art opened as Kentucky's second art museum in 1977, in a restored Carnegie Library building. The museum's mission is to provide visual arts programs in all forms as a way to strengthen and inspire aesthetic and humanistic values.

The museum has acquired an important collection of American, European and Asian fine and decorative arts dating from the 15th century to the present and a special emphasis is the documentation of the cultural history of Kentucky. Major traveling exhibitions; visual and performing arts; interpretive events and educational programs for children and adults occur throughout the year.

Theatre Workshop of Owensboro (Olde Trinity Centre)

The City of Owensboro dedicated Olde Trinity Centre to Theatre Workshop of Owensboro (TWO) in 1973, and deeded the property to TWO in 1999. Olde Trinity Centre, erected in 1875, is the oldest example of Gothic revival architecture in Western Kentucky and is the oldest brick church building in Owensboro. It is listed on the National Register of Historic Places. It served as the Trinity Episcopal Church from 1875 until 1964, and from 1964 to 1967 was the home of the Cliff Hagan Boys Club.

TWO was organized for the purpose of providing opportunities and promoting interest in all areas of community theatre. The vision of TWO is to be a progressive, community rooted theatrical arts organization that grows and challenges its volunteers to bring to life the very best assortment of theatrical productions to its audiences. In April of 2011, TWO purchased the historic Opryhouse located on Frederica Street. Built in 1912, this building was one of the first free-standing movie theatres in the country. It was first the Empress and then Malco movie theater and then served as home to Goldie's Best Little Opryhouse. TWO plans to renovate the 100 year old building into an elegant, comfortable multi-use performing arts center that the entire region can cherish.

Owensboro Symphony Orchestra

The Owensboro Civic Orchestra presented its first performance on January 31, 1967, at the Owensboro-Daviess County High School Auditorium with a mission to perform symphonic music of the highest quality to a diverse and expanding audience and to provide music education that enhances community life and the cultural environment of the region.

The Owensboro Symphony Orchestra has been performing in RiverPark Center in Cannon Hall since 1992. On July 1, 2005, the OSO moved from a renovated firehouse into a state of the art 12,000 square foot Owensboro Symphony Academy, which is immediately adjacent to the RiverPark Center. The Owensboro Symphony Academy provided private and semi-private instruction, Kindermusik and Suzuki programs and offers more than 20 different educational programs to the community. The Owensboro Symphony Orchestra provides opportunities for growth and enrichment through its Youth and Cadet Orchestras, Musicians in the Schools, a residency program by guest artists, a Young Artist competition and school day performances. More than 6,000 young people experience the Owensboro Symphony at RiverPart Center "Arts Teach Kids" concerts.

Under the direction of Maestro Nicholas Palmer, the Orchestra features music expressing a wide gamut of styles. The OSO's repertory is based around the works of the masters of Western European Art Music

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of Beethoven, Brahms, Schubert, Mozart, yet incorporates music of new composers as well. The Owensboro Symphony Orchestra is the premier producer of live classical and pops music for the Western Kentucky region.

Owensboro Area Museum of Science and History

Founded in 1966, the Owensboro Area Museum of Science and History is located in downtown Owensboro's historic district. In 1995, the Museum moved to the former S.W. Anderson Department Store building, an historic 19th and early 20th century building.

The Museum offers a wide range of educational programming to school groups and other organizations. The programming is aligned with Kentucky and Indiana core curriculum. The Museum has one traveling/temporary exhibit gallery and five permanent exhibit galleries. Two additional permanent exhibit galleries are under construction. The Museum also host numerous events for the community.

RiverPark Center

RiverPark Center is located on the banks of the Ohio River in Downtown Owensboro. It is a non-profit performing arts and civic center that entertains and educates nearly 200,000 people – including 32,000 children annually through nearly 800 events.

The \$17 million Center, which opened in 1992, showcases music, theatre, and special events. It has also become known as “Broadway West”, producing Broadway national and international tours. RiverPark Center is home to the Owensboro Symphony Orchestra, Owensboro Dance Theatre and the ever popular Friday After 5 summer concert series.

The mission of the RiverPark is to improve the quality of life by hosting and presenting diverse arts and civic events, focusing on arts in education.

International Bluegrass Museum

The International Bluegrass Music Museum is located in the RiverPark Complex in downtown Owensboro. Bluegrass is the official state music of Kentucky. The museum was established to preserve the history of the music that Bill Monroe created and is located only thirty minutes from the town of Rosine, Kentucky and Jerusalem Ridge, the home place where Mr. Monroe was born and raised and now rests in peace. The mission of the museum is to develop and maintain an environment in which people of all ages can discover the richness of bluegrass music. The International Bluegrass Music Museum is the world's only facility dedicated to the history and preservation of the international history of bluegrass music.

Daviess County Public Library

The Daviess County Public Library provides countywide library service from a central facility located at 2020 Frederica St. The library moved from 450 Griffith Avenue to its new facility in 2007, a fifty thousand square foot building with room on site for future expansion. The public library provides free library services to all full-time students.

According to their web site, the Daviess County Public Library provides residents the means to pursue lifelong learning; to meet their recreational reading interest; to find, evaluate and use information in a variety of formats; to get answers to their questions; and to better understand their personal and community heritage.

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Health Services

According to *Strategies for Tomorrow*, Owensboro benefits from its status as a regional center for health care services in that health care dollars flowing into Owensboro from the region have a multiplier effect of turning over five times. This, coupled with the large number of jobs in the field, makes health care the major service industry for Owensboro.

GRADD County Health Report Card

In 1996, the Green River Regional Health Council began tracking health statistics in an effort to examine the health status of the region and influence positive changes in regional health policies. The result was the 1996 Community Health Report Card, which analyzed regional data in 22 key health indicators and compared that data with national and state averages and goals. The report card was viewed as an opportunity to determine target areas for regional improvement and increase public awareness of key health issues that affect our region's health care infrastructure and economic progress, as well as the lives of its families.

The 2008 County Health Report Card continues to track key health statistics. The comprehensive report can be accessed at www.gradd.com. Daviess County ranked 8th of 120 counties in the state in terms of health (1 being most healthy to 120 being least healthy). The strengths in Daviess County were low youth smoking, low obesity, good oral health, low motor vehicle deaths, high graduation rate, high per capita income, well insured and low breast cancer rates. Rates slightly higher than the state and extremely higher than the nation occurred for lung and bronchus cancer.

AMBULATORY (OUTPATIENT) CARE FACILITIES

Private Physicians

Physicians provide the vast majority of basic ambulatory medical services, mostly in freestanding, private practices normally exempt from state planning and regulation.

The Green River District Health Department

The Green River District Health Department, located in Owensboro, is licensed and regulated by the Kentucky Cabinet for Health Services. According to The GRDHD website, their mission is to improve the quality of life by promoting, protecting and enhancing the health and well being of the public. The focus is to develop and maintain healthy habits and lifestyles within our communities and to ensure that our citizenry is protected through environmentally safe surroundings. Some of the services provided at the district level include well child screening and immunizations, Women, Infants and Children supplemental food program (WIC), diabetes prevention and control, nutrition services, tobacco control and prevention, sexual education, adult day care, home health, environmental services, social work services, and tuberculosis control.

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Outpatient Surgical Centers

Exhibit 6-T5: Outpatient Surgical Centers

- Southpark Surgicare (1 Operating Room)
- Owensboro Surgery Center (formerly Health South Surgery Center) (7 operating rooms)
- Gastrointestinal Endoscopy Center of Owensboro (formerly Physicians Affiliated Care Endoscopy Center) (2 operating rooms)

According to the Inventory of Kentucky Health Facilities, Health Services and Major Medical Equipment prepared by the Kentucky Cabinet for Health Services in January 2011 there are 3 licensed ambulatory surgical centers within Daviess County. These centers are designed for same day surgery on an outpatient basis and offer a total of 10 operating rooms.

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Owensboro Medical Health System (OMHS)

Owensboro Medical Health System (OMHS), a community based, not-for-profit hospital serving an eleven county region in Western Kentucky and Southern Indiana, operates with a mission to heal the sick and to improve the health of the community. The organization's vision is to become a regional center of excellence by actively listening and partnering to meet the individual healthcare needs of those it serves. MHS was established in 1995 as the result of a merger between two local hospitals – Owensboro Daviess County Hospital and Mercy Hospital – combining over 150 years of caring tradition in an effort to consolidate and invest in new services, eliminate duplication, reduce costs to patients and improve quality of care.

The hospital is licensed to operate 477 beds. Annually, OMHS cares for an average of over 18,000 inpatients, treats 18,000 surgical patients, delivers 1,800 babies and provides care for more than 63,000 patients in the emergency department. OMHS is the largest employer in western Kentucky, with a workforce that has grown from 2,000 at merger to 3,400. OMHS is a full service hospital with a medical staff of 200 physicians and major service lines that include cancer care, cardiac care, emergency care, home care, occupational health, post-acute care services, surgery and women's services, and full range of outpatient services. Other OMHS facilities include the Mitchell Memorial Cancer Center, a state-of-the-art outpatient facility; the HealthPark, a medical-based fitness center and over 20 diagnostic center, physician practices and clinics.

In June of 2010, OMHS broke ground for a new state of the art hospital facility to advance the vision of delivering a regional hospital that is high-quality, environmentally friendly flexible, innovative and futuristic, that will meet the healthcare needs of the region. The new hospital is designed to enhance the patient and family experience and to provide the highest quality of care with maximum efficiency. The hospital will include 477 patient beds. The planned opening date for the new facility is 2013.

RiverValley Behavioral Health

RiverValley Behavioral Health provides in patient treatment in a non-profit specialty hospital providing diagnosis and treatment for children and adolescents with mental illness. The hospital, established in February 1987, is licensed for 80 beds. Two 9-bed residential treatment centers provide the most intensive level of professional clinical services as a step-down program from in-patient care.

LOCAL EMERGENCY MEDICAL SERVICES

In February 1998, Owensboro and Daviess County entered into an agreement with Yellow Ambulance Service/Owensboro-Daviess County Ambulance Service to provide exclusive countywide ground emergency medical ambulance services and Emergency Medical Services (EMS). EMS means medical treatment and care that may be rendered at the scene of any medical emergency or while transporting any patient in an ambulance to an appropriate medical facility, whether an emergency or non-emergency, including ambulance transportation between medical facilities.

Social Services

Social service agencies seek to sustain and enrich the lives of individuals, as well as the collective life of the community. Although many agencies within our community fit this description, this report is concerned with those services operated by state and local government that have been established to meet the special needs of low-income and disadvantaged people.

Exhibit 6-T6: Income and Poverty, 2010 estimate, Daviess County, KY

Income and Poverty Status, 2010 estimates		
	Number	% of Total
Poverty Estimate all ages	15,215	16.2%
Poverty estimate under age 18	5,650	24.6%
Source: KY State Data Center, U.S. Census Bureau Small Area Estimates		

Census data for 1989 indicate that for Daviess County 15.4% of all persons had incomes below the poverty level. By 1999, the figure had decreased to 12.3%. Additionally, the rate of poverty for related children under the age of 18 decreased from 20.8% to 15.6% from 1989 to 1999. Estimates for 2010 show an increase in overall poverty to 16.2%, as well as an increase to 24.6% for those under 18.

