Osceola Municipal Airport Master Plan Update

Prepared for:

CITY OF OSCEOLA

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Osceola Municipal Airport

Master Plan Update

City of Osceola, Arkansas

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1.0 Introduction

The Osceola Municipal Airport (7M4) is a vital part of the national airspace system and an integral component of the transportation network that serves the City of Osceola and the southern portion of Mississippi County, Arkansas. Southern Mississippi County geography is dominated by delta lowlands situated along the Mississippi River basin, where the majority of the land is farmed. The economy of Osceola and Mississippi County depends predominately on agriculture, with major crops including cotton, soybeans, corn, and rice. Industry in the region also supports the Denso Corporation and the construction of the Big River Steel Mill and its associated supporting industries. These businesses not only provide employment and revenue sources to the region and local economy, but they also have led to increased requests for airport improvements for additional business use.

The focus of this document will be to update the Masterplan completed in 2008 and on the total aviation facility and its environs, development of an aviation facility that can accommodate future demand that is not constrained by its environs while efficiently maximizing available development property to support the future at Osceola Municipal Airport.

1.1 Facility Inventory Process

As the initial step in the airport planning program, the inventory is a systematic data collection process that provides an understanding of past and present aviation factors associated with 7M4. A comprehensive inventory, including the following major inventory tasks, is used to form the basis for airport recommendations throughout the study.

- On-site inspection (conducted in September 2015) and inventory of airport facilities, equipment, and services to assess existing physical conditions.
- Discussions with local officials, the economic development members, airport manager/Fixed Base Operator (FBO), and airport tenants regarding recent airport trends, operations, and services.
- Collection of airport activity data, project records, and aeronautical background information; a review of historical airport information, previous airport layout plans, maps, charts, and photographs of airport facilities.
- Collection of regional, county, city, and airport development information to understand regional economic conditions and determine the surrounding airport service area characteristics.
- Review of current and planned on and off-airport land use development and property information, including surrounding land use patterns, existing and proposed transportation developments, infrastructure, and utilities.
- Collection of regional climatic information, including predominant winds, cloud and visibility conditions, and precipitation levels.

1.2 Existing Conditions

7M4 is located in southern Mississippi County, Arkansas, west of the Osceola central business district. The airport is south of west Keiser Avenue (state route 140), and access to the airport is via Airport Road with a direct connection from West Keiser Avenue.

The airport has one hard surface asphalt runway (3,800' x 75') that is in good condition. The runway is oriented north/south with a runway designation of 1-19. The runway has Medium Intensity Lights (MIRLs) with Runway End Identifier Lights (REILs) serving Runway 19. The published weight bearing capacity for an aircraft is 8,500 pounds with single wheel gear configuration. During times of inclement weather an RNAV (GPS) Instrument Approach serves the airport to Runway 19. The published minimums for the approach can bring aircraft to 400-feet above the ground with visibility as low as one mile.

Terminal area infrastructure consists of a temporary terminal building, a 50' x 40' box hangar, and a five-bay covered plane port with two enclosed hangars. A 200' x 150' aircraft parking apron is located in the hangar area. Auto access and parking are collocated in the apron area near the temporary terminal building. A 24-hour self-service fuel system is available for 100 low lead aviation fuel.

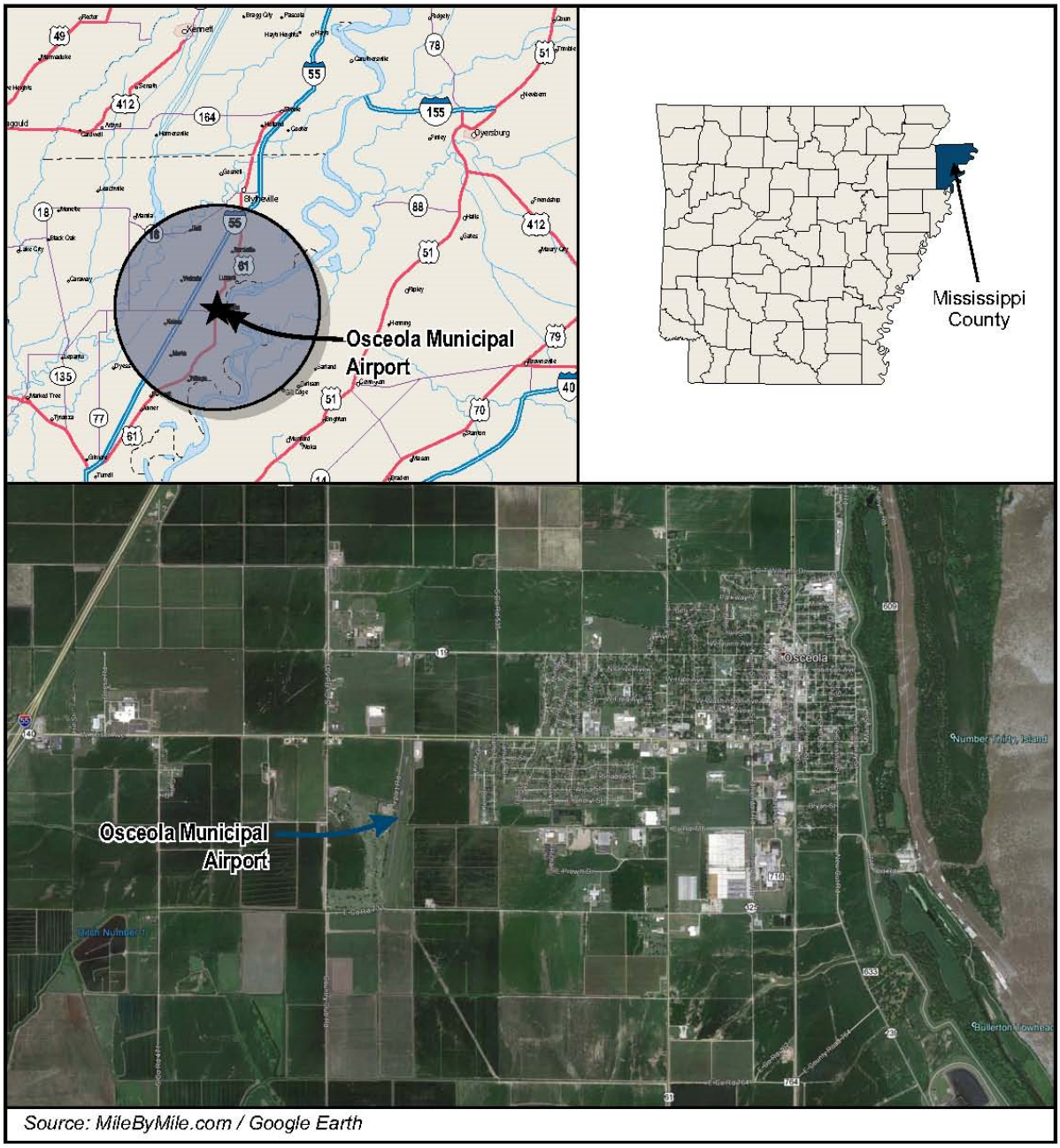
7M4 is classified as an approach Category B (aircraft with approach speeds of less than 121 nautical miles per hour) and Airplane Design Group I (aircraft with wingspan of less than 49-feet and tail height of less than 20-feet). The airport serves mostly single engine piston aircraft utilized for personal flying and agricultural spraying operations.

The airport is classified as a General Aviation airport within the Federal Aviation Administration (FAA), National Plan of Integrated Airport System (NPIAS) and a Local Airport in the Arkansas Airport System Plan. The FAA 5010 Master Record, last inspected in 2015, reports that the airport encompasses 110 acres and experiences an estimated 13,100 annual operations and bases 13 aircraft.

Airport Location and Access

Figure 1 depicts the location of 7M4 2.3 miles east of Interstate Highway 55 (I-55) that provides automobile access to Memphis, Tennessee, and St. Louis, Missouri, the two largest metropolitan areas in proximity to the airport.

Figure 1
Vicinity Map



Source: MileByMile.com / Google Earth

Airport Role

The City of Osceola owns the Osceola Municipal Airport. The Mayor and City Council appoints a five-member Airport Commission that reports to the Mayor. In addition, the Mayor appoints an airport manager that oversees the day-to-day operations and reports directly to the Mayor.

The FAA identifies design standards for airports and their operating pavements within Advisory Circular 150/5300-13A, Change 1, *Airport Design*. Pavement categorization is provided for runways through the Runway Design Code (RDC) while taxiway pavements are designated separately through the Taxiway Design Group (TDG). The RDC is defined by three variables: Airport Approach Category (AAC), Airplane Design Group (ADG), Instrument Approach Procedure (IAP) visibility minimums. Previously, the Airport Reference Code (ARC) and runway design were not classified based on IAP minimum visibilities. **Table 1-1** outlines the AAC and **Table 1-2** documents the ADG. **Table 1-3** delineates the various possibilities defining visibility minimums for IAPs.

Table 1-1
Aircraft Approach Category (AAC)

AAC	V_{REF}/Approach Speed [1]
A	Approach speed less than 91 knots
B	Approach speed 91 knots or more but less than 121 knots
C	Approach speed 121 knots or more but less than 141 knots
D	Approach speed 141 knots or more but less than 166 knots
E	Approach speed 166 knots or more

Source: FAA Advisory Circular 150/5300-13A, Change 1, *Airport Design*
[1] V_{REF} = Landing Reference Speed or Threshold Crossing Speed

Table 1-2
Airplane Design Group (ADG)

Group #	Tail Height (ft [m])	Wingspan (ft [m])
I	< 20' (< 6 m)	< 49' (< 15 m)
II	20' - < 30' (6 m - < 9 m)	49' - < 79' (15 m - < 24 m)
III	30' - < 45' (9 m - < 13.5 m)	79' - < 118' (24 m - < 36 m)
IV	45' - < 60' (13.5 m - < 18.5 m)	118' - < 171' (36 m - < 52 m)
V	60' - < 66' (18.5 m - < 20 m)	171' - < 214' (52 m - < 65 m)
VI	66' - < 80' (20 m - < 24.5 m)	214' - < 262' (65 m - < 80 m)

Source: FAA Advisory Circular 150/5300-13A, Change 1, *Airport Design*

Table 1-3
IAP Visibility minimums

RVR (ft.) *	Instrument Flight Visibility Category (statute mile)
5000	Not lower than 1 mile
4000	Lower than 1 mile but not lower than ¾ mile
2400	Lower than 3/4 mile but not lower than 1/2 mile
1600	Lower than 1/2 mile but not lower than 1/4 mile
1200	Lower than 1/4 mile

Source: FAA Advisory Circular 150/5300-13A, Change 1, *Airport Design*
* RVR values are not exact equivalents

2.0 Airfield Facilities Inventory

Airfield facilities are needed to support aircraft operations. These facilities are discussed in the following section.

2.1 Runways

7M4 is served by a single runway system. The primary runway, Runway 1-19, is 3,800-feet long and 75-feet wide. The runway is constructed of asphalt pavement that is in good condition. The published weight-bearing capacity for the runway is 8,500 pounds, based on single wheel gear configuration loading. The instrument approach to Runway 19 requires non-precision markings. Runway 1 has basic markings. The runway is surrounded by drainage ditches that move large amounts of water away from the city, leaving the soils saturated.

2.2 Taxiways

The current airport layout does not include a taxiway system. The single connector taxiway provides direct access from the runway to the apron. Recently the FAA changed the design guide to remove direct access from runways to aprons. The current design standard requires at least one turning movement from aprons to runways. Each end of the runway has a turnaround teacup that allows aircraft sufficient room to make a 180 degree turn following back-taxi operations along the runway and positioning for takeoff.

2.3 Aprons

The airport has an aircraft apron that functions as a place for fueling aircraft, transitioning to and from the runway to the hangar area, and parking for aircraft. The T-hangars and box hangar both have access to and use of the apron. An additional apron is located to the east of the box hangar and primarily used by agricultural aircraft operations. The northern portion of the apron is used for auto parking. There is no real delineation to separate the auto parking from aircraft operations.

2.4 Airfield Lighting

The airport has installed a medium intensity runway lighting system (MIRL). The lighting system can be controlled by pilots transmitting using the microphone in their aircraft via the common traffic advisory frequency (CTAF). The lighting controls and equipment were located in the terminal building but were recently relocated to an enclosure north of the fueling system. The airport rotating beacon is located on pole south of the T-hangar area. Runway end identifier lights (REIL) are located outboard of the Runway 19 threshold lights.

3.0 Landside Facilities

3.1 General Aviation Terminal

For years, the airport was served by a 1,230-square-foot single-story brick terminal building. In 2014, this building was destroyed by a fire and subsequent vandalism. The building was demolished when it was deemed too costly to repair. Recently the City installed a temporary building to serve as a terminal building, located on the northern side of the apron, serving as the terminal until the completion of the master plan.

3.2 General Aviation Hangars

The airport has two hangars located on the main apron. One hangar is a 40’ x 50’ box hangar serving a single agriculture operator, opening to the north onto the apron. There is an additional apron to the east of the box hangar that is used for agricultural operators.

One eight-unit t-hangar is located within the terminal area with six of the bays open and the remaining two fully enclosed.

3.3 Fuel Facility

The aviation fueling facility for the airport consists of a 3,000-gallon above-ground fuel tank, providing 100 low-lead fuel for piston driven aircraft. Fuel is available 24 hours per day via a credit card system, located on the north side of the aircraft apron.

3.4 Segmented Circle

A segmented circle and wind cone are located on the eastern side of the airfield directly across from the terminal area, providing traffic pattern and wind direction information to pilots.

3.5 Security

The airfield is open and does not include any typical security barriers. Direct automobile access to the runway surface allow the potential for intrusion and misuse. Perimeter fencing is limited, giving people and wildlife unrestricted access to all areas of the airport, potentially leading to vandalism of aircraft and property.

3.6 Utilities

The airport is served by overhead power utilities located on the highway, accessed along the airport entrance road. Sewer is not available and wastewater is disposed of in a septic system.

4.0 Land Use

Historically the land surrounding the airport was agricultural, but recent development along West Keiser Avenue (state route 140) has changed the uses. With the construction of the Wal-Mart Supercenter, road frontage property has been offered by private landowners for commercial development. With available utilities and infrastructure, encroachment to the airport will continue. Areas outside of the commercial zone are a mixture of residential, industrial, and agricultural.

Land uses surrounding the airport are typical in nature for rural general aviation airports. Development of areas to the north are concerning and will negatively affect the airport. The city should work to acquire these properties directly off of centerline along the highway.

4.1 North

Areas located north of the airport across West Keiser Avenue are currently agricultural. Designated as commercial. The road frontage is currently for sale for development. This area is located within the runway protection zone (RPZ) and approach area and development would negatively affect the airport. The area south of West Keiser Avenue and slightly east of the airport property supports a Case tractor dealership, located beneath FAA Part 77 surfaces. The location of the highway does not meet the current FAA design standards and will be discussed later in the master plan.

4.2 South

Areas located to the south of the airport are agricultural with development potential being less of a concern due to the lack of paved roads and services. A part of the city-owned golf course is located to the south of the airport, some portions are positioned within the RPZ and other designated airport safety areas. The FAA design guide does not allow for these uses within these areas.

4.3 East

Areas situated directly to the east of the airport are agricultural, with areas of homes and light industrial uses present, beyond that a power substation is located to the southeast for the airport. A high power transmission line estimated to be 80-feet tall with four power lines on outriggers traverses the area positioned east moving towards the southwest.

4.4 West

The western portion of the surrounding land is comprised of a city-owned golf course, which encroaches on areas needed for airport development and designated airport safety areas. Discussion of the impacts of the golf course will be provided later in the master plan.

With Osceola developing and business expanding along Keiser Avenue, the the city should look into zoning to protect the airport from future encroachment.

5.0 Roadblocks

The City will have to overcome several roadblocks in development, since their intent is to develop the airport into a business aircraft capable facility. These roadblocks are discussed below.

5.1 Design Standards

The current Runway Design Code (RDC) is a B-I, which is not suitable for an airport that intends to serve business jet aircraft. The design standards contained in AC 150-5300-13A, Change 1 will require costly renovations and expansion to the current airport layout. Several of the roadblocks to the existing B-I design standards are as follows:

- Relocating entrance road
- Acquiring and relocating the Case tractor dealership
- Shifting the runway south to remove West Keiser Avenue from the RPZ
- Rerouting drainage features (ditches and culverts)
- Acquiring and relocating a portion of the city-owned golf course
- Providing remediation's for violations to protected airspace
- Relocating powerlines to the south
- Relocating road to the south
- Increasing runway strength/weight bearing capacity

Any expansion of the airport from the existing configuration would increase the number and severity of roadblocks.

6.0 Solid Waste Recycling Plan

As part of the City of Osceola, the airport is served by the Street and Sanitation Department. Businesses can either choose to have bagged garbage picked up or have an 8-cubic-yard dumpster available for collection. Commercial bagged waste is removed weekly and the dumpster service is emptied on an as-needed basis.

The City is part of the regional solid waste management plan for Mississippi County Regional Solid Waste Management District and offers recycling that can be dropped off in a dumpster

adjacent to the City Hall building. The plan is located in Appendix B. This material is relocated to a recycling facility when full.

Solid waste produced by the airport is limited, currently there are no full time businesses operating daily on the airport. Individual users of the airport produce all the solid waste that is generated. Agricultural operators currently using the box hangar produce the majority of the solid waste.

In order for the airport to move forward, a solid waste removal plan should be implemented. The city should have available trash receptacles for users of the airport to dispose of general refuse, and make available additional receptacles for petroleum containers, such as aircraft motor oil and additives. Agricultural operators using the airport should be required to remove all hazardous chemical containers, fertilizer containers, and seed bags at their expense and dispose of offsite.

7.0 Environmental Overview

An analysis and inventory of the environment on and surrounding an airport identifies resources that may need to be addressed prior to implementation of any future proposed airport planning recommendations. This process provides notification to the airport sponsor that some coordination and correspondence with various state and federal agencies may be required before any construction takes place.

7.1 Climate

The climate surrounding Osceola has an average low of 34 degrees Fahrenheit in the winter months and an average high of 91 degrees Fahrenheit in the summer months. The average annual precipitation is 4.5 inches a month with May being the wettest month and August being the driest. Wind patterns are predominately north/south in nature.

7.2 Seismic Activity

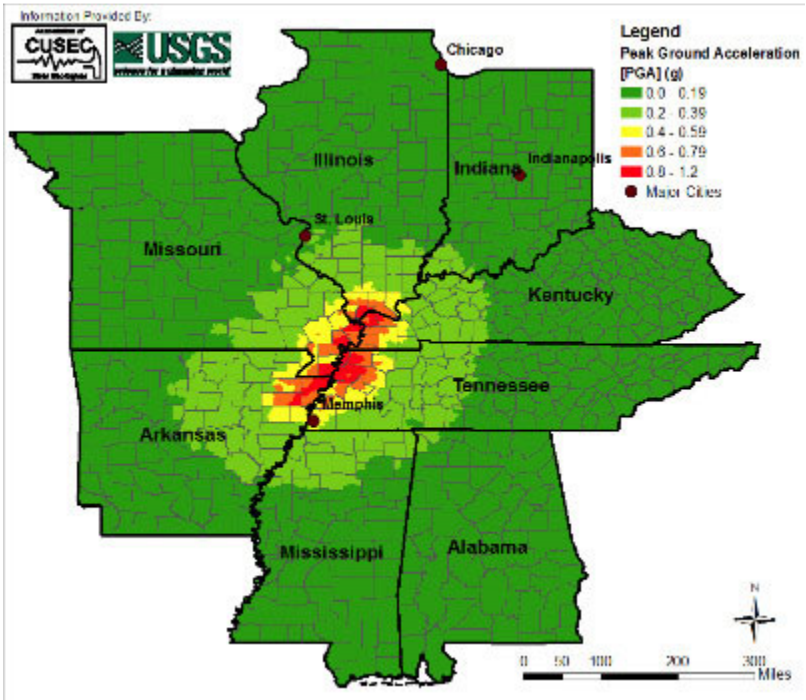
The airport lies 65 miles south of the New Madrid Fault in the New Madrid Fault Zone. This fault line was responsible for the devastating earthquake in 1811-1812 with the worst earthquake measuring an 8.6 on the Richter scale. This zone follows the Mississippi River from Cairo, Illinois, to south of Memphis, Tennessee. Sixty-eight earthquakes ranging between Magnitude 2.0 and Magnitude 3.9 shook this region from 2009-2011. In 2012, a total of 223 total earthquake events took place in the New Madrid Zone. Figure 2 below depicts the New Madrid Seismic Zone.

7.3 Soils

The Osceola Municipal Airport is located in the Mississippi Delta Region. The river floods much of the surrounding land, often depositing nutrient rich soil across the region. In 1879, Congress created the Mississippi River Commission (MRC) to oversee federal funding for flood control. Today the MRC, along with the Corps of Engineers, oversees thousands of miles of levees to control flooding and limit the impact of the river. Recent flood stage conditions on the Mississippi River have been controlled by the levee system. The overall makeup of the soils is mostly

sharkey clay and silty loam. The majority of the land is used for various crop production, from rice to cotton to grain crops. With the proximity to the Mississippi River, the water table is easily reached for irrigation.

Figure 2
New Madrid Seismic Zone



7.4 Historical, Architectural, Archaeological, and Cultural Resources

The National Historic Preservation Act of 1966 requires that an initial review be made to determine if any properties in or eligible for inclusion in the National Register of Historic Places are within the area of a proposed action's potential environmental impact. The Archaeological and Historic Preservation Act of 1974 provides for the survey, recovery, and preservation of significant scientific, pre-historic, historical, archaeological, or paleontological data when such data may be destroyed or irreparably lost due to a federal, federally funded, or federally licensed project. Research on the Arkansas Historical Commission website and the National Register of Historic Places indicate no sites of historic nature in the airport vicinity. As with any new development, a thorough investigation and coordination should be conducted through both state and federal cultural resource offices before any new construction or recommendations occur on the airfield.

The Mississippi County Region was home to several Indian tribes first documented in the 1500s. Numerous archaeological digs in the region have taken place and artifacts recovered over time.

Before any construction takes place, it will be necessary to perform all environmental due diligence required for proposed projects and airport improvements.

7.5 Fish, Wildlife, and Plants

The Endangered Species Act requires each federal agency to ensure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered or threatened species or result of the destruction or adverse modification of habitat of such species. According to the U.S. Fish and Wildlife Service, several endangered species are listed for Mississippi County, Arkansas, to exist on or have habitat available within the county. As defined by the U.S. Fish and Wildlife Service, an endangered species is any species of wildlife whose continued existence as a viable component of the state's wild fauna is determined to be in jeopardy, and a threatened species is any species of wildlife that appears likely, within the near future, to become an endangered species. Table 7-1, Mississippi County Threatened and Endangered Species, lists the threatened and endangered species for Mississippi County on a federal status.

It is uncertain if these species reside near or on airport property; therefore, coordination with both the U.S. Fish and Wildlife Service and Arkansas Game and Fish Commission will be required before any future construction is commenced.

Table 7-1
Threatened and Endangered Species

Common Name	Genus/Species	Federal Status
Interior Least Tern	Sterna antillarum athalassos	LE
Piping Plover	Charadrius melodus	LT
Pallid Sturgeon	Scaphirhynchus albus	LE
Bald Eagle	Haliaeetus leucocephalus	BGEPA
Fat Pocketbook	Potamilus capax	LE
Scaleshell	Leptodea leptodon	LE

Source: US Fish and Wildlife Service Online Database
BGEPA = Federally Protected; LE/LT = Federally Listed Endangered/Threatened

8.0 Airspace System and Aids to Navigation

All flights conducted within the national airspace system, whether under Visual Flight Rules (VFR) or Instrument Flight Rules (IFR), do so based on regulations mandated by the FAA. Taking these rules into account, each airport—whether private or public—has a specific role that it plays as part of this system.

8.1 Air Traffic Service Areas and Aviation Communications

FAA air traffic controllers, stationed at En-Route Control Centers or Air Route Traffic Control Centers (ARTCC), facilitate the safe movement of aircraft operating primarily under IFR conditions

within a defined geographic jurisdiction. There are currently 22 geographic ARTCC's established within the continental United States, each one responsible for a specific geographic region or boundary delineation. The Osceola Municipal Airport is located within the Memphis ARTCC, which includes airspace in portions of Tennessee, Kentucky, Arkansas, Alabama, Louisiana, and Missouri.

8.2 Airspace

As seen in **Figure 4**, 30-Minute Drive time Analysis, the local airspace immediately surrounding Osceola is designated as Class E airspace. Class E airspace generally exists in the absence of Class A, B, C, and D airspace extending upward from either 700-feet or 1,200-feet above the surface to 18,000-feet MSL within five miles of airports without an air traffic control tower (ATCT) and is intended to provide a transition area for instrument approaches. VFR traffic is allowable without radio communications; however, IFR flights and aircraft must be capable of communicating with air traffic control (ATC) and be equipped with Mode C altitude reporting transponders. Currently, the Class E airspace associated with Osceola Municipal has a floor of 700-feet above the surface of the field.

The Osceola Municipal Airport is located 11 nautical miles from the Memphis Class B Airspace with the top reaching 10,000-feet and the inner ring reaching the ground. Class B airspace requires radio contact as well as Mode C capability to enter the airspace.

8.3 Navigational Aid (NAVAID)

Airport NAVAIDs, located on the field or at other locations in the region, are specialized equipment that provides pilots with electronic guidance and visual references in an effort to execute instrument approaches and landings and point-to-point navigation. There are no NAVAIDs located on the airport; however, NAVAIDs available for use by pilots in the Osceola Municipal Airport vicinity include Very High Frequency (VHF) Omnidirectional Range/Distance Measuring Equipment (VOR/DME) and Very High Frequency Omnidirectional Range/Tactical Air Navigation (VORTAC). A VOR/DME is a system of VHF Omnidirectional Range Radio Beacons that emit signals to aid navigation instruments in an aircraft to determine the location of the VOR station from the aircraft with respect to magnetic north. The co-located distance measuring equipment (DME) is used to measure the slant range distance of an aircraft from the navigational aid, in nautical miles. A VORTAC is essentially the same thing as a VOR/DME but is co-located with a military Tactical Air Navigation system that is available for civil use. Due to the high costs of maintaining this equipment, as well as the advances, accuracy, and less costly GPS navigation capabilities, once this equipment reaches the end of its useful life, the FAA is decommissioning it.

NAVIADs associated with the Osceola Municipal Airport are Dyersburg VORTAC, which is 38 miles to the northeast; the Jonesboro VOR/DME, which is located 30 miles to the northwest; and the Memphis VORTAC, which is 40 miles to the south.

Currently there is one instrument approach associated with the Osceola Municipal Airport. The RNAV (GPS) to Runway 19 offers a straight-in approach with minimums as low as 40-feet above the airport elevation and one-mile visibility. With the absence of weather reporting information available at the Osceola Municipal Airport, the approach is dependent of obtaining an altimeter setting from either Blytheville Municipal Airport or the Covington Municipal Airport. When using the Covington weather information, the minimums increase 20-feet.

8.4 Airport Service Area

The airport service area is a geographic region served by a select airport. A determination can be made regarding the service area covered by the Osceola Municipal Airport through application of the National Plan of Integrated Airport Systems (NPIAS) or by locating competing airports and their relative distance to population centers, assessing the role of surrounding airports, and evaluating their facilities, equipment, and services, as well as programmed expansion projects. Surrounding airports have varying degrees of influence on the airport service area with respect to competing services (flight training, charters, fuel, maintenance, courtesy car, security, etc.), facilities and equipment, NAVAIDs, and accessibility. However, it should be noted that the demand for aviation facilities does not necessarily conform to political geographical boundaries.

The service area for the Osceola Municipal Airport was determined by applying the following service area models:

NPIAS Service Area

This service area is defined by application of FAA Order 5090.B, Field Formulation of the National Plan of Integrated Airport Systems (NPIAS). The NPIAS Service Area is defined by an area encompassed by 30-minute (25-mile) ground access to the originating airport. Several public-use airports and privately owned facilities fall within this 25-mile area, which excludes the NPIAS criteria from realistically defining the entire service area boundary.

Composite Service Area

This service area takes into consideration the role and service level of each civilian public-use airport in the immediate area that provides service to the General Aviation community, other population centers, and ground access distance and travel times between surrounding public-use General Aviation airports. The composite service area is then defined by the consultant through an interpolation of these parameters as they relate to each other.

Table 8-1, Area Public-Use Airport Facilities, lists information regarding the facilities and services at the nearest public-use General Aviation airports in relation to the Osceola Municipal Airport. Understanding the capabilities and influence of the surrounding airports provides insight into existing and future aviation demand and the airport role and service area. Airports located east of the Mississippi River are not deemed in the service area due to the drive time and the lack of crossing points on the river.