Kentucky Cabinet for Health and Family Services

The mission of the Kentucky Cabinet for Families and Children is to provide statewide leadership in protecting and promoting the well being of Kentuckians by delivering quality human services. Within this Cabinet, The Department for Community Based Services administers an array of services including child and adult protection, permanency, and services to enhance family self-sufficiency. The Department consists of seven Divisions that include the Division of Service Regions, the Division of Child Care, the Division of Policy Development, the Division of Protection and Permanency, the Division of Family Support, the Division of Child Support, and the Division of Disability Determinations Services. This Department was created from the abolished Department for Social Insurance and Department of Social Services. Programs administered by the Department for Community Based Services include:

- ◆ Child Care and Development Block Grant;
- ◆ Child Support Enforcement;
- ◆ Food Stamps;
- ◆ Food Stamp Employment and Training Program;
- ◆ Kentucky Transitional Assistance Program (K-TAP);
- ◆ Kentucky Works;
- ◆ Medicaid (policy only);
- ◆ Mentally Ill/Mentally Retarded (MI/MR) Supplement Program;

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- ◆ Social Services Block Grant;
- ◆ State Supplementation;
- ◆ Volunteer Insurance Program; and,
- ◆ Welfare-to-Work.

Kentucky Cabinet for Workforce Development

The mission of this Cabinet is to provide high-quality education, training, and employment opportunities for individuals and the business community, resulting in a skilled workforce and economic vitality in the Commonwealth. Within this Cabinet, the Department for Employment Services provides three primary services that benefit both employers and workers. Job Services is a labor exchange that matches available workers with employers who need their skills and experience. Work search and referrals may be conducted locally, statewide, and nationally. Unemployment Insurance provides short-term benefits for those who are unemployed through no fault of their own. Labor Market Information contains a wide range of statistical data on employment and wage patterns.

Audubon Area Community Services, Inc.

This is a private, non-profit community action agency created under the Economic Opportunity Act of 1964 and authorized by KRS 273.410. Headquartered in Owensboro, the agency serves 34 western Kentucky counties. Funds are made available through contributions from public and private sources, federal and state grants, and various local sources. The agency operates a broad range of services to help individuals and families move out of poverty. Services provided under the umbrella of this agency identified in the *Audubon Area Community Services, Inc. 2010 Annual Report* are:

- ◆ Housing and Weatherization
- ◆ Intra-County Transit System (GRITS)
- ◆ Senior Services Corps
- ◆ Child Care Assistance Program Resource & Referral
- ◆ Counseling Services
- ◆ Head Start/Early Head Start/Migrant Head Start
- ◆ Counseling Services/Community Services/General Assistance

Help Office of Owensboro, Inc.

This agency is a cooperative, non-profit organization of churches designed to supply information about available help to the citizens of the community and to provide referral to those existing agencies that afford services to persons and families in need. The agency is comprised of a board of directors, a director, and a number of volunteers.

RiverValley Behavioral Health

RiverValley offers out-patient services as well as school based services and therapeutic foster care for children with severe and persistent emotional problems. RiverValley Behavioral Health also provides MR/DD support through residential support in an apartment or family home setting, community habilitation in a sheltered day program, supported employment services and job training, and brain injury services.

RiverValley Behavioral Health also provides adult services for those persons with severe and persistent mental illness with behavior intervention, community support, therapeutic rehabilitation, continuing care, case management, personal home care and supportive housing. A variety of outpatient mental health services are offered to all, including substance abuse and prevention services. Substance abuse services

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range from prevention and early intervention out-patient services to a residential chemical dependency program offers stabilization and rehabilitation treatment for adults. A crisis stabilization residential treatment program for adults is offered for acute chronic episodes or crisis without medial complications as an alternative to hospitalization. A crisis line provides emergency information and referral services 24 hours a day.

The CFC, Cigar Factory Center, a 130,000 square foot facility, houses administrative and legal services, including case management, finance, human resources, medical records, outpatient mental health and substance services, intensive outpatient substance abuse services, HIPAA offices, management information system and the regional prevention center and library.

River Valley Behavioral Health currently hosts over 21 Kentucky based programs that include in-patient and out-patient services for those with mental health, mental retardation/developmental disabilities, alcohol and drug additions, prevention, recovery and treatment.

Boulware Center

This faith based non-profit center is the region's oldest homeless shelter in Daviess County providing shelter for men. The center shelters single men, single women, childless couples, two parent families, and single parent families. The center serves its clients and assists vacating clients with furniture, food, medications, clothing, linens, etc. Services of the Boulware Center include childcare, job placement, substance abuse and support groups, nutrition and hygiene groups, and pre-natal instruction. Services include outpatient drug and alcohol treatment,

Boulware offers both emergency shelter and long term, comprehensive services for homeless men, women and children to the Green River Area District of Western Kentucky on a campus located on Wing Avenue in a converted convent with approved space for 90 residents. Originally located on Hall Street in Owensboro, the Hall Street campus was leased in June 2011 to Lighthouse Recovery, another non-profit offering drug rehabilitation services to the community.

Daniel Pitino Shelter

The shelter opened in 1994 to serve homeless families, women, and children. The shelter is a non-profit, non-denominational, privately-supported organization which offers both emergency and transitional housing, provides nutritional food, primary physical and mental health care, essential services, and educational enhancement including life skills, legal aid source and computer training. The shelter has the capacity to service 65 individuals, 50 transitional and 15 emergency.

The shelter houses the Saint Stephen Cathedral Soup Kitchen serving doughnuts and coffee and one hot meal a day 365 days a year. It also house the McAuley Clinic, sponsored by the Owensboro Medical Health System and providing free medical care to those without medical insurance.

Owensboro Area Shelter and Information Services (OASIS)

OASIS is the sole provider of emergency shelter for homeless victims of domestic violence and their children for the Green River Area Development District area. OASIS has a seventy (70) bed capacity. Thirty-two (32) beds are restricted for emergency shelter for victims of domestic violence, and thirty-eight (38) beds are available for individuals and families who require services beyond the emergency phase.

Centro Latino

This facility offers lodging, clothing, food, transportation, furnishings, and translation services to Hispanic migrant workers and to Hispanics who settle in the area.

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Area Agency on Aging

This agency is part of a nationwide Network on Aging under the direction of the US Administration on Aging. The primary responsibility of the agency is for the implementation of the Older Americans Act of 1965, as amended, and assisting in the administration of site programs under the supervision of the Kentucky Office of Aging Services and local programs serving older Kentuckians. This agency is designated by the Commonwealth of Kentucky to develop and administer an Area Plan on Aging. The plan provides for a comprehensive delivery system of services to seniors to each of the seven counties that make up the Green River Area Development District (GRADD). The agency is administered by the GRADD staff, advised by the Green River Area Council on Aging and is operated under the supervision of the GRADD Board of Directors.

Aging Long-Term Care Beds

According to the November 2011 report by the Kentucky Cabinet for Health and Family Services, Inventory of Health Facilities and Services, there are eleven long-term care facilities in Daviess County with a total of 681 nursing facility beds, including 10 skilled nursing beds, 22 nursing home beds, 60 Alzheimer beds and 394 personal care beds.

Owensboro Regional Recovery Center

Kentucky's governor announced in early January 2005, a program called "Recovery Kentucky", an initiative to help Kentuckians recover from substance abuse that often leads to chronic homelessness. The program calls for the establishment of housing centers in each of the six congressional districts to house and provide treatment services through recovery to 1,000 homeless, or those at-risk of being homeless, particularly those persons with a history of substance abuse.

"Recovery Kentucky" is a joint effort by the Governor's Office for Local Development (GOLD), the Department of Corrections, and the Kentucky Housing Corporation (KHC). These agencies have developed a financial plan that makes available construction and operational financing.

Recovery Kentucky's service-based model is patterned after the education model used successfully at The HOPE Center in Lexington and The Healing Place in Louisville. These centers, like the ones to be constructed, provide shelter and a safe place to recover. The centers also provide peer support, daily living skills training, job responsibilities and challenges to practice sober living.

A Recovery Center for men serving up to 100 residents was granted a Conditional Use Permit to locate in Daviess County at 4301 Veach Road in August of 2006 after lengthy public hearings before the Owensboro Metropolitan Board of Adjustment. Owensboro Regional Recovery (ORR) accepted its first residents on February 1, 2010. ORR is a partnership between Audubon Area Community Services, Inc. and the Lighthouse Recovery Services, Inc. ORR is funded in part by the Kentucky Housing Corporation, the Department for Local Government and the Kentucky Department of Corrections.

Public Parks and Recreation

Parks and recreation is an integral part of the image, character and quality of life in Daviess County and Owensboro. The City of Owensboro and Daviess County Fiscal Court Parks and Recreation oversee green space parks, recreational facilities and programming in an effort to fulfill the leisure needs of the citizens of our community.

The City of Owensboro and Daviess County Fiscal Court Parks and Recreation Departments focus on improving the quality of life for all residents through focusing on the following key concepts:

1. Ensure the provision of open space and parks.
2. Provide a wide variety of leisure activities, events, services and facilities.
3. Encourage health, fitness, relaxation, enjoyment and learning through programming and facilities.
4. Offer opportunities for community involvement and opportunities for appreciation and care of the natural environment.

There are five primary challenges facing both departments.

1. The lack of adequate indoor and outdoor recreation space for people of all ages.
2. Many of the City's recreation facilities are at the end of their useful life as it applies to pools, Moreland Park Tennis Center and the Dugan Best Recreation Center.
3. Development of effective partnerships that can maximize each other's resources and eliminate duplication of services provided by any agency in the community.
4. Establishing the core services each department should be addressing in meeting citizens' needs.
5. Accounting for changing community economic realities, national and local trends, and changes in community desires.

Inventory of Public Parks

Public recreational facilities in the community are provided by the parks and recreation departments of the City of Owensboro, Daviess County Fiscal Court and the City of Whitesville. There are a total of 37 public parks in Daviess County. Each of these parks is categorized as primarily serving one of the following functions, even though a park may function as more than one of these types.

- ◆ **Community Parks**, which are generally large in size, having a broad range of facilities to serve the entire community;
- ◆ **Neighborhood Parks**, which are smaller, serving citizens within a particular neighborhood (generally within a one-half mile radius); and,
- ◆ **Special Use Areas**, generally having limited, specialized facilities that serve individuals who share an interest in the specific facilities provided.

Exhibit 6- T8 includes the functional type assigned to each of the public parks, their sizes and existing facilities. Exhibit 6-M_ shows the locations of the public parks. Aside from the public parks, there are other recreational areas in Daviess County, including educational sites that contain outdoor recreational facilities and privately owned recreation areas, including country clubs, swim and health clubs, church facilities, fish and game clubs and lake resorts. Beyond Daviess County, within a one to two hour drive, there are 20 state parks in our different states.

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In reviewing facilities and acreage available to our residents in comparison to nationally accepted standards, surpluses and deficiencies can be noted. These references are based upon the 2010 US Census Data which states that the population of Daviess County is 96,656 and the City of Owensboro's population is 57,265.

Our community has many parks and recreation amenities to offer. However, there are some gaps in reference to the national standards that are illustrated in the following table.