Table 8-1
Area Public Use Airport Facilities

Airport	Distance from Osceola (NM)	Runway Characteristics	Aircraft/ Operations	Airport Services
Osceola Municipal	____	1/19 - 75'x3,800'	13 Based A/C 13,100 Ops/YR	Fuel(100LL) Temporary Terminal, Hangars
Arkansas International	16.7	18/36 – 150'x11,602'	6 Based A/C 25,000 Ops/YR	Fuel(JetA)Terminal, Hangars, Maintenance
Blytheville Municipal	17.3	18/36 – 75'x4,999'	13 Based A/C 22,000 Ops/YR	Fuel(100LL/JetA) Terminal, Hangars, Maintenance
Manila Municipal	14.1	18/36 – 60'x4,200'	14 Based A/C 31,100 Ops/YR	Fuel(100LL/JetA) Terminal, Hangars, Maintenance, Instruction
Marked Tree Municipal	21.3	18/36 – 60'x3,200'	1 Based A/C 23,700 Ops/YR	Fuel(100LL) Hangars

Figure 3
Airport Service Area

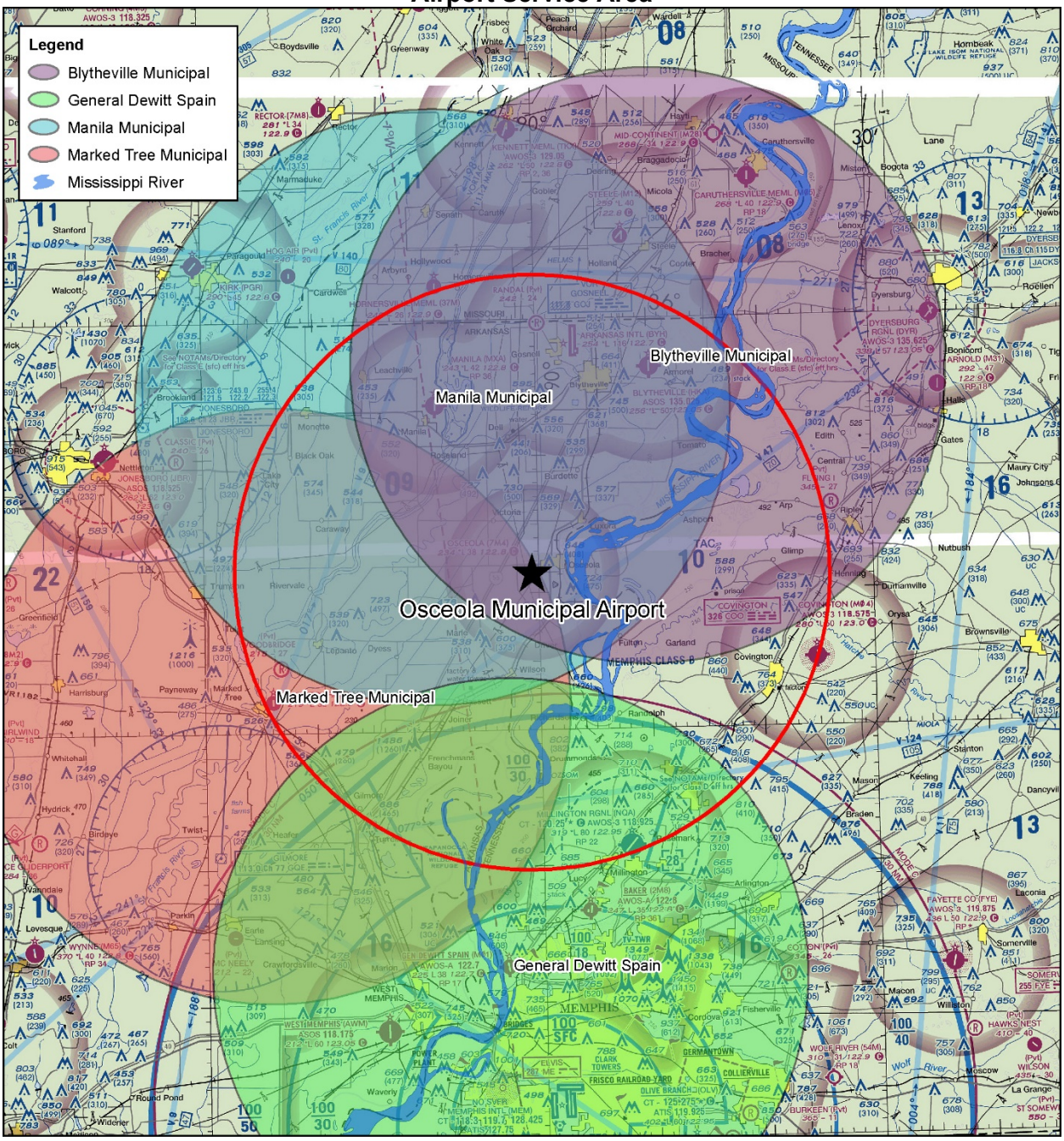
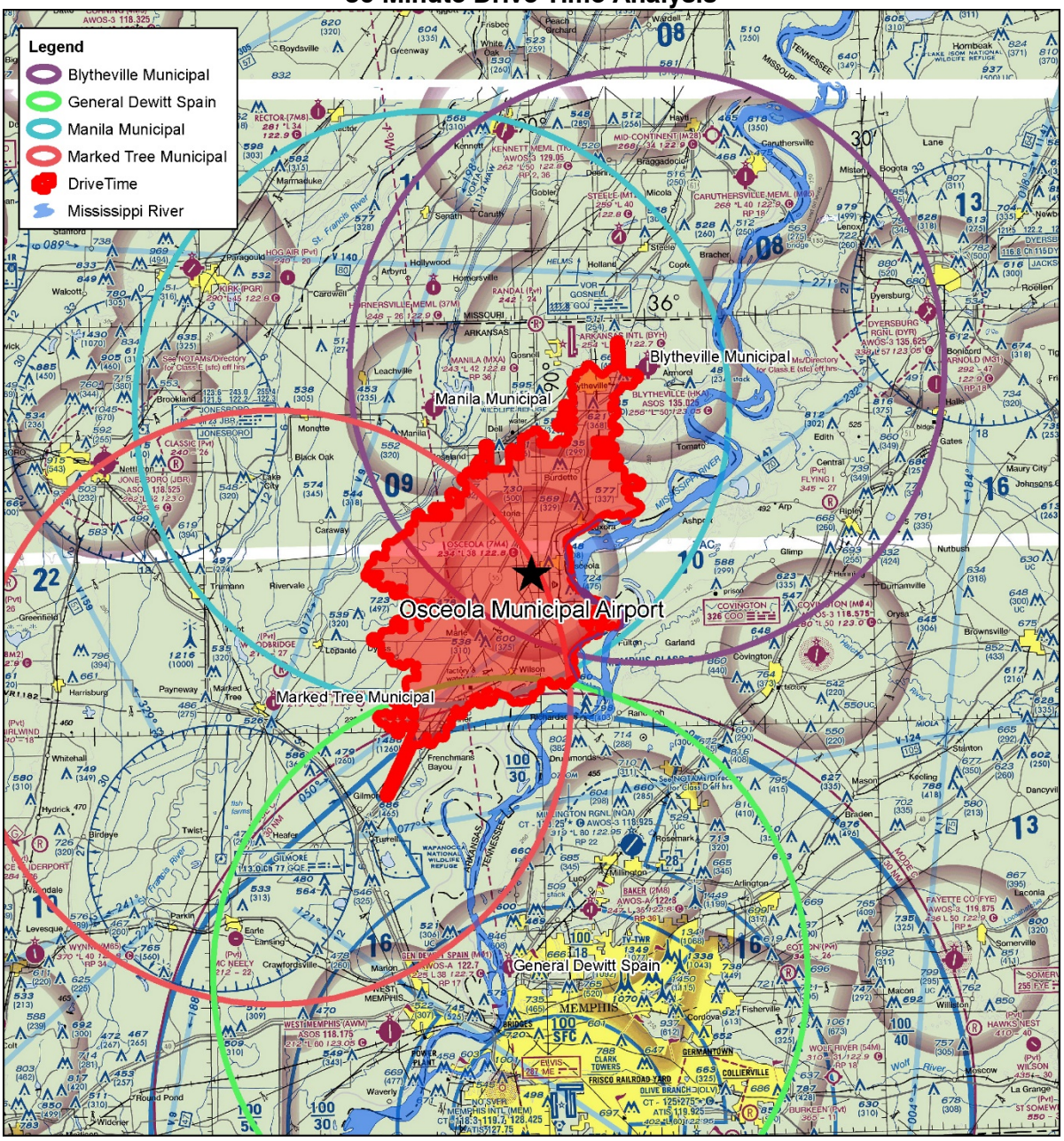


Figure 4
30 Minute Drive Time Analysis



9.0 Economic Analysis

The economic overview of Osceola and Southern Mississippi County greatly affect the development of the Osceola Municipal Airport. In recent years, the City has experienced industrial growth with companies identifying the lack of aviation services as a limiting factor of doing business in the area.

9.1 Arkansas State Airport System Plan

The Arkansas State Airport System Plan completed a survey of the 91 public use airports in the state. The report resulted in an economic impact to the state of $3.2 billion in economic activity that was a product of aviation. The state's employment traced to aviation was just shy of 40,000 jobs. The system plan assigned a level to all airports in the state with 1 being the smallest General Aviation airport and 5 being an Air Carrier airport, such as Bill and Hillary Clinton National Airport in Little Rock, Arkansas. The Osceola Municipal Airport was classified as a level 2 airport, which serves small aircraft and the local community. Factors in the assignment of this level are geographic location and existing/desired facilities and services. Level 2 airports should be able to support small twin-engine aircraft and all single-engine General Aviation aircraft. During the evaluation phase it was noted that the airport needed additional public use (terminal) space and self-service fueling. Since the system plan was completed, the terminal has been demolished and replaced with a temporary terminal, but it is still deficient of the recommended available size. A self-service fuel system was also installed. The based aircraft at the time of the evaluation was 12 and forecasted for no growth during the 20-year period. However, based aircraft have increased to 13.

9.2 Federal Aviation Administration – ASSET Report

The FAA conducted a study of the 3,300 airports listed in the National Plan of Integrated Airport Systems (NPIAS) to determine their role in the national airport system. Much like the Arkansas System Plan, the ASSET report grouped airports into four categories. These groups are National, Regional, Local, and Basic, with National being the largest size airport. The Osceola Municipal Airport was listed as a Basic airport serving local pilots with less than 10-based aircraft with low activity and puts them in a position to receive less annual federal funding.

9.3 Osceola and Mississippi County

While according to Census data Mississippi County and Osceola experienced a slight decrease in population from 2000 to 2010, industry has increased in Osceola and brought additional jobs to the area. This has helped projections in Osceola since the last census, and the full impact of that change will not be known until the jobs are fully developed.

Table 9-1
City County Population Trends

Year	City of Osceola	Mississippi County	Arkansas
2000	8,875	51,979	2,673,400
2010	7,757	46,480	2,915,918
2014	7,320	44,235	2,966,369

Source: Quickfacts from the U.S. Census Bureau

9.4 Income

Based on the information provided from the U.S. Census Bureau, the median household for Mississippi County Arkansas in $36,428, which is below the state average of $40,768. The median household income for the City of Osceola is $33,125. With the construction of Big River Steel and the potential for jobs reaching the $75,000 per year range, the city and county should see an increase in the next census.

9.5 Industry

Mississippi County is covered mainly by agricultural fields, with farming being the primary industry. Support services for agricultural operators, such as implement dealerships, farm supplies, and seed and fertilizer suppliers complement the farming industry. One major impact to the county was the arrival of the Nucor steel mill located in the northern part of the county. This industry brought numerous support businesses and provides alternative employment opportunities. The City of Osceola supports the American Greeting facility that employees, at its peak, 1,331 employees. The company occupies 2.6 million square feet of facility equivalent to 60 acres and recently announced the development of the Big River Steel mill. The Big River mill is a major industrial development for the City of Osceola and has brought several support businesses to the area. Big River Steel plans to add up to 500 jobs with the average salary of $75,000 a year. This does not include the additional support industries and their associated employment and salaries. Other industries located in Mississippi County include:

American Greetings
IPSCO, Inc.
Viskase Corp.
Mississippi County Hospital System
NIBCO, Inc.
Tenaris Tube Corp.
Gilster-Mary Lee
PSCO Tubular, Inc.
Evonik Industries
Marine Terminals of Arkansas
Nucor Yamato Steel
Kagome Foods, Inc.

9.6 Aviation Impacts and Business

Mississippi County is home to four airports and covers 920 square miles within its boundary. The County hosts two county seats: Blytheville and Osceola. These two cities are comprised of the population centers and are located to the northern and southern edges of the County with the

airports are located on the edges of the county. Blytheville has two General Aviation airports located within the city limits: Manila, Arkansas, located on the northwest county edge and Osceola to the south. The airports located in Blytheville are the largest in the county, capable of accommodating business jet traffic. With the announcement of the Big River Steel project, business jet operations have increased; however, these operations are taking place in the northern part of the county, requiring a drive from Blytheville Municipal Airport and the Arkansas International Aeroplex to Osceola of approximately 28 miles away via Interstate 55. Due to the rural area, the airport signage is not marked well and roadways can be difficult to navigate. The City of Osceola has received numerous requests over the past several years to increase the size and services at the Osceola Municipal Airport. These letters are attached in Appendix A. During the preliminary development of the Big River Steel Project, numerous aircraft representing companies tied to the construction, financing and supply line have used business aviation to visit the region. These aircraft have used other facilities due to the lack of runway length and services located at the Osceola Municipal Airport.

9.7 Multimodal Hub

The industrial area located to the south of Osceola encompasses the infrastructure to support multimodal activities. With the industrial growth, a slack water port has been constructed to service the steel mill. Bunge operates a grain storage facility on the river as well, using barges to move grain to market. The Burlington Northern and Santa Fe (BNSF) has rail in a north/south direction to Memphis and St Louis. A dedicated rail spur to the industrial area serves several business. Interstate 55 is located 7.5 miles to the west. Plans are in place to construct a connector from the industrial park to the interstate to handle the increased shipping traffic from the mill. Airports serving this component of the multimodal hub able are located in Blytheville and West Memphis, Arkansas. These facilities are located approximately 28 road miles to the north and approximately 45 miles to the south.

10.0 Aviation Demand Forecasts

The purpose of forecasting aviation activity is to estimate future airport facility and equipment needs. The preferred demand forecasts are used to identify the type, extent, and timing of aviation development. In addition, the forecasts are instrumental in identifying airport-related infrastructure and capacity needs and aiding in estimating the financial feasibility of airport development alternatives.

Airport activity is often influenced by the types of aviation services offered for transient and based aircraft and by the general business environment. In addition, factors such as vigorous local airport marketing, gains in sales and services, increased industrialization, changes in transportation mode preferences, and fluctuations in the national or local economy all influence aviation demand. Aviation activity forecasts are developed in accordance with national trends and regional/local influences and in context with the inventory findings, including local population and airport survey information. This chapter will examine aviation trends and the numerous factors that have influenced those trends in the United States and Arkansas.

The previous masterplan completed in 2008 relied on historical aviation activity that was reported as the same for the years 1990-1998. This data was highly inflated and represented 0% change for the years. The last year in the study period was adjusted and represented an 89% decrease in overall activity. This discrepancy and recent business developments in the area render the 2008 forecast unreliable.

10.1 Summary of Based Aircraft and Historic Annual Operations

Table 10-1, Historic Aviation Activity, summarizes the available historic based aircraft and annual operations (local, itinerant, air taxi, and military) at Osceola since 1995. A based aircraft is defined as an actively registered airplane stationed at a select airport that regularly uses the airport as the primary "home base" for filing flight plans, frequently uses available airport amenities, and/or maintains a formal commitment for long-term aircraft parking/storage. An aircraft operation is one take off and/or landing of an aircraft. Aircraft operations are identified as local and itinerant. Local operations consist of those within a 20-mile radius of an airport, while itinerant operations include all operations other than local, having a terminus of flight or origination of flight at another airport at least 20 miles away as defined by FAA Order 7210.3U.

The following observations were identified for the Osceola Municipal Airport as part of the inventory of historic and current airport activity levels:

- **Aircraft Activity Summary:** Based aircraft at the Osceola Municipal Airport have varied widely from a low of 12 to a high of 13. Limiting factors are the lack of services, hangar space and length of runway. Current aircraft owners from Osceola have aircraft located at other airports in order to take advantage of hangar space.

- **Operational Activity Summary:** Operations at Osceola have slightly increased from 5,726 in 2000 to 9,365 in 2015.

(It is noteworthy that the operational numbers from 1990-2001 in the Terminal Area Forecast (TAF) appear to be placeholders and not correct data. The numbers do not have any deviation from year to year and seem to be excessively high.)

Table 10-1
Historical Aviation Activity
Osceola Municipal Airport

Year	Based Aircraft	Local Operations	Civilian Itinerant Operations	Military Itinerant Operations	Total Airport Operations
1995	9	40,000	6,500	0	46,500
2000	8	40,000	6,500	0	46,500
2005	2	4,240	1,486	0	5,726
2010	8	8,000	1,100	0	9,100
2015	13	8,232	1,133	0	9,365

Source: FAA Terminal Area Forecasts

10.2 National General Aviation Trends

An understanding of recent and anticipated trends within the General Aviation (GA) industry is important when assessing aviation demand. National trends can provide insight into the potential future of aviation activity with some having an effect on aviation demand in the study area while others will have little or no appreciable impact on local aviation demands.

Various data sources were examined and used to support the analysis of national GA trends and include:

- Federal Aviation Administration, FAA Aerospace Forecasts, Fiscal Years 2015-2035
- National Business Aircraft Association (NBAA), NBAA Business Aviation Fact Book, 2014
- General Aviation Manufacturers Association (GAMA), General Aviation Statistical Databook and Industry Outlook, 2014

General Aviation Overview

GA aircraft are defined as all aircraft not flown by commercial airlines or the military. GA activity is divided into six use categories, as defined by the FAA. Personal use and air taxi (FAR Part 135) use of GA aircraft are the two largest components of GA activity. Currently, the FAA's 2015-2019 National Plan of Integrated Airport System (NPIAS) illustrates depicts 19,360 public and private airports located throughout the United States with 5,148 of these open to public use, including Osceola. The number and distribution of public-use airports available to GA users provides a valuable transportation and economic resource to local communities, businesses, and individuals throughout the region, state, and nation.

General Aviation Function and Role

The FAA recognizes three broad categories of aviation activity: GA, certificated air carrier, and military. Convenience, safety, and rapid accessibility are the most important variables affecting community growth and economic vitality. GA includes all civilian aircraft other than the certificated air carriers and military aircraft. FAA statistics indicate that GA represents the largest, and in many ways, the most significant segment of the national air transportation system, accounting for 96 percent of all civilian airports, 95 percent of all civilian aircraft, 84 percent of all pilots, and about 75 percent of all aircraft operations. With nearly 80 percent of GA flying conducted for business purposes, GA has directly contributed to the movement of manufacturing and service industries away from larger metropolitan areas to smaller, rural communities.

General Aviation Industry

The GA industry began a pronounced decline in 1978. This decline continued sporadically through most of the 1980s and into the early 1990s with minimal recoveries in the latter years. Nationally, this decline resulted in the loss of over 100,000 manufacturing jobs and a drop in aircraft production from about 18,000 aircraft annually to only 928 aircraft in 1994, as well as a dramatic drop in the number of new student pilots.

Contributing to the GA decline during this period was the large number of liability claims experienced by aircraft manufacturers; the loss of some veterans' benefits that helped to cover the cost of student pilot training for military veterans; and the recessionary economy. The large number of aircraft accident lawsuits caused dramatic increases in aircraft manufacturing costs. Aircraft manufacturers estimate that these lawsuits contributed to approximately 30 percent of the cost of a new aircraft.

In 1994, the passage and adoption of the General Aviation Revitalization Act (GARA) brought some relief to the GA aircraft industry by establishing an 18-year statute of repose on liability related to the manufacture of all general aviation aircraft and their components. Before GARA, there was no time limitation on an aircraft manufacturer's liability. This new legislation prompted some GA aircraft manufacturers to return their production lines of single-engine piston aircraft to limited output. While adoption of GARA promoted single-engine piston aircraft production, their cost has continued to rise. This has caused aircraft production levels to remain well below those experienced during the 1960s and 1970s when the annual numbers of aircraft manufactured were commonly more than 10,000.

Some positive impacts GARA has had on the GA industry have been reflected in recent national statistics. Since 1994, GA activity has increased. The active GA aircraft fleet is growing and there has been an increase in shipments of fixed-wing GA aircraft.

More recently, the terrorist attacks of 2001, the prolonged military response to terror throughout the world, and the current prolonged recessionary national economy have dampened GA industry trends. This is evident in the layoffs at Cessna and other aircraft manufacturers and the limited numbers of new aircraft orders worldwide. Significant restrictions were placed on GA flying

following 9/11, which resulted in severe limitations placed on GA activity in a number of important areas of the country. Most of these restrictions have lifted, and business and corporate aviation is experiencing some positive gains resulting from additional use of GA aircraft for business and corporate travel. This benefit is tied directly to the increased security measures implemented at commercial service airports that significantly influences travel times.

10.3 Business Use of General Aviation

Business aviation is the fastest growing segment of GA. More and more companies and individuals are using GA aircraft as a tool to improve their business efficiency and productivity. Many of the nation's employers who use general aviation are members of the NBAA. The NBAA indicates that approximately 95 percent of all Fortune 500 companies operate GA aircraft of various sizes and complexities. In fact:

- Among *Business Week's* 2014 "50 Most Innovative Companies," 95 percent of the S&P 500 companies on that list utilized their own business aircraft;
- Among *Fortune's* 2014 "100 Best Places to Work," 86 percent of the S&P 500 companies on that list utilized their own business aircraft;
- Among *Business Week's* 2014 "25 Best Customer Service Companies," 90 percent of the S&P 500 on that list utilized their own aircraft;
- And among *Fortune's* 2014 "50 World's Most Admired Companies," 95 percent of the S&P 500 companies on that list utilized their own aircraft.

Business use of GA aircraft ranges from small, single-engine aircraft rentals to multiple aircraft corporate fleets supported by dedicated flight crews and mechanics. Use of GA aircraft allows employers to transport personnel and air cargo efficiently and oftentimes more cost effectively. Many times, businesses use GA aircraft and airports to link multiple office locations and reach existing and potential customers who can be difficult to reach via commercial aviation services. Business aircraft use by smaller companies is on the rise as various chartering, leasing, time-sharing, interchange agreements, partnerships, and management contracts have emerged.

10.4 FAA Aerospace Forecasts

Annually, the FAA publishes aerospace forecasts that summarize existing conditions and attempt to predict trends in aviation activity components. Each published forecast provides an analysis of previous aerospace forecasts and updates them in reference to the year's trends in aviation and economic activity. Many factors are considered in the FAA's development of aerospace forecasts. Some of the most important considerations are United States and international economic forecasts and anticipated trends in fuel costs. In general, the FAA's aerospace forecasts provide one of the most detailed evaluations of historic and forecast aviation trends. They provide the general framework for examining future levels of aviation activity for the nation, specific states and regions, and airports. Items monitored and forecasted by the FAA on an annual basis include:

Active Pilots **Active Aircraft Fleet** **Active Hours Flown**

Historic and projected activity in each of these categories will be examined in the following sections. Data presented is based on the most recent available data, contained in FAA Aerospace Forecasts, Fiscal years 2015-2035.

Active Pilots

Active pilots are defined by the FAA as individuals who hold both a pilot certificate and a valid medical certificate. The FAA projects a slow steady growth in the active pilot population through 2035. Total active GA pilots are projected to increase to approximately 448,400 by 2035, which represents an annual growth rate of approximately 0.1 percent.

Active General Aviation Aircraft Fleet

The FAA tracks the number of active GA aircraft in the United States fleet annually. An active aircraft is one that is currently registered and has flown at least one hour during the year. Total active aircraft are expected to increase at 0.4 percent annually. Jet/turbo-prop and light sport aircraft will experience the largest growth. The turbo-prop fleet including helicopters is projected to grow at 2.4 percent annually. The turbine jet fleet will slightly outpace this group at 2.8 percent. The piston-powered fleet, single-engine and multi-engine, including helicopters, is projected to decrease at an annual rate of 0.5 percent. This decline is dominated by multi-engine fixed-wing aircraft while the piston helicopter fleet will actually see growth of 2.1 percent annually. Light sport aircraft started being recognized and forecast in 2005.

Active General Aviation Hours Flown

The FAA projects that the total number of aircraft hours flown will increase by 1.4 percent annually between 2015 and 2035. More rapid growth will occur during the term beginning in 2023 due to increases in the fixed wing turbine fleet and an increasing utilization rate in both single and multi-engine piston aircraft. Hours flown by the turbine fleet, including helicopters, will increase 2.9 percent annually compared to the decline of 0.3 percent for all piston powered aircraft. The anticipated increase in piston-powered helicopters is expected to increase by 2.2 percent annually they are too small a segment of the piston fleet to have a significant impact on overall flight hours. Jet aircraft flight hours are expected to increase at an average annual rate of 3.6 percent while turbo-props will increase at a slightly reduced rate.

10.5 Terminal Area Forecast

The Terminal Area Forecast (TAF) is a detailed FAA forecast-planning database that the FAA produces each year covering airports in the NPIAS and is prepared to assist the FAA in meeting its planning, budgeting, and staffing requirements. The TAF forecasts are made at the individual airport level and are based in part on the national FAA Aerospace Forecast. The TAF contains historical and forecast data for enplanements, airport operations, instrument operations, and

based aircraft. Data covering the 264 FAA and 239 contract-towered airports, 228 terminal radar approach control facilities, and 2,873 non-FAA airports as of 2015. Data in the TAF are presented on a U.S. Government fiscal year basis. The TAF assumes an unconstrained demand for aviation services.

As its primary input, the TAF uses the FAA Aerospace Forecasts from the specific year. Aviation activity forecasts for FAA-towered and federal contract-towered airports are developed using historical relationships between airport passenger demand and/or activity measures and local and national factors that influence aviation activity. Each estimate is examined for its reasonableness and consistency by comparisons with historical trends of airport activity. If forecasts deviate from their expected trend, the FAA uses other statistical techniques to reforecast the series. Other methods may include use of regression analysis and the use of growth rates developed separately from the TAF. The TAF may incorporate estimates prepared by local authorities and/or recent FAA-approved airport master plan forecasts, when FAA staff concludes that the methods used to develop these forecasts are acceptable.

The TAF summary report for each airport includes the following basic elements as appropriate:

- Passenger enplanements – air carrier, commuter, total
- Itinerant aircraft operations – air carrier, air taxi, GA, military, total
- Local aircraft operations – GA, military, total
- Total operations – itinerant plus local
- Total instrument operations
- Based general aviation aircraft

At airports similar to the Osceola Municipal, the TAF report usually reflects a slight or zero percent growth rate due to a lack of ability to conduct aircraft operations counts in the absence of a control tower. Based on the Osceola TAF, the FAA reflects a slight percentage growth rate following the national TAF and is showing a slight increase in annual operations through 2035. While this is not uncommon at most general aviation airports across the country, it renders this forecast virtually unusable as a baseline from which to perform realistic forecasts for future use.

11.0 Osceola Municipal Airport – Aviation Demand Forecasts

Development of aviation forecasts involves analytical and judgmental assumptions to realize the highest level of forecast confidence. The GA demand forecasts are developed in accordance with national trends and in context with the inventory findings, including local population and per capita income trends. The forecasts developed here begin with baseline information from 2014 and with 2015 as the first forecast year. National GA trends and forecasts, used to provide a baseline of growth rates, are provided by the FAA Aerospace Forecasts, Fiscal Years 2015-2035. These forecasts are unconstrained, indicating facilities will be developed as the need arises. The initial forecasts have been developed for all the GA activity (based aircraft, operations, fleet mix, and

instrument approaches) at the Osceola Municipal Airport. The various forecast techniques used to develop a "preferred" set of GA forecasts for Osceola are as follows:

Trend Analysis

Trend analysis is the simplest and most familiar form of forecasting and is also one of the most widely used. Historical data is collected and used to forecast an estimate of the aviation demand element into future years. An assumption of this forecast method is that historical levels for aviation demands will continue and influence similar linear progressions on the future demand levels. Though this assumption seems broad in its application, it can serve as a reliable benchmark against other forecast methods.

Regression Analysis

The forecasts of aviation demand, the dependent variable, are projected on the basis of one or more external indicators, the independent variables. Historical values for both the dependent and independent variables are analyzed to determine their relationships. Once defined, this relationship is used to project the dependent variable with a forecast or projection of the independent variable. In aviation forecasting, an example of the dependent variable includes based aircraft. Population or median household income levels are commonly used independent variables that aid in the projection of aviation growth. Due to the population slightly declining in Osceola and Mississippi County, a regression analysis will not be provided.

Market Analysis

These aviation demand forecasts are developed based on a causal model technique in which independent variables statistically relate the relationship(s) between historical events and aviation demands. This forecast method typically uses an easily identifiable independent variable such as population, which has a high correlation on the indirect cause-and-effect relationship with certain segments of the general aviation industry. The market share often employs a static and dynamic variable relationship between community factors and GA trends that aids in predicting aviation growth based on forecast community indicators such as population.

11.1 Forecast of Based Aircraft

Based on information obtained in the inventory analysis and surveys, the following factors and assumptions have been incorporated into the general aviation forecasts of based aircraft and annual operations for Osceola:

- An "unconstrained" forecast of aviation demand assumes greater aircraft utilization resulting from airfield and terminal area improvements and/or development that would accommodate this increase in activity.
- Future operational levels are attributable to business needs, flight training and recreational interests. Airport facilities will need to accommodate a broad array of GA aircraft and remain flexible to accommodate larger business-type aircraft.

- The growing popularity of fractional ownership of corporate jets by business owners, the design of more efficient single-engine aircraft, and the introduction of light sport aircraft and very light jets will all have a positive influence on the forecasts at Osceola Municipal.
- The forecast of based aircraft and operational levels is tied to the development of Big River Steel and the potential for Osceola to attract additional employment to the area that may require use of aviation facilities.

The number of GA aircraft that can be expected to base at an airport facility is dependent on several factors, such as available facilities, airport operator services, airport proximity and access, etc. GA operators are particularly sensitive to both the quality and location of their basing facilities, with proximity of home and work often identified as the primary consideration in the selection of an aircraft-basing location. Several key limiting factors reduce the potential for growth. The lack of runway length and the weight bearing capacity of the runway as well as the lack of hangar space and the condition of the hangars are limiting factors for based aircraft. Demand for aircraft hangar storage is moderate. Current residents of Osceola house aircraft at other airports due to these conditions.

Determining the number and type of aircraft anticipated to be based at an airport is a vital component in developing the plan for the airport. Depending on the potential market and forecast, Osceola will tailor a plan in response to anticipated demand.

The TAF was used as the preferred based aircraft forecast to predict based aircraft growth for the Osceola Municipal Airport. **Table 11-1** represents the forecast developed for predicting based aircraft at Osceola Municipal. Neither historical trend line forecast provided a reasonable expectation with the longer term trend line showing a decreasing number and the short-term trend line predicting a greater based forecast than was reasonable or could be sustained by the airport and local community. The FAA Aerospace Forecasts provided a close approximation of the TAF figures which were selected as the preferred based aircraft forecast for Osceola.

Table 11-1
Based Aircraft
Osceola Municipal Airport

Year	Terminal Area Forecast	Trend Line 1990 – 2014	FAA Aerospace Forecasts Growth Per Aircraft Type	Trend Line 2006 – 2014
2015	12	12	12	12
2020	17	7	13	18
2025	17	7	14	24
2030	17	6	15	29

When evaluating based forecast by type of aircraft, it is apparent that the facilities are not suited for larger aircraft. Again available runway length and weight bearing capacity play a major factor in the lack of based aircraft larger than light twin-engine aircraft. Limited hangar facilities for larger aircraft are not available and fuel for turbine aircraft is not available. With the request letters from business operators, we can forecast additional operations of turbo-prop and jet aircraft. While the majority of these appear to be itinerant, the forecast would take into account the location of several of these businesses and with accommodating facilities available see an increase in based business aircraft.

11.2 Aircraft Operations Forecast

In developing the operations projections, several existing general aviation forecasts were reviewed. As presented in **Table 11-2**, Summary of Aircraft Operations Forecasts, 2015-2035, this assessment includes three forecast of operations for Osceola. The first shows the TAF. The second and preferred forecast hinges on data found in the FAA Aerospace Forecast Fiscal Years, 2014-2035. These forecasts indicate a 1.4 percent average annual increase for all sectors of GA. The FAA Aerospace Forecast for turbo-prop and jet aircraft show an annual growth rate of 2.9 and 3.6 respectively and an average of 3.25 percent. The adjusted FAA Forecast graduates Osceola's growth rate from 1.4 percent to 3.25 percent out to 2035. Typically, operation levels correlate directly with population. The third forecast shown below begins with the reported TAF numbers and uses the utilization rate of TAF data from 2006 to 2014 for the 2030 forecast from the current utilization rate to the final utilization rate for the years shown.

The preferred forecast was selected based on the anticipation of population growth reliant on the Big River Steel mill opening and the impact of new jobs in the area. The potential operations from businesses requesting for improvements to the airport support this choice. Additionally, support industry development will lead to added job opportunities in Osceola. With this industrial development, the Osceola Municipal Airport anticipates local population and aviation needs to increase to serve these businesses. In order to meet these needs the airport will have to expand at a minimum of a B-II category.

Table 11-2
Summary of Aircraft Operations Forecasts, 2015-2030
Osceola Municipal Airport

Year	FAA Terminal Area Forecast	FAA GA Adjusted Forecast	Osceola Graduated Utilization Rate
2015	**9,230**	**9,230**	**9,230**
2020	**9,919**	**10,130**	**13,250**
2025	**10,660**	**11,260**	**17,176**
2030	**11,456**	**12,900**	**21,100**

Rounded used in table

11.3 Operational Fleet Mix

The forecasted fleet mix is based upon the preferred operational forecasts tempered by commitment letters received from potential users of Osceola Municipal. One potential user stated that they would conduct 450 jet operations and 1,200 turbine helicopter operations per year based on their current travel profile into the region in support of their growing business ventures. These aircraft operations are estimated to consume approximately 68,000 gallons of Jet-A aircraft fuel annually. Various sized aircraft that have requested improvements to the Osceola Municipal Airport. These aircraft are close in comparison and the request letters show that various B-II aircraft are requesting additional runway length and pavement strength in order to utilize the airport.

Table 11-3 displays the forecast fleet mix by operational type aircraft at Osceola Municipal. The fleet is expected to migrate from predominately single-engine piston towards a mix of business aircraft in the multi-engine piston, turbo-prop, and small to medium business jet aircraft. Please note no military operations existing are forecasted in this chart. All operations are general aviation operations.

Table 11-3
Summary of Aircraft Operational Fleet Mix, 2015-2030
Osceola Municipal Airport

Year	Single-Engine Piston	Multi-Engine Piston	Turbo-Prop	Turbo-Jet	Helicopters	Total Operations
2015	5,060	1,600	1,920	400	250	**9,230**
2020	5,400	1,300	2,060	1,070	300	**10,130**
2025	5,750	900	2,340	1,950	320	**11,260**
2030	6,420	900	2,830	2,370	380	**12,900**

Table 11-4 displays the forecast fleet mix by aircraft approach category and airplane design group, the two components of the FAA's airport reference code, for Osceola Municipal. As with the aircraft type shown in Table 10-3, the fleet is expected to migrate from predominately A-I/B-I aircraft towards a mix of more complex sophisticated aircraft with growing trends in the business aircraft composed of turbo-prop aircraft and small to medium business jet aircraft.

Table 11-4
Summary of Aircraft Operational Fleet Mix, 2015-2030
Osceola Municipal Airport

	Airplane Approach Category			Airplane Design Group			
Year	Category A	Category B	Category C	Group I	Group II	Group III	Helicopters
2015	7,150	1,830	0	6,800	2,180	0	250
2020	7,570	2,200	60	7,100	2,730	0	300
2025	8,100	2,740	100	7,415	3,500	25	320
2030	8,970	3,360	190	8,300	4,170	50	380

Local and Itinerant Operations

According to FAA Order 7210.3U, Facility Operation and Administration, February 16, 2006, a local operation is any operation performed by an aircraft that "remains in the local traffic pattern, performs a simulated instrument approach, or operates to or from the Osceola Municipal Airport and a practice area within a 20-mile radius of the field or tower." An itinerant operation is any operation that is not considered local. According to the TAF and due to the absence of military training operations, 87 percent of the operations conducted at the airport are local and 13 percent are itinerant. These percentages are expected to fluctuate slightly with itinerant operations growing. **Table 11-5,** Summary of Local and Itinerant Operations, 2015-2035 provides a summary of this information.

Table 11-5
Summary of Local and Itinerant Operations, 2015-2030
Osceola Municipal Airport

Year	2015	2020	2025	2030
Local Operations	7,800	7,730	7,560	6,956
Itinerant Operations	1,430	2,400	3,100	4,500
Total	**9,230**	**10,130**	**10,660**	**11,456**

Annual Instrument Operations

Annual Instrument Approach Forecasts are based on actual operations collected from www.flightwise.com . These actual operations of annual civilian instrument approaches arriving at the Osceola Municipal Airport total 180 IFR operations since January of 2014. This averages out to 83 annual IFR operations. The forecast of annual instrument approaches (AIAs) provides

further guidance in determining requirements for the type, extent, and timing of future navigational (NAVAID) equipment. These figures are strictly for IFR instrument meteorological conditions (IMC), which exist whenever the cloud ceiling is at or below 1,000-feet and/or visibility is lower than three miles. If instrument approaches are calculated for marginal visual flight rules (MVFR) conditions, the monthly potential instrument approaches into Osceola would nearly double. MVFR weather conditions occur whenever the cloud ceiling is lower than 3,000-feet and/or the visibility is less than five miles. Due to the lack of available runway length and weight bearing capacity of the runway, jet operations were not observed in this listing of IFR operations. Business aircraft usage provides more IFR operations. Business aircraft transport people and goods in order to save time and money. This type of flying requires flights into inclement weather requiring the use of the instrument landing equipment.

Table 11-6
Summary of Instrument Approach Operations, 2015-2030
Osceola Municipal Airport

	Year	2015	2020	2025	2030
IFR Operations	GA Operations	134	153	179	215
	Air Taxi Operations	59	71	86	106
	Total	193	224	265	320
Marginal VFR Operations	GA Operations	224	256	300	359
	Air Taxi Operations	93	112	135	166
	Total	**317**	**368**	**435**	**525**

12.0 Critical Aircraft

Current critical aircraft for the Osceola Municipal Airport are limited by the existing airport geometry and is typically the largest aircraft conducting at least 500 operations per year. Determining the critical aircraft is important for assessing airport design, layout, and the structural and equipment needs for both the airfield and terminal area. It is evaluated with respect to size, speed, and weight. These current aircraft are usually small less than 12,500-pounds and single-wheel load. Typical aircraft are single engine Cessna, Beechcraft, and Piper aircraft including certain light twin-engine piston meeting this requirement that are used primarily for personal flying. Based on the types of aircraft utilizing the airport, the existing critical aircraft is in the Airport Approach Category (AAC) of A (approach speeds of less than 91 knots). This category primarily includes single engine piston aircraft that typically weigh less than 12,500 pounds. The Airplane Design Group (ADG) of I (tail height less than 20-feet and/or wingspan of less than 49-feet).

A recent justification study was completed to determine the runway length needed. Following the guidelines in AC 150/5325-4B, *Runway Lengths Requirements for Airports*, the critical airport

based on the forecast and support letters the critical aircraft was found to be a family of aircraft listed in Table 9 in the previously mentioned AC that includes aircraft wanting to base at the airport today. These aircraft are calorized as aircraft of more than 12,500 pounds up to and including 60,000 pounds. The majority of operations will be conducted by a Cessna Citation Sovereign aircraft that is requesting to be based at the airport. This aircraft is current conducting over 400 operations from other airports. Currently these aircraft are required to utilize other airports in the region and the forced to drive to Osceola to conduct their business or visit their local facility. These aircraft support major industries in the community. The most demanding aircraft requesting to use the Osceola Municipal Airport falls within the ARC B-II design category. **Table 12-1** depicts four examples of typical aircraft within this design group that have requested improvements to the airport.

Table 12-1
Potential Aircraft Operators
Osceola Municipal Airport

Aircraft	AAC	ADG	TDG
Embraer Phenom 100	B	I	1A
Embraer Phenom 300	B	II	1A
Falcon 10	B	I	1A
Citation Sovereign	C	II	2

13.0 Forecast Summary

The Osceola Municipal airport has primarily been used for local GA flying. The current airport infrastructure has impacted the potential for business aviation to use the airfield. With a design code of B-II, the airport would be able to accommodate a greater number of business aircraft. Over the past 10 years, several businesses have requested the expansion of the airport. This effort has been refueled with the construction of the Big River Steel mill and supporting industry. Letters of support for expansion from a B-I facility to a B-II facility are supported by this forecasted growth. Currently, business aircraft operators are using other airports in the region, sometimes in excess of a 45-minute one-way drive to reach their destination near Osceola due to the lack of facilities available at Osceola including runway length and weight bearing capacity. The next chapter, Facility Requirements, identifies the types and extent of facilities needed to adequately accommodate the demand for additional facilities documented in this chapter.

14.0 Facilities Requirements

This section identifies the long-range requirements used to determine the facilities needed to meet the forecast demand as planned in accordance with Federal Aviation Administration (FAA) airport design standards and airspace criteria. Identification of a needed facility does not necessarily

constitute a “requirement” in terms of design standards, but an “option” for facility improvements to accommodate future aviation activity. However, market demand will ultimately drive the requirements for construction and development at 7M4.

Airfield facility components include runways, taxiways, navigational aids (NAVAIDs), airfield marking, signage, and lighting, while terminal area components are comprised of hangars, terminal building, aircraft parking apron, fuel dispensing units, vehicular parking, and airport access requirements.

The forecast developed for 7M4 supports the facility supporting B-II aircraft. This growth would increase the classification of the airport in the ASASP from a level 2 airport to a level 3 airport and the FAA classification from a basic airport to a local airport. These increases will require infrastructure improvements to the existing airport. The increase to a level 2 airport within the ASASP would require the following:

- Runway length of at least 4,500-feet
- Runway Width of 75-feet
- Full parallel taxiway
- GPS Approach
- Pavement strength of at least 30,000 DWL
- Weather Reporting on field
- Jet A fuel
- Full service FBO facility

14.1 Runway 1/19

Runway Length

FAA AC 150/5325-4B, *Runway Length Requirements*, provides guidance to help determine the most appropriate recommended runway lengths for an airport predicated on the category of aircraft using the airport. By design, the primary runway typically has the longest runway, the most favorable wind conditions, the greatest pavement strength, and the lowest straight-in instrument approach minimums. 7M4’s runway is currently 3,800-feet long.

TABLE 14.1
RUNWAY LENGTH REQUIREMENTS – RUNWAY 1-19
OSCEOLA MUNICIPAL AIRPORT

Aircraft Category	Length (Dry Pavement)(ft)	Deficiency (ft)
Small Aircraft: 12,500 pounds or less		
95% GA Fleet	3,200	0
100 % GA Fleet	3,800	0
100 % GA Fleet with 10 or more passenger seats	4,350	550
Large Aircraft between 12,500 and 60,000 pounds		
75% of fleet at 60% useful load	4,700	900
75% of fleet at 90% useful load	6,800	3,000

Source: AC 150/5325-4B, Runway Length Requirements for Airport Design, Figures 3-1 and 3-2.

Generalized length only. Actual lengths should be calculated based on the specific aircraft's operational nomographs.
Useful load refers to all usable fuel, passengers, and cargo.
Calculations based on a 240-foot airport elevation and a mean maximum daily temperature of 91˚.

Table 14.1 above supports the existing runway length of 3,800 supporting GA aircraft of 12,500 lbs. or less. However, certain B-II aircraft are larger than the chart accounts for. When moving into the large aircraft category for 75% for the fleet at 60% of useful load we exceed the available runway length by 900-feet. It is important to note that aircraft in the B-II category consist of turbojet aircraft. Users of these aircraft have requested access to 7M4. FAR part 135 for hire aircraft are governed by strict insurance requirements. The standard industry requirement for runway length for turbojet aircraft is a minimum of 5,000-feet of runway length. In addition, turbojet aircraft have published operational data for using runway with contamination caused by rain, ice or snow. The normal landing lengths can be increased as much as 15%. With these considerations, Osceola Municipal should plan to increase the runway length to a minimum of 5,000-feet.

Runway Width

FAA AC 150/5300 (current series) delineates the requirements for runway width. At present, Runway 1-19 is 75-feet wide. This meets the recommended runway width for the existing RDC of B-II-5000.

Runway Strength

The published runway strength for 7M4 is 8,500 single wheel load. This capacity is a limiting factor for aircraft wanting to use the existing airport. The ASASP Level 3 airport requires a pavement strength of at least 30,000 dual wheel load. This will increase capacity and meet the needs of the forecasted fleet mix.

Wind Coverage/Runway Alignment

The FAA prescribes the optimal runway alignment based on crosswind coverage. The prescribed crosswind coverage for a given runway is 95 percent for each given ARC. Currently the runway alignment offers combined an IFR wind coverage for the 10.5-knot wind of 93.4% and the 13-knot wind of 96.7%. These coverages meet the runway design.

14.2 Airfield Design Standards

Compliance with airport design standards is required to maintain a minimum level of operational safety. The major airport design elements are established from FAA AC 150/5300(current series), *Airport Design* and Federal Aviation Regulations (FAR) Part 77, *Objects Affecting Navigable Airspace*, and should conform with FAA airport design criteria without modification to standards.

Runway Safety Area (RSA)

The runway safety area (RSA) is a two-dimensional area surrounding and extending beyond the runway and taxiway centerlines. This safety area is provided to reduce the risk of damage to airplanes in the event of undershoot, overshoot, or excursion from the runway. In addition, it must

be cleared and free of objects except those required for air navigation and graded to transverse and longitudinal standards to prevent water accumulation, as consistent with local drainage requirements. Under dry conditions, the RSA must support emergency equipment and aircraft without causing structural damage or injury to the occupants. The FAA recommends the airport own the entire RSA in “fee simple” title. Based on FAA B-I design standards, the RSA should extend beyond the end of the runway for 240-feet and be 120-feet wide with no steeper grade than three percent. The RSA at 7M4 is met laterally and longitudinally along Runway 1-19. To meet the forecast for a B-II facility the RSA would increase to extend beyond the end of the runway for 300-feet and be 150-feet wide with no steeper grade than three percent. The current RSA meets the lateral and longitudinal requirements.

Object Free Area (OFA)

The object free area (OFA) is a two-dimensional area surrounding runways, taxiways and taxilanes. It must remain clear of objects except those used for air navigation or aircraft ground maneuvering purposes, and requires clearing of above-ground objects protruding higher than the nearest perpendicular point along the RSA. An object is considered any ground structure, navigational aid, people, equipment, terrain or parked aircraft. The FAA recommends that the airport own the entire OFA in "fee simple" title. Currently, ARC B-I standards indicate requirements of 400-feet wide and 240-feet beyond each runway end. The airport entrance road is in violation of the OFA for approximately 1,750-feet of the OFA. In addition, a portion of the aircraft-parking apron is located inside of the OFA. From the apron area to the southern portion of the OFA a tree line with scrub brush penetrates the OFA. The eastern portion of the OFA has two areas with small trees/scrub brush located with the limits. When moving to a B-II the OFA increases in size to 500-feet wide and 300-feet beyond runway end. The increase in width extends off the airport property and onto the golf course on the western side. The eastern side increases to include the wind cone and additional trees along the drainage ditch. If the airport extends the runway to meet B-II standards or becomes turbojet capable (5,000-feet) the OFA off the end of the runway will become an issue.

Obstacle Free Zone (OFZ)

The obstacle free zone (OFZ) is airspace above and centered along the runway centerline, and precludes taxiing, parked airplanes and object penetrations except for frangible post mounted NAVAIDs expressly located in the OFZ by function. Due to the facilities required, only the Runway OFZ is applicable. The length of the OFZ is fixed at 200-feet beyond the associated runway end, but the width is dependent upon the RDC and visibility minimums associated with the instrument approach procedures associated with the runway. The OFZ width at 7M4 is 250-feet and the elevation of the OFZ is equal to the closest point on the runway. Currently the airport layout meets the OFZ requirements. Any extensions to the runway pavement would require the OFZ to be revaluated.

Building Restriction Line (BRL)

The building restriction line (BRL) represents the boundary that separates the airside and landside facilities and identifies suitable building area locations based on airspace and visibility criteria. The BRL is established with reference to the FAR Part 77 primary and transitional surfaces, as well as the airfield safety areas. Based on existing instrument approach procedures, the Runway 1-19 primary surface is centered on runway centerline, 500-feet wide and extends 200-feet beyond each runway end. The transition surfaces slope up (7:1) from the primary surface to the horizontal surface 150-feet above airport elevation. Based on the activity at the field, instrument approach types, and RDC, the 35-foot BRL should be 495-feet from the runway centerline. Osceola maintains a BRL at approximately 350-feet from runway centerline that provides 14-feet of clearance to the closest hangars. Other commercial buildings exist on private property adjacent to the airport. These buildings are located approximately 311-feet from the runway centerline and provide nine-feet of clearance for a business. Future building sites must take into account the ground elevation, structure height, and the perpendicular runway edge elevation in determining suitable building locations. The combination of these factors may make it possible for structures to be constructed that are clear of FAR Part 77 airspace surfaces and a prescribed BRL. There are additional buildings that are airspace obstructions, they could require installation of obstruction lighting during the short-term planning period.

Runway Approach Surface

The approach surface is a three-dimensional trapezoidal FAR Part 77 imaginary surface extending beyond each runway end and has a defined slope requiring clearance over structures and objects beyond the runway threshold. The purpose of the approach surface is to provide proper clearance for the safe approach and landing of aircraft. The existing approach surface dimensions associated with Runway 1-19 differ on each runway end. The existing approach surface for the Runway 19 end is for a non-precision instrument approach procedure and has dimensions of 500’ x 5,000’ x 2,000’ with a 20:1 slope. The approach surface to the Runway 1 end is for a visual approach and has a reduced size with dimensions of 250’ x 5,000’ x 1,250’ with a 20:1 slope.

Runway Line-of-Sight

An acceptable runway profile permits any two points, generally each runway end, five-feet above the runway centerline, to be mutually visible for the entire runway length. The sight distance along a runway from an intersecting taxiway needs to be sufficient to allow a taxiing aircraft to enter safely or cross the runway, in addition to seeing vehicles, wildlife, and other hazardous objects. However, if the runway offers a full-length parallel taxiway, an unobstructed line of sight will exist from any point five-feet above the runway centerline to any other point five-feet above the runway centerline for one-half the runway length. There are no line-of-sight requirements for a taxiway. There are no line of sight deficiencies.

Runway Protection Zone (RPZ)

The purpose of the runway protection zone (RPZ) is to enhance the protection of people and property on the ground, and to prevent obstructions that are potentially hazardous to aircraft operations. The FAA recommends that airports own the entire RPZ in "fee simple" title and that the RPZ be clear of any non-aeronautical structure or object that would interfere with the arrival and departure of aircraft. However, if “fee simple” interest is unachievable, the next option is controlling the heights of objects through an avigation easement.

An FAA Interim Guidance Letter (IGL) (Sept 2012) addressed acceptable property uses within an RPZ. The IGL was released to specify and emphasize existing use standards and indicates that if any of the following project types are initiate the RPZ ownership must be reevaluated:

- An airfield project (e.g., a runway extension, runway shift);
- A change in the critical design aircraft that increases the RPZ size;
- A new or revised instrument approach procedure that increases the RPZ dimensions; and,
- A local development proposal in the RPZ (either new or reconfigured).

Land uses within an RPZ that require specific and direct coordination with the FAA include:

- Buildings and structures;
- Recreational land uses;
- Transportation facilities:
- Rail facilities
- Public road/highways
- Vehicular parking facilities;
- Fuel storage facilities;
- Hazardous material storage;
- Wastewater treatment facilities; and,
- Above-ground utility infrastructure.

The RPZ is a two-dimensional trapezoid area that normally begins 200-feet beyond the paved runway end, and extends along the runway centerline. When it begins somewhere other than 200-feet from a runway end, there is a need for two RPZs, approach and departure. The approach RPZ begins 200-feet from the threshold. The departure RPZ begins 200-feet from the end of runway pavement or takeoff runway available (TORA), if different.

RPZ dimensions are determined by the type/size of aircraft expected to operate at an airport and the type of approach, existing or planned, for each runway end (visual, precision, or non-precision). The recommended visibility minimums for the runway ends are determined with respect to published instrument approach procedures, the ultimate RDC, airfield design standards, instrument meteorological conditions, wind conditions, and physical constraints (approach slope clearance) along the extended runway centerline beyond the runway end. The current Runway 1 approach and departure RPZ and the Runway 19 RPZ all have dimensions of 500’ x 1,000’ x 700’.

Existing RPZ conditions that do not meet FAA standards on the north end of the airport is the location of a commercial business. Portions of the buildings are located within the RPZ. This condition will need to addressed by either relocating the business or shifting the runway. Other conditions outlined by the IGL describe above are grandfathered and accepted by the FAA. Not all of the RPZ property is owned or controlled by the City of Osceola as recommended by the FAA. The City does not control RPZ property beyond the airport boundary through easements. Acquisition of fee-simple property or avigation easements should be completed as properties/funds are available and should be based on the future runway and approach capabilities.

14.3 Airfield Lighting and Marking Requirements

Airport lighting is used to help maximize the utility of the airport during day, night and adverse weather conditions. FAA Order 7021.2C, *Airport Planning Standard Number One - Terminal Air Navigation Facilities and Air Traffic Control Services* specify minimum activity levels to qualify for visual and electronic navigational aids and equipment. Recommended lighting systems for the Airport include:

Airfield Lighting and Pavement Marking

Currently, Runway 1-19 is equipped with medium intensity runway lights (MIRL). The current MIRLs are preset on the lowest intensity setting and are installed with a pilot control switch connected to the common traffic advisory frequency (CTAF) radio. Pilots can increase the brightness of the MIRLs through a series of microphone click transmissions on the CTAF.

Runway pavement markings should follow requirements prescribed in FAA AC 150/5300-13(current issue), and AC 150/5340-1J, *Standards for Airport Markings*. Runway 1-19 pavement has non-precision markings based on the instrument approach procedure to Runway 19 and basic markings to Runway 1.

Runway End Identifier Lights (REIL)

This lighting system provides rapid and positive identification of the runway approach end, consisting of a pair of synchronized (directional) flashing white strobes located laterally along the runway threshold. Runway end identifier lights (REIL) are typically installed along with threshold lights at each runway end. REILs are not commonly needed unless an airport is situated within an area of heavy light pollution or adjacent to areas that would deem them necessary at specific times such as a lighted ball field, lighted rodeo grounds, etc. Currently REIL lights are located on Runway 19. In the future REILs serving both runway ends should be a consideration.

Visual Guidance Slope Indicators

Typical visual guidance slope indicators (VGSI) provide a system of sequenced colored light beams providing continuous visual descent guidance information along the desired final approach descent path (normally at three degrees for three nautical miles during daytime, and up to five nautical miles at night) to the runway touchdown point. The system normally consists

of two precision approach path indicator (PAPI-2) or four (PAPI-4) lamp housing units installed 600 to 800-feet from the runway threshold and offset 50-feet to the left of the runway edge. 7M4 Is not equipped with VGVSI and should consider adding them to both runway ends.

Airport Signs

Standard airport signs provide runway and taxiway location, direction, and mandatory instructions for aircraft movement on the ground. 7M4 does not have a system of standard signs installed that indicate runway, taxiway and aircraft parking destinations. FAA Advisory Circular 150/5345-44G, *Specifications for Taxiway and Runway Signs* and FAA Advisory Circular 150/5340-18D, *Standards for Airport Sign Systems*, outline the specifications for these items and should be followed for proper implementation, upgrades, and upkeep of airport signs.

Wind Cone/Segmented Circle/Airport Beacon

7M4 has a segmented circle with a lighted wind cone east of the Runway that is utilized as a standard wind indicator.

The airport-rotating beacon is used for visual airport identification during nighttime hours and inclement weather conditions. 7M4's beacon is located on the west side of the airfield south of the parking apron. The beacon is older and located approximately 30-feet above the ground. In the future, the airport should inquire about a standard medium intensity beacon and standard height pole.

Automated Weather Observation System (AWOS)

Automated weather observation systems (AWOS) consist of various types of sensors, a processor, a computer-generated voice subsystem, and a transmitter to broadcast minute-by-minute weather data from a fixed location directly to the pilot. The information is transmitted over a discrete VHF radio frequency. The transmission is broadcast in 20-30 second messages in standard format, and can be received within 25-nautical miles of the automated weather site. AWOS are significant for non-towered airports with instrument procedures to relay accurate and invaluable weather information to pilots. At airports with instrument procedures, an AWOS weather report eliminates the remote altimeter setting penalty, thereby permitting lower minimum descent altitudes (lower approach minimums). These systems should be sited within 500 to 1,000-feet of the primary runway centerline. FAA Order 6560.20B, *Siting Criteria for Automated Weather Observing Systems*, assists in the site planning for AWOS systems.. As part of the level 3 airport in the ASASP is for airports to have and AWOS system.

Global Positioning System (GPS)

Global positioning system (GPS) is a highly accurate worldwide satellite navigational system that is unaffected by weather and provides point-to-point navigation by encoding transmissions from multiple satellites and ground-based data-link stations using an airborne receiver. GPS is presently FAA-certified for en-route and non-precision instrument approach navigation with precision instrument approaches based on GPS being developed for commercial airports. The

current program provides for GPS stand-alone and overlay approaches (GPS overlay approaches published for runways with existing VOR/DME, RNAV and NDB approaches). Recently, the selective availability segment of the channel was decommissioned, thereby enhancing the accuracy of the GPS signal. The Wide Area Augmentation System (WAAS) is being installed at or near airports to provide a signal correction enabling these GPS precision approaches. A straight-in area navigation instrument approach is available to Runway 19 utilizing GPS signals and on-aircraft receivers to guide aircraft to a safe landing at 7M4.

14.4 Landside Facilities

Terminal Area Requirements

The terminal building serves both a functional and social capacity central to the operation, promotion and visible identity of any airport. Key terminal area requirements are developed in consideration of the following general landside design concepts:

- Future terminal area development for general aviation airports serving utility and larger than utility aircraft should be centralized;
- Planned development should allow for incremental linear expansion of facilities and services in a modular fashion along an established flightline;
- Major design considerations involve minimizing earthwork/grading, avoiding flood-prone areas and integrating existing paved areas to reduce pavement (taxilane) costs;
- Future terminal expansion should allow sufficient maneuverability and accessibility for appropriate types (mix) of general aviation aircraft within secured access areas; and,
- Future terminal area development should enhance safety, visibility, and be aesthetically pleasing.

Currently the airport terminal consists of a two room portable building with a bathroom. The last brick and motor building was destroyed by a fire and demolished. Following the guidelines in the ASASP, a terminal of at least 2,500 square feet should be constructed to provide public use space to include phones, restrooms, pilot and conference space.

Aircraft Storage Hangars

Future hangar areas should achieve a balance between maintaining an unobstructed expansion area, minimizing pavement development, and allowing convenient airside and landside access. For planning purposes, hangars should accommodate at least 95 percent of all based general aviation aircraft. Typically, single-engine aircraft demand 1,000 to 1,200 square feet, twin-propeller aircraft require 1,200 to 3,000 square feet, and business turboprop/jet aircraft require approximately 3,000 square feet. General hangar design considerations include the following:

- Construction of aircraft hangars beyond an established building restriction line (BRL) surrounding the runway and taxiway areas and built beyond the runway OFZ, runway and taxiway OFAs, and remain clear of the FAR Part 77 Surfaces and Threshold Siting Surfaces;
- Maintaining the minimum recommended clearance between T-hangars of 75-feet for one-way traffic, and 125-feet for two-way traffic. Taxilanes supporting T-hangars should be no less than 25-feet wide. Individual paved approaches to each hangar stall are typically less costly, but not preferred to paving the entire T-hangar access/ramp area;
- Construction of additional hangar space to accommodate 95 percent of the current based aircraft, hangar waiting list, and forecast need;
- Interior and exterior lighting and electrical connections on new hangar construction. Enclosed hangar storage with bi-fold doors is recommended;
- Adequate drainage with minimal slope differential between the hangar door and taxilane. A hard-surfaced hangar floor is recommended, with less than one percent downward slope to the taxilane/ramp; and,
- Segregate hangar development based on the hangar type and function. From a planning standpoint, hangars should be centralized in terms of auto access, and located along the established flight line to minimize costs associated with access, drainage, utilities and auto parking expansion.