Exhibit 6 –T7: Standards and Comparisons for Park Facilities

	ACREAGE LEVEL		
City Standard	12 ac per 1,000 pop/equates to 687.2 ac		
City Actual	1002.5 ac		
City Surplus or (Deficit)	315.3 ac		
County Standard	15 ac per 1,000 pop/equates to 590.9 ac		
County Actual	396.6		
County Surplus (or (Deficit)	(194.3)		
City & County Need	1278 ac		
City & County Existing	1399.1 ac		
City & County Surplus or (Deficit)	121.1 ac		
	Soccer Fields	Baseball	Softball
City/ County Standard	1 per 4,000 pop	1 per 5,000 pop	1 per 4,000 pop
City & County Need	24	19	23
City & County Existing	19	16	11
City & County Surplus or (Deficit)	(5)	(3)	(13)
	Football	Basketball/ Outside	Golf Course
City/ County Standard	1 per 10,000 pop	1 per 2,500 pop	1 per 25,000 pop
City & County Need	9	38	3
City & County Existing	4	18	3
City & County Surplus or (Deficit)	(5)	(20)	0
	Gym	Flat Pools	Aquatic Center
City/ County Standard	1 per 4,000 pop	1 per 20,000	1 per 50,000 pop
City & County Need	24	3	2
City & County Existing	3	2	0
City & County Surplus or (Deficit)	(21)	(1)	(2)
	Play	Ice Rinks	Tennis
City/ County Standard	1 per 2,500 pop	1 per 50,000 pop	1 per 4,000 pop
City & County Need	38	1	24
City & County Existing	21	1	30
City & County Surplus or (Deficit)	(17)	0	6

Source: City of Owensboro Parks Department, Daviess County Parks Department

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Exhibit 6-T8: Inventory of Existing Public Parks & Recreation Facilities in Daviess County (5/2012)

PARKS BY TYPE, LOCATION AND FACILITIES			FACILITIES																													
PARK CODE		ACRES	Archery range	Baseball diamond	Basketball court	Boat launch	Fishing	Football field	Gazebo	Golf (9-hole)	Golf (18-hole)	Golf (disc)	Horseshoes	Ice skating rink	Pavilion (closed)	Pavilion (open)	Picnic area	Play field (open)	Playground equip.	Recreation center	Rental	Restrooms	Soccer field	Softball diamond	Swimming pool	Tennis court	Trails (bike, skate)	Trails (hiking)	Trails (walking)	Volleyball court	Spray Park	Skate Park
C- Community Park		Total																														
N- Neighborhood Park		1399.1																														
S- Special Use Area																																
C	COMMUNITY PARKS:	1136																														
	Owensboro:	791.0																														
C1	Yewell Heritage Park	44.0					•											•														
C2	Thompson-Berry Park	38.5																	•			9										
C3	Jack Fisher Park	33.0					•									2	•	•				•		5			•		•			
C4	Chautauqua Park	31.0	3	•												•	•	•	•			•			•		•		•			
C5	Legion Park	23.8		2										2		•	•	•	•			•				1		•		•		•
C6	Moreland Park	17.0	2	•										•	•	•	•	•	•			•			1		•		•	2		
C7	English Park	12.0				•	•	•							1	•	•	•	•			•										
C8	Waymond Morris Park	52.0					•	4								•	•	•	•								•		•			
C9	Ben Hawes Park/golf course & Urban Service Area Balance:	539.7	•	•	•					•	•	•			3	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	
C10	Yellow Creek Park+ Rural Service Area:	153.5		•	•		•		•		•	•	•		•	•	•	•	•			•				•	•	•	•	•	•	•
	Rural Service Area:	191.5																														
C11	Panther Creek Park+	124.5	•	•		•		•		•	•	•			•	•	•	•	•			•					•	•	•	•	•	•
C12	Horse Fork Creek Park +	67.0					•								•	•	•	•	•			9						•	•			
N	NEIGHBORHOOD PARKS:	99.7																														
	Owensboro:	49.8																														
N1	Dugan Best Park	11.0		•	•											•	•	•	•	•	•	•			2							
N2	Russell Shifley Park	10.3		•												•	•	•	•	•		•										
N3	Southern Park ~	9.5	3																			•			4							
N4	James Mason Park	5.0																•									•		•			
N5	Kendall-Perkins Park	5.0		2												•	•	•	•	•			•		2				•			•
N6	York Park	5.0		•													•	•	•	•					•							
N7	Max Rhoads Park	1.2		•													•	•	•	•												
N8	Goose Egg Park	0.3															•	•	•	•												
N9	Heartland Park	0.4																•	•	•												
N10	Old Germantown Park	2.1						•									•	•	•	•							•		•			
	Urban Service Area Balance:	9.0																														
N11	Thruston Park+	9.0		•																		•		•								
	Whitesville:	30.4																														
N12	Whitesville City Park %	22.0	2	•												•	•	•	•	•		•		•			•		•	•	•	
N13	Old Whitesville School Park +	8.4		•	•											•				•	•	•		•								
	Rural Service Area Balance:	10.5																														
N14	Stanley Park+	10.0		•									•				•	•	•	•	•				•						•	
N15	Knottsville Park @	0.5		•																												
S	SPECIAL-USE AREAS:	163.4																														
	Owensboro:	161.7																														
S1	Hillcrest Golf Course	70.0					•	2	•																							
S2	Adkisson Greenbelt Park	40.5																									•		•			
S3	Joe Ford Nature Park	14.0																				•					•		•			
S4	Owensboro Sportscenter	10.0		•																		•						•				
S5	Edge Ice Arena	5.0												•								•										
S6	Cap Gardner Nature Park	2.0						•									•	•	•								•		•			
S7	Smother's Park	1.5													4	•	•	•	•			•					•		•			•
S8	Cravens Pool	1.0																							•							
S9	Middle School Tennis Courts ~	1.0																								4						
S10	Airport Practice Fields	16.7																	4													
	Urban Service Area Balance:																															
S11	Greenbelt Park	1.7																									•		•			

@ Leased from Diocese of Owensboro by Daviess Co. Parks & Rec. Dept
% City of Whitesville + Daviess Co. Parks & Rec. ~ City of Owensboro leases.
& Geographically grouped with USA bal., although within city limits. State maintains Carpenter/Kingfisher lakes near
Yelvington.

Source: City of Owensboro Parks Dept, Daviess County Parks Dept, May 2012

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There are several recommendations for facility and park improvements which remain a consideration of local government over the next ten years. Those items include:

City of Owensboro

- Adkisson Greenbelt Park – acquire additional trail access properties and develop additional sections of the park
- Ben Hawes Park – build shelter and restroom
- Hillcrest Golf Course – upgrade irrigation system, rebuild greens, add fencing around portion of the course
- Jack C. Fisher Park – build new restrooms and renovate the Fifth Field
- Moreland Park – renovate the Tennis Center
- Southern Park – build new restrooms
- Sportscenter – renovate
- Waymond Morris Park – build restroom and shelter, additional development
- Yewell Heritage Park - develop

Daviess County

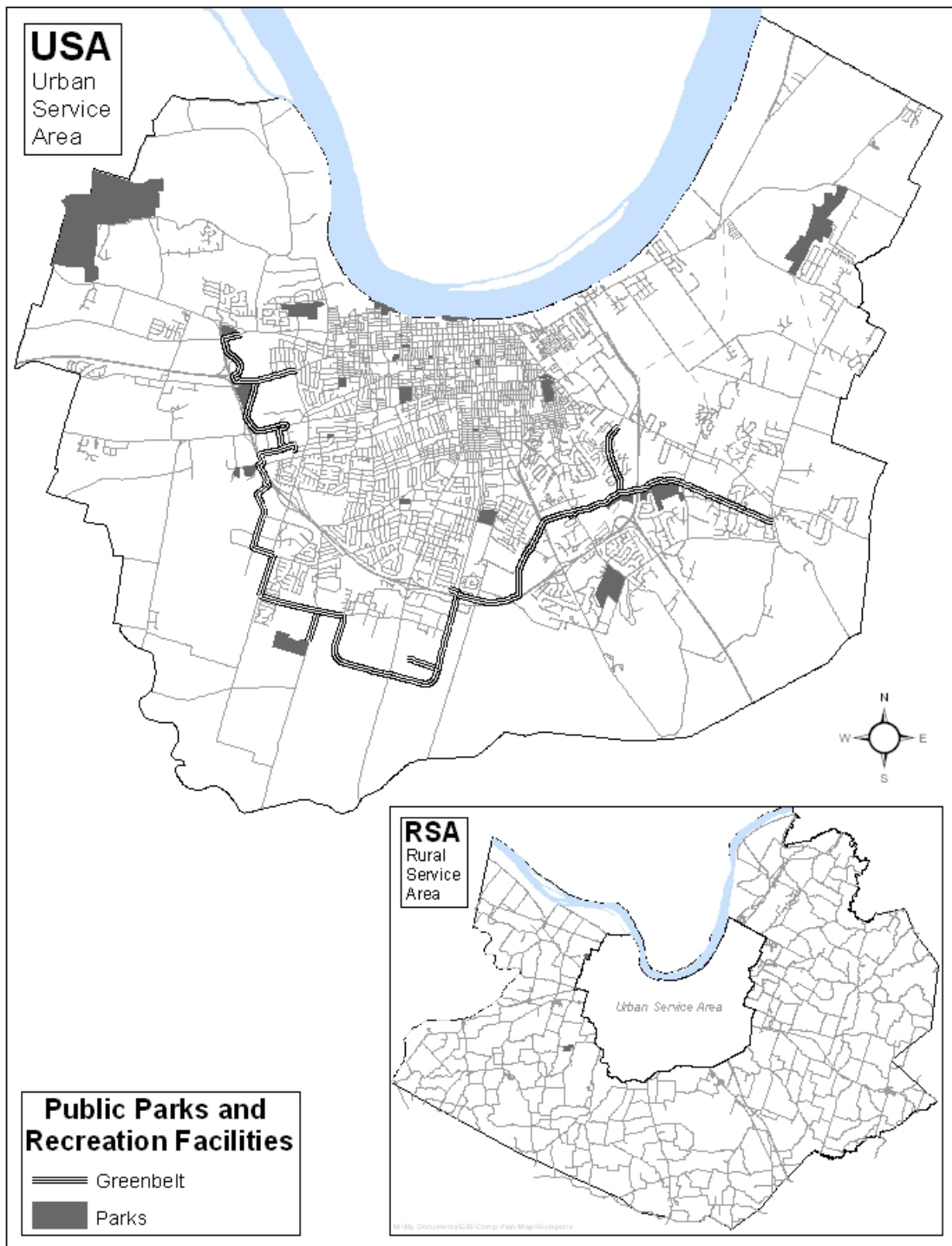
- Panther Creek Park – Asphaltting over existing chip and seal roads and parking lots, signage renovations, sidewalk replacements, parking lot renovation, playground equipment installed
- Panther Creek Park South – Disc golf course improvements (tee pads and signage)
- Yellow Creek Park – Pioneer Village improvements/additions, major asphalt improvements, announcer booth renovations
- Horse Fork Creek Park – Construct new spray park, additional security lighting, covered shade areas, relocation of maintenance facilities, continued tree plantings
- Horse Fork Creek Park Greenbelt – Trailhead project at Fairview Drive (parking lot, restrooms)

The recreational needs of our community are constantly changing. Awareness of changing needs, trends and program adaptation is a necessity. Program services must be designed accordingly for all ages that are served. The need to keep abreast of what other agencies, clubs and schools are offering will help prevent duplication of services.

When new parkland is established, care should be taken in fitting proposed facilities to the land and in bringing our community's facility deficits in line with accepted standards.

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Exhibit 6-M1: Public Parks & Recreation Facilities in Daviess County (6/2012)



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Telecommunications

Before 1974, Evansville, Indiana provided television service in Daviess County. However, in February of 1974, Owensboro Cablevision (now Time Warner) began servicing the Owensboro area. Since then, additional cable systems, satellite services and “wireless” cable systems have been introduced, offering enhanced television service to almost all areas of Daviess County.

Radio Supply

The first commercial AM radio station, WOMI, was established in Daviess County in 1938. The first FM station was WSTO, which also was the first FM station established in the state of Kentucky. Today, numerous FM and AM radio stations operate within the region, serving Daviess County.

Telephone Supply

Telephone service is supplied by AT & T Company. Additionally, several companies supply services for cellular phone communication as well as “land line” telephone service in conjunction with other internet or television service in Daviess County.

Information Technology

The purpose of this section is to provide information and insight into the issues concerning the use and development of a significant new topic of importance for Daviess County, and for other communities across the nation: the rapidly developing field of information technology and its accompanying infrastructure.

The concept of "Universal Access" is defined as "the ability of every citizen to have access to information technology and infrastructure developments." This does not necessarily mean a computer or Internet access in every home, but the ability for every citizen to have such access if so desired. This ability is available through the Daviess County Public Library, and could be offered through facilities located in other public buildings, schools, or kiosks in shopping centers. It could also be provided in the home through any number of service providers. Many people already take advantage of this capability through modems and telephone lines.

The Green River Area Development District is promoting ConnectGRADD, Inc. (CGI), a groundbreaking initiative aimed at delivering affordable, high-speed broadband internet access across the entire rural region. This is one of the first efforts in the nation and is collaboration between the fiscal courts of Daviess, Hancock, Henderson, McLean, Ohio, Union and Webster counties and the internet service provider Q-Wireless. Over half of the region's residents live in rural communities and pay for DSL or cable internet service. Comparable service through CGI begins at about half the cost. Improved broadband infrastructure offers rural residents access to e-government services, economic development, entrepreneurship, education, tele-health and entertainment opportunities.

Cellular Towers, PCS Facilities and Satellite Dishes

The Owensboro Metropolitan Planning Commission registered with the Public Service Commission on December 21, 1998. In April of 2002, complete authority for regulation and placement of cellular antennae towers was given to local planning commissions that registered with the Public Service Commission. New legislation amended KRS 100.985 through 100.987 to include application requirements and duties and powers of planning commissions in the regulation and siting of cellular tower antenna. Upon the passing of the new legislation, the OMPC formed a committee to develop zoning regulations in compliance with the Kentucky Revised Statutes, which were adopted by the OMPC,

COMMUNITY FACILITIES

Daviess County Fiscal Court and the City of Whitesville. The following exhibits show the location of existing cellular communications towers and approved locations for cellular communications towers in Daviess County.

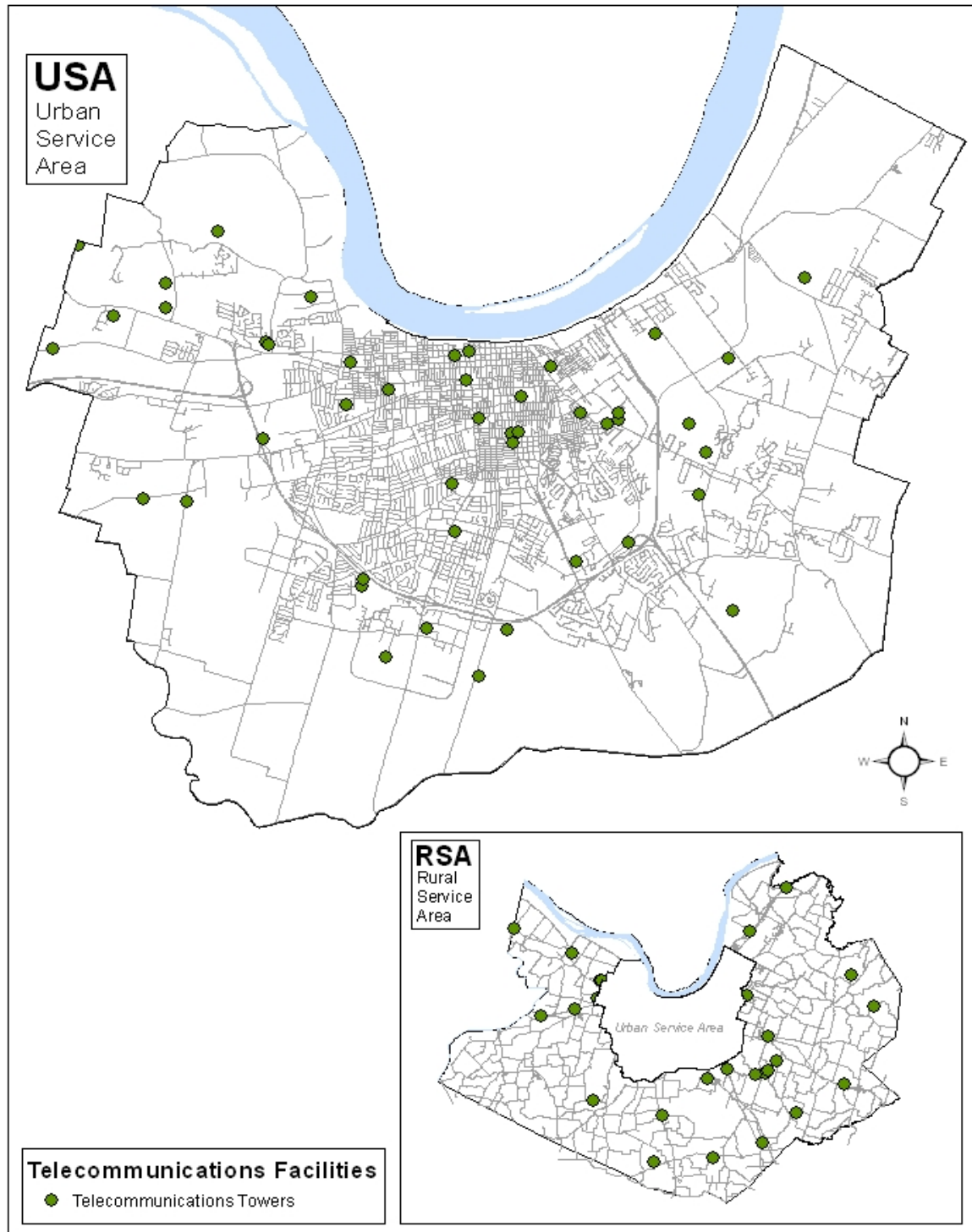
Exhibit 6-T9: Identified Telecommunications Towers and Approved Tower Sites within Daviess County

Site Address	Primary Service Provided	Latitude			Longitude			Ground Elevation (AMSL)	Tower Above Grade Elevation	Tower Type
		DEG	MIN	SEC	DEG	MIN	SEC			
Back Square Dr	?	37	43	6	87	7	52	392'	152'	?
3420 Bartley Rd	Cellular	37	45	14.30	87	16	41.59	411'	275'	Guyed
4280 Ben Head Rd	Broadcast	37	41	51	86	59	26	525'	260'	Guyed
Ben Head Rd @ Ware Rd	?	37	42	4	86	59	8	440'	348'	?
94 Booth Field Rd	Cellular	37	47	8.9	87	10	48.5	525'	200'	Self
34 Booth Field Rd	?	37	46	53	87	10	52	431'	180'	Self
720 Cumberland St	Cellular	37	45	35.23	87	06	07.09	401.169'	130'	Monopole
3790 Earls Ln	Cellular	37	45	28.36	87	09	32.82	395'	161'	Self
811 E Parrish Av	?	37	45	58	87	6	6	420'	185'	Roof Top
2035 E Parrish Av	Cellular	37	45	44	87	4	48	480'	320'	Self
E Parrish Av	?	37	45	48	87	4	48	480'	310'	?
1517 E 9 th Street	Cellular	37	46	18.3	87	05	43.383	412.13'	132'	Monopole
3051 Fairview Dr	?	37	44	55	87	3	43	410'	350'	Guyed
3000 Fairview Dr (block)	?	37	45	23	87	3	38	422'	221'	Monopole
720 Frederica St	?	37	46	8	87	6	51	400'	248'	Self
1501 Frederica St	?	37	45	43	87	6	40	410'	214'	Self
3301 Frederica St	Broadcast	37	44	29	87	6	58	400'	430'	Self
701 Fulton Dr	?	37	43	25	87	7	19	390'	199'	Self
3560 Hayden Rd	Cellular	37	46	19.45	87	3	21.67	400'	199'	Monopole
2000 Highway 140 E (block)	Broadcast	37	36	29	87	3	15	440'	1,103'	Self
895 Highway 140 W	Cellular	37	36	11.24	87	07	48.08	479.47'	195'	Lattice
2900 Highway 142 (block)	?	37	41	46	87	0	6	550'	270'	Guyed
1230 Highway 279	Cellular	37	45	45.16	87	14	05.05	400'	305'	
2917 Highway 54	?	37	45	42	87	3	52	448'	300'	Self
9511 Highway 54	Cellular	37	41	14.4	86	53	15.5	656'	199'	Monopole
Highway 81	?	37	44	46	87	10	32	407'	65'	?
2056 Hill Bridge Rd	?	37	41	25	87	3	46	449'	215'	Self
Indian Hill Rd	?	37	46	11	86	51	5	606'	304'	?
100 Industrial Dr	?	37	46	32	87	9	31	400'	205'	Self
100 Industrial Dr	?	37	46	32	87	9	31	400'	405'	Self
100 Industrial Dr	Broadcast	37	46	30	87	9	29	400'	353'	Guyed
5022 Jones Rd	Cellular	37	46	42.35	87	00	50.61	419'	275'	Self
11318 Kelly Cemetery Rd	Cellular	37	53	34	86	57	54	568'	180'	Self
2812 Kentronics Dr	?	37	47	2	87	8	56	398'	193'	Guyed
2516 Lancaster Av	?	37	45	51	87	8	26	395'	120'	Self
5734 Lee Rudy Rd	Cellular	37	46	25	87	12	21	472'	198'	Self
Leitchfield Rd	?	37	45	41	87	4	57	500'	140'	Guyed
Medley Rd	?	37	47	44	87	10	11	512'	195'	?
3400 New Hartford Rd (block)	?	37	44	10	87	5	20	450'	315'	?
2931 Newbolt Rd	Cellular	37	43	39	87	3	15	438'	385'	Guyed
1539 Norris Av	Cellular	37	45	48	87	5	19	472'	185'	Self
4021 Old Hartford Rd	Cellular	37	44	23.50	87	04	38.72	403'	175'	Self
9661 Old Hartford Rd	Cellular	37	37	29.93	86	59	32.47	451'	225'	Lattice
5031 Old Lyddane Bridge Rd	?	37	44	47	87	11	8	428'	42'	Self
Old State Rd	?	37	42	37	86	58	31	420'	365'	?
300 Overstreet Rd (block)	?	37	47	33	87	12	8	458'	308'	Guyed
300 Overstreet Rd (block)	?	37	47	33	87	12	3	458'	253'	?
Pleasant Valley Rd	?	37	46	41	87	4	20	404'	232'	?
10799 Pup Creek La	Cellular	37	48	11.26	86	52	50.33	505.562'	195'	Monopole
1409 Reid Rd	Cellular	37	47	18.24	87	02	20.78	409.9'	160'	Monopole
320 Rudy Rd	Cellular	37	46	47	87	11	33	510'	295'	Guyed
235 Saint Ann St	?	37	46	27	87	6	49	400'	288'	Roof Top
815 Sutherland Av	?	37	46	1	87	7	53	397'	120'	?
5155 Sutherland Rd	Cellular	37	42	53.68	87	6	36.26	390'	300'	Self
6040 Sutherlin Ln	Cellular	37	42	02.67	87	02	19.36	391'	275'	Guyed
209 Sutton La	?	37	46	19	87	8	23	401'	152'	?
2070 Tamarack Rd	?	37	43	52	87	8	11	397'	90'	Self
2070 Tamarack Rd	?	37	43	57	87	8	11	396'	160'	Self