Currently 7M4 has limited aircraft storage in various conditions ranging from a 50' x 40' box hangar to a five bay plane port with two enclosed bays. These hangars are designed to house single engine and small twin-engine aircraft. With the aviation forecast predicting growth from 12 to 17 aircraft, additional hangar space will be needed. In addition, there is not a large hangar to accommodate transient aircraft or an FBO.

Aircraft Storage (Based Aircraft/Itinerant Aircraft Apron)

Paved aircraft parking and tie-down areas should be provided for approximately 40 percent of the peak/design day itinerant aircraft, plus approximately 25 percent of the based aircraft. FAA airport planning criteria recommends 360 square yards (3,240 square feet) per itinerant aircraft space and approximately 400 square yards (3,600 square feet) per based aircraft. Other site specific apron planning and design considerations include:

- Maintaining the apron area beyond all airfield safety areas per airport design requirements (RSA, OFA, RPZ, and OFZ); and,
- Preserving the minimum runway centerline to aircraft parking apron separation of 500-feet for ARC B-II with approach visibility minimums not lower than ¾ mile.

- Planning for sufficient aircraft taxiing and maneuvering space, for entering and exiting the aircraft parking apron without risk of structural damage;
- Allowing two-way passing of aircraft leading to the runway and taxiway system.
- Locating the main aircraft apron near the mid-section of the primary runway with sufficient space to allow for a continuation of building and hangar expansion adjacent to the flight line.

7M4 has approximately 70,000 square feet of aircraft apron. Portions of the apron are not useable for aircraft parking due to the proximity to the runway centerline and the OFA. Other portions are used for auto parking adjacent to the terminal building. The entrance road has no real separation from the aircraft apron, allowing automobile and aircraft to operate in close proximity to each other. With these negative impacts useable aircraft apron space is limited and aircraft fueling and parking can be cramped. Future apron layouts need to be located in areas not encroached by the OFA and provide ample aircraft movement and parking for forecasted demand.

Fuel Storage Requirements

Fuel storage requirements are based on the forecast of annual operations, aircraft utilization, average fuel consumption rates, and the forecast mix of GA aircraft anticipated at 7M4. On average, the typical single-engine airplane consumes 12.0 – 16.0 gallons of fuel per hour and flies approximately 100 nautical miles (1.0 to 1.5 hours) per flight. Turbine aircraft generally will fly greater distances averaging 300 nautical miles and approximately 1.5 – 2.0 hours. Market conditions will determine the ultimate need for fuel tanks and their size. The following guidelines should be implemented when planning future airport fuel facilities:

- Aircraft fueling facilities should remain open continually (24-hour access), remain visible and be within close proximity to the terminal building or FBO to enhance security and convenience;
- Fuel storage capacity should be sufficient for average peak-hour month activity, which normally occurs during the summer months;
- Fueling systems should permit adequate wing-tip clearance to other structures, designated aircraft parking areas (tie-downs), maneuvering areas, and OFAs associated with taxilane and taxiway centerlines;
- Locating the fuel facilities beyond the RSA and BRL;
- Equipping all fuel storage tanks with monitors to meet current state and federal environmental regulations, and be sited in accordance with local fire codes;
- Have a dedicated fuel truck for Jet-A delivery to minimize the liability associated with towing and maneuvering expensive aircraft up to and in the vicinity of fueling facilities;
- Maintaining adequate truck transport access to the fuel storage tanks for fuel delivery; and,
- Capable of storing at least a month's supply of fuel to minimize delivery charges.

Currently 7M4 has a 3,000 gallon above ground fuel tank offering 100 low lead fuel for piston driven aircraft. Fuel is available 24-hours a day via a credit card self-fueling system. As the airport expands and larger aircraft are able to use the facility, Jet A fuel should be offered. Jet A storage tanks commonly hold between 8,000 and 12,000 gallons of fuel. Demand for fuel should be based on request and types of aircraft using the facility. Until the runway is lengthened to at least 4,500-feet, Jet A may not be justified.

Auto Parking, circulation and Access Requirements

Automobile parking requirements are calculated using 1.5 spaces per design hour passenger. This is typical for non-towered general aviation airports with similar levels of operations. Based aircraft owners commonly park in their individual hangars while flying. Maintaining a dedicated public auto parking lot in close proximity to the terminal building to provide convenient access for pilots and passengers is important especially to itinerant pilots. Presently, there is ample parking immediately adjacent to the terminal. The current airport access road is located inside of the runway OFA and will need to be relocated. The current auto parking is located on the aircraft-parking apron. Steps should be taken to delineate these two areas. Once a permanent solution has been made for the terminal building, auto access and parking locations can be determined.

Summary of Airport Terminal Facility Requirements

The current facilities offered at 7M4 are limited and not configured to meet all FAA design standards and guidelines. Expanded hangar facilities are needed to meet current and forecasted aviation demand. Aircraft movement areas for fueling and transitioning of aircraft need to be designed to ensure safe movement of aircraft. Projects to reconfigure or expand the apron should take into account the forecasted growth over the next 20 years.

15.0 Airport Alternatives Analysis

Introduction

This section describes the airfield and terminal area alternatives for the facility design criteria identified in the Facility Requirements chapter. The focus of this section is to evaluate the merits and deficiencies of alternatives, and provide the technical basis necessary for determining a preferred or recommended airport development plan and property acquisition and management direction.

While the assessment of alternatives is based on technical judgment, the most favorable airport improvement option should be compatible with regional planning policies. Additionally, it should be consistent with social, economic, political and environmental goals. In order to determine the best possible course of action, the alternatives incorporate the following factors in the development and evaluation of potential design options:

- Compliance with FAA airport and airspace guidelines and standards;
- Adherence with the short- and long-range goals and objectives of the City of Osceola and the Osceola Airport Commission;
- Compatibility with existing and proposed on and off-airport land uses; and,
- Minimization of potential environmental impacts.

Critical to the success of the airport is an effective use of all the properties at the field. The need to bring the airfield into current FAA design standards and expand the runway was identified by the aviation demand forecasts and the level of potential business aircraft that are interested is using the airfield. The need for additional apron and aircraft storage hangars was also identified. Additional property is needed to meet current runway safety areas laterally and beyond each runway end and for any future runway expansion considerations. Alternatives will be laid out to most effectively use the existing airfield facilities while accommodating the forecast of aviation demand and the facilities identified in the previous discussion.

Airside Alternatives/Recommendations

Airside facilities are those that are used for supporting the active movement and circulation of aircraft and include runways, taxiways, and approach facilities and equipment. Landside facilities pertain to the aircraft apron areas, hangar development areas, terminal area development, and any business park/industrial development areas.

Because all airport functions relate to and revolve around the runway/taxiway layout, airside development is typically evaluated before landside development. Specific considerations include runway length, runway width, and approach protection criteria needed to support the forecast use of the field through the planning period. Following a review of these airside development alternatives, a review of landside development will also be presented. As part of this process, it is important to establish a set of goals that provide the framework for any future development at the airport. These goals include:

- A safe, efficient operating environment;
- An effective direction for future development at the airport;
- Enhancing the self-sustaining capability of the airport by ensuring the highest and best use of available airport property maximizing airport revenue;
- Plan and develop the airport with the future needs and requirements of Osceola and the surrounding communities; and
- Encourage protection of the established investment by minimizing potential land use conflicts.

15.1 Runway Alternative 1- Meet Current FAA Design Standards

The airports existing facilities do not meet several FAA design standards for a B-II airport. In order to meet the forecast and the current demand, the airport will need to improve its facilities as well as lengthen the runway to 5,000-feet.

Runway Lengthening/Widening: Modifying the runway to 5,000' x 75' will require modifications to the surrounding airfield and require acquiring additional property to the south of the airport. The runway will be lengthened 1,200-feet to the south on the same alignment. This alternative would require declared distances. This would affect the landing distance of Runway 19, shortening it to 4,300-feet, making it difficult for business jet aircraft to land.

Runway Strength: The reported runway strength is 8,500 pounds single wheel load. This reported weight bearing capacity limits aircraft to small single engine and light multi-engine aircraft. The existing runway pavement will require reconstruction to add strength and weight bearing capacity to serve forecasted traffic. The recommended pavement strength is a duel wheel load of 45,000 pounds.

Road Relocation: Cyro Road will be required to be relocated. The new alignment will need to be located outside of the proposed RPZ. The *Interim Guidance on Land Uses within a Runway Protection Zone* released in September of 2012 will require coordination with the FAA for final roadway alignment. This relocation of this road will require additional land acquisition.

Waterway Relocation/Mitigation: Drainage ditch No. 2A flows from the east into Drainage ditch No. 2 that flows parallel to the runway south into Ditch No 3. The flow and location of these ditches will be impacted with any project to shift or lengthen the runway. A portion of the current ditch is located within the RPZ. This drainage way will require relocation and or encapsulation. Any modification to the ditch will require environmental permitting and clearance before any work can be completed.

Utilities: Utilities located along Cyro road will be required to be relocated. All above ground utilities in the vicinity of the airport will need to be checked against Part 77 surfaces for airspace violations. Any additional utilities located during design will need to be addressed.

Parallel Taxiway: A parallel taxiway increases the safety of aircraft operations by limiting back taxiing, allowing a safe holding position and flow of traffic. With jet aircraft wanting to base at the airport and new instrument approaches being developed, a parallel taxiway is warranted. A parallel taxiway constructed 300-feet west of the runway centerline will require property acquisition from the city owned golf course. This project will displace portions of three fairways and greens that will be required to be reconstructed on additional land required for this development.

Property Acquisition: Airport expansion will require property acquisition from three potential landowners. This acquisition will allow the runway to shift to the south and meet FAA design standards and obtain 5,000-feet pavement length and clear RPZ's.

Terminal Area Development: The current terminal area is constrained and has areas that cannot be used due to their proximity to the runway. The current terminal building is located in a temporary trailer with parking and access crossing the active aircraft parking apron. Hangars were constructed over a decade ago and are in need of repair. At times, the apron can be congested when aircraft are using the field. These issues, along with the forecast, indicate a new terminal area and layout would be needed. To satisfy the Arkansas Statewide System Plan and the forecast, the terminal would need to include at a minimum two – 10 unit t-hangars, box storage hangar, terminal building of at least 2,500 square feet of terminal space and jet a and avgas for aircraft. In addition, ample parking and tie down space for aircraft are needed. The constraints on the existing terminal area and lack of available land will require the terminal area to be relocated.

Instrument Approach Procedure: Currently 7M4 has one RNAV (GPS) instrument approach to Runway 19. This approach can direct aircraft to an elevation of 620-feet MSL (400 feet above runway end) and one-mile visibility during times of inclement weather. With the growth of the airport, it would beneficial to work towards additional approaches for the airport.

15.2 Runway Alternative 2

Runway Alternative 2 focuses on shifting the runway to the south and lengthening to meet B-II standards. This alternative meets FAA design guides.

Runway Lengthening/Widening: Alternative 2 will include modifying the runway to 5,000' x 75'. This lengthening and widening will require modifications to the surrounding airfield and require acquiring additional property to the south of the airport. The runway will be lengthened approximately 1,958-feet to the south on the same alignment with a relocation of the Runway 19 threshold in order to bring the RPZ onto airport property. This alternative would have full use of the runway pavements with no displacement restrictions or declared distances.

Runway Strength: The reported runway strength is 8,500 pounds single wheel load. This weight limits aircraft to small single engine and light multi-engine aircraft. The existing runway pavement will require reconstruction to add strength and weight bearing capacity to serve forecasted traffic. The recommended pavement strength is a duel wheel load of 45,000 pounds.

Road Relocation: Cyro Road will be required to be relocated or closed. The new alignment will need to be located outside of the RPZ. The *Interim Guidance on Land Uses within a Runway Protection Zone* released in September of 2012 will require coordination with the FAA for final roadway alignment. The relocation of this road will require land acquisition.

Waterway Relocation/Mitigation: Drainage ditch No. 2A flows from the east into Drainage ditch No. 2 that flows parallel to the runway south into Ditch No 3. The flow and location of these ditches will be impacted with any project to shift or lengthen the runway. A portion of the current ditch is located within the RPZ, and will require encapsulation. Any modification to the ditch will require environmental permitting and clearance before any work can be completed.

Utilities: Utilities located along Cyro road will be required to be relocated. High power transmission traverse from northeast to southwest south of the airport. These power lines cross the extended runway centerline and unless relocated, restrict the airport from shifting southward. The transmission line towers average 50-feet tall, and carry multiple lines and are owned by Entergy. During this masterplan, Garver has discussed the relocation of these lines with Entergy. Estimates for relocation are provided in the following sections.

Parallel Taxiway: A parallel taxiway increases the safety of aircraft operations by limiting back taxiing, allowing a safe holding position and flow of traffic. With jet aircraft wanting to base at the airport and new instrument approaches being developed, a parallel taxiway is warranted. A parallel taxiway constructed along the west side of the airfield will require property acquisition and relocation assistance from the city owned golf course. This project will displace portions of three fairways and greens. Additionally, the taxiway would cross Ditch 3 and Cyro road.

Property Acquisition: Airport expansion will require property acquisition and easements from at least five potential landowners. These acquisition and easement will allow the runway to shift to the south and meet FAA design standards. The total anticipated land to be acquired is estimated to be 118 acres. The easements needed will require approximately 15 acres.

Terminal Area Development: The current terminal area is constrained and has areas that cannot be used due to their proximity to the runway. The current terminal building is a temporary trailer and the access road needs to be relocated. Hangars are old and some are in need of repair. At times, the apron can be congested when aircraft are using the field. These issues, along with the forecast, indicate a new terminal area and layout would be needed. To satisfy the Arkansas Statewide System Plan and the forecast, the terminal would need to include a minimum of two – 10 unit t-hangars, a box storage hangar, terminal building of at least 2,500 square feet of terminal space and jet a and avgas for aircraft, in addition to ample parking and tie down space for aircraft. Land available for this development would located at the northern most portion of the airfield on the west side.

Instrument Approach Procedure: Currently 7M4 has an instrument approach to Runway 19. With the growth of the airport, it would beneficial to work towards an approach for both ends of the runway. The high power transmission lines located south of the airport will need to be

relocated for expansion of the airport. In addition, these lines should be located in areas not to impact future approach procedures.

15.3 Terminal Area Development Alternative:

The current terminal area is located too close to the runway primary surface and object free area. The terminal area footprint is surrounding by drainage features and off-airport property. The current airport access road flows directly onto the aircraft apron. When small aircraft are parked on the apron, fueling and aircraft movement can be difficult due to the lack of pavement. The future parallel taxiway will traverse the existing apron requiring the removal of the temporary terminal and the relocation of the box storage hangar. With these existing constraints and future needs of the statewide system plan and the forecast, the airport will need to look for alternatives.

West Side Development: Depending on the runway alternative chosen, the City has available property located to the north of the existing terminal development. This land is sufficient for the development required and is located off Keiser Ave. The terminal development will need the following:

- Aviation Fuel: 100LL and Jet A
- Terminal Space (2,500 square feet minimum)
- Hangar Space
  - T-Hangar – Minimum 10 unit t-hangar
  - Box Hangar (100 feet x 100 feet)
- Aircraft Apron and tie down locations

East Side Development: East side development of the terminal area will allow the terminal area to be located more centrally located and require less land acquired from the golf course. Roadblocks to the east side development are the following:

- Automobile access to the terminal area will require new construction
- Parallel taxiway development will be impacted by ditch No 2. This ditch alignment will be required to be relocated.
- Land acquisition along the east side will be required for the development of the terminal area and parallel taxiway.

Recommended Development Plan

The preferred option for both airside and landside alternatives combine to form the recommended development plan. The recommended development plan provides the 20-year footprint for the airport. It is a compilation of the final alternatives adjusted and revised based on discussions, solicitations and comments from the City, airport board, and advisory committee.

16.0 Airport Layout Plan

As part of the masterplan, an Airport Layout Plan (ALP) has been developed to reflect the need for additional facilities for 7M4. The ALP was developed following FAA guidance located in Advisory Circulars 150/5070-B (current addition) and AC 150/5300-13A (current addition) as well as information from previous sections in this masterplan. Major changes depicted in the ALP is the lengthening and shift of the runway to meet forecasted traffic and current FAA design standards. With this growth, property acquisition will be required and displacement of portions of a golf course.

The ALP will consist of 12 sheets. These sheets are discussed below and are located in Appendix C:

16.1 Airport Layout Drawing (ALD)

The airport layout drawing depicts the two dimensional layout of the airfield and protective surfaces. It consists of existing and proposed features including runways, taxiways, aprons, buildings and access areas. The major change in this drawing will be the shifting of the runway to the south with an extension, a parallel taxiway and new terminal area development. In addition, the ALD depicts adjacent land impacted by growth of the airport. Major utility relocation of the Entergy high power transmission line is depicted as well.

16.2 ALD – Phasing

The ALD-Phasing drawing depicts phasing of projects for the development of the airport. The phasing will aid in the understanding of the progression of projects for the life of the ALP.

16.3 Airport Airspace and Inner Portion of the Approach Surface Drawing

The FAA Part 77 surfaces will be updated to show the impacts of the runway shift to the south. This will be used in future attempts to develop additional instrument approach procedures. The Inner portion of the Approach Surface Drawing will depict potential and existing impacts to the approach. Included will be the traversway clearances over roadways in the approaches.

16.4 Runway Departure Surface Drawing

This sheet will depict the departure surfaces as defined in AC 150/5300-13 for the 40:1 departure surface. Any penetrations to the surface will be noted with mitigation potential.

16.5 Terminal Area Drawing

The terminal area drawing depicts the facilities needed to service and house aircraft, passengers and businesses. The existing terminal area and apron are located too close to the runway and violate FAA protected surfaces. The remainder of the apron is deficient and does not allow forecasted aircraft sufficient operational space. Portions of the existing apron will be utilized until the runway is shifted and reconstructed. Building and pavement will be removed

and expanded as development continues. Portions of the golf course and pond will be used requiring a pond to be partially filled.

16.6 Terminal Area Drawing – Future

The future terminal area drawing depicts the required growth needed to meet the forecast. This phasing sheet aids the understanding of the progression from the existing layout to the future.

16.7 On Airport Land Use

The on airport land use drawing will depict the land uses of airport property and potential uses for future development. Areas to be acquired and utilized for airport development are depicted on this drawing.

16.8 Airport Property Map

The airport property map depicts land owned by the airport and potential land required for expansion, development and to protect FAA approach surfaces. This ALP will be depicting several tracts of land required for the expansion. This may will assist the airport in property acquisition and justification for the required land.

16.9 Drawings

The airport layout plan set is located in Appendix C.

17.0 Facilities Implementation Plan

In order to reconstruct 7M4 into a facility that will meet the forecast, structured phasing will be required to meet FAA, State and local funding streams. The three major phases for development will include Phase One (0-5 years), Phase Two (5-10 years) and Phase Three (10 years and beyond). These phases may be accelerated if funding and work progresses quickly.

17.1 Phase One

Phase One will the most critical phase of the project. The engineering design, environmental clearance and land acquisition are crucial to the project moving forward. Land acquisition will require appraisals and review appraisals of land to be acquired. Land to be acquired includes the acquisition and reconstruction of two golf holes. The reconstruction may require additional land to be acquired. Land acquisition in this phase does not include the Baker Implement property, but may be considered in the future. Additionally, an easement will be acquired for the relocation of the 161Kv Entergy transmission line. This easement will conform to their standards and be acquired under the airport project. Additional tracts of agricultural land will be required. The total land to be acquired will be 98 acres and 14.3 acres of easement.

Once the design is complete, land acquired, grading, and drainage of the site will be competed. This will require the installation of numerous drainage structures, rerouting of drainage ditches

and installing a box culvert routing the drainage under the runway environment. The runway environment will be graded and prepped for paving.

Runway paving and lighting will follow the grading and drainage. This will provide the airport with a 5,000-foot runway and allow operations to resume. Portions of the existing apron will be used during this phase.

17.2 Phase Two

Phase Two begins with expansion of the airfield. The parallel taxiway and apron will be constructed with associated lighting. The existing apron will be demolished and reconstructed requiring the existing entrance road to be demolished and relocated. Portions of the golf course property will be used for the apron expansion, requiring a pond to be filled in. Utilities (water and sewer) will be run to the terminal area to support the 2,500 square foot terminal building. In addition, a 12 bay t-hangar we be constructed to house existing based aircraft and other currently displaced at other airports. A 100'x100' community hangar will be constructed to house based or business jet aircraft. Lastly, the existing fuel farm will be relocated and an additional Jet A fuel system will be installed. Both systems will be served by a 24-hour card reader allowing pilot to fuel their aircraft at their own will.

17.3 Phase Three

Phase Three will consist of building out the airport apron and adding an additional t-hangar and box hangar. The perimeter of the airfield will be fenced with 7-foot chain-link with barbed wire fence to protect people and aircraft. In addition, the fencing will help control wildlife from entering the active airfield area.

18.0 Capital Improvement Plan

Opinions of probable construction cost have been developed to support the Facilities Implementation Plan. The detailed spreadsheet can be found in Appendix D.

18.1 Phase One: 0 to 10 Years

✈ Property and Easement Acquisition (including relocation costs)	$1,170,000
✈ Transmission Line (Entergy)/Sewer/Gas Relocation	$3,000,000
✈ Grading and Drainage (Runway)	$2,865,000
✈ Runway Paving	$3,250,000
✈ Runway/Airfield Lighting	$1,020,000
Total:	**$11,305,000**

18.2 Phase Two: 10 to 15 years

✈ Taxiway and Apron Paving	$3,600,000
✈ Taxiway and Apron Lighting	$750,000
✈ Entrance Road Construction	$750,000
✈ Utility (Water and Sewer)	$625,000
✈ Terminal Area (Terminal and Hangars)	$1,980,000
Total:	**$7,705,000**

18.3 Phase Three: 15 years and beyond

✈ Perimeter Fencing	$600,000
✈ Hangar Construction/Apron Expansion	$1,920,000
Total:	**$2,520,000**

19.0 Airport Development Funding Sources

Funding for GA airports is typically available from federal, state, and local sources. At 7M4, a combination of these funding sources will be required during the short and long-term planning periods to implement the preferred airport development. 7M4 is currently recognized in the FAA's National Plan of Integrated Airport Systems (NPIAS), which means it is eligible for FAA Airport Improvement Program (AIP) funding, in addition to state funding.

19.1 Federal Aviation Administration:

In Arkansas, federal airport state-apportionment, entitlement, and discretionary improvement grants for GA airports, such as 7M4, are administered through the Arkansas-Oklahoma Airport Development Office of the FAA's Southwest Region. The AIP provides federal planning and development grants to public-use airports included in the NPIAS. The Federal Airport and Airways Trust Fund is the source of all AIP funds. These funds are collected through aviation user-generated taxes (airline passenger tax, aircraft parts and fuel) and appropriated by Congress for eligible airport construction and improvement projects. The current system of federal airport funds is distributed by formula and discretion in accordance with provisions contained in the Airport and Airway Improvement Act of 1982, as amended. FAA Order 5100.38D, Airport Improvement Program (AIP) Handbook, provides guidance and describes policies and administrative procedures for funding AIP projects.

Under AIP, approximately 18-20 percent of total AIP available for grants minus non-primary entitlements are available for state-apportionment grants. The national priority system is used to distribute state-apportionment improvement funds in accordance with FAA provisions based on

population and land size of the states. Distribution within Arkansas is based on the degree of need. The state-apportionment funds available for Arkansas airports in 2015 was $2,961,724.

As a part of Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (AIR 21), GA airports listed in the NPIAS are authorized to receive non-primary airport entitlement (NPE) funds. The NPE funds available for Arkansas airports in 2015 was $15.3 million, which is set aside from AIP State apportionment. Since 7M4 is listed in the 2015-2019 NPIAS, it qualifies for this funding source. 7M4 could receive NPE funds equal to one fifth of the five-year cost estimate for airport improvements as listed in the NPIAS, to a maximum of $150,000 per year.

Discretionary funding is the remainder of AIP grant funding available after distributions are made to the other grant categories. Discretionary funds are typically set aside for Noise and Environmental compatibility projects, Military Airport Programs, relievers, and capacity/safety/security/noise related projects at for primary and reliever airports.

19.2 Arkansas Department of Aeronautics (ADA) Funding:

In addition to the FAA's AIP, the 7M4 administers State funded programs for airport planning, maintenance, and construction projects. The funding is generated from sales tax on aviation fuel retail, aircraft retail, and aircraft parts and maintenance. The 7M4 is currently authorized to spend an appropriated $15 million per fiscal year on airport improvement projects. The State offers the following grant programs:

95-5 Percent or 90-10 Percent Match (FAA-State) FAA Airport Improvement Program

- Available to airports approved for Federal funding by FAA (NPIAS Airports).
- Limit of 5 percent or 10 percent (depending on FAA grant) of total project cost, except that State share shall not exceed $400,000.
- FAA federal grant number required and all FAA Grant Assurances apply.
- State Grant Application reviewed after project completion and AIP paid.

50-50 Percent Match (State-Local)

- Available to all public owned / public use airports.
- Limited to 50 percent of total project cost – State share not to exceed $250,000.
- Limit of one 50 percent grant per airport per fiscal year.
- Cash and/or In-Kind match required (In-Kind requires pre-approval)

80-20 Percent Match (State-Local)

- Available to all public owned / public use airports.
- Limited to 80 percent of total project cost – State share not to exceed $250,000.

- Limit of one 80 percent grant per airport per fiscal year.
- Cash and/or In-Kind match required (In-Kind requires pre-approval)

90-10 Percent Match (State-Local)

- Available to all public owned / public use airports.
- Limited to 90 percent of total project cost – State share not to exceed $150,000.
- Limit of one 90 percent grant per airport per fiscal year.
- Cash and/or In-Kind match required (In-Kind requires pre-approval)

100 Percent Grant (State Only)

- Available to all public owned / public use airports.
- Emergency requests only – limited to disaster areas – declared by Governor.
- Application must be based on Governor's Disaster Declaration. Insurance payments and other financial help will be reviewed before awarding grant.

19.3 Local Funding

Local funds from the City of Osceola/Airport Board will be used as matching funds. The matches vary as discussed above.

20.0 Summary

The Osceola Municipal Airport (7M4) is a vital part of the national airspace system and an integral component of the transportation network that serves the City of Osceola and the southern portion of Mississippi County, Arkansas. The need for an improved airport has escalated by user request, industrial and business development as well as local citizens wanting to base aircraft in Osceola. These factors lead to this masterplan update, which uncovered missed operations due to the lack of existing airport geometry. The forecast coupled with the justification revealed that jet aircraft are unable to use the existing airport and are going to other landing sites. Additionally, aircraft owners are wanting to base jet aircraft in Osceola today. While researching information for the justification, it was revealed that a runway of at least 5,500 feet is warranted.

This masterplan update explores the existing airport site and is currently limited to a runway of 5,000 feet. In order to expand the length further, the cost will increase due to the relocation of the Entergy transmission line being relocated further. With the projected cost escalating and the limiting factors of the existing site, the next step would be to complete a feasibility assessment of the existing site.

Appendix A

REGIONAL SOLID WASTE MANAGEMENT PLAN
FOR
MISSISSIPPI COUNTY
REGIONAL SOLID WASTE MANAGEMENT
DISTRICT

March 1, 2006

MISSISSIPPI COUNTY
REGIONAL SOLID WASTE MANAGEMENT PLAN

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REGIONAL SOLID WASTE MANAGEMENT PLAN
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Mississippi County
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PART TWO - CHAPTER ONE — ACTIVITIES ANALYSIS

A.C.A. §8-6-704. Boards - Powers and duties. "(a) The regional solid waste management boards shall have the following powers and duties…(2) To evaluate on a continuous basis the solid waste needs of their District… (3) To formulate recommendations to all local governments within their District on solid waste management issues, and to formulate plans for providing adequate solid waste management…"

Section 2.101 Overview

A. History

1. Provide a history of the District relative to legislated or regulated solid waste management requirements.

Act 870 of 1989, codified as A.C.A. §8-6-701 et seq., established eight Regional Solid Waste Planning District. Mississippi County was originally included in the Eastern Arkansas Solid Waste Planning District. During the early 1990s, several counties represented on the Board decided to break away from the Eastern Arkansas District and form what was a less cumbersome structure for managing solid waste in their respective counties while maintaining accountability to their constituency.

2. How were the District boundaries established?

Craighead County established its own single-county district in 1991. Lawrence, Clay and Greene counties gained ADEQ approval in late 1991 to form a three county District. Mississippi County petitioned the ADEQ twice in 1992 to form a four county district with Lawrence, Clay and Greene counties and was twice denied the request. Finally in February of 1993, Mississippi County was awarded its current single county district status.

Act 752 of 1991 mandated that all local governments plan for the development of solid waste management systems. The original guidelines for regional solid waste management plans, dated 1988, required a plan that had an "orderly narrative explanation of the collection and disposal of all solid waste generated within the territorial boundaries of a local government". The plans that the Regional Solid Waste Management Boards provided pursuant to the 1988 guidelines served an integral purpose in the early days of the development of regional solid waste management systems throughout Arkansas. Subsequent to the original plan was the requirement for periodic reporting of Needs Assessments by each District, which also served to update demographic and service information contained in the original plan.

3. What has been the District's greatest accomplishment in terms of solid waste management?

The Mississippi County Regional Solid Waste Management District's ("MCRSWMD" or "District") greatest accomplishment has been the bringing together seventeen city governments and the County government with a common goal of providing cost-effective solid waste services to the people of Mississippi County.

B. Current

1. Describe the Board's planning process as it relates to legislated or regulated solid waste management requirements.

The MCRSWMD Board of Directors relies on the recommendations of management and contracted special professional service providers to guide them in planning to incorporate any changes in regulated solid waste management requirements. Where appropriate, the changes will be included in needs assessment updates.

2. What does the District want the Plan to do for the citizens of its area?

The District wants to provide planning to protect the public health and the State's environmental quality as pertains to effective solid waste management in the District.

3. Give a descriptive snapshot of solid waste management in the District.

Collection of solid waste within the District boundaries is accomplished by a number of different methods ranging from multiple drop-off locations to collection by both public and private haulers. The District does not own or operate any type of solid waste management facility. Mississippi County owns and operates a Class 1 and Class 4 landfill outside the city limits of Luxora. The City of Manila has a permitted transfer station and Knight's Disposal Service has a permitted transfer station in Blytheville. Both the cities of Blytheville and Osceola operate a permitted yard waste composting facility. Mississippi County has a permitted waste tire transfer station facility located in Luxora at the landfill facility site.

Section 2.102 Organization and Administration

A.C.A. §8-6-703. Creation of District and boards - Members of boards et seq…"

A. District

1. Provide a chart that gives the organizational hierarchy of the District and/or its affiliates, agencies and/or peripheral organizations.

The Mississippi County Regional Solid Waste Management District was established in February 1993. The District represents and serves the citizens of Mississippi County in ensuring that safe, efficient, economical, and lawful solid waste disposal and management is available throughout the County. The District further provides educational programs to the County's citizens that allow the successful implementation of solid waste disposal and management.

2. Describe the role the District plays in the development and implementation of effective solid waste management programs.

There is no specific District regulations or ordinances for the MCRSWMD. The District is governed by the decisions of the Board of Directors that are implemented by the District Staff.

3. Append administrative procedures, regulations, ordinances or policies relative to the District.

Copies of applicable procedures, regulations, ordinances and policies relative to the District are included in the Appendices. Included in Appendix C are copies of regulations and/or ordinances that have been provided by municipalities within the District.

B. Board

1. Provide a list or an organizational chart of Regional Solid Waste Board Members of the following:

a. Number of members on the Board.

b. Identify of Chairperson.

c. Name, title, address, phone and fax numbers, and e-mail address for each member.

d. County or city represented.

The MCRSWMD Board of Directors oversees the District activities. When necessary, rules or regulations are adopted to ensure that solid waste management activities are carried out in a safe, efficient, economical, and lawful manner.

As a Regional Solid Waste Planning Board, Mississippi County has the following powers and duties:

- To collect data, study and initially evaluate the solid waste management needs of all waste management needs of all localities within their District and to publish their findings as a Regional Needs Assessment.
- To evaluate on a continuous basis the solid waste needs of their District, and thereby update the Regional Needs Assessment at least biennially.
- To formulate recommendations to all local governments within their District on solid waste management issues, and to formulate plans for providing adequate solid waste management.
- To issue or deny Certificates of Need to any applicant for a solid waste disposal facility permit within their District.
- To adopt such rules or regulations as necessary to assure public notice and participation in any findings or rulings of the Board.
- To carry out all other powers and duties conferred by Act 870.

Other responsibilities granted to the Management Board include:

- To petition the commission or director of ADEQ to issue, continue in effect, revoke, modify, or deny any permit for any element of a solid waste management system located within the District based on compliance or noncompliance with the solid waste management plan of the district.
- To establish programs to encourage recycling.
- To adopt an official seal and alter it at pleasure.

- To maintain an office at such place as it may determine.
- To sue and be sued in its own name and to plead and be pleaded.
- To make and execute contracts and other instruments necessary or convenient in the exercise of the powers and functions of the District, including but not limited to entering into contracts and agreements with private entities for provisions of services.
- To carry out all other powers and duties conferred by Act 752.
- To enter into an agreement with another solid waste management district to allow one district to transfer solid waste to another district. This will only be allowed if a solid waste district has no legally permitted landfill which can accept solid waste.
- Apply for such permits, licenses, certificates, or approvals as may be necessary to Construct, maintain, and operate any portion of a solid waste management system, and to obtain, hold and use licenses, permits, certificates, or approvals in the same manner as may other person or operating unit of any other government.
- Employ such engineers, architects, attorneys, real estate counselors, appraisers, financial advisors, and other consultants and employees as may be required in the judgment of the district and to fix and pay their compensation from funds available to the district therefore.
- Purchase all kinds of insurance including, but not limited to, insurance against tort liability, business interruption, and risk of damage to property.

The MCRSWMD Board of Directors is comprised of the Mississippi County Judge and the mayors of the cities of first class in the county (Blytheville, Gosnell, Manila and Osceola). The current members of the Board are:

Mississippi County Board Members

Judge Steve McGuire –Mississippi County
Mississippi County Courthouse
200 West Walnut; Room 204
Blytheville, AR 72315
Phone: (870) 763-3212
Fax: (870) 763-0150

Mayor Barrett Harrison – City of Blytheville
City Hall
Blytheville, AR 72315
Phone: (870) 763-3602
Fax: (870) 762-0443

Mayor Dick Reams – City of Gosnell
307 S. Airbase Hwy.
Blytheville, AR 72315
Phone: (870) 532-8544
Fax: (870) 532-4438

Mayor Clifford Veach – City of Manila
Manila, AR 72442
Phone: (870) 561-5102
Fax: (870) 561-4438

Mayor Dickie Kennemore – City of Osceola
City Hall
Osceola, AR 72370
Phone: (870) 563-5102
Fax: (870) 563-5195

2. Provide the schedule and the location(s) of the Board meetings.

The Board meets on an infrequent basis to discuss issues associated with solid waste management within the District. Board meetings are held in the office of one of the board members.

C. Staff

1. Provide a list or an organizational chart of Regional Solid Waste Staff Members showing the name and title for each person.

No formal organizational chart has been developed for the District. The MCRSWMD staff functions as coordinators, special project consultants, regulations reviewers, information sources, and monitors of the solid waste management in the District. The District staff expects the County Judge and the Mayors to provide the citizens with the necessary solid waste management policies and procedures to protect human health and the environment in the District.

2. Provide phone and fax numbers and e-mail addresses for staff members who should be contacted for solid waste information for the District.

The following staff member should be contacted for solid waste information for the MCRSWMD:

Laura Hansen
Mississippi County Regional Solid Waste Management District
200 West Walnut, Room 204
Blytheville, Arkansas 72315
Phone: 870-763-3212
Fax: 870-763-0150
Email: mcajudge@missconet.com

Section 2.103 Revenues and Expenditures

A. District

1. Describe the revenue sources that fund solid waste management activities within the District. Include the legal authority.

The District finances its operation through state (ADEQ) and federal grant monies, and the Mississippi County general fund. Revenues from the Mississippi County Landfill and those revenues from hauler licensing go to this fund. The cost of waste disposal within the MCRSWMD is set by the Mississippi County at $27.50 per ton for Class 1 waste and $16.50 per ton for Class 4 wastes.

2. List all revenue sources and/or fees, such as user fees, waste disposal fees, licensing fees, grants, loans, rental income, earned interest and sales of recovered materials. Provide an estimation of total receipts from each revenue source from the previous year for the District. Estimate the percentage of annual revenue from each source.

As noted above, revenues from the Mississippi County Landfill and those revenues from hauler licensing go to a general fund for Solid Waste Management. The cost of waste disposal within the MCRSWMD is set by the Mississippi County at $27.50 per ton for Class 1 waste and $16.50 per ton for Class 4 wastes.

A number of cities in the District collect a fee for solid waste services in the city.

3. List the solid waste services that are supported by these revenues.

The solid waste services funded by the revenues described above are the operation of the Mississippi County Landfills. The fees collected by local cities and private waste haulers fund the collection of solid waste and disposal at the landfill.

4. Provide a report for the most recent fiscal year that identifies solid waste revenues and expenditures for the District. (This report should be an expansion of and be complementary to the annual audit report provided by outside independent auditors.)

A summary report of revenues and expenditures for the MSRSWMD is included in Appendix D. The summary report is in two parts, the Material Analysis Report shows the revenue generated by solid waste disposal in the Mississippi County Landfill, the sole source of funding for the District. In addition, a summary of expenditures for 2005 is included in the Expenditure Guidelines Report. Below is a summary of revenues and expenditures for the District for 2005:

2005 Revenue	
Solid Waste Disposal Fees	$ 2,520,845
2005 Expenditures	
Personnel and Benefits	$ 436,158
Operating Supplies and	$ 111,286
Other Services and Charges	$ 626,165
Capital Expenditures	$ 322,498
2005 Expenditure Total	$ 1,496,107

B. County

1. List the solid waste services that are supported by county revenues.

Even though there is no written policy, it has been the practice that all wastes generated within the county are disposed of at the Mississippi County Landfill. It is not envisioned that the MCRSWMD Board would look outside Mississippi County to gain disposal capacity, thereby creating the need for inter-local agreements. Currently, the disposal rates at the Mississippi County Landfill are $27.50 per ton for Class 1 waste and $16.50 per ton for Class 4 wastes. Revenues support curbside pickup for residents and the cost of disposal fees at the Mississippi County landfill.

C. City

1. List the solid waste services supported by city revenues.

The cities of the first class in Mississippi County are Blytheville, Gosnell, Leachville, Manila, and Osceola. The following is brief discussion of solid waste management in these cities.

The City of Blytheville operates a collection service that serves 6,779 households with once a week curbside collection. The city also has an exclusive service contract with Knight's Disposal to collect waste from commercial facilities. Knight's currently services 208 commercial customers in Blytheville. A mandatory fee of $15.25 is charged to all households in the city for collection and disposal services. The Blytheville City Sanitation Department currently employs 19 full-time employees involved in solid waste management.

The City of Gosnell operates a collection service that serves 1,300 households within the city. Garbage is collected two times per week at the households. Knights Disposal collects solid waste outside the city limits. The city employees three full time employees for collection. A mandatory fee of $10.25 is charged to all households in the city for collection and disposal services.

The City of Manila finances it's solid waste collections service by a mandatory fee if $8.00 per household and $25.00 per business. Knight's Disposal collects waste once per week for approximately 1,300 households and multiple times a week for approximately 90 businesses.

The City of Osceola finances its solid waste collections with a mandatory fee of $8.00 per household. Solid waste is collected in curbside service by the city at 3,400 households twice per week. Approximately 540 businesses are also served by the City of Osceola Sanitation Department.

The City of Leachville did not respond to written surveys or to telephone requests for information for the update of this plan.

Both the City of Blytheville and the City of Osceola formerly operated Solid Waste Incinerators in their respective cities. Neither incinerator is currently in use.

Section 2.104 Demographics

A.C.A. §8-6-704. Boards - Powers and duties. "(a) The regional solid waste management boards shall have the following powers and duties: (1) To collect data, study, and initially evaluate the solid waste management needs of all localities within their District, as provided in § 8-6-716…"

A. Planning Area

1. Identify the District by its full name. List the counties and cities that comprise the District.

The MCRSWMD is comprised of a single county (Mississippi) and encompasses 932 square miles. There are sixteen incorporated towns and cities within the District as listed below:

- Town of Bassett (Incorporated),
- City of Blytheville (Class 1),
- Town of Birdsong (Incorporated),
- Town of Burdette (Incorporated),
- Town of Dell (Incorporated),
- Town of Dyess (Incorporated)
- Town of Etowah (Incorporated)
- City of Gosnell (Class 1),
- City of Joiner (Class 2),
- City of Keiser (Class 2),
- City of Leachville (Class 1)
- City of Luxora (Class 2)
- City of Manila (Class 1)

- Town of Marie (Incorporated),
- City of Osceola (Class 1),
- Town of Victoria (Incorporated), and
- City of Wilson (Class 2).

2. *Provide a map clearly showing the jurisdictional areas the District.*

Figure 1 shows the entire District with the cities served and their jurisdictional areas identified.

Figure 2 shows the entire District and the location of the permitted solid waste facilities.

3. *Include the area of any solid waste management authorities within the District.*

No separate solid waste authorities exist in the District.

B. Population

1. *List the most current population of the District (list by county; provide source of information and year). Current populations may be found at www.census.gov/main/cen2000.html or http://quickfacts.census.gove/fgd/states/0500.html .*

The population of Mississippi County, according to the 2000 census, was 51,979

2. *Describe how the population has changed over the last 10 years.*

The population of Mississippi County, according to the 1990 census, was 57,525; and, according to the 2000 census, was 51,979, a decrease of 9.6%. These data were retrieved from the U.S. Census Bureau website http://quickfacts.census.gov.

3. *Provide a population projection for the next 10 years.*

The population of Mississippi County was projected for the next 10 years (2006 through 2016) using the formulas provided in Appendix 5 of the Statewide Solid Waste Management Plan (November 1, 2003). The average annual population loss rate based on the 1990 and 2000 census reports is 0.96%. Applying that same rate of decrease to each successive year, the calculated estimates of population for the next 10 years are as follows:

2006 population:	(2006 minus 2000) x -0.0096 + 1 x 51,979 = 48,985
2007 population:	(2007 minus 2000) x -0.0096 + 1 x 51,979 = 48,486
2008 population:	(2008 minus 2000) x -0.0096 + 1 x 51,979 = 47,987
2009 population:	(2009 minus 2000) x -0.0096 + 1 x 51,979 = 47,488
2010 population:	(2010 minus 2000) x -0.0096 + 1 x 51,979 = 46,989
2011 population:	(2011 minus 2000) x -0.0096 + 1 x 51,979 = 46,490
2012 population:	(2012 minus 2000) x -0.0096 + 1 x 51,979 = 45,991
2013 population:	(2013 minus 2000) x -0.0096 + 1 x 51,979 = 45,492
2014 population:	(2014 minus 2000) x -0.0096 + 1 x 51,979 = 44,993
2015 population:	(2015 minus 2000) x -0.0096 + 1 x 51,979 = 44,494
2016 population:	(2016 minus 2000) x -0.0096 + 1 x 51,979 = 43,995

4. *Are there any significant demographic trends that may affect waste disposal or waste generation figures in the District?*

There are no significant demographic trends that would impact the waste disposal or waste generation figures in the district.

5. Are large groups of people moving into or out of the area for any special reason?

Based upon the latest census data, the extreme northeast region of Arkansas is currently experiencing a decline in population as is supported by the population estimates provided above.

C. Industry

1. Provide a business profile for the District.

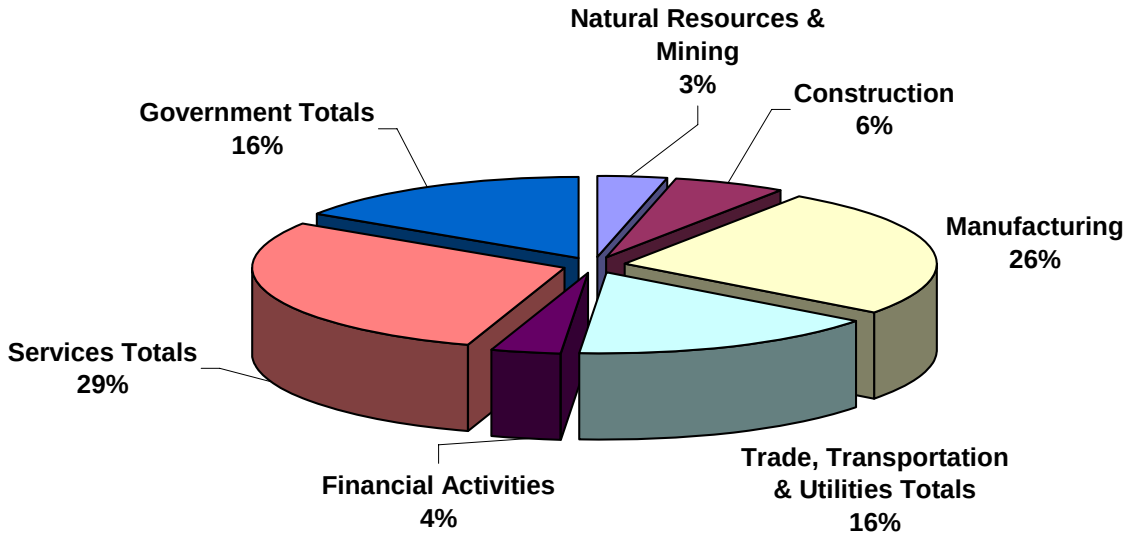
In general, Mississippi County has an agricultural-based economy with several large industrial employers in the area. The four largest employers in the area all employ greater than 500 people and include American Greetings Corporation in Osceola, Nucor-Yamato Steel Company in Armorel, Maverick Tube Corporation in Blytheville, and Nucor Steel in Blytheville. In addition to the industrial manufacturing sector which contributes approximately 70% of the income and employees approximately 26% of the workforce of the area, retail trade and general services account for approximately 16% of the income and employ 29% of the workforce of the area. The following charts show a breakdown of Income Distribution in the county as well as the breakdown of employment types covered by the Worker Compensation Program in the state.

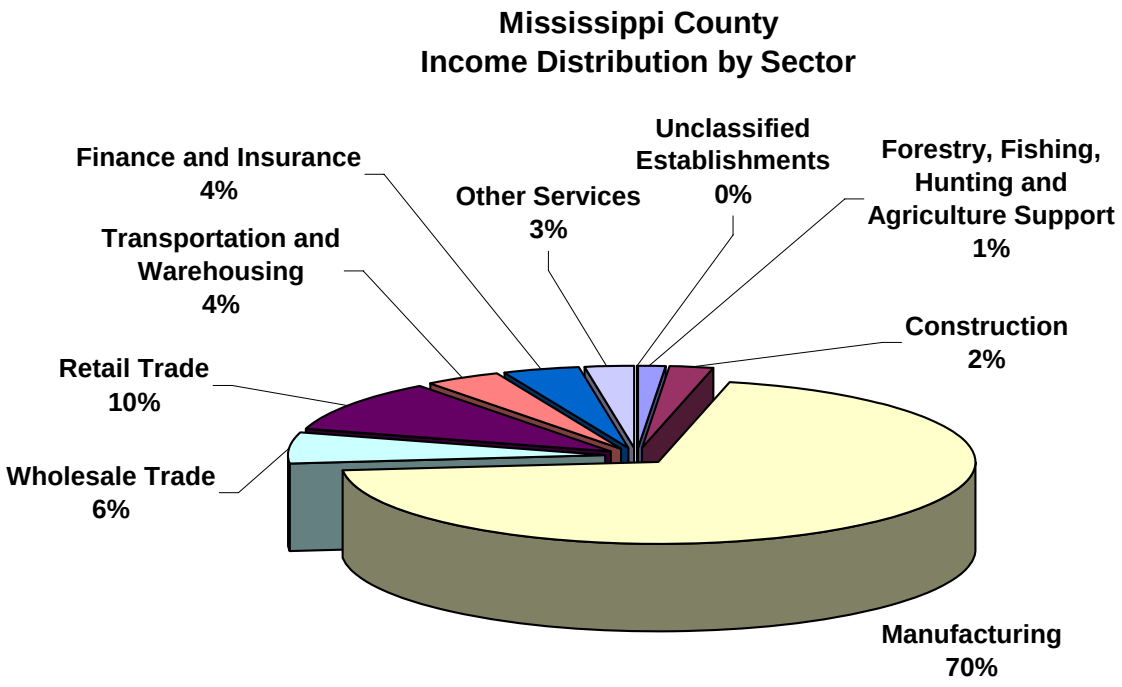
The information presented is summarized from the Mississippi County Profile from the Arkansas Department of Economic Development website and the Arkansas Employment Security Division website.

2. I*dentify and discuss regional economic factors that are expected to affect future waste generation rates and quantities over the next 10 years.*

There are no known economic factors that are expected to significantly impact future waste generation rates beyond general demographics that have already been discussed.

Mississippi County
Covered Employment
North American Industry Classification System





D. Haulers

A.C.A. §8-6-721. Licensing haulers of solid waste. (a) A person who engages in the business of hauling solid waste must obtain a license from the regional solid waste management board if: (1) The person is engaged in the collection of solid waste within the district; or (2) The person is engaged in the transportation of solid waste for disposal or storage in the district.

Explain the process by which a person who engages in the business of hauling solid waste obtains a license from the Regional solid Waste Management Board.

Procedures to be followed in obtaining a license from the MCRSWMD Board include:

- During the first quarter of each year, all previous permit holders during the current year will receive an application for the next succeeding year's permit.
- Applications must be received at the District office not later than March 31 of that year. Applications must include the two page form supplied by the District, the required fees, as well as proof of Contractor/Vehicle Liability Insurance. There is an annual fee of $50 per vehicle for the hauler.
- Applications will be processed as received by the District, and permits will be mailed to the hauler.
- All licenses issued by the District under this regulation will expire on December 31st of the year of issuance.

1. *What process does the District use to oversee active licensees? Do regular inspections of the haulers for compliance take place? Are licenses revoked for non-compliance, such as hauling waste without a cover?*

No formal process exists for overseeing haulers in the District. All haulers are required to submit the required forms and fees and are contacted by the Staff when they are past due on the submittals.

2. *Include here (or append) a copy of the District's hauler's licensing policy and procedures as well as an updated listing of licensed haulers and service areas.*

The following are the current licensed haulers for the District:

Name	Phone #	Address
Waste Management	870-935-1491	6734 Hwy. N. Jonesboro, AR
Lee Bradley	870-763-2674	309 Wilson Street Blytheville, AR 72315
Willie Lee Brown	870-537-4412	2381 West State Hwy. 181 Joiner, AR 72350
Delta Disposal, Inc. Contact: Mike Beeson Judy Beeson	870-933-9635	PO Box 2502 1810 East Lawson Road Jonesboro, AR 72404
Goolsby Metal Recycling	870-763-9086	3002 W. Main Blytheville, AR
Knight's Disposal Serv., Inc. Contact: William Knight	870-532-8085	PO Box 9087 Gosnell, AR 72319
Northcutt Trucking, Inc. Contact: Bobby Northcutt Delores Northcutt	573-695-2442	PO Box 222 Cooter, MO 63839
Osceola Waste Materials, Inc. Contact: Thomas Shoemaker	870-563-5461	PO Box 752 1125 Industrial Drive Osceola, AR 72370
John L. Welch	870-763-2832	6848 East Hwy 137 Blytheville, AR 72315

E. Volumes

A.C.A. §8-6-716. Regional needs assessment.(a)….(2) The assessment shall include, at the minimum, the following:

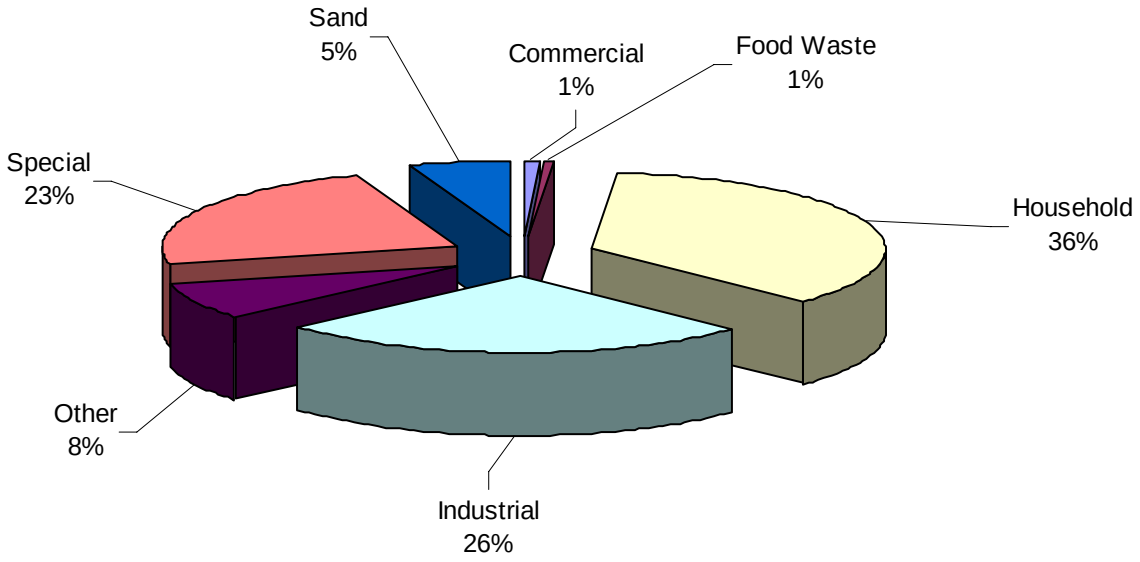
(A) An evaluation of the amount of solid waste generated within the district and the amount of remaining disposal capacity, expressed in years, at the solid waste disposal facilities within the district that are permitted under the Arkansas Solid Waste Management Act, § 8-6-201 et seq.;"

1. *Provide a waste stream characterization with data concerning waste types and amounts generated and disposed within the district and/or waste transported out of the District for disposal.*

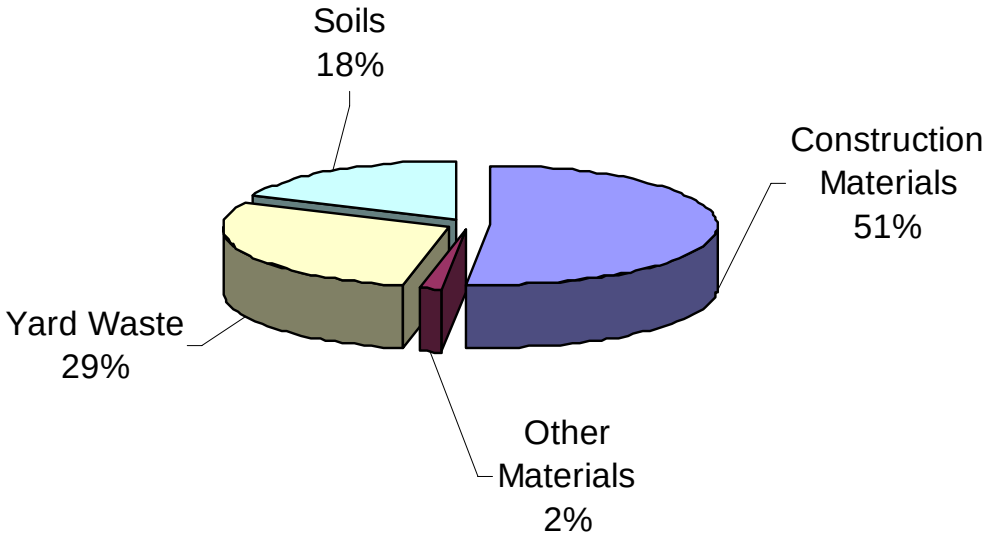
The Mississippi County Landfill, which is operated by the county, provides disposal for all county generated wastes. The volume of waste generated within the county is generally consistent with waste generation rates for the state.

The following charts show the breakdown of the Class 1 and Class 4 waste streams based upon actual receipts from 2005 provided by the Mississippi County Landfill.

Mississippi County Landfill
Class I Wastes Receipts
2005



Mississippi County Landfill
Class IV Waste Receipts
2005



2. *For the most recent calendar year, how many tons of solid waste were generated within the District and disposed in Class I Landfills or other solid waste management facilities located in or out of the District?*

The Mississippi County Landfill, which is operated by the county, provides disposal for all county generated wastes. According to the 2004 Annual Engineering Inspection Report prepared by Northstar Engineering Consultants, Inc, waste receipts at both the Class 1 and Class 4 landfills peaked in 2001 and have been slowly declining for the last few years. In 2004, 54,035 tons of Class 1 waste and 22,402 tons of Class 4 waste were received. These figures represent an increase in waste volumes for both facilities. If the population growth for Mississippi County continues to decrease over the next ten years, the volume of waste is expected decrease as well. The volume of waste generated within the county is generally consistent with waste generation rates for the state.

3. *To the best of your ability, examine and discuss the trends regarding the sources of solid waste generated using the following categories:*

   a. *Residential*

   b. *Commercial*

   c. *Industrial*

Mississippi County is currently experiencing a downward trend in population and the waste generated by residential customers is expected to follow, also, based upon the population trend, no major expansion of commercial businesses is anticipated.

However, there has been resurgence in the area in industrial development with the steel mills and a proposed coal burning power plant to be located in the County. Additionally, the entire northeast portion of the state may be influenced by a potential auto assembly plant rumored to be sited there in the near future.

4. *To the best of your ability, provide the current disposal capacity of the facilities within the District's service area.*

According to the 2004, Annual Engineering Inspection Report prepared by Northstar Engineering Consultants, Inc, the available air space for the Mississippi County Class I Landfill is approximately 1.3 million cubic yards, which is anticipated to provide capacity for approximately 12 years. The Class 4 landfill has no available air space according to the report. A recent survey of the Class 4 facility shows this not to be true and the projected life is currently being investigated.

5. *To the best of your ability, examine and discuss the trends regarding the types of solid waste generated using the following categories:*

   a. *Yard waste*

   b. *Construction/Demolition waste*

   c. *Tires*

   d. *Recyclables*

   e. *White goods*

   f. *Municipal solid waste*

The District does not track waste quantities in the categories described in a, b, c, d, e or f above. Therefore it is not possible to estimate trends in these categories.

6. Has the waste stream increased or decreased over the last five years. Provide an explanation.

Waste quantities received at the Mississippi County Landfill have remained approximately constant over the past five years. There was a small peak in disposal in 2001, with a small dip in 2003. However, the 2004 disposal numbers show the amount increasing slightly.

7. Project the waste stream for the next five years. Support your projections.

Per capita Class 1 and Class 4 waste generation (based on census data for the county in the and reported volumes disposed) was calculated at approximately 7.0 lb/capita per day in 2003, increasing to about 8.3 lb/capita per day in 2004. Based on a per capita waste generation rate of 7.6 lb/capita per day, (the average of these two years), the projected approximate volumes of Class 1 and Class 4 wastes that will be generated over the next five years will be:

2006: Projected pop. 48,985 x 7.6 lb/day x 365 days = ~135,900,000/2000 = ~67,900 tons
2007: Projected pop. 48,486 x 7.6 lb/day x 365 days = ~134,500,000/2000 = ~67,220 tons
2008: Projected pop. 47,987 x 7.6 lb/day x 365 days = ~133,100,000/2000 = ~66,500 tons
2009: Projected pop. 47,488 x 7.6 lb/day x 365 days = ~131,700,000/2000 = ~65,800 tons
2010: Projected pop. 46,989 x 7.6 lb/day x 365 days = ~130,300,000/2000 = ~65,100 tons

E. Flow

A.C.A. §8-6-716. Regional needs assessment.(a)….(2) The assessment shall include, at the minimum, the following:

An evaluation and balancing of the environmental, economic, and other relevant factors which would be implicated by acceptance of solid waste from beyond the boundaries of the district.