COMMUNITY FACILITIES

Site Address	Primary Service Provided	Latitude			Longitude			Ground Elevation (AMSL)	Tower Above Grade Elevation	Tower Type
8400 Texas Gas Rd	Cellular	37	39	24.17	86	56	57.97	510'	295'	Guyed
1722 Triplett St	?	37	45	34	87	6	14	407'	200'	Self
1926 Triplett St	Cellular	37	45	28.01	87	6	11.99	400'	196'	Roof Top
7955 US 60 E	Cellular	37	50	48.15	87	00	43.56	392.36'	300'	Self
8349 US 431	Cellular	37	39	03.19	87	07	14.64	389.89'	280'	Guyed
4600 Veach Rd (~ block)	?	37	43	25	87	6	15	390'	197'	Self
300 Walnut St	?	37	46	24	87	7	0	400'	157'	Guyed
2335 W 5 TH St	Cellular	37	46	14.77	87	08	16.98	404'	140'	Monopole
4301 Windy Hollow Rd (block)	?	37	40	1	87	12	32	545'	274'	Guyed
4747 Winkler Rd	Cellular	37	44	12.9	86	59	09.18	435'	275'	Self
121 Woods Rd	Cellular	37	50	46.75	87	18	54.91	379'	199'	Monopole
2920 Yale Place	?	37	45	0	87	7	0	450'	195'	Roof Top
Source: Crown Communication, Inc.; Bryant Engineering, Inc.; OMPC records thru Dec 2011										

Exhibit 6 –M2: Telecommunications Towers and Approved Tower Locations



MT 000, documents\GIS\Community Facilities\Community Facilities\Telecommunications Towers

Utility Supply

Electric Supply

Early in 1901, Owensboro Municipal Utilities (OMU) began service to the Owensboro incorporated areas and has been Owensboro's major supplier since that time. Owensboro's first electric plant, the Brush Electric Light and Power Company, was organized in 1882. In 1900, the City of Owensboro authorized the purchase of land on Daviess Street, near 14th Street, as the site of the first municipal-owned power plant. Numerous additions became necessary: a new light and water plant was authorized in 1933; an additional 130,000-kilowatt generator was added in 1953. The Elmer Smith power station, located on US Highway 60 East, went on line in 1964 with a rated capacity of 151,000 Kilowatts; Unit 2, at 265,000 Kilowatts, was added in 1974. OMU added SO₂ scrubbers in 1994 to comply with the Clean Air Act of 1990.

Kenergy Corporation, and its predecessor Green River Electric Corporation (GREC) has served the rural areas of Daviess County since 1937. The first stake was driven on a farm on Veach Road in 1937. Acquisitions were made of the Cumberland Public Utilities Company and Tri-City Utilities Company in the 1940s. GREC combined with Henderson Union Electric in July 1999 to form Kenergy Corporation. Kenergy presently serves 14 counties in western Kentucky.

Exhibit 6-T10 shows the change in customers and electric power consumption between 1982 and 2011.

Big Rivers Electric in Henderson, Kentucky supplies Kenergy with power. Big Rivers has power plants in Hawesville, Centertown and Sebree, Kentucky. OMU's power sources are located on US 60 East. The two Elmer Smith stations have a combined capacity of 416,000 Kilowatts. They are also interconnected with Kentucky Utilities. Exhibit 6-M3 delineates electric supply districts within Daviess County.

Exhibit 6-T10: Electric Supply: Customers & Power Usage

	OMU	Kenergy	Total
1982			
Customers	24,731	11,835	24,731
Megawatt-Hours	538,379	191,443	729,822
1987			
Customers	26,111	13,565	39,676
Megawatt-Hours	664,402	237,934	902,336
1999			
Customers	25,250	18,038	43,288
Megawatt-Hours	820,829	N/A	N/A
2005			
Customers	25,407	19,700	45,107
Megawatt-Hours	870,060	*484,152	1,354,212
Current	2011	2010	
Customers	26,100	20,697	46,797
Megawatt-Hours	891,497	Not available	
2005-2011 Change			
Customers	693	997	1690
Percentage	2.7%	5.1%	3.7%
Megawatt-Hours	21,437		
Percentage	2.5%		

Source: OMU and Kenergy *approximate value

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Installation of underground electrical distribution lines is optional for a developer. In 2005, OMU had 62.82 miles of lines underground. In 2005, Kenergy had approximately 146 miles of underground line in Daviess County. Local estimates have shown the cost of underground versus overhead lines to be approximately the same. Overhead lines have many years experience to back them up, but installation of underground lines is on the increase for several reasons: the equipment is available and ready for installing lines underground; maintenance is much easier; and the visual effect is much more pleasing. Aesthetics has led to much greater demand for underground lines in new residential subdivisions, other new development areas, and in downtown Owensboro. Exhibit 6-T11 shows changes in distribution substations and lines since 1982.

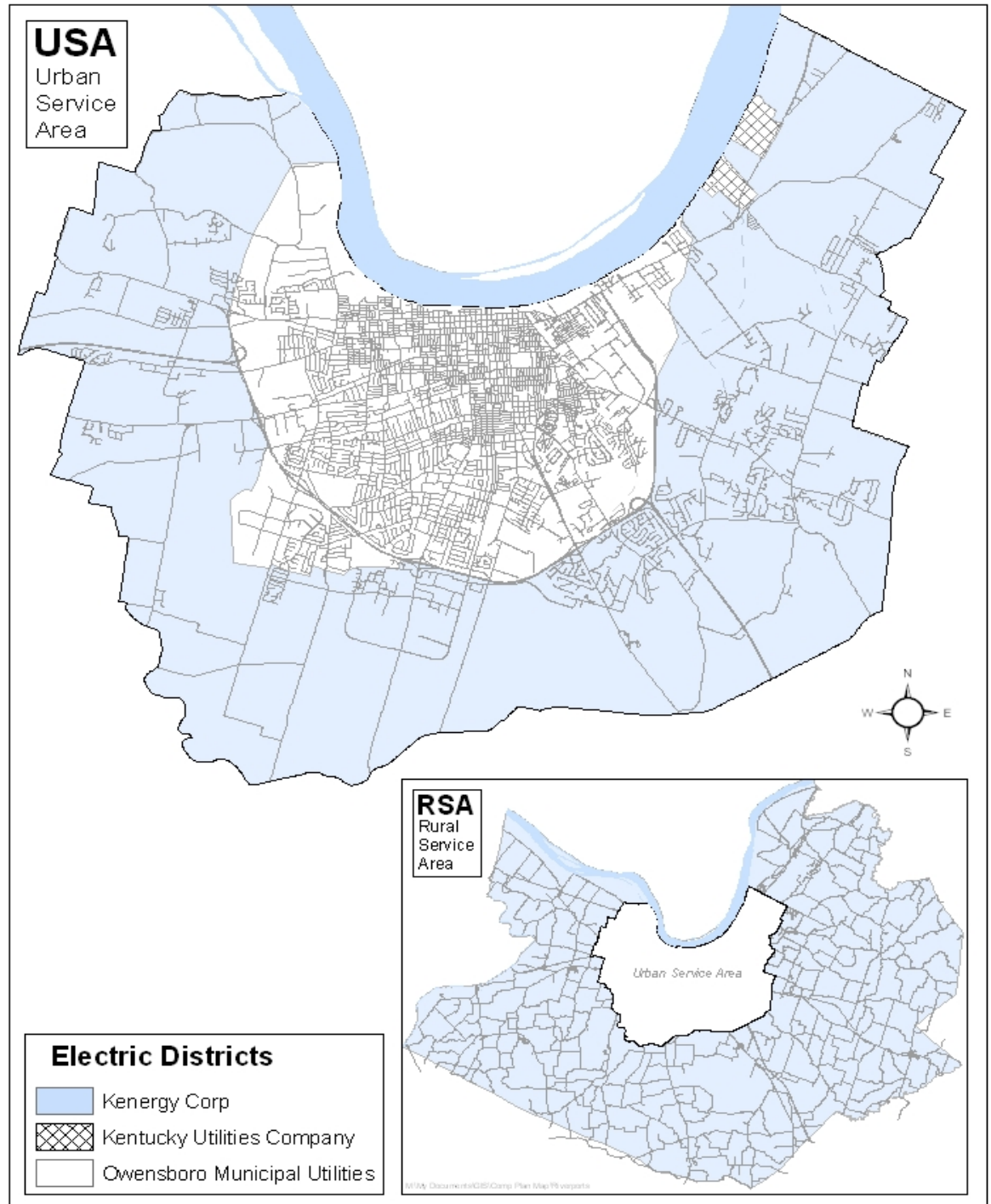
Exhibit 6-T 11 – Electric Distribution Substations and Lines

	1982	1987	1999	2005	2011
Kenergy					
Distribution lines (miles)	1,067	1,089	1,152	1,227	1,330
Distribution Substations	10	10	N/A	15	15
OMU					
Distribution lines (miles)	N/A	N/A	298	301	314
Distribution Substations	N/A	N/A	16	15	16

In the 1980s, conservation became a key to future uses of electrical and other energy sources. The oil crises of the 1970s showed that even if new sources were found, the price could fluctuate dramatically. Since then, research toward efficiency in extracting known sources of energy is another important aspect. The use of renewable or recyclable fuels has been on the rise (wood, used tires), and new building technologies have significantly improved heating and cooling efficiencies. Wind generators, geothermal wells, and solar heating have become alternate sources of energy in some sections of the nation. According to the *GREC 1988 Annual Report*, Kenergy initiated its geothermal system marketing program in October of 1987.

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Exhibit 6-M3 –Electric Districts in Daviess County, KY



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Natural Gas Supply

Atmos Energy Corporation is a public utility in the business of natural gas distribution, serving residential, commercial, and industrial customers in western and central Kentucky. Atmos Energy's Kentucky operations are headquartered in Owensboro, serving more than 182,000 homes and businesses throughout western and central Kentucky.

In December 1980, Western Kentucky Gas merged with Texas American Energy Corporation of Midland, Texas. This association ended in December 1987, when Energas Corporation of Dallas, Texas acquired WKG. In 1989 Energas became ATMOS Energy Corporation. Presently, Atmos Energy is the country's largest natural-gas-only distributor, serving about 3.2 million gas utility customers in 12 states from the Blue Ridge Mountains in the East to the Rocky Mountains in the West. Atmos Energy employs 68 people in Daviess County, 212 people in Kentucky, and more than 4,500 corporate wide.

Atmos Energy served 32,914 customers in Daviess County as of December 31, 2010. Exhibit 6- T12 illustrates the number of customers and consumption of natural gas (adjusted for normal weather) in Daviess County over the past 29 years. Residential consumption has stabilized since the last comprehensive plan review while commercial consumption and customers have declined somewhat. The reduction in commercial customers; as well as the continued improvement in equipment and building efficiencies most likely account for the decrease in commercial consumption. The significant increase in industrial consumption most likely reflects lower and more stable gas commodity prices during the interim. Since the exhibit is a point in time summary, it is important to remember that natural gas is a commodity with price increases and decreases similar to any other traded commodity. This price volatility is a reality of the market and can significantly impact consumption as prices fluctuate. Atmos Energy (as all regulated utilities must) cannot mark-up the commodity price and simply pass any increases or decreases to customers through the Purchased Gas Adjustment that is reviewed and approved by the Kentucky Public Service Commission.