1. Evaluate the environmental, economic, and any other factors that are affected by the acceptance of solid waste from beyond the boundaries of the District and the transfer of solid waste outside of the District.

The MCRSWMD does not have any written policies regarding waste flow and there currently is not any mechanism in place to monitor waste flow in or out of the District. However, there currently is sufficient permitted disposal capacity for Class 1 and Class 4 wastes generated within the District at the Mississippi County Landfill. If the District requires additional disposal capacity, then the county will permit the necessary capacity to meet the needs of the District.

Section 2.105 Current Services

A.C.A. §8-6-704. Boards - Powers and duties. "(a) The regional solid waste management boards shall have the following powers and duties:

(1) To collect data, study, and initially evaluate the solid waste management needs of all localities within their District, as provided in § 8-6-716, and to publish their findings as a regional needs assessment;

(2) To evaluate on a continuous basis the solid waste needs of their District, and thereby update the regional needs assessments at least biennially;

(3) To formulate recommendations to all local governments within their District on solid waste management issues, and to formulate plans for providing adequate solid waste management…"

A.C.A. §8-6-710. Solid waste management responsibility. (a)(1) Each regional solid waste management board shall be the governmental entity primarily responsible for providing a solid waste management system for the district.

A. Collection Services

1. *Describe the role the District plays in the development and implementation of collection services.*

The District periodically conducts Needs Assessments that includes an evaluation of collection services to ensure that all households are receiving affordable and convenient coverage.

2. *List all counties and/or municipalities in the District that have door-to-door/curbside collection service.*

Table 1 lists the municipalities within the District, the type of collection service, the funding mechanism, and the population served. There are no municipalities within the District that do not have access to some type of collection service. Some of the smaller towns use drop-off facilities for the population that fall outside the curbside collection area. Waste from these drop-off locations is transported to the Mississippi County Landfill.

3. *Include the funding mechanism that provides the service (county tax, water bill, etc.) to the extent information is available or to the best of your ability. See answer to question 2.*

4. *What types of services do the counties or municipalities rely on for collection services? See answer to question 2.*

5. *Whose responsibility is it to arrange for collection in each county?*

6. *Is participation mandatory or voluntary? See answer to question 2.*

7. *What is the percentage of the District's residents that do not participate in a collection service?*

It is unknown at this time what percentage of the District's residents do not participate in a collection service.

8. *List all counties and/or municipalities within the District that do not have access to some type of collection service or access to inadequate collection service. Include populations.*

There are no municipalities within the District that do not have access to some type of collection service. Some of the smaller towns use drop-off facilities for the population that fall outside the curbside collection area.

9. *Is there a system that works well within the District? Explain.*

Mandatory fees that are included on a sewer or water bill or a sales tax are the most effective means of ensuring consistent collection in municipalities and incorporated towns. A predictable revenue source that is achieved with a consistent customer base allows haulers (contracted or municipal) to commit resources for personnel and equipment. Mandatory participation with a predictable waste volume may also allow municipalities to negotiate contracts with haulers for a reduced rate for residents, compared to the rates for voluntary participation.

10. Describe progress and setbacks in collection service efforts within the District.

No major setbacks have occurred in collection service recently. The District does face the challenge of collection in extremely rural areas.

11. *Provide a description of solid waste collection needs within the District.*

The vast majority of households and businesses within the District are being served with some type of collection service. Some improvement in services is needed in rural areas and a few municipalities.

B. Disposal Services

A.C.A. §8-6-704. Boards - Powers and duties. "(a) The regional solid waste management boards shall have the following powers and duties:

(4) To issue or deny certificates of need to any applicant for a solid waste disposal facility permit within their District with the exception of permits for landfills when a private industry bears the expense of operating and maintaining the landfill solely for the disposal of waste generated by the industry or wastes of a similar kind or character…"

1. Describe the role the District plays in the development and implementation of disposal services.

The District periodically conducts Needs Assessments that includes an evaluation of disposal facilities. The District ensures that regulations and policies are in place that maintain adequate disposal capacity for the District.

2. *Does the District own and/or operate and/or partner with others on any disposal facilities?*

The MCRSWMD currently partners with Mississippi County, which owns and operates a permitted Class 1 Landfill and a permitted Class 4 landfill. Both are located near Luxora, Arkansas. All waste from the District is disposed of at these facilities.

The District ensures that a safe, efficient, economical and lawful method of disposal of solid waste is available to the citizens of Mississippi County.

Based on the May 2004 Annual Engineer's Report (submitted to ADEQ in May 2005 by Northstar Engineering Consultants, Inc.), the Mississippi County's Class 1 landfill has approximately 12.2 years of capacity remaining (based on 2004 disposal rates) in the currently active area. The Class 4 landfill is nearing capacity but plan are underway to rectify this situation.

The MCRSWMD has adopted policies that facilitate accurate documentation of all municipal solid waste generated within the District and its proper disposal and procedures for obtaining a Certificate of Need for solid waste facilities within the District.

3. What part does the District play in the disposal of wastes for its citizens?

To date the District has concentrated upon educating the citizens of the District by making the most of public appearances of the District officers. The County Judge has utilized his appearances at schools, civic clubs, and chambers of commerce to provide information about solid waste disposal and recycling. The District attempts to provide information on recycling, used oil disposal, waste tire disposal, yard waste disposal during public events such as the county fair.

4. *What counties or municipalities own and/or operate and/or partner with others on any disposal facilities?*

There are no partnerships in the District.

5. *What part do the counties or municipalities play in the disposal of wastes for its citizens?*

As noted in question #2 above, the District currently partners with Mississippi County, which owns and operates a permitted Class 1 Landfill and a permitted Class 4 landfill. All waste from the District is disposed of at these facilities. None of the municipalities has a role in disposal of wastes.

6. *Describe progress and setbacks in disposal service efforts within the District.*

No major setbacks have been encountered in waste disposal efforts in the recent past.

7. *Provide an evaluation of solid waste disposal needs within the District.*

The waste disposal needs of the District are currently being met.

C. Recycling Services

A.C.A. §8-6-704. Boards - Powers and duties. "(a) The regional solid waste management boards shall have the following powers and duties: …. (7) To establish programs to encourage recycling…"

A.C.A. §8-6-720. Opportunity to recycle - Recyclable materials collection (a)(1) Beginning July 1, 1992, each regional solid waste management board shall ensure that its residents have an opportunity to recycle. "Opportunity to recycle" means availability of curbside pickup or collection centers for recyclable materials at sites that are convenient for persons to use…et al."

1. *Describe the role the District plays in the development and implementation of recycling services.*

The MSRSWMD approach to recycling is to manage and coordinate the efforts of the local governments in the District. The MCRSWMD Staff is faced with limited supply of funding combined with the fact that recycling is not one of the highest priorities of the general population. Therefore no District wide collection service has been established.

2. *Does the District (or county or municipality within) have a recycling coordinator?*

District has no recycling coordinator.

3. *Provide a description of each recycling project within the District.*

4. *Include recycling and marketing efforts on the part of local programs, their principal end-users, and successes and failures.*

The District educates its Citizens about recycling and its merits. However, there is a very low interest in pursuing collection programs.

5. *A.C.A. §8-6-720 requires that at least one Recyclable Materials Collection Center be established in each county of a District unless the Arkansas Pollution Control and Ecology Commission grants the Board an exemption. List the facilities and their locations.*

The District operates a drop-off facility for recyclable materials at the Mississippi County Landfill, including yard waste and used oil and filters. The used oil is picked up by the City of Gosnell who uses the oil as a fuel for its shop furnace. The oil filters are burned in the boilers at Nucor Steel Mill. The City of Osceola also has a drop off recycling facility. Most of the recyclable materials from the numerous industrial facilities are handled by private entities.

6. *List composting facilities in the District.*

There are two permitted yard waste composting facilities in the MCRSWMD. The Cities of Blytheville and Osceola operate facilities located in each city. Both facilities accept waste from across the entire District if dropped off. Both cities provide curbside collection within the city limits, and the Osceola facility also has a curbside leaf vacuum that collects loose leaves from its residents.

7. *Provide the volume and types of materials that were recycled in the District during the previous year.*

Information concerning the total volume and types of recyclable materials for the District is unavailable at this time.

8. *Do counties and/or municipalities in the District cooperate on recycling and marketing efforts?*

Not currently, but the District staff is encouraging and working towards cooperation between entities.

9. *Describe progress and setbacks in recycling and marketing efforts by the District.*

Commercial recycling in the District could be improved. The District continues efforts to conduct workshops designed specifically for commercial waste producers. The District offers assistance to any grocery store or restaurant owner that requests assistance. Most organic waste from these sources is used as hog feed by local farmers.

10. *Provide an evaluation of recycling needs within the District.*

The recycling needs of the District are not fully known at this time. Funding for these types of programs and assessments is not currently available so no evaluation can be made.

11. *Complete and append the annual reporting forms specific to the District's Recycling Program. (Recycling Program reporting forms shall be supplied separately from the Recycling Branch of the Arkansas Department of Environmental Quality, Solid Waste Management Division).*

A system has not yet been implemented within the District to track recycled materials.

D. Waste Reduction Services

A.C.A. §8-6-711. District solid waste management system. (a) A district is authorized to own, acquire, construct, reconstruct, extend, equip, improve, operate, maintain, sell, lease, contract concerning, or otherwise deal in facilities of any nature necessary or desirable for the control, collection, removal, reduction, disposal, treatment, or other handling of solid waste.

1. Describe the role the District plays in the development and implementation of waste reduction services.

Waste reduction within the District, in terms of solid waste that has been diverted from landfills, has been achieved primarily through the recycling programs described in Section 2.105(C).

2. List the waste reduction programs within the District to the extent that information is available or to the best of your ability.

Waste reduction programs are discussed in detail in Section 2.105(C).

3. Provide an evaluation of waste reduction needs within the District.

The MCRSWMD has not adopted any policies pertaining to waste reduction. Waste reduction has been implemented through the individual efforts of the industrial and commercial facilities within the District.

It is unknown at this time, the extent to which District taxpayers or small businesses take advantage of the Recycling Equipment Tax Credit Program or the loans available through the Small Business Assistance Program for waste elimination or reduction equipment.

E. Special Materials Services

A.C.A. §8-6-710. Solid waste management responsibility. (a)(1) Each regional solid waste management board shall be the governmental entity primarily responsible for providing a solid waste management system for the district.

1. Illegal Disposal Services

a. Illegal Dumping Services

i. Describe the role the District plays in the development and implementation of Illegal dump control services.

The MCRSWMD identifies illegal dumps, as part of the on-going needs assessment process. This is accomplished through a variety of methods, including referral, site inspections, and coordination with the inspection and enforcement activities of the ADEQ.

The District does not employ a licensed Illegal Dumps Control Officer.

ii. *Provide a list or map of approximate locations of the illegal dump sites known to be located within the District.*

An aerial survey was conducted in May of 1999 in an attempt to identify illegal dumps in the county. The location information was forwarded to the county officials including the sheriff's department for tracking and prosecution.

The ADEQ Illegal Dumps Database includes the following complaints for illegal dumps that have been filed in 2004 and 2005. Following inspection by the ADEQ, the following list of complaints were considered valid.

Mississippi County:

- Complaint received in April 2004 against Jeff Long, for an illegal dump located on East 1st Street in Dyess. The inspection report indicated that the offender was illegally hauling and dumping tires on his property. A letter was sent to the offender and the local sheriff visited the site.

- Complaint received in October 2005 against Clyde Blount, for an illegal dump located on Airbase Highway near Gosnell. The inspection report indicated that the offender was illegally dismantling and salvaging mobile homes on his property. In addition, tires were being burned. The site was visited by ADEQ and the offender was instructed to cease the operation. A letter was sent to the offender.

b. Litter Services

i. Describe the role the District plays in the development and implementation of litter control services.

The District does not conduct any coordinated litter programs. Litter control at the MCRSWMD's Class 1 Landfill is conducted in accordance with Arkansas Regulation 22 and the facility's permit.

The District does not have any roadside litter collection program. The Arkansas Highway and Transportation Department contracts with an independent firm that mows the highway right-of-ways. Before mowing, the crews pick up litter and other debris.

The Mississippi County Landfill has an annual County Wide Clean Up day when the landfill accepts solid waste from individuals for free or from commercial entities for half price. All waste must be delivered to the landfill for the incentive to apply. The program is very well received and the annual clean up day is usually a huge success.

ii. *Provide an evaluation of litter needs within the District.*

The current system of litter control within the District is satisfactory.

c. Open Burning Services

*i. Describe the role the Dis*trict plays in the development and implementation of open burning services.

When they occur, open burning issues are referred to the ADEQ's Air Division under Regulation 18, the Arkansas Air Pollution Code.

ii. *Provide an evaluation of open burning needs within the District.*

Open burning is not a pervasive or persistent problem within the District…… except when rice fields are burned.

2. Waste Tire Services

A.C.A. §8-9-405. Waste tire grants. "(a) The Arkansas Department of Environmental Quality shall, by July 1, 1992, establish a program to make waste tire grants to regional solid waste management boards which desire, individually or collectively, to: (1) Construct or operate, or contract for the construction or operation of, a waste tire processing facility and equipment purchases therefore…et al."

a. Waste Tire Program Services

i. Describe the role the District plays in the development and implementation of waste tire management program services.

Arkansas Regulation 14 bans the landfilling of whole tires and describes associated procedures for the management of waste tires. Waste tires may be monofilled, but landfilled only if the tires are split, or shredded. Mississippi County is a member of the East Arkansas Waste Tire District (EAWTD). The Tire District was formed in 1993 to provide centralized waste tire planning, collection, and processing for the entire region. The Tire District operates twelve waste tire collection sites and has a contracted hauler and disposal/processing company (Eaton-Moery Environmental Services, Inc., EMS). One of the twelve collection sites is in Mississippi County.

ii. Describe the District's current waste tire collection, transportation and disposal program.

The Mississippi County operates one Waste Tire Collection Center at the Mississippi County Landfill facility. The Collection Center is open the same hours as the landfill facilities. Waste tires are collected in 40 yard roll-off containers that is also used for hauling. All hauling and disposal/processing is done by EMS and is collected by the East Arkansas Waste Tire District.

iii. Does the program adequately serve the needs of the District? If not, what corrective measures are being undertaken?

This waste tire program adequately serves the needs of the District.

iv. List the waste tire collection centers for each county. Include the physical location. List the days and times of operation.

See the answer to question ii above for information.

v. List the waste tire processing facility(ies) used by the District. Include the physical location.

District tires are currently taken to the EMS 3T Landfill/Processing Facility near Levesque (Cross County) for processing or landfilling. The current contract for waste tire services with EMS expires on June 30, 2006. In recent months, the EAWTD has formulated plans to process District tires using grinders that will be located at the Nucor-Yamato (Nucor) facility in Blytheville (to be operated by Nucor) and at the EMS facility at Levesque (to be operated by EMS). The two grinders are intended to allow the processing of waste tires for a test burn at Nucor and other recycling opportunities that may occur. Under an agreement that was reached on October 31, 2005, the EAWTD will retain ownership of the two grinders and the authorized use and maintenance of the grinders will be described in signed agreements with Nucor and EMS. ADEQ's approval and processing of the grant application allowing the EAWTD to place a grinder at EMS is contingent upon EMS submitting an updated Annual Engineering Inspection Report with topographic survey for the Class 3T monofill in Levesque

to the ADEQ. In addition, EMS must address all compliance issues and deficiencies at the monofill.

b. Waste Tire Counting Services

i. Describe the role the District plays in maintaining waste tire counts.

The District does not provide for waste tire counting within the District.

ii. Describe the manifesting, accounting, or tire count process.

The EAWTD provides the manifest forms and only original copies are accepted at the collection centers. Forms are available and can be picked up at any of the collection centers, or by calling the EAWTD office. Copies of completed manifests are provided to the waste tire generator, waste tire hauler, waste tire collection site, and the EAWTD. The collection site retains copies of manifests for a period of one year. The EAWTD retains copies of manifests for a period of 3 years.

iii. List the number and types of tires generated during the previous calendar year.

The EAWTD maintains records of the number and sizes of tires that are received for entire Waste Tire District, and Mississippi County. During the calendar year ending December 31, 2005, the following tires were received by the Waste Tire District from Mississippi County:

- 25,619 passenger tires,
- 3,599 truck tires, and
- 265 specialty tires.

iv. List the number and types of tires processed during the previous calendar year.

A total of 29,483 tires were collected for disposal or processing during 2005 from Mississippi County.

v. List the number and types of tires disposed during the previous calendar year.

A total of 28,817 tires were collected from Mississippi County in 2004, including:

- 25,572 passenger tires,
- 3,043 truck tires, and
- 316 specialty tires.

vi. List the number and types of tires stored at the end of the previous calendar year.

No tires were stored. Bins are emptied as soon as they are filled.

vii. Describe the type of disposition and give the percent of each type of disposition (i.e., 80% TDF; 20% waste tire chip aggregate).

EMS transports tires from the collection facilities to the EMS facility located near Leveaque, Arkansas for processing or disposal. In 2004, EMS reported that 80% of tires are monofilled and 20% were processed for tire chips for drainage projects. Future plans are to process a large percentage of District tires for TDF.

viii *Describe progress and setbacks in waste tire count efforts within the District*

An accurate system of waste tire counts is currently in place within the Waste Tire District.

viiii *Provide an evaluation of waste tire count needs within the District*

The current system of waste tire counts in the District is satisfactory.

c. Waste Tire Site Control Services

i. Describe the role the District plays in the development and implementation of waste tire site control services.

The District does not provide for waste tire site control within the District and completes the annual Waste Tire Site Report that is required under Arkansas Regulation 14.

ii. Describe what the District is doing to control dumping of waste tires.

The District monitors the movement of tires within the District and, as a result, it is estimated that the number of waste tires not properly processed or disposed within the District is very low. If enforcement is needed, the EAWTD will work with the ADEQ and local law enforcement officers to resolve the issue.

When necessary, the EAWTD handles small abatement sites by utilizing local county/state inmate labor to load waste tires into 40-cubic yard roll-off containers. The EAWTD attempts to prosecute persons responsible for waste tire sites, if identified. Access to the sites is restricted after abatement.

iii. For each prior calendar year, provide a list of the number of waste tire sites abated, locations, number and types of tires for each site, and the cost of cleanup of each site. (This information is used for the national report to the Rubber Users Directory.)

APC&EC Regulation No. 14 defines a waste tire site as a site where 1,000 or more used or waste tires are accumulated in the outdoors. No major sites were abated during 2005.

iv. Describe how the District inventories waste tire sites.

Waste tire sites are identified by complaints from citizens or local government. Individual counties take the responsibility to locate and control waste tire sites. When a waste tire site is reported, the District works with the county to identify the source of the tires and to clean up the site.

v. *How many waste tire sites are currently known to exist within the District? List and give approximate locations, rank the sites in order of abatement urgency and specify potential risks to human health and the environment. Provide photos where available. Provide estimates of the number and types of tires at each site. Provide estimates of the cost to clean up each site. Identify for each site whether or not the District will need to apply for abatement funds to clean up the site. Provide a timeline to eliminate known waste tire sites.*

There are no known waste tire sites in the EAWTD at this time.

3. Batteries Services

Describe the role the District plays in the development and implementation of lead-acid battery services.

The MCRSWMD currently does not have a program to manage the collection of automotive and small sized batteries. Automotive batteries are collected at retail automotive stores when they are replaced and those facilities arrange for their collection.

4. Waste Oil Services

Describe the role the District plays in the implementation of waste oil services.

The District collects used motor oil at the Mississippi County Landfill site near Luxora. The collection facility was constructed with grant monies from ADEQ and accepts both used oil and oil filters. The oil filters are drained and crushed and sent to Nucor Steel in Blytheville to be burned in the facility's boilers at the site. Commercial recyclers pick up the used oil. The town of Gosnell collects some used oil from the District to burn in the heaters in the town shop. Retail automotive businesses collect waste oil for pickup by commercial recyclers as well.

5. Medical Waste Services

The District does not play any role in the development or implementation of medical waste services. Hospitals, medical, or other facilities that generate medical waste may transport the waste to an offsite permitted treatment or disposal facility, or may transfer custody of untreated waste to a transporter that is permitted by the Arkansas Department of Health.

6. Hazardous Waste Services

The District does not play any role in the development or implementation of hazardous waste services. Questions that arise are referred to the Hazardous Waste Division of the ADEQ.

7. Household Hazardous Waste Services

i. *Describe the role the District plays in the development and implementation of household hazardous chemical waste services.*

Household hazardous chemical wastes are accepted at the MCRSWMD Class 1 Landfill for disposal. The District does not currently conduct household hazardous chemical waste collections or provide educational or technical services associated with household hazardous chemical waste.

ii. Describe briefly how household chemicals are currently managed in the District and/or county.

Household hazardous chemical wastes are accepted at the District's Class 1 Landfill for disposal.

iii. List household hazardous waste collection activities or locations within the District.

The District does not currently conduct household hazardous chemical waste collections.

iv. Describe progress and setbacks in household hazardous waste collection service efforts within the District.

The District has considered using a rotating household hazardous waste collection site within the District. However, there is not much interest in developing such a program.

v. *Provide a description of educational and technical services provided by the District as they relate to household hazardous chemical waste services.*

The District does not provide educational or technical services associated with household hazardous chemical waste.

8. Waste Electronics Services

i. Describe the role the District plays in the development and implementation of waste electronics services.

At this time, the District does not play a role in the development and implementation of waste electronics services.

ii. Does the District have a waste electronics collection and/or recycling center? If yes, please describe.

At this time, the District has not developed or implemented waste electronics collection services. Currently, waste electronics are disposed with municipal waste at the District's Class 1 Landfill. Through EPA's Plug-In program, manufacturers and retailers are working together to raise public awareness on electronics reuse and recycling and to create more take back opportunities for consumers and businesses. Plug-In partners include: Best Buy; Cingular Wireless; Dell; eBay's Rethink Initiative; Hewlett Packard; Intel; JVC; Lexmark; NEC; Panasonic; Philips; Sharp; Sony; Samsung; and Staples.

iii. Describe progress and setbacks waste electronics service efforts within the District.

At this time, the District has not attempted to develop or implement waste electronics services.

iv. Provide a description of educational and technical services provided by the District as they relate to waste electronics services.

The District currently does not provide educational and technical services relating to waste electronics services.

v. Provide an evaluation of waste electronic needs within the District.

Electronic waste (e-waste) is the fastest growing component of the daily waste stream and will increasingly consume more and more valuable airspace in the Class 1 Landfill. Hazardous waste generated in households is not regulated; however, due to the hazardous elements found in electronics, the ADEQ currently discourages landfill disposal and a state ban on disposing e-waste in landfills will become effective January 1, 2008. There is a need within the District for the development of either a public or private waste electronics disposal program and an associated public education program. The District may be able to establish a program through a grant from ADEQ as allowed by The Electronic Solid Waste Management Act. This act established the Computer and Electronic Recycling Fund, that is administered by the ADEQ, and allows grants to be awarded for the development of programs to properly dispose of electronic equipment, either by de-manufacturing or recycling.

9. Construction and Demolition Waste Services

i. Describe the role the District plays in the development and implementation of construction and demolition waste services.

The District's role in construction and demolition (C & D) waste services includes in general, efforts to provide solid waste planning to local governments and in the licensing of haulers.

ii. Provide an evaluation of construction and demolition waste needs within the District.

The current system of management of C & D waste in the District is satisfactory

10. Other Solid Waste Services

i. Describe the role the District plays in the development and implementation of services for any other solid wastes not previously covered in this document.

The District provides technical assistance for other solid wastes, when requested. The District staff and Board members receive continuing education to keep the District updated on new programs and new equipment associated with solid waste issues.

ii. Provide an evaluation of other solid waste needs within the District.

At this time, there are no other solid waste needs for the District.

F. Education and Public Awareness Services

Describe the role the District plays in the development and implementation of education and public awareness services.

1. District's Role

To date the District has concentrated upon educating the citizens of the District by making the most of public appearances of the District officers. The County Judge has utilized his appearances at schools, civic clubs, and chambers of commerce to provide information about solid waste disposal and recycling. The District attempts to provide information on recycling, used oil disposal, waste tire disposal, yard waste disposal during public events such as the county fair.

2. Active Programs Utilized

List active programs utilized by the District, such as Keep Arkansas Beautiful, Arkansas Recycling Coalition, and the Arkansas Department of Environmental Quality's Solid Waste Management Programs.

The MCRSWMD participates in the ADEQ's Environmental Education Programs, Recycling Grants Program, Illegal Dump Eradication and Corrective Action Program, and Waste Tire Program.

3. District Programs

List in-house and other solid waste educational programs, litter programs, illegal dumping prevention programs, and any others not mentioned here. Describe the nature of each effort and level of participation. Include the following:

- *Name of organization/sponsor*
- *County(ies) or city(ies)*
- *Addresses and phone numbers*
- *Target participants*
- *Description of activities*

The District is not aware of any in-house or other solid waste educational programs, litter programs, illegal dumping prevention programs, or others that have not been previously mentioned.

4. Communication Strategies

How is the District communicating with their citizens?

Prior to the adoption, amendment, or repeal of any rule or regulation, the MCRSWMD Board publishes a notice at least 20 days in advance in the Arkansas Democrat Gazette.

5. Public Meetings/Communication

i. Are there regularly scheduled forums where the public can voice environmental concerns?

The MCRSWMD Board, at its discretion, may direct that oral testimony or arguments be received by the Board prior to the adoption, amendment, or repeal of any rule or regulation. There are no regularly scheduled forums.

ii. Are Board meetings regularly scheduled?

The MCRSWMD Board meets as necessary in the public office of one of the Board members.

iii. Are the meetings publicized or promoted for the public's knowledge? How - radio, television, newspaper, other?

No announcements of Board meetings are published.

iv. Are there any opportunities for the public to receive training or current environmental information via a public forum or meeting?

The District promotes and hosts educational workshops and satellite forums, some of which are open to the general public.

v. Are there any public announcements, training, or education involving litter control awareness and illegal dump elimination?

The District's educational outreach program includes topics such as illegal dumping.

6. Internet Access

Does the Regional Solid Waste Management Board have a web page?

The MCRSWMD does not have a website.

7. Publications

Are there any newsletters or environmental publications for the public?

The District does not currently publish any newsletters or other publications.

G. Other Services

1. Transportation

a. What role does the District currently play in solid waste transportation issues and needs?

The District Board adopts regulations concerning transport of waste within the District. The District implements the Waste Hauler Licensing Program for the District.

b. Provide an evaluation of transportation needs within the District.

No evaluation of transportation needs is available at this time..

PART TWO - CHAPTER TWO — ACTION PLAN

A.C.A. §8-6-710. Solid waste management responsibility. (a)(1) Each regional solid waste management board shall be the governmental entity primarily responsible for providing a solid waste management system for the district.

Section 2.201 Mission Statement

The mission of the MCRSWMD is to represent and serve the citizens of Mississippi County in ensuring that safe, efficient, economical, and lawful solid waste disposal and management is available throughout the County.

Section 2.202 Executive Summary

A. Strategies

The MCRSWMD implements regulations and policies that ensure that solid waste within the District is collected and properly disposed. In addition, it performs needs assessments to evaluate the existing solid waste management system and to determine if there are any problems or opportunities for improvement. Other functions of the District include:

- Identification and assistance in the closure of illegal dump sites;
- Licensing of solid waste haulers;
- Technical assistance for handling and disposal of special materials, as needed; and
- Coordination of environmental education programs.

Updates to this plan will be performed annually to re-evaluate the projected demand for and life of existing solid waste facilities and to identify problems as they may occur.

B. Outlook

The MCRSWMD hopes to continue to help the County and communities within the County in implementing safe, efficient, economical and lawful means of disposal of solid waste.

Solid waste management efforts during the next decade should be directed at diverting as much waste as possible from the landfill(s) through waste reduction and recycling. Public and community participation through education and incentives will play an integral part in these efforts.

Section 2.203 Goals

A. District's High Level Goals

With the ADEQ's Land Objectives and the Solid Waste Management Division's High-Level Goals in mind, the following high-level goals for the CCRSWMD have been established for the next decade:

High Level Goal A: By 2015, all solid waste management facilities will be within 80% compliance of operation performance standards.

High Level Goal B: Increase recycled, reclaimed, or reused waste by 20% by 2015 (compared to 2004 statistics).

High Level Goal C: Increase the amount of properly disposed solid waste by 25% by 2015. (compared to 2004 statistics).

B. District's Plan's Goal Areas

1. Collection

All Mississippi County residents have access to waste collection services that are provided by either public and private haulers. Curbside collection in the rural portion of the District is done on a voluntary basis with residents directly contracting with private haulers. The participation rate of the rural community for curbside collection is unknown. The following is the collection system goal for the District:

Goal: The District will perform an assessment to determine if there is a need to improve the participation rate for rural collection. The assessment will be completed by the end of 2008.

2. Disposal

The existing Mississippi County landfill provides adequate disposal capacity for the County. There are no current plans to increase the permitted capacity for solid waste disposal in the County.

Currently, there is no household hazardous waste (HHW) or waste electronics (E-waste) collection facility within the District. Diversion of these types of wastes would reduce the amount of waste being disposed and increase the amount of recycling in the District as outlined in High Level Goals B and C above. The following is the disposal goal for the District:

Goal: Evaluate the feasibility of establishing an E-waste collection facility in the District by the end of 2008.

3. Recycling

One of the District's High Level Goals is to increase recycled, reclaimed, or reused waste by 20% by 2013. Currently, Mississippi County has a drop-off location for yard waste, used oil and filters, and waste tires at the County's landfill facility. Yard waste is also collected in Blytheville and Osceola. Interest in development of additional collection facilities or curbside collection of recyclables within the District has been very low in the past. However, in order to meet the High Level Goal on recycling, the District will survey communities in the District to determine if there is any interest in developing additional collection programs. The District's recycling goal is:

Goal: Survey the communities within the District to determine the interest in development of additional recycling collection programs. The survey will be completed by the end of 2008.

4. Waste Reduction

The District currently does not have any programs for educating the citizens and industries about waste reduction practices. When possible, the District will advise the public and industries about loans available through the Small Business Assistance Program for waste elimination or reduction equipment.

Goal: Develop method for educating citizens and industries of the county about waste reduction by the end of 2009.

5. Special Materials

a. Illegal Disposal

Because illegal disposal (illegal dumping, litter and open burning) is typically a minimal problem for the District, there are no plans for the development or modifications to the existing programs that deal with illegal disposal in the County.

b. Waste Tires

The existing waste tire collection program in the District is satisfactory. Therefore, there are no plans for the development or modifications to the existing program.

c. Batteries

There currently is no system for collection and disposal of batteries in the District other than collection at automobile retail facilities. There are no plans for the development or modifications to the existing program.

d. Household Chemical Waste

The District currently does not have a program for the collection of household chemical waste (or HHW) nor does it anticipate development of a program in the near future.

e. Waste Electronics

The District currently does not have a program for the collection of waste electronics. However, the District may be able to establish a program through a grant from ADEQ as allowed by The Electronic Solid Waste Management Act. This act established the Computer and Electronic Recycling Fund, that is administered by the ADEQ, and allows grants to be awarded for the development of programs to properly dispose of electronic equipment, either by de-manufacturing or recycling.

Goal: Evaluate the feasibility of establishing an electronic waste collection facility in the District by the end of 2007. If the evaluation indicates the need for such a facility, apply for grant to establish the program in 2008.

f. Construction and Demolition Waste

The District currently does not have a construction and demolition (C & D) waste reduction program. This waste is typically disposed in the Mississippi County Class 4 landfill. The District does not have any plans for the development of a C and D waste production program.

6. Education and Public Awareness

The District currently provides the citizens and industries in Mississippi County with adequate information about the District's programs through public appearances. There are no plans for modifying the current system.

7. Other Goals

There are no other goals that the MCRSWMD has for improving solid waste management within the District.

Section 2.204 Goal Areas - Objectives

A.C.A. §8-6-710. Solid waste management responsibility. a)(1) Each regional solid waste management board shall be the governmental entity primarily responsible for providing a solid waste management system for the district.

A. Collection

Problems

The participation rate in curbside collection in the rural parts of the District is not known.

Solutions

Perform an assessment of the rural collection system to determine the participation rate and determine if improvements are necessary.

B. Disposal

Problems

Household hazardous wastes and E-waste are disposed in the Mississippi County Class 1 landfill and there isn't a program for separate collection of these waste streams.

Solutions

Evaluate the feasibility of establishing an E-waste collection facility in the District.

C. Recycling

Problems

Recycling participation and volume of materials recycled need to be increased.

Solutions

1. Survey the communities within the District to determine the interest in development of additional recycling collection programs.

2. Investigate the feasibility of recycling polypipe that is used for agricultural irrigation systems.

D. Waste Reduction

Problems

Knowledge of waste reduction techniques and programs is minimal.

Solutions

Educate public on waste reduction techniques and opportunities.

E. Special Materials

Problems

The District currently does not have a E-waste collection program and this waste is being disposed in the County Class 1 landfill.

Solutions

Evaluate the feasibility of establishing a E-waste collection facility in the District.

F. Education and Public Awareness

No problems identified.

G. Other Goals

No problems identified.

Section 2.205 Administrative

A. Plan Implementation

Upon approval of this Plan by the ADEQ, the MCRSWMD Board will review the goals and preliminary implementation timetable and develop a list of priorities for the District. A final implementation timetable will be developed and appended in the Plan. Any changes to the goals and timetable will be submitted to the ADEQ.

B. Implementation Timetable

A preliminary implementation timetable is provided Appendix D.

C. Funding and Budget

As stated previously, the District is currently adequately staffed and there are no plans for hiring additional staff in the near future.

Section 2.206 Legislative Studies

The District typically notifies the local representative of the Arkansas legislature if there are any issues that it feels need to be addressed. At this time, there are not any specific issues that it wishes to see addressed by the Arkansas Legislature.

Section 2.207 Appendices

The following appendices are included with this plan:

- Appendix A – Administrative Procedures
- Appendix B – By-Laws
- Appendix C – Regulations and Ordinances
- Appendix D – Tables, Charts, Graphs and Maps
- Appendix E – Other Information

APPENDIX A

Administrative Procedures

“MCRSWMD does not have a format set of Administrative Procedures”

APPENDIX B

By-Laws

“MCRSWMD does not have a format set of by-laws”

APPENDIX C

Municipality Solid Waste Ordinance

ORDINANCE NO. 1393

AN ORDINANCE PROHIBITING THE KEEPING, STORING AND/OR MAINTAINING OF INOPERABLE MOTOR VEHICLES AND OTHER UNSIGHTLY AND UNSANITARY ITEMS UPON PRIVATE PROPERTY AND REQUIRING PREMISES TO BE KEPT FREE FROM WEEDS, RANK GRASS, GARBAGE, RUBBISH AND OTHER UNSIGHTLY AND UNSANITARY ARTICLES WITHIN THE CORPORATE LIMITS, PROVIDING FOR DISPOSAL OF SAME; REQUIRING PROPERTY OWNERS TO ELIMINATE, FILL UP OR REMOVE STAGNANT POOLS OF WATER OR ANY OTHER UNSANITARY THING, PLACE OR CONDITION; PROVIDING A PROCEDURE TO BE FOLLOWED BY THE CITY IN SUCH CASES TO PERFECT A LIEN UPON SAID PROPERTY; FIXING A PENALTY THEREFOR; DECLARING AN EMERGENCY; AND FOR OTHER PURPOSES.

WHEREAS, in many areas of the City of Blytheville, inoperable vehicles, tires, appliances, paper, glass, building materials, building rubbish, weeds, grass, garbage, and other unsightly and unsanitary things have been permitted to remain upon private property for long periods of time, and

WHEREAS, all of the aforementioned items, and other items, constitute an attractive nuisance for children, provide harborage for rats, animals, and mosquitoes, constituting a menace to the public's health, safety and welfare; and

WHEREAS, the storage of these aforementioned items, and other items upon private property, and the failure to eliminate all or any of the aforementioned items, is unsightly, obnoxious, detrimental to the neighborhood and results in depreciation of property value.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BLYTHEVILLE, ARKANSAS:

Section one. That from and after the passage and approval of this Ordinance it shall be unlawful for the owner(s) or occupant, agent or anyone having supervision or control of a residential building, structure or property to fail to comply with the following:

(a) The storage of an inoperable and/or abandoned vehicle shall not exceed thirty (30) days. In this paragraph "inoperable and/or abandoned vehicle" means any motor vehicle or part thereof that is in a state of disrepair and incapable of being moved under its own power or does not have a current safety inspection and license plate.

(b) Grass, weeds, or any other plant that is not cultivated, may not grow to a greater height than ten (10) inches on an average on an individual lot, tract, parcel, or to grow in rank profusion upon the premises.

(c) Rubbish, brush, trash, dead trees, building materials or any other objectionable, unsightly or unsanitary matter of whatever nature may not accumulate or be present upon any lot, track or parcel of land. If building materials are stored on the premises, all such materials must be stored at least eighteen (18) inches off the ground.

(d) Grass, weeds or any plant that is not cultivated, may not grow in rank profusion, or otherwise, in, along, upon or across the abutting sidewalk or parkway, to a height of more than ten (10) inches on the average.

(e) The open storage of iceboxes, refrigerators, or any other appliances or furniture shall not exceed a period of thirty (30) days, and during storage period, all doors, latches and locks are to be removed or made inoperative in a manner to ensure the safety of all citizens.

(f) No stream or drainageway may be used for the purpose of throwing or placing of stumps, brush, litter, rubbish, or any other liquid or solid material within or along the banks of any such stream or natural drainageway, unless required permits have been obtained.

(g) The accumulation of stagnant pools of water are not allowed, nor is it allowable for any form of vessel to accumulate water in which mosquitos or other insects may breed.

(h) The property, including all adjacent rights-of-way and alleys, may not be used for illegal dumping of any solid or liquid, household, commercial, industrial, construction or demolition waste, including but not limited to: garbage, trash, furniture, tin cans, bottles, rubbish, refuse, lumber, whether dumped, thrown, burned , spilled, or abandoned.

(i) No trees, shrubs, bushes or any other plant may impede the flow of pedestrian traffic on any sidewalk and/or public right-of-way, or in any other manner causing an unauthorized obstruction or the public enjoyment of a sidewalk and/or public right-of-way.

Section two. After having been given seven (7) days notice in writing by the Office of Inspection and Code Enforcement, any property owner(s), occupant agent or anyone having supervision or control of said property, who fails, refuses or neglects to perform the duties required by said notice in connection with his or their property as specified herein,

(a) shall be guilty of a misdemeanor and upon conviction therefor, shall be punishable by a fine of not less than One hundred dollars ($100.00), nor more than Five hundred dollars ($500.00); each day such violation occurs or shall continue shall be considered a separate offense, or

(b) the Chief of Police of the City of Blytheville, Arkansas, acting in cooperation with the Office of Inspection and Code Enforcement of the City of Blytheville, Arkansas, is hereby authorized to enter upon the property and correct said situation, by removing, or having removed from said premises the inoperable vehicles, tires, iceboxes, refrigerators, appliances, glass, building materials, building rubbish and/or other unsightly condition, and the cost thereof shall be charged to the owner(s) of the property and the City of Blytheville will enforce a lien against said property.

Section three. Citations to appear in Blytheville Municipal Court may be issued by any police officer attached to the City of Blytheville Police Department, Department of Inspection and Code Enforcement officials and or any other official as designated by the City Council of the City of Blytheville.

Section four. In case the owner(s) of any lot or other real property is unknown, or his whereabouts is not known or is a nonresident of this State, then a copy of the written notice herein above referred to shall be posted upon the premises and before any action to enforce such lien shall be had, the City Clerk shall make an Affidavit setting out the facts as to unknown address or wherabouts of nonresidents, and thereupon service of publication as now provided for

by law against nonresident defendant be had and an attorney ad litem shall be appointed to notify the defendant by registered letter addressed to his last known place of residence if same can be found.

Section five. The lien herein provided for, which shall not exceed an annual amount equal to two cents per square foot of the lot or tract of land involved, may be enforced and collected in either one of the following manners:

(a) The lien may be enforced at any time within eighteen (18) months after work has been done, by action of the Chancery Court; or

(b) The amount of the lien herein provided may be determined at a hearing before the City Council held after thirty (30) days written notice by certified mail to the owner(s) be known, and if the name and whereabouts of the owner(s) be known, and if the name of the owner(s) cannot be determined, then after publication of notice of such hearing in a newspaper having a bona fide circulation in Mississippi County for one (1) insertion per week for four (4) consecutive weeks; and the amount so determined at said hearing, plus ten percent (10%) penalty for collection, shall be certified by the City Council to the Mississippi County Tax Collector, and by him placed on the tax books as delinquent taxes, and collected accordingly, and the amount, less three percent (3%) thereof, when so collected shall be paid to the City of Blytheville, Arkansas.

Section six. Said City shall have the option of enforcing this Ordinance by any one or more methods as provided for herein, and the use of one remedy prescribed herein by said City shall in no way prevent or prohibit the City of Blytheville from proceeding under different or other remedies as herein provided.

Section seven. All Ordinances or parts of Ordinances in conflict herewith are hereby repealed.

Section eight. The City Council has determined that inoperable vehicles, appliances and other unsightly and/or unsanitary items, are being accumulated upon private property throughout the corporate limits of the City and such practice constitutes a health hazard as well as being

unsightly and obnoxious and this situation should be corrected at once. Therefore, an emergency is hereby declared to exist and this Ordinance being necessary for the immediate preservation of the public health, peace and safety, shall be in full force and effect immediately upon its passage and aproval.

ADOPTED: June 18, 1996

MAYOR

ATTEST:

CITY CLERK

ORDINANCE NO. 1486

AN ORDINANCE REPEALING ORDINANCE 1373 AND ANY OTHER CONFLICTING ORDINANCE SETTING UP SANITATION FEES AND REGULATIONS FOR THE CITY OF BLYTHEVILLE, ARKANSAS

WHEREAS, the Sanitation Committee of the City Council has recommended certain changes in the sanitation fees and regulations.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BLYTHEVILLE, ARKANSAS, THAT:

SECTION I. COLLECTION FEES:

RESIDENTIAL

The fees to be charged and paid for the collection and disposal of residential garbage and trash will be on a monthly basis, with payment in advance, as follows:

		Monthly Fee
Each residence or apartment occupied By one family, separate metered, separate pickup	Garbage	$ 8.79
	Trash	$ 3.31
	Total	$12.10
Apartment buildings or trailer parks Not served by individual water meters, Each apartment or trailer	Garbage	$ 8.79
	Trash	$ 3.31
	Total	$12.10

COMMERCIAL/INDUSTRIAL

The fees to be charged and paid for the collection and disposal of commercial garbage will be on a quarterly basis, payable in advance as follows:

Dumpsters

(a) No. One Fire Zone

The fee for shared use of one dumpster (city provided, 4-cubic yard) in the No. One Fire Zone will be a minimum charge of sixty-eight Dollars ($68.00) per quarter.

(b) Uncompacted Per Cubic Yard

All fees will be figured annually, billed quarterly and may be prorated as necessary. Dumpster fees will be computed by the number of scheduled pickups (customer will be charged for the full capacity of the dumpster each time it is emptied) based on Five Dollars ($5.00) per uncompacted cubic yard. When changes are made in the pickup schedule, charges will be adjusted accordingly.

(c) Compacted Per Cubic Yard

The fee for compacted waste will be thirteen Dollars ($13.00) per cubic yard.

Cans-Monthly Fees

For each commercial business using cans with a maximum capacity of 32 gallons, the minimum fee for one to four cans will be fifty-seven Dollars ($57.00) quarterly.

Any business requiring more than four cans will be required to acquire an approved dumpster, with either two, four, or six cubic yard capacity.

Home Occupations

All home occupations including existing beauty shops located at a residence will be billed as commercial customers, with minimum quarterly charge of fifty-seven Dollars ($57.00), payable in advance.

SECTION II. COLLECTION TIME, PREPARATION:

Garbage will be collected from business and commercial dumpsters as deemed necessary. Trash and garbage will be collected from private residences and apartments by the Sanitation Department once a week. Each residence and apartment complex (unless otherwise noted) shall be required to own and use a city approved 90-gallon solid waste receptacle for their garbage. It is made the duty of the occupants of

every residence in the City to have garbage on their premises properly placed in the approved receptacle and available for collection by the Sanitation Department on the scheduled day of pickup. All receptacles shall be placed within 5 feet of the curbside. Receptacles should not be at curbside before 6:00 PM the day preceeding the collection day and must be removed from the curb no later than 6:00 pm the day of collection.

If a resident is disabled or for any reason unable to meet curbside requirements the resident must notify the Sanitation Department and be able to produce reasonable evidence of a disablity.

No garbage, waste or refuse will be collected unless same is in plastic bags in a covered container with a maximum capacity of 90 gallons or a dumpster with a maximum capacity of six cubic yards, both of which must be approved by the City of Blytheville. No explosives, ashes, cinders, animal or human waste, grass or hedge clippings or non compactible items will be placed in solid waste receptacals or dumpsters. All collections will be made from the street side curb of dwellings in residential districts. All garbage will be drained of liquids before being placed in garbage containers.

SECTION III. RECYCLING, REQUIREMENTS FOR:

All yard waste, such as leaves, grass, hedge clippings, and tree limbs, will be prepared for collection separate from garbage and other household trash. Yard waste will be bagged for collection, separate from all other trash.

Residences and commercial businesses will comply with all publicized recycling programs, whether pilot or city-wide, including proper preparation and placement of required recyclable items.

SECTION IV. COLLECTION OF OTHER THAN GARBAGE:

As a part of its duty, the Sanitation Department may collect and haul large or excessive accumulation of weeds, limbs, vegetation, refuse, debris or other like substance from any alley or premises of any person or business and said responsible party will be required to pay for such services the sum of Fifty Dollars ($50.00) per load. Public Works will notify the City Collector the amount and person to be billed. The City Collector will receive payment for such services.

It is distinctly provided that this ordinance does not in any way obligate city employees or city trucks to clean or pickup refuse or

debris resulting from construction or any other contracted work. However, this refuse may be removed by the Sanitation Department at a charge of Fifty dollars ($50.00) per load.

SECTION V. PAYMENT – PERSON RESPONSIBLE:

The fees chargeable against dwelling houses and other establishments are levied on and collected from the person as named on the monthly statement from the Blytheville Waterworks.

The owners of any trailer park or apartment complex in the City of Blytheville, where trailers or apartments are occupied as residences and are not served by an individual water meter, will be responsible for the payment of sanitation fees for each unit. The owner will provide an appropriate size dumpster and will pay the City Collector Commercial dumpster rate. Any other dwelling in the City of Blytheville not serviced by the water meter will be billed through the City Collector's office.

SECTION VI. COLLECTION – MONTHLY RESIDENTIAL FEES:

The Blytheville Waterworks is hereby directed to collect the garbage fee in the City of Blytheville for each residential customer. Said fees will be listed as separate items on every residential water bill at the rate of Eight and 79/100 Dollars ($8.79) per month for garbage, and Three and 31/100 Dollars ($3.31) per month for trash, for a total of Twelve and 10/100 Dollars ($12.10) per month for sanitation service per residential unit.

Any person not paying this fee on or before the 17th of the month the bill is received, will be assessed a penalty of ten percent (10%) of the amount billed.

The Blytheville Waterworks will issue a check to the City Collector of the City of Blytheville not later than the 10th of each month for all moneys collected the previous month.

Commercial, industrial, and home occupation fees will be billed and collected by the City Collector.

All residences must purchase a 90 gallon solid waste receptacle from the City of Blytheville. The fee for the receptacle will be thirty-eight and 04/100 Dollars ($38.04). Residence owners must pay Blytheville Waterworks for the receptacles. Two options are available.

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(1) A monthly payment (on the water bill) of Three and 17/100 Dollars ($3.17) for a period of Twelve (12) months.
(2) A single payment (on the water bill) of thirty-eight and 04/100 Dollars ($38.04).

SECTION VII. EXCLUSIVE SERVICE, RESTRICTION:

All garbage, waste, trash, and refuse in the City of Blytheville will be collected by the Sanitation Department of the City of Blytheville, Arkansas, exclusively.

SECTION VIII. Any ordinance or parts of ordinances in conflict herewith are hereby repealed.

SECTION IX. The provisions of this ordinance are hereby declared to be severable. If any provision will be held to be invalid or to be inapplicable to any persons or circumstances, such invalidity or inapplicability will not affect the remainder of the provisions of this ordinance.

SECTION X. Any person, firm, corporation or association of persons violating any provision of this ordinance, or failing to pay any of the fees herein provided, will be deemed guilty of a misdemeanor, and upon conviction in the Municipal Court of the City of Blytheville, will be fined any sum not exceeding Two Hundred and Fifty Dollars ($250.00).

SECTION XI. The rates in the ordinance shall be reviewed regularly by the Blytheville City Council Finance Committee and shall be subject to change as need be, by the approval of the full City Council.

SECTION XII. The effective date of this ordinance will be January 1, 2000.

Passed this 16 day of Nov., 1999.

APPROVED: _____
BARRETT E. HARRISON, MAYOR

ATTEST: Grace Haynie
GRACE HAYNIE, CITY CLERK

Sanitation
12-19-00

ORDINANCE NO. 150

AN ORDINANCE AMENDING ORDINANCE NO. 1486 SETTING SANITATION FEES

WHEREAS, the Sanitation Committee of the City Council has recommended certain changes in the sanitation fees.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BLYTHEVILLE, ARKANSAS:

SECTION I That Section I. entitled COLLECTION FEES- RESIDENTIAL be amended to read as the following:

SECTION I. COLLECTION FEES:

RESIDENTIAL

The fees to be charged and paid for the collection and disposal of residential garbage and trash will be on a monthly basis, with payment in advance as follows:

	Monthly Fee	
Each residence or apartment occupied by one family, separate metered, separate pickup		
	Garbage	$ 8.79
	Trash	$ 6.46
	Total	$15.25
Apartment buildings or trailer parks not served by individual water meters, each apartment or trailer		
	Garbage	$ 8.79
	Trash	$ 6.46
	Total	$15.25

SECTION II That any ordinance or parts of ordinance in conflict herewith are hereby repealed.

SECTION III. This ordinance being necessary to continue to provide services to the City, an emergency is hereby declared and this ordinance shall take effect January 1, 2001 and be in full force from and after that date

Passed this 19 day of December, 2000

APPROVED

Barrett E. Harrison, Mayor

ATTEST:

Grace Haynie

Grace Haynie, City Clerk

ORDINANCE NO. 1996-3

AN ORDINANCE PROVIDING FOR THE COLLECTION AND DISPOSAL OF GARBAGE AND WASTE IN THE TOWN OF ETOWAH, ARKANSAS, ESTABLISHING THE PROCEDURE AND FEES FOR SUCH SERVICES REPEAL AND FOR OTHER PURPOSES: AND DECLARING AN EMERGENCY.

BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF ETOWAH, ARKANSAS:

Section 1. The Town of Etowah will enter into an agreement for waste collection and disposal with a "private waste disposal contractor to collect and remove all garbage from residential and commericial establishments. No other person, firm or corporation shall be permitted to collect and remove garbage and waste commercially for a fee, unless approved by the Town Council.

Section 2. Garbage and waste within the meaning of this ordinance shall mean and be construed to include all rejected food waste, every refuse accumulation of animal, fruit or vegetable matter, grass, tin cans, glass, leaves, rubbish from homes, business or industry and other substances which are detrimental to the beauty and sanitation of the Town of Etowah. The terms garbage and waste shall not in any way include or apply to large appliances, car bodies, dead animals, and wood, limbs, brush and other such items which cannot be sealed in bags as hereinafter provided.

Section 3. The contractor shall collect garbage and waste from all residences at least once a week.

Section 4. For the sanitation services rendered under this ordinance by the Town of Etowah, all persons, residents or occupants of residences, businesses and industries shall pay a sanitation fee as follows:

(1) The rate shall be Eight Dollars and Seventy Five Cents or Eight Dollars for Senior Citizens 62 and older per month for each single residence or each single dwelling unit and for each single family unit of a multiple unit dwelling.

For all commerical businesses the sanitation fee, types of containers and the number of weekly pickups will be nogotiated with the Contractor.

(2) The sanitation charge shall be billed monthly at the 5th of each month.

(3) The monthly charge shall be imposed upon the owners or occupants of all improved property, within the city limits, without regard to whether services if the System are actually being utilized. Vacant unoccupied property not actually using the services of the System shall not be subject to a charge, but the burden of showing vacanacy and non-use shall rest on the owner of the property.

(4) The fees provided for herein shall be paid to the Town of Etowah within ten days from the billing date. In the event a sanitation charge is not paid by the 15th of the month from the billing date, a penalty of ten percent of each delinquent fee is hereby levied upon the person delinquent in payment, and said penalty shall become a part of and be collected with the regular fees heretofore levied. In the event that any fee levied herein remains unpaid for a period in excess of thirty (30) days, the Town of Etowah is hereby authorized to insititute a civil suit for the recovery of said fee with any penalties that may be attached thereto, together with all court costs.

Section 5. All residential customers shall place the garbage and waste in the supplied carts. as specified by the Town. No other containers will be allowed.

No person, firm or corporation shall place or throw waste paper trash or other garbage on any street, sidewalk alley or public place within the Town of Etowah, Arkansas, at any time day or night. Provided, that all such garbage must be placed in proper receptacles as herein provided, and kept on the premises at some point accessible to the garbage contractor. Provided, further, that the exact location of all receptacles may be under the direction and control of the Mayor or his assistants in charge of garbage.

It shall be unlawful for any person other than the Garbage Contractor , person owning the cart, to deposit any garbage, article or substance in the receptacle or any portion of its contents, except as herein provided. No unathorized person or persons shall distrub, remove or collect any garbage or waste situated in any cart and located within the town limits of the Town of Etowah.

It is hereby made the duty of the occupant of every dwelling and business in the Town of Etowah to have the garbage and waste carts on their respect curbs. all carts must be out by 7:00 A.M. day of trash pickup. After pickup the carts must be pushed back off of curb by no later than 36 hours after trash pickup.

Section 6. This ordinance shall not in any way obligate the Town its agents or employees, to clean or pickup refuse or debris resulting from demolition of construction on property where buildings are being removed, constructed or repaired, nor wood or limbs resulting from removal of trees on private property.

Section 7. It shall be unlawful for any person, firm or corporation to dump or throw garbage, trash, refuse, leaves or waste on any vacant lot, street, ditch or alley in the Town of Etowah. It shall be unlawful for any person to place barrells on street right of ways for the purpose of burning papers, trash, and etc.

Section 8. The Town Council shall have the power and the authority to reduce or increase the fees to be charged hereunder for said service by resolution.

Section 9. Any person, firm or corpration violating any provision of this ordinance or failing to pay any of the fees provided herein shall be guilty of a violation, and, upon conviction, shall be fined in the sum not less than Fifty Dollars ($50.00) , nor more than Two Hundred Dollars ($200.00).

Section 10. The various section and parts of this ordinance or to be considered separable, and, therefore, if any section or part is found to be invalid for any reason, it shall not invalidate the remaining provisions hereof.

Section 11. All ordinances and parts of ordinances in conflict herewith are hereby repealed.

Section 12. That it is hereby ascetained and declared that the existing garbage pickup service is inadequate for the needs of the Town of Etowah and the inhabitants thereof, thus endangering the life, health and safety of the inhabitants and their property. It is therefore, declared that an emergency exists, and this Ordinance being necessary for the immediate preservation of the public peace, health and safety, shall take effect and be in force from and after its passage.

PASSED AND ADOPTED THIS 19th day of Nov, 1996.

Charles McColl
Mayor

ATTESTED:
Pamela Weatherly
Town Recorder

ORDINANCE NO. 34

AN ORDINANCE PROVIDING FOR THE COLLECTION AND DISPOSAL OF GARBAGE AND WASTE IN THE TOWN OF MARIE, ARKANSAS ESTABLISHING THE PROCEDURE AND FEES FOR SUCH SERVICES, REPEALING ALL ORDINANCES IN CONFLICT HREWITH, AND FOR OTHER PURPOSES; AND DECLARING AN EMERGENCY.

BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF MARIE, ARKANSAS:

Section 1. The Town of Marie, its agents and employees, shall collect and remove all garbage and waste in the Town of Marie from residential dwellings. No other person, firm or corporation shall be permitted to collect and remove garbage and waste commercially for a fee, unless approved by the Town Council.

Section 2. Garbage and waste within the meaning of this ordinance shall mean and be construed to include all rejected food waste, every refuse accumulation of animal, fruit or vegetable matter, grass, tin cans, glass, leaves, rubbish from homes, business or industry and other substances which are detrimental to the beauty and sanitation of the Town of Marie. The terms garbage and waste shall not in any way include or apply to large appliances, car bodies, dead animals, and wood limbs, brush and other such items which cannot be sealed in bags as hereinafter provided.

Section 3. The Town of Marie shall collect garbage and waste from all residences at least twice weekly. The Town will provide a suitable garbage and waste disposal dump.

Section 4. For the sanitation services rendered under this ordinance by the Town of Marie, all persons, residents or occupants of residences, shall pay a sanitation fee as follows:

(1) The rate shall be Seven Dollars and No Cents ($7.00) per month for each single residence or each single dwelling unit for each single-family unit of multiple unit dwelling.

(2) The sanitation charge shall be billed monthly and added to the monthly water bill.

(3) The monthly charge shall be imposed upon the owners or occupants of all improved property, within the town limits, without regard to whether services of the system are actually being utilized. Vacant unoccupied property not actually using the services of the system shall not be subject to a charge, but the burden of showing vacancy and non-use shall rest on the owner of the property.

(4) The fees provided for herein shall be paid to the Town of Marie within twenty days from the billing date. In the event a sanitation charge herein remains unpaid for a period in excess of thirty (30) days, the Town of Marie Municipal Waterworks Division is hereby authorized and directed to discontinue water service to such delinquent person, and the Town of Marie is hereby authorized to institute a civil suit for the recovery of said fee with any penalties that may be attached thereto, together with all court cost.

Section 5. All residential customers shall place the garbage and waste in sealed plastic bags, or other similar containers, as specified by the Town.

The Town will furnish plastic bags sufficient in number for one bag per pickup.

FILED
OCT 15 2004
BY.....

All broken glass and other sharp object shall be wrapped in paper or material to prevent punching holes in the bags.

All plastic bags placed for collection shall be tied with wire tie closures or their equivalent before being placed at a location for pickup.

It is hereby made the duty of the occupant of every dwelling and business house in the Town to have the garbage and waste on their respective premises placed at a site approved by the Town.

No unauthorized person or persons shall disturb, remove or collect any garbage or waste situated in any container and located within the town limits of the Town of Marie.

Section 6. This ordinance shall not in any way obligate the Town, its agents or employees, to clean or pick up refuse or debris resulting from demolition of construction on property where buildings are being removed, constructed or repaired, not wood or limbs resulting from removal of trees on private property.

Section 7. It shall be unlawful for any person, firm or corporation to dump or throw garbage, trash, refuse, leaves or waste on any vacant lot, street, ditch or alley in the Town of Marie.

Section 8. The Town Council shall have the power and authority to reduce or increase the fees to be charged hereunder for said service by resolution.

Section 9. Any person, firm or corporation violating any provision of this ordinance or failing to pay any of the fees provided herein shall be guilty of a misdemeanor, and, upon conviction, shall be fined in any sum not less than Twenty Five Dollars ($25.00), nor more that One Hundred Dollars ($100.00).

Section 10. The various sections and parts of this ordinance are to be considered separable, and therefore, if any section or part is found to be invalid for any reason, it shall not invalidate the remaining provisions hereof.

Section 11. All ordinances and parts of ordinances in conflict herewith are hereby repealed.

Section 12. That it is hereby ascertained and declared that the existing garbage pickup service is inadequate for the needs of the Town and the inhabitants thereof, thus endangering the life, health and safety of the inhabitants and their property. It is, therefore, declared that an emergency exists, and this ordinance being necessary for the immediate preservation of the public peace, health and safety, shall take effect and be in force from and after its passage.