Texas Gas transmission is the primary interstate pipeline serving Atmos Energy's Kentucky operations. The Texas Gas transmission system provides access to producing areas in Louisiana and East Texas as well as offshore wells in the Gulf of Mexico. There are 34 wells in underground storage fields located in Daviess County at various locations, with a total storage capacity of approximately 4,035,300 MCF (one MCF = 1,000 cu. ft).

The distribution system includes transmission lines, distribution mains, service lines, measuring stations, and pressure regulators.

Two major transmission lines convey gas from, or to, Owensboro. These high-pressure lines are used to convey gas from a source of supply to distribution systems in Owensboro and surrounding communities.

A network of 2 to 12-inch pipes distributes gas to customers throughout the Owensboro area. Distribution mains normally carry anywhere from 1 to 60 psi with most residential customers only requiring 1/4 psi at their homes.

The service connection or line from the distribution main to the customer's property is made by the company.

Two common types of aboveground installations are measuring stations and pressure regulating stations. Measuring stations contain large meters that measure gas volumes supplied to the entire system, parts of the system, or major industrial, institutional, and commercial users. The regulator stations maintain constant pressure throughout the system by automatically adjusting flows at interconnections between

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various capacity lines. Locally, these regulators are in the open and located adjacent to street and road rights-of-way.

Exhibit 6-T12: Gas Customers & Consumption 1982-2011

Type	Customers	Consumption (MCF)
1982		
Residential	22,215	2,457,000
Commercial	2,023	1,156,400
Industrial	32	1,881,200
Total	24,270	5,494,600
1987		
Residential	23,524	2,367,600
Commercial	2,161	1,113,000
Industrial	33	1,542,100
Total	25,718	5,022,700
1999		
Residential	27,591	2,428,579
Commercial	2,585	1,102,009
Industrial	48	3,237,441
Total	30,224	6,768,029
2005		
Residential	29,571	2,263,812
Commercial	2,703	974,181
Industrial	45	2,019,305
Total	32,319	5,257,297
2011		
Residential	30,382	2,267,722
Commercial	2,490	793,924
Industrial	44	3,262,935
Total	32,916	6,324,581
1987-1999 Change		
Total Increase	4,506	1,745,329
% Increase	17.5%	34.7%
1999-2005 Change		
Total Increase	2,095	-1,510,732
% Increase	6.9%	-28.7%
2005-2011 Change		
Total Increase	597	1,067,284
% Increase	1.8%	20.3%

Source: Atmos Energy (Customers as of 12/31/2010 & Consumption 12 months ending 5/31/2011)

According to the U.S. Energy Information Agency's (EIA) Annual Energy Outlook 2011 gas supplies should be abundant (mostly due to shale gas production) and prices should remain stable through 2035. American Gas Association surveys consistently place Atmos Energy's Kentucky operations among the top 25% in terms of low costs to customers. With Abundant supply, stable prices, and a well maintained system Atmos Energy in Daviess County is well positioned to serve any expected growth in the community.

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Water Supply

A clean, pure supply of water fit for human consumption is one of the elementary essentials needed to sustain human life. The general elements of a water supply system include:

- ◆ A source of supply (wells, streams, or lakes)
- ◆ A conduit to convey water from the source of supply to the community
- ◆ Storage facilities for usable water
- ◆ A treatment plant to remove impurities
- ◆ A distribution system of pipes to deliver water to consumers

Within Daviess County, six separate water districts supply water service to over 43,000 customers. The table below provides information on these water districts. The Southeast Daviess County and West Daviess County Water districts transmit water through twelve (12) inch pipes, while the other water districts (except OMU) primarily use six (6) inch pipes. Owensboro Municipal Utilities' largest pipe size is thirty (30) inches. The Southeast Water District's system includes approximately 1.3 miles of sixteen (16) inch water line, approximately 4.2 miles of twelve (12) inch water line, 8.0 miles of ten (10) inch water line and about 33.0 miles of eight (8) inch water lines, and about 116.0 miles of six (6) inch or smaller water lines. The West Daviess County Water District has 2.0 miles of twelve (12) inch water line, 12 miles of ten (10) inch water lines, 41 miles of eight (8) inch water lines and 146 miles of six (6) inch or smaller lines.

Exhibit 6-T13: Daviess County Water Districts

Water District	Customers		Storage Capacity	
	2006	2011	2006	2011
SE Daviess Co.	5,952	6,489	1,770,000	2,270,000
W. Daviess Co.	4,315	4,692	1,460,000	1,810,000
E. Daviess Co.	4,256	4,365	1,550,000	1,850,000
Ohio County	456	461	--	--
OMU	24,000	25,780	14,000,000	14,000,000
Whitesville	1,300	1,300	450,000	450,000
TOTAL	40,279	43,087		

Source: GRADD & water districts

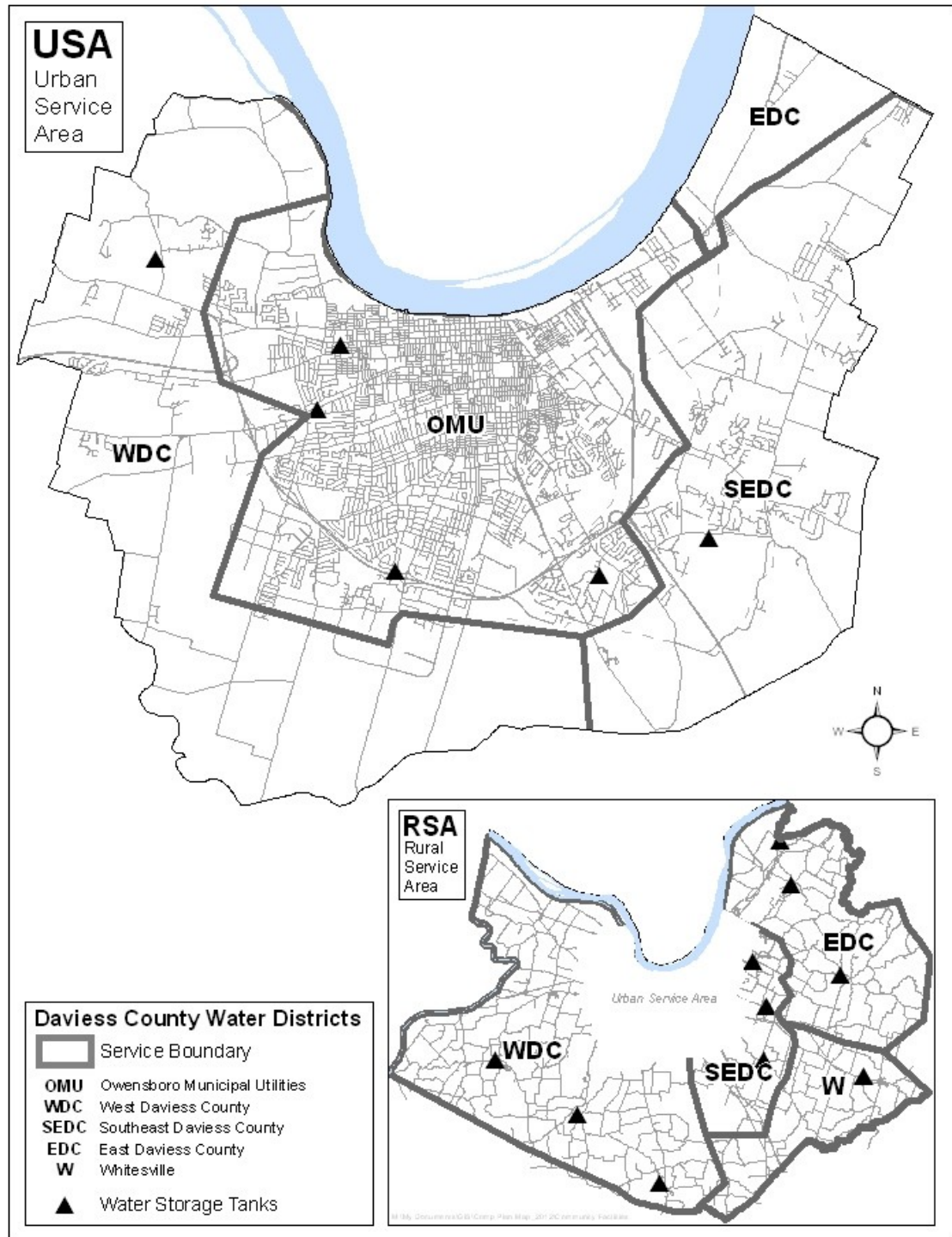
* approximate per City of Whitesville

The largest supplier of water in the county is Owensboro Municipal Utilities (OMU). All customers, except for those customers supplied by the Ohio County Water District, are supplied with water from the 34 wells that are owned and operated by OMU. OMU water storage includes Plant A with 4 mg clear well, Cavin Plant with 5 mg storage, Hill Crest Tank with 2 mg, Fred Tank with 1 mg, Parish tank with 1 mg and Bon Harbor with 1 mg. The Ohio County Water District draws its water from the Green and Rough rivers. Its storage capacity approaches 5 mg for the entire county with a portion of that capacity serving almost 500 customers in Daviess County.

Fire hydrant spacing was found to vary widely in some of the declining residential areas of Owensboro in the 1965 plan. Since then, Chapter Six of the *Owensboro Metropolitan Subdivision Regulations - Public Improvement Specifications* was adopted. Specifications require placement of hydrants in new residential subdivisions involving new streets to be placed no further apart than 600 feet. In major subdivisions on existing county roads, hydrants may be placed up to 1,000 feet apart. Refer to Chapter Six of the *Public Improvements Specifications* for further information.

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Exhibit 6-M4: Water District Boundaries



Sanitary Sewage Disposal

Wastewater Services

The Regional Water Resource Agency (RWRA) is the provider of public comprehensive wastewater services for Owensboro and Daviess County, with the exception of the facilities planning boundary of City of Whitesville, Kentucky. RWRA was formerly the Owensboro Sewer Commission that provided wastewater treatment and conveyance facility maintenance prior to its establishment through the adoption of identical enabling ordinances of the City of Owensboro and Daviess County Fiscal Court in February 1995 under KRS 76.231. At its formation, RWRA was the first utility in Kentucky created under this statute. RWRA's mission is to provide public wastewater services, along with responsibility to govern the community's efforts to improve water quality and environmental conditions related to the waterways within the area.

Since the formation of the Agency, RWRA has focused its efforts on two major components that include regionalization of the Agency within the 201 Facilities Planning Boundary and the continuation of projects to reduce the effects of overflows from the combined system located in the Owensboro area.

RWRA's regionalization efforts have included extensions through system development projects to the Highway 60 East, Highway 54 (Dermont area), Highway 56 (Sorgho area), U. S. Highway 60 West, Highway 231 (Masonville area) and the Yellow Creek basin (Thruston area). These extensions, along with community growth, have allowed for the elimination of 30 package wastewater treatment plants, and service to approximately 4,500 new customers formally connected to either the treatment plants or through the extension to unsewered neighborhoods with assessment projects. The assessment projects would typically provide service to an unsewered neighborhood through the construction of collector sewers within the neighborhood areas. These projects have essentially provided sewer service to most urbanized areas within the 201 Facilities Planning Boundary/Urban Service Area, with the exception of Philpot.

RWRA's water quality improvements began prior to the formation of the Agency with the construction of the East Wastewater Treatment Plant on Pleasant Valley Road. Subsequent projects in the south Owensboro area have allowed for the systematic removal and redirection of sanitary sewage flow from the combined sewer system to the East Plant. With each project, the amount of sanitary sewage flow traveling through the combined system has been reduced; thus, reducing the volumes that could be discharged during rain events at the Ohio River. These improvements have also reduced the concentration of sewage within the system thus reducing contaminant loads that could occur during overflow events. Other projects associated with the combined sewers in the community include projects to store combined sewage within the system such as the Devins Ditch Project, the Green River Area Health Department Basin, and the Parkview Drive basin. RWRA has partnered with the City of Owensboro to complete projects to improve the drainage systems from the south Owensboro area to convey additional stormwater away from the combined system in the Scherm Road, Harsh Ditch and Devins Ditch areas. These projects, predominantly funded by the City of Owensboro, will also allow for additional stormwater to be removed from the combined sewer system and eventually conveyed away from the combined sewer system. RWRA is awaiting response from the Kentucky Division of Water and Environmental Protection Agency with regard to its Framework Document submittal associated with the eventual Long-Term Control Plan to reduce Combined Sewer Overflow (CSO) impacts from the system.

RWRA has devoted extensive efforts to rehabilitate the infrastructure within the system, including most of the pump stations and many of the older downtown sewers. This rehabilitation has included the lining

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of a portion of the tunnel sewers and other prioritized sewers in need of structural enhancement and infiltration improvements.

RWRA Sewer Service Information

RWRA has two wastewater treatment facilities. The East Treatment Plant is located just east of the US 60 Bypass off Pleasant Valley Road, and the Max N. Rhoads West Treatment Plant is located at the north end of Ewing Road along the Ohio River. These treatment plants provide available daily designed treatment capacity of 6.8 Million Gallons per Day (MGD) and 15.0 MGD, respectively. Current daily usage at these facilities are well below the design capacities which enables RWRA to accept a significant amount of new customer growth.

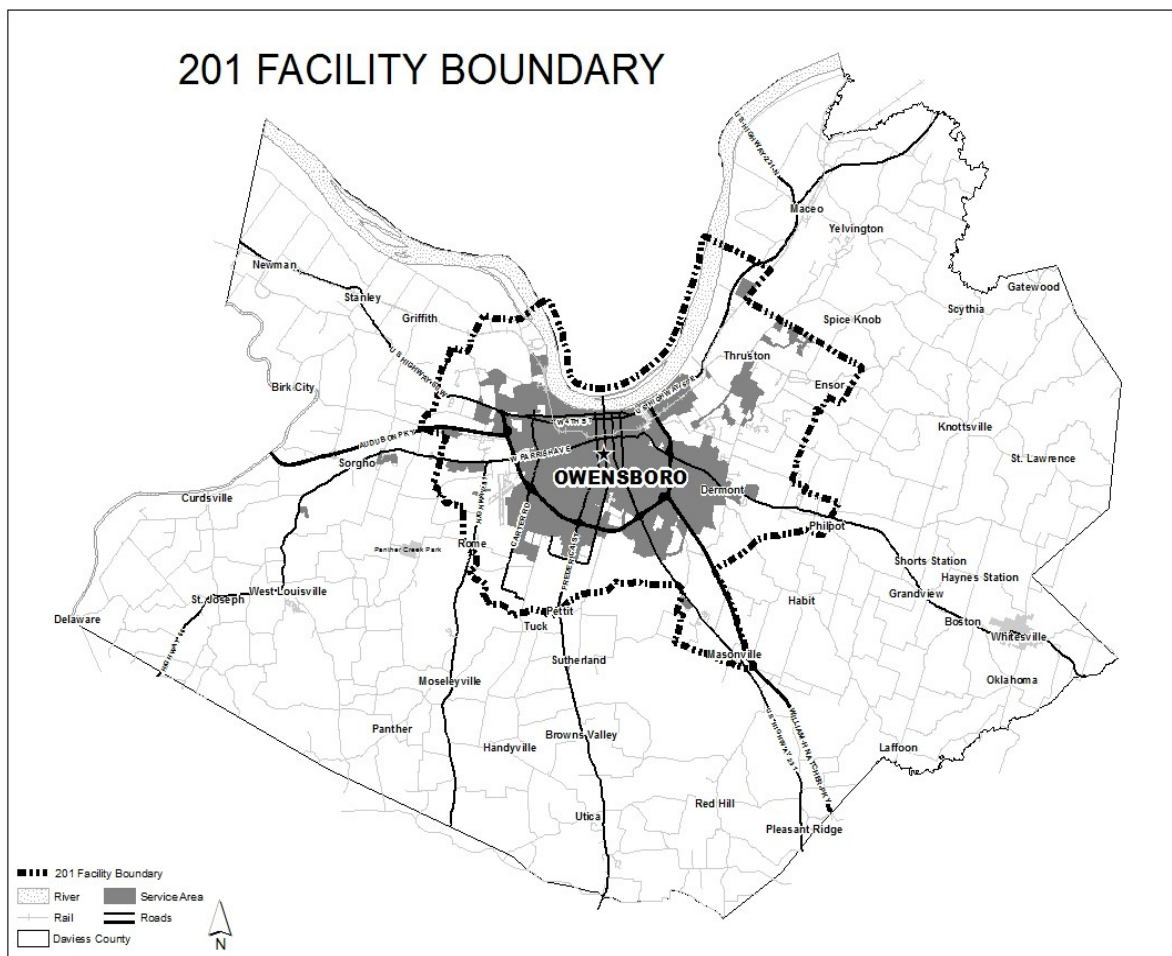
RWRA has operated under a “Growth Pay For Growth” philosophy at the direction from the local legislative governments. This philosophy lead to the development, capacity and assessment fees to accomplish this purpose. The infrastructure that has been constructed in these newly developing areas within the Urban Service Boundary was designed to allow for potential growth of the system. RWRA’s policies regarding development in these areas were established to encourage a contiguous growth of the community and discourage urban sprawl.

The Owensboro Metropolitan Planning Commission and RWRA, along with the local legislative bodies, should develop policies governing future development and requirements related to the construction of sewers and connection to the RWRA wastewater system to further discourage urban sprawl.

201 Facilities Plan Update for Owensboro/Daviess County (1996)

The objective of this plan update was to develop a cost-effective and environmentally sound strategy for expanding the wastewater collection and treatment system to accommodate existing needs and projected growth to the year 2017.

Exhibit 6-M5: Sanitary Sewer Facilities Plan

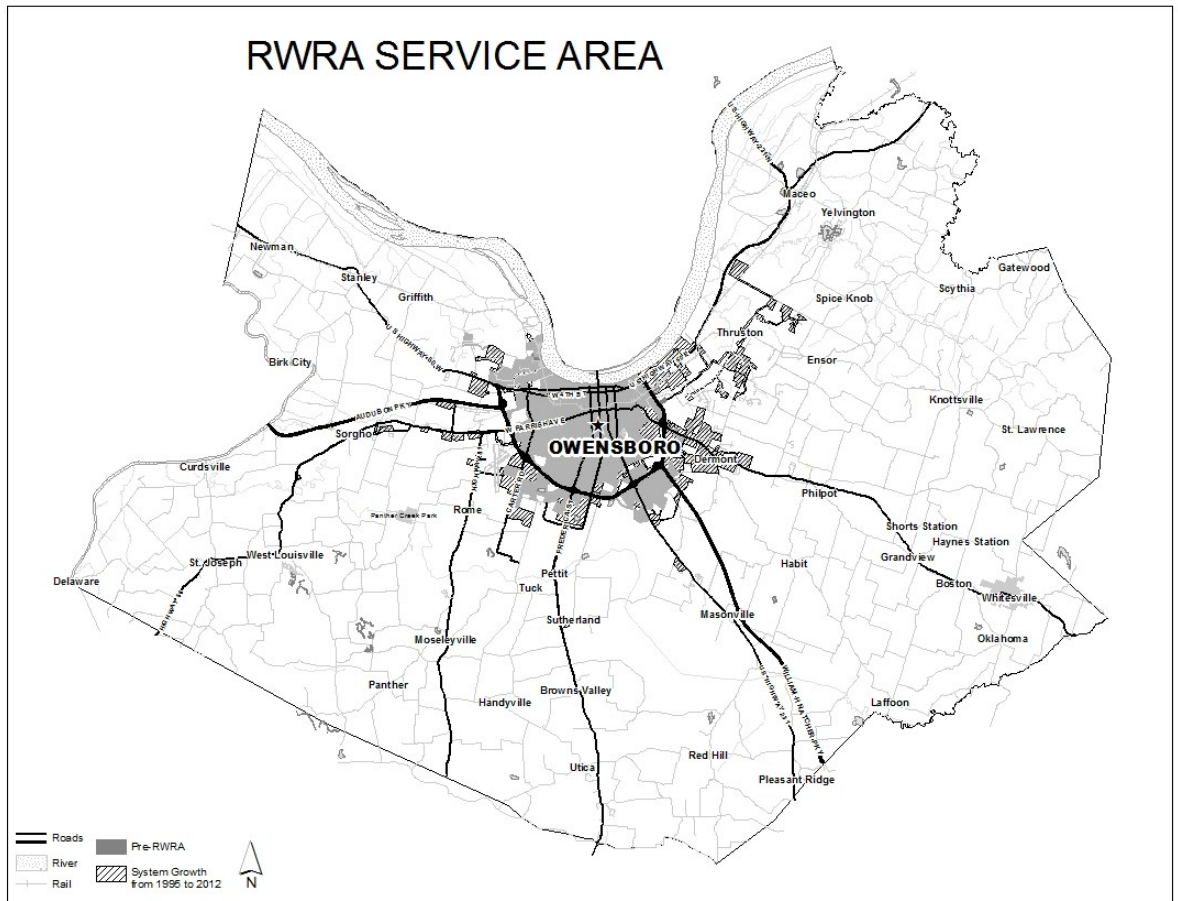


Whitesville Sanitary Sewers

A sewage collection system was built in the City of Whitesville in 1982 and 1983 in conjunction with a treatment plant. Prior to the installation of this system, waste disposal was achieved by individual septic tank systems. The collection system comprises 6, 8 and 10-inch gravity sewers, one master pump station and 5 localized pump stations.

Wastewater disposal in the RSA generally relies on septic tank systems. However, there are 18 private sewage treatment facilities located within the Rural Service Area. Nine of these plants treat residential or school wastes, while the remaining 9 plants treat sanitary wastes and/or production wastes from commercial or industrial sources.

Exhibit 6-M6: Sanitary Sewer Service Area



Storm Water Disposal

Since 1975 there have been four storm water studies completed:

- *A Storm Water Facilities Plan for the Owensboro Metro Area*, by G. Reynolds Watkins in 1975
- *The Owensboro Flood Abatement Study*, by Johnson, Depp and Quisenberry (JDQ) in 1979
- *The Owensboro-Daviess County Drainage Implementation Plan*, by JDQ in 1980
- *Storm Water Master Plan*, by Quest Engineers, Inc. in 1999 for the City of Owensboro

The 1975 study evaluated the major drainage systems which convey runoff from the urbanized area, but did not include the storm evaluated problem areas, proposed specific capital improvements for ten projects totaling \$2.27 million in 1975 dollars and recommended storm water controls on new development. Also recommended are storm water controls on new development.

The 1979 study was more limited in scope and focused on recommendations and improvements to the Scherm, York and Devins ditches. The purpose was to increase the capacity of the ditches to convey a 25-year design storm event and was estimated to cost \$1.18 million in 1979 dollars.

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The JDQ study in 1980 evaluated drainage problems in six separate watersheds. Costs were estimates at over \$11 million in 1980 and would have increased the capacity of the drainage areas to convey a 25 year design storm event.

The remainder of this section focused on the most recent plan. Two of the four considerations used were aimed at not exacerbating the existing drainage problems in the county. The considerations were:

- Detention facilities are recommended at the downstream end of each watershed to mitigate the increased runoff rate resulting from construction of proposed storm water facility improvements. Runoff rates into the county will be the same or less than what now exists.
- Where existing channels in the county are inadequate to convey the 25-year storm event, a recommended channel widening or detention volume is provided that enables the runoff to stay within the channel banks.

According to *A Storm Water Facilities Plan for the Owensboro Metro Area*, storm water in the relatively flat Owensboro metro area falls into three major drainage basins: The Ohio River, Panther Creek, and the Green River. Within the Owensboro urban area, most storm water is carried to the Ohio River by underground pipes. In the Green River and Panther Creek basins, however, surface channels originally constructed as agricultural ditches carry the storm water. These channels run through land that has very little slope. Therefore, the velocity of storm water flow is restricted, and the low velocities, in turn, are unable to scour the banks of trees and brush which further impede water flow. The maintenance of these surface channels presents an unusual and extreme burden for local government.

Contrary to popular belief, Panther Creek generally has very little effect on flooding within the Owensboro urban area. Flooding in the Panther Creek area most often is the result of winter or spring storms of low intensity, but high duration -- maybe 4 or 5 inches for 1 or 2 days. This brings Panther Creek to a high stage, which, in turn, produces a backwater effect on other streams within a mile or so of Panther Creek. To alleviate flooding of this type, all of Panther Creek would have to be improved, as well as the many surface channels serving Owensboro.

In the summer and early fall, a different type of storm usually occurs. Before the storm, the ground is dry and channels empty, but the rainfall is so intense and of such short duration that flash flooding takes place. This type of flooding presents the most pressing problems to the Owensboro urban area -- and its alleviation requires localized surface drainage improvements.

The 1999 Storm Water Master Plan

Objectives of the plan include:

- ◆ Develop a plan that would be used on a day-to-day basis as a practical guide for storm water management.
- ◆ Maximize the use of existing data.
- ◆ Establish an expected level of protection.
- ◆ Achieve a substantial reduction in flooding.
- ◆ Develop a prioritized list of storm water improvements.
- ◆ Communicate effectively during the plan preparation through a storm water advisory committee.

A Storm Advisory Committee was formed to provide assistance in discussing and reaching consensus on the level of protection, priority methodology, implementation and other primary issues.

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Major systems consisted of drainage facilities greater than or equal to an equivalent 36 inch pipe. Drainage facilities less than an equivalent 36 inch pipe were designated as minor systems in the plan. Minor systems were included only where required to evaluate any of 30 specific locations identified by city staff as flood prone. The 13 major systems include:

Persimmon Ditch	Goetz Ditch	Gilles Ditch	Target Ditch
Devins Ditch	Harsh Ditch	Rhodes/York Ditch	Horse Fork
Carter Rd Ditch	Yellow Creek	Scherm Ditch	Middle School
Tamarack Ditch			

Existing data used in the plan included a number of maps and related text that provided information on the existing boundaries of the watersheds; zoning, topography, soil, & floodplain areas; and storm, sanitary, and combined sewer systems. City staff also provided information on 30 specific areas that had been identified as flood-prone.

New data also had to be developed. The determination of which design storm event - 2, 10, 25 year, etc. - for which to plan would dictate the needed data and analyses. To decide this, two typical systems were thoroughly studied: an urban closed-conduit (Scherm) and a rural open-conduit (Persimmon). The results were extrapolated to the overall drainage system to estimate the costs for improvements for the respective storm events. To effectively handle a 25-year storm would not cost significantly more than for a 10-year storm, which the Advisory Committee deemed to be the minimum design objective. However the increase to design improvements to effectively handle a 50 year or 100 year storm event would cost significantly more and would not be economically feasible. Therefore, the **consensus of the Advisory Committee for the design storm (level of protection) on which the plan would be based was the 25-year event.**

Inventory data for the 13 major systems was then gathered, including horizontal and vertical control. FEMA's model was available, so compatible software was used to study hydrology, hydraulics, and culverts. Models are necessary to quantify the runoff from a watershed and the routing of the storm water through the existing storm water drainage facilities.

Due to the size of the Harsh and Horse Fork watersheds, they were subdivided into their main channel and tributaries. This resulted in **evaluation of 21 watersheds**. The models calculated the amount of runoff, the route through the existing system, where existing facilities were inadequate to convey the 25-year event, and recommended improvements. Detention facilities and diversion channels were incorporated to maximize the use of existing facilities and minimize the magnitude of proposed facilities. The Horse Fork #2 watershed was the only one of the 21 sheds evaluated that did not require any improvements to convey the 25-year storm event. Improvements to the other 20 watersheds were combined into **71 separate projects** at an estimated total 1999 cost of approximately **\$64 million**. Implementation is dependent on the level of funding available. It was estimated that \$4 million would be available annually but this funding was not realized.

Within the City of Owensboro, storm water facilities are a city responsibility - but for the remainder of Daviess County, responsibility lies with private property owners with guidance from the Daviess County Fiscal Court. Unfortunately, storm water flow recognizes only gravity, and not political boundaries. Due to the pattern of drainage systems in the Owensboro Urban Service Area, a storm water problem and the proposals for its alleviation often relate to both political jurisdictions. Corrective action depends upon the joint and cooperative efforts of both City and County.

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The 1975 and 1980 plans both recommended the formation of a Joint City-County Drainage Commission. In the mid 1990's when Regional Water Resource Agency was formed, consideration was given to making storm water runoff and drainage the responsibility of this agency for the city and the county, but this did not occur.

The 1975 *Storm Water Facilities Plan* recommended several actions to be taken in regard to new development that remain valid today. These include:

- Full review of storm water needs for new development prior to approval by city, county or planning commission. *Currently implemented through regulatory review and approval of site plans, development plans and subdivision plats.*
- Use of detention facilities where possible to accommodate excess floodwaters on site. *Currently, detention is required for most new urban development. Responsibility for maintenance varies from basin to basin.*
- Proper consideration of the entire drainage basin affected, rather than only the property under development.
- Securing a more detailed definition of the 100-year flood plain and developing appropriate mechanisms for protecting the area from inappropriate development. *There have been 3 flood studies conducted by FEMA since 1975. Flood plain maps and zoning regulations were adopted in the fall of 1980, the current Flood Insurance Rate Maps became effective April 16, 2009.*

A Daviess County Drainage Advisory Commission was organized by Daviess County Fiscal Court in 2011. The Commission identifies drainage issues of significance to the county and is in the process of requesting proposals to develop a county wide storm water master plan.

Rural Drainage Improvements

For fiscal year 2000, the Daviess County fiscal Court budgeted \$250,000 to address public drainage issues in the unincorporated areas of Daviess County.

Panther Creek and its tributaries drain 371 square miles of land. Floods in this basin inundate residential and agricultural portions of a large part of central Daviess County. The 100-year flood plain extends into the Owensboro urban area at several locations.

In 1997, the Corps investigated the costs vs. benefits of constructing numerous, high-volume detention basins at strategic points along Panther Creek. During storm events, water would be detained in holding basins along Panther Creek, and then released slowly downstream. This technique might reduce the frequency of localized and lesser flood events that aggravate particular areas each year.

However, the larger and more widespread that storm events become, the less effective this system of basins would become. For example, in a widespread 10-year storm, the backwaters of the Green River impact Panther Creek 13 miles upstream from the Green to around Highway 279 South. This slows the rate of flow on Panther Creek further upstream. Because there is not capacity downstream, water spreads out over a large, relatively flat area.

The Daviess County Fiscal Court aggressively took on the approach to improve the overall drainage by building flood control detention basins distributed in key and important flood potential areas across the county. Those basins were financed through local and federal funds and constructed in locations as recommended by the most recent study, the **1999 Storm Water Master Plan** by Quest Engineers. The following projects have been built by the county in the past several years:

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- Gilles Basin on Gilles Ditch
- Horse Fork Basin on a tributary of Horse Fork Creek

Solid Waste

The Daviess County Landfill at 7772 Hwy 815 serves as the primary disposal facility for all solid wastes. There are also convenience centers in the county at 7772 Highway 815 and at 11025 Highway 144. Transfer stations are located at , 2129 Grimes Ave (public) , 100 Ellis Smeathers Rd (private), and 719 Wrights Landing Rd (private) Tires, scrap metal, aluminum can, yard waste, and hazardous chemicals can be disposed at twelve different sites in the area. Except for hazardous chemicals, facilities for the aforesaid are mostly located in and around the urbanized areas of Owensboro. Hazardous chemical disposal is outside of the county.

Either the Owensboro Sanitation Department or fourteen private collectors in Daviess County collect residential, commercial, and industrial solid wastes. The largest collection service is provided by the City of Owensboro on a house-to-house, curbside basis, through customer use of mobile toters. Businesses, schools, and hospitals use large containers for their solid wastes and the frequency of collection is dependent upon the volume of waste. Most rural private collection systems have also gone to the mobile toter system in the last few years.

Local Ordinances

Ordinance Number KOC 830.6 regulating solid waste management in Daviess County was introduced by the Daviess County Fiscal Court on February 5, 2008 and became effective February 26, 2008. Public health, safety, and welfare; storage, collection, transportation, processing and disposal of solid waste are addressed in the ordinance. The ordinance mandates that all residential and commercial waste generated in Daviess County shall be disposed at the Daviess County landfill or delivered to the county-owned Daviess County Transfer Station.

The City of Owensboro amended its solid waste ordinance in December of 1995. The revision acknowledge the Daviess County Fiscal Court as the principal provider of solid waste for Daviess County, eliminated the landfill section of the ordinance and specified department organization, containers, collection, special loads, fees, collection techniques, billing and self-service permits.

The City of Whitesville does not have a solid waste ordinance. However, there are several county-permitted haulers that provide sanitation service to the residents of Whitesville.

The Owensboro Metropolitan Zoning Ordinance controls the location of private landfills throughout Daviess County. Private landfills are prohibited in Urban Agriculture zones and conditionally permitted in Rural Agriculture zones. Landfills operated by local government are not subject to local zoning regulations.

The Daviess County Health Department locally enforces the “general nuisance” and “public health” statutes. In addition, the Kentucky Division of Air Pollution Control enforces open-burning regulations.

The Daviess County’s ***Solid Waste Management Plan for 2008-2012*** was submitted to the Commonwealth’s Natural Resources and Environmental Protection Cabinet, Department for Environmental Protection in November of 2007 and approved in February of 2008. The plan was

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prepared in conformance with KRS 224.43-340 and is the fifth, five-year plan prepared by the county. The purpose of the plan is to provide orderly extension and improvement of solid waste management, to protect public health and the environment and to minimize the social and economic costs associated with improper solid waste management practices. The plan is consistent with the state's Solid Waste Management Plan enacted in 1980, and seeks to address the procedures for implementing identified short-term, intermediate and long-term tasks. Daviess County Fiscal Court adopted the plan by Resolution No. 25-2007 on November 15, 2007. The plan mandates solid waste collection and permit requirements for solid waste haulers, recyclers and tree trimmers. Owensboro Municipal Utilities power station continues the burning of tires as a tire derived fuel supplement, which was approved in August of 1998. It was estimated that over one million tires would be removed from the waste stream annually.

A complete copy of the solid waste plan can be viewed at the office of the Solid Waste Manager under the Daviess County Fiscal Court. An update of the plan was submitted to the state in October of 2012.