PASSED: July 30, 2003.

APPROVED:

Mayor

ATTEST:

Recorder

ORDINANCE NO. 153

AN ORDINANCE PROVIDING FOR THE COLLECTION AND DISPOSAL OF GARBAGE AND WASTE IN THE CITY OF WILSON, ARKANSAS ESTABLISHING THE PROCEDURE AND FEES FOR SUCH SERVICES, REPEALING ALL ORDINANCES IN CONFLICT HEREWITH, AND FOR OTHER PURPOSES; AND DECLARING AN EMERGENCY.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF WILSON, ARKANSAS:

Section 1. The City of Wilson, its agents and employees, shall collect and remove all garbage and waste in the City of Wilson from residential dwellings. No other person, firm or corporation shall be permitted to collect and remove garbage and waste commercially for a fee, unless approved by the City Council.

Section 2. Garbage and waste within the meaning of this ordinance shall mean and be construed to include all rejected food waste, every refuse accumulation of animal, fruit or vegetable matter, grass, tin cans, glass, leaves, rubbish from homes, business or industry and other substances which are detrimental to the beauty and sanitation of the City of Wilson. The terms garbage and waste shall not in any way include or apply to large appliances, car bodies, dead animals, wood, grass clippings, leaves, limbs, brush and other such items which cannot be sealed in bags as hereinafter provided. Grass clippings, leaves, limbs and brush will be picked up, at the City's convenience, when placed on the curb in front of the residence. Grass clippings and leaves must be bagged separately in clear bags to be picked up.

Section 3. The City of Wilson shall collect garbage and waste from all residences at least twice weekly. The City will provide a suitable garbage and waste disposal dump.

Section 4. For the sanitation services rendered under this ordinance by the City of Wilson, all persons, residents or occupants of residences, shall pay a sanitation fee as follows:

(1) The rate shall be Ten Dollars and No Cents ($10.00) per month for each single residence or each single dwelling unit for each single-family unit of multiple unit dwelling.

(2) The sanitation charge shall be billed monthly and added to the monthly water bill.

(3) The monthly charge shall be imposed upon the owners or occupants of all improved property, within the city limits, without regard to whether services of the system are actually being utilized. Vacant unoccupied property not actually using the services of the system shall not be subject to a charge, but the burden of showing vacancy and non-use shall rest on the owner of the property.

(4) The fees provided for herein shall be paid to the City of Wilson within twenty days from the billing date. In the event a sanitation charge herein remains unpaid for a period in excess of thirty (30) days, the City of Wilson Municipal Waterworks Division is hereby authorized and directed to discontinue water service to such delinquent person, and the City of Wilson is hereby authorized to institute a civil suit for the recovery of said fee with any penalties that may be attached thereto, together with all court cost.

Section 5. All residential customers shall place the garbage and waste in sealed plastic bags, or other similar containers, as specified by the City.

The City will furnish plastic bags sufficient in number for one bag per pickup.

All broken glass and other sharp object shall be wrapped in paper or material to prevent punching holes in the bags.

All plastic bags placed for collection shall be tied with wire tie closures or their equivalent before being placed at a location for pickup.

It is hereby made the duty of the occupant of every dwelling and business house in the City to have the garbage and waste on their respective premises placed at a site approved by the City.

No unauthorized person or persons shall disturb, remove or collect any garbage or waste situated in any container and located within the city limits of the City of Wilson.

Section 6. This ordinance shall not in any way obligate the City, its agents or employees, to clean or pick up refuse or debris resulting from demolition of construction on property where buildings are being removed, constructed or repaired, not wood or limbs resulting from removal of trees on private property.

Section 7. It shall be unlawful for any person, firm or corporation to dump or throw garbage, trash, refuse, leaves or waste on any vacant lot, street, ditch or alley in the City of Wilson.

Section 8. The City Council shall have the power and authority to reduce or increase the fees to be charged hereunder for said service by resolution.

Section 9. Any person, firm or corporation violating any provision of this ordinance or failing to pay any of the fees provided herein shall be guilty of a misdemeanor, and, upon conviction, shall be fined in any sum not less than Twenty Five Dollars ($25.00), nor more that One Hundred Dollars ($100.00).

Section 10. The various sections and parts of this ordinance are to be considered separable, and therefore, if any section or part is found to be invalid for any reason, it shall not invalidate the remaining provisions hereof.

Section 11. All ordinances and parts of ordinances in conflict herewith are hereby repealed.

Section 12. That it is hereby ascertained and declared that the existing garbage pickup service is inadequate for the needs of the City and the inhabitants thereof, thus endangering the life, health and safety of the inhabitants and their property. It is, therefore, declared that an emergency exists, and this ordinance being necessary for the immediate preservation of the public peace, health and safety, shall take effect and be in force from and after its passage.

PASSED: May 18, 2004.

APPROVED:

Mayor

ATTEST:

Recorder

APPENDIX D

Tables, Charts, Graphs, and Maps

Tables

Table 1. Waste Services Collection By Municipality.

Municipality	2000 Population	Operator and Home Office	Revenue Source	Monthly Cost per Household (HH)	Households Served by Collection	Frequency of Collection	Disposal Facility
Bassett	168	Knights Disposal Gosnell, AR 72319	Mandatory Fee	$3.00	60	1/month	Mississippi County Landfill
Birdsong *	40						Mississippi County Landfill
Blytheville *	18,272	City of Blytheville Sanitation	Mandatory Fee	$15.25	6779	1/week	Mississippi County Landfill
Burdette	129	Knights Disposal Gosnell, AR 72319	Mandatory Fee	$4.50	75	1/week	Mississippi County Landfill
Dell	251	Knights Disposal Gosnell, AR 72319	Mandatory Fee	$13.28	100	1/week	Mississippi County Landfill
Dyess	515	Delta Disposal Jonesboro, AR 72404	Mandatory Fee	$12.72	180	1/week	Mississippi County Landfill
Etowah	366	Delta Disposal Jonesboro, AR 72404	Mandatory Fee	$11.50	150	1/week	Mississippi County Landfill
Gosnell	3,968	City of Gosnell Collection	Mandatory Fee	$10.25	1300	2/week	Mississippi County Landfill
Joiner	540						Mississippi County Landfill
Keiser *	808						Mississippi County Landfill
Leachville	1,981						Mississippi County Landfill
Luxora *	1,317						Mississippi County Landfill
Manila	3,055	Knights Disposal Gosnell, AR 72319	Mandatory Fee	$8.00	1300	1/week	Mississippi County Landfill
Marie	108	City of Wilson Collection Truck	Mandatory Fee in Water Bill	$7.00	40	2/week	Mississippi County Landfill
Osceola	8,875	City of Osceola Sanitation Department	Mandatory Fee	$8.00	3400	2/week	Mississippi County Landfill
Victoria *	59						Mississippi County Landfill
Wilson	939	City of Wilson Collection Truck	Mandatory Fee in Water Bill	$10.00	430	2/week	Mississippi County Landfill

Table 2. Preliminary implementation timetable for Mississippi County RSWMD.

Goal	Proposed Year of Completion									
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
High Level Goals: • 80% compliance of operation performance standards • Increase recycling by 20% • Increase amount of properly disposed waste by 25%										• • •
Collection: • Rural collection system assessment • Develop goals for improving rural collection system (if necessary)			• •							
Disposal: • Evaluate the feasibility of establishing E-waste collection facility • Apply for grant to develop facility (if necessary)			•	• 						
Recycling: • Survey communities to determine if interested in developing recycling collection program • Develop goals for establishing programs (if neccessary)		•	•							
Waste Reduction: • Add information about waste reduction techniques to existing District information				•						
Construction and Demolition Waste: • Evaluate the feasibility of developing a C & D waste program				•						

*Municipality did not respond to written survey or telephone interview requests.

Figures

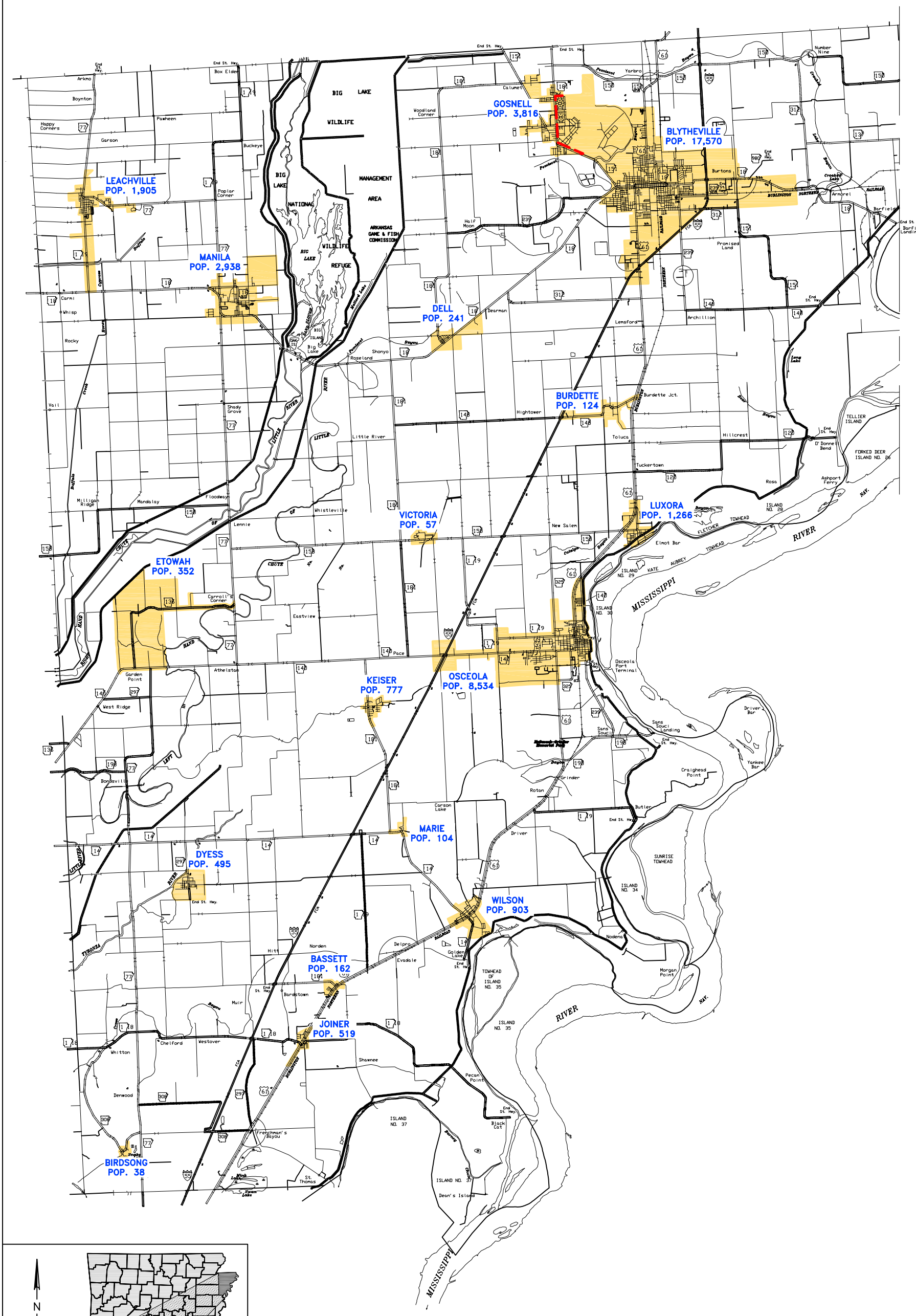

Figure 1

MCRSWMD

CITIES & JURISDICTIONS

By: JT

Date: Feb 13, 2006

File: FG01.DWG

Project No. 4355-031

ftn Associates Ltd.

GOSNELL
POP. 3,816

BLYTHEVILLE
POP. 17,570

LEACHVILLE
POP. 1,905

MANILA
POP. 2,938

DELL
POP. 241

BURDETTE
POP. 124

VICTORIA
POP. 57

LUXORA
POP. 1,266

ETOWAH
POP. 352

KEISER
POP. 777

OSCEOLA
POP. 8,534

MARIE
POP. 104

DYESS
POP. 495

WILSON
POP. 903

BASSETT
POP. 162

JOINER
POP. 519

BIRDSONG
POP. 38

BIG LAKE WILDLIFE MANAGEMENT AREA

BIG LAKE NATIONAL WILDLIFE REFUGE

ARKANSAS GAME & FISH COMMISSION

MISSISSIPPI RIVER

LEGEND

- CLASS 1 LANDFILL
- CLASS 4 LANDFILL
- MSW TRANSFER STATION
- WASTE TIRE HANDLING FACILITY
- COMPOST YARD WASTE FACILITY

Mississippi County

Figure 2

PERMITTED SOLID WASTE FACILITIES

ftn Associates Ltd.

By: JT
Date: Feb 13, 2006
File: FG02.DWG
Project No. 4355-031

Material Analysis Report

Material Analysis Report by Material

Inbound and outbound materials for the period 01/01/2005 - 12/31/2005
Summary Report for sites 00 - 99
Accounts 0 - 999999 Customer Types - z Materials - ZZZZZZZZZZ Material Types - z

Date	Material	Type	Customer Type	Tickets	Count	Est. vol.	Act. Vol.	Est. Wt.	Actual Wt.	Charge
	LATE CHG		Total	30	0	0	0	0.00	0.00	450.00
			Average		0	0	0	0.00	0.00	15.00
	ASBESTOS		Total	10	0	117640	0	58.82	58.82	3,216.49
			Average		0	11764	0	5.88	5.88	321.65
	COMMERCIAL		Total	221	0	1537580	0	768.79	768.79	22,680.91
			Average		0	6957	0	3.48	3.48	102.63
	CONCRETE		Total	146	0	3568280	0	1784.14	1784.14	18,469.40
			Average		0	24440	0	12.22	12.22	126.50
	CONST		Total	1096	0	11982020	0	5991.01	5991.01	104,120.97
			Average		0	10933	0	5.47	5.47	95.00
	FOOD WASTE		Total	40	0	759940	0	379.97	379.97	11,209.37
			Average		0	18999	0	9.50	9.50	280.23
	FREE TIRES		Total	310	17146	730900	0	365.45	365.45	0.00
			Average		55	2358	0	1.18	1.18	0.00
	FURN/JUNK		Total	358	0	2676520	0	1338.26	1338.26	22,109.35
			Average		0	7476	0	3.74	3.74	61.76
	HOUSEHOLD		Total	4576	0	53469120	0	26734.56	26734.56	735,412.85
			Average		0	11685	0	5.84	5.84	160.71
	INDUSTRIAL		Total	5036	0	42315840	0	21157.92	21157.92	623,781.88
			Average		0	8403	0	4.20	4.20	123.86
	METAL		Total	53	0	75760	0	37.88	37.88	662.37
			Average		0	1429	0	0.71	0.71	12.50
	NYS/REFRAC		Total	714	0	27152720	0	13576.36	13576.36	238,962.62
			Average		0	38029	0	19.01	19.01	334.68
	OTHER		Total	1388	0	11906140	0	5953.07	5953.07	172,547.17
			Average		0	8578	0	4.29	4.29	124.31
	PALLETS		Total	15	0	45340	0	22.67	22.67	399.47
			Average		0	3023	0	1.51	1.51	26.63

Material Analysis Report by Material

Inbound and outbound materials for the period 01/01/2005 - 12/31/2005
Summary Report for sites 00 - 99
Accounts 0 - 999999 Customer Types - z Materials - ZZZZZZZZZZ Material Types - z

Date	Material	Type	Customer Type	Tickets	Count	Est. vol.	Act. Vol.	Est. Wt.	Actual Wt.	Charge
	PER TIRE		Total	6	469	0	0	0.00	0.00	469.00
			Average		78	0	0	0.00	0.00	78.17
	PLASTICS		Total	26	0	280200	0	140.10	140.10	2,468.58
			Average		0	10777	0	5.39	5.39	94.95
	POLY-PIPE		Total	94	0	410320	0	205.16	205.16	3,615.08
			Average		0	4365	0	2.18	2.18	38.46
	REJECTED		Total	2	0	37640	0	18.82	18.82	0.00
			Average		0	18820	0	9.41	9.41	0.00
	RUBBER		Total	14	0	57740	0	28.87	28.87	508.72
			Average		0	4124	0	2.06	2.06	36.34
	RUBBISH		Total	84	0	1380560	0	690.28	690.28	11,721.00
			Average		0	16435	0	8.22	8.22	139.54
	SAND		Total	238	0	8284980	0	4142.49	4142.49	38,342.51
			Average		0	34811	0	17.41	17.41	161.10
	SHINGLES		Total	592	0	2791540	0	1395.77	1395.77	24,594.61
			Average		0	4715	0	2.36	2.36	41.54
	SLAG		Total	27	0	0	0	501.99	501.99	8,845.14
			Average		0	0	0	18.59	18.59	327.60
	SOILS		Total	2	0	35920	0	17.96	17.96	212.62
			Average		0	17960	0	8.98	8.98	106.31
	SPECIAL		Total	1081	0	42688040	0	21344.02	21344.02	364,525.32
			Average		0	39489	0	19.74	19.74	337.21
	TIRES		Total	15	3661	151540	0	75.77	75.77	1,136.55
			Average		244	10103	0	5.05	5.05	75.77
	TREES/LOGS		Total	1617	0	14157940	0	7078.97	7078.97	116,856.98
			Average		0	8756	0	4.38	4.38	72.27
	WIRE		Total	2	0	3220	0	1.61	1.61	28.37

Material Analysis Report by Material

Inbound and outbound materials for the period 01/01/2005 - 12/31/2005
Summary Report for sites 00 - 99
Accounts 0 - 999999 Customer Types - z Materials - ZZZZZZZZZZ Material Types - z

Date	Material	Type	Customer Type	Tickets	Count	Est. vol.	Act. Vol.	Est. Wt.	Actual Wt.	Charge
			Average		0	1610	0	0.80	0.80	14.19
	ZDOL		Total	62	0	0	0	0.00	0.00	-6,501.78
			Average		0	0	0	0.00	0.00	-104.87
	ZERO LOAD		Total	38	0	0	0	14.41	14.41	0.00
			Average		0	0	0	0.38	0.38	0.00
			Report Total	**17893**	**21276**	**226617440**	**0**	**113825.12**	**113825.12**	**2,520,845.50**
			Report Average		**1**	**12665**	**0**	**6.36**	**6.36**	**140.88**

Expenditure Guideline
FOR THE PERIOD(S) JAN 01, 2005 THROUGH DEC 31, 2005

		ANNUAL CURRENT BUDGET	ENCUMBERED	ACT MTD POSTED AND IN PROCESS	ACT YTD POSTED AND IN PROCESS	REMAINING BALANCE	PCT	
010	COUNTY GENERAL FUND							
380	COUNTY SANITATION							
	PERSONAL SERVICES							
0100	SALARIES	247,229.87	0.00	28,169.24	245,382.57	1,847.30	99	---------
0400	VACATION BUY BACK	0.00	0.00	0.00	0.00	0.00	0	
0500	OVERTIME SALARIES	57,158.82	0.00	7,242.08	60,492.50	3,333.68-	105	----------
0600	SOCIAL SECURITY	23,286.24	0.00	2,689.06	23,099.52	186.72	99	---------
0700	RETIREMENT	35,644.18	0.00	4,440.59	36,317.85	673.67-	101	----------
0900	INSURANCE	75,564.56	0.00	4,187.11	70,865.15	4,699.41	93	---------
TOTAL:	PERSONAL SERVICES	438,883.67	0.00	46,728.08	436,157.59	2,726.08	99	---------
	SUPPLIES							
1610	PRINTING/SUPPLIES	650.00	0.00	160.15	953.16	303.16-	146	----------!!!!
1700	GENERAL OFFICE SUPPLIES	2,250.00	0.00	142.03	2,417.07	167.07-	107	----------
2400	CLOTHING/UNIFORMS	3,600.00	0.00	596.51	4,288.31	688.31-	119	----------!
2500	FUEL/OIL/LUBRICANTS	42,000.00	0.00	9,002.98	97,232.40	55,232.40-	231	----------!!!!
2600	TIRES/TUBES	4,546.00	0.00	273.07	6,395.62	1,849.62-	140	----------!!!!
3800	SMALL TOOLS	0.00	0.00	0.00	0.00	0.00	0	
TOTAL:	SUPPLIES	53,046.00	0.00	10,174.74	111,286.56	58,240.56-	209	----------!!!!
	OTHER SERVICES & CHARGES							
4600	SPECIAL LEGAL FEES	135,000.00	0.00	0.00	273,197.22	138,197.22-	202	----------!!!!
4800	PROFESSIONAL SERVICES	30,550.00	0.00	32,538.75	177,861.32	147,311.32-	582	----------!!!!
4840	CONTRACT LABOR	45,000.00	0.00	1,550.00	22,162.00	22,838.00	49	----
4900	TELEPHONE	1,054.00	0.00	99.60	1,378.55	324.55-	130	----------!!!
5000	POSTAGE	1,200.00	0.00	0.00	1,000.00	200.00	83	--------
5100	COMMUNICATIONS/RADIO	0.00	0.00	0.00	0.00	0.00	0	
5200	TRAVEL	0.00	0.00	0.00	0.00	0.00	0	
5900	FLEET INSURANCE	11,550.00	0.00	3,201.50	4,638.50	6,911.50	40	----
6100	UTILITIES	1,500.00	0.00	174.09	4,217.57	2,717.57-	281	----------!!!!
6500	REPAIR/MAINT. BLG/GROUNDS	17,741.00	0.00	1,762.36	17,243.11	497.89	97	---------
6600	REPAIR/MAINT MACH/EQUIPMENT	72,000.00	0.00	44,607.45	117,691.26	45,691.26-	163	----------!!!!
6800	EQUIPMENT LEASE	18,000.00	0.00	0.00	0.00	18,000.00	0	
7200	PUBLIC RECORDS/PHOTO	810.00	0.00	0.00	1,200.00	390.00-	148	----------!!!!
8700	OTHER MISCELLANEOUS	2,097.00	0.00	1,007.74	5,575.39	3,478.39-	265	----------!!!!
TOTAL:	OTHER SERVICES & CHARGES	336,502.00	0.00	84,941.49	626,164.92	289,662.92-	186	----------!!!!
	CAPITAL OUTLAYS							
9100	CAPITAL OUTLAYS	0.00	0.00	0.00	0.00	0.00	0	
9300	EQUIPMENT PURCHASE	0.00	0.00	0.00	61,447.39	61,447.39-	9999	----------!!!!
9320	TIME PURCHASE OF EQUIPMENT	120,000.00	0.00	6,281.91	124,478.28	4,478.28-	103	----------
9510	CELL CONSTRUCTION	248,000.00	0.00	9,897.21	136,572.53	111,427.47	55	-----
TOTAL:	CAPITAL OUTLAYS	368,000.00	0.00	16,179.12	322,498.20	45,501.80	87	--------
TOTAL:	COUNTY SANITATION	1,196,431.67	0.00	158,023.43	1,496,107.27	299,675.60-	125	----------!!
TOTAL:	COUNTY GENERAL FUND	1,196,431.67	0.00	158,023.43	1,496,107.27	299,675.60-	125	----------!!

APPENDIX E

Other Information

No Additional Information is Included.

Appendix B

RICK CRAWFORD
1ST DISTRICT, ARKANSAS

COMMITTEE ON AGRICULTURE
SUBCOMMITTEE CHAIRMAN OF
LIVESTOCK, RURAL DEVELOPMENT,
AND CREDIT

COMMITTEE ON TRANSPORTATION
AND INFRASTRUCTURE

Congress of the United States
House of Representatives
1711 Longworth Building
Washington, DC 20515

WASHINGTON, DC
1711 LONGWORTH HOB
WASHINGTON, DC 20515
PHONE: 202 225-4076
FAX: 202 225-5602

JONESBORO
2400 EAST HIGHLAND
SUITE 300
JONESBORO, AR 72401
PHONE: 870 203-0540
FAX: 870 203-0542

CABOT
112 SOUTH FIRST STREET
CABOT, AR 72033
PHONE: 501-843-3043
FAX: 501-843-4955

MOUNTAIN HOME
1001 HIGHWAY 62 EAST
SUITE 9
MOUNTAIN HOME, AR 72653
PHONE: 870-424-2075
FAX: 870-424-3149

WWW.CRAWFORD.HOUSE.GOV

February 20, 2015

Mr. Kelvin Solco
Regional Administrator
Federal Aviation Administration
Southwest Region
2601 Meacham Boulevard
Fort Worth, TX 76137-4204

Dear Mr. Solco,

I am writing in support of the City of Osceola's efforts to conduct a feasibility study to determine if construction of a new airport is needed, or if the existing one can be modified in a cost-effective manner, to support the increasingly growing traffic. Mayor Dickie Kennemore tells me that he has requested to have the City's allocated entitlement funds for FY2015 be reallocated towards this feasibility study.

As you may be aware, in the Fall of 2014, Big River Steel received final approval and began construction of a 1.3 billion dollar facility just to the southeast of the City of Osceola. This new facility will not only increase airport traffic, but the size of the planes arriving and departing will be larger. I am told this may require an increase in the runway length from its current 3800 ft. to 5000 ft. to provide proper accommodations.

Mr. Solco, I am proud to support this request as it is crucial for the City of Osceola and its ever-growing infrastructure. Under the circumstances, I urge your serious consideration of this request, in accordance with the regulations, and I ask that you notify me of your decision.

Thank you for your attention to this matter.

Sincerely,

Rick Crawford
MEMBER OF CONGRESS

RC/js

THE LAWRENCE GROUP
1 PARK AVENUE
WILSON, ARKANSAS 72395
(870)655-8311 • FAX (870)655-8106

Dear Sirs,

February 25, 2015

The Lawrence Group would like the FAA to consider building a 5,000 ft runway in South Mississippi County as soon as possible to accommodate a significant increase in needed corporate jet transportation to and from the area. The development of Big River Steel Mill, increase in related businesses, and substantial growth within our group of companies here in Wilson creates a need for a more robust and convenient air travel facility. The Osceola airport currently has no jet fuel, a burned out FBO building, and no taxiways for safe aviation operations. This lack of essential facilities as well as an inadequate 3,800 ft runway puts limitations on local corporations' ability to consider this airport sufficient and reliable for day-to-day use.

The Lawrence Group of companies uses two jets and one helicopter currently to shuttle leaders and key personnel around to 5 states – many days seeing multiple trips in and out of the county. We alone would use the new facility for a least 1,650 landings (450 jet & 1,200 helicopter) and would purchase approximately 68,000 gallons of jet fuel per year based on our own travel profile from 2014. Having access to a local modern airport would not only create more convenience for companies currently operating or developing in the area, but might also create some incentive for other companies to invest in the region.

Additionally, the Lawrence Group has made a multi-million dollar decision to base our company headquarters in Wilson, AR. We are investing in capital and infrastructure in a campaign to refurbish the town both for community revitalization as well as business expansion. The state of Arkansas Parks and Tourism is now planning to begin construction of a new four million dollar Hampson Museum in town which has potential to attract notable tourism and travel to our part of state.

We work with many corporations each month that would fly into a South Mississippi county airport if it was available. A partial list of those companies are:

Bayer: http://www.cropscience.bayer.com/
Valent: http://www.valent.com/
Monsanto: http://www.monsanto.com/pages/default.aspx
Dow: http://www.dowagro.com/
Syngenta: http://www.syngenta.com/global/corporate/en/Pages/home.aspx
Dupont: http://www.dupont.com/industries/agriculture.html
Adama: http://www.adama.com/us/en
FMC: http://www.fmccrop.com/grower/
John Deere: http://www.johndeere.com/
Helena: http://www.helenachemical.com/
CPS: http://www.cpsagu.com/
Bank of America
U.S. Air-Conditioning

We strongly urge you to consider the growing needs of the surrounding area in light of these and other developments taking place now.

THE LAWRENCE GROUP
1 PARK AVENUE
WILSON, ARKANSAS 72395
(870)655-8311 • FAX (870)655-8106

South Mississippi County would welcome and utilize a new modern and much-needed aviation facility.

Sincerely,

Gaylon Lawrence
The Lawrence Group
Wilson, AR 72395

ISA, INC

June 1, 2013

Mr. Dickie Kennemore, Mayor
City of Osceola
P.O. Box 443
Osceola, Arkansas 72370

Dear Mayor Kennemore:

It is my understanding that the City of Osceola is pursuing an extension of Runway 01-19 at the Osceola Municipal Airport. International Steels close proximity to Osceola makes it ideal to be able to fly our clients, partners, personnel, supplies, etc, in and out of Osceola Municipal Airport. Most of our flights utilize Phenom 100 and Phenom 300 Jet aircraft that are not currently able to land at Osceola due to the existing runway length. Instead they have to land at either Blytheville Airport, Gosnell AeroPlex, Memphis Airport, etc., and then we have to provide transportation to our facility. If the runway were lengthened, our company estimates an average of fifty operations per year and would benefit greatly from being able to land in Osceola as opposed to an airport more than 30 minutes away.

Your administration has always been supportive of local businesses like International Steel and we appreciate your concerns for our success. Please let us know if we can be of any assistance in moving this project forward. This project would greatly benefit our company and its future operations.

Sincerely,

International Steel Inc.

STEWART SOKOL & GRAY LLC
ATTORNEYS AT LAW

John Spencer Stewart PC *†♦□#
Jan D. Sokol*†□
Thomas A. Larkin*♦□
Angela M. Otto*
Robert B. Coleman*
Lawrence A. Wagner*
James M. Daigle PC*
Tyler J. Storti*□

2300 SW FIRST AVENUE
SUITE 200
PORTLAND, OREGON 97201-5047
(503) 221-0699
FAX (503) 223-5706
www.lawssg.com

Scott D. Schnuck*
Jesse C. Ormond
Kathryn M. Walter

Email: tlarkin@lawssg.com

June 3, 2013

All Members of Oregon Bar
* Washington Bar
† District of Columbia Bar
♦ Alaska Bar
□ Idaho Bar
Wyoming Bar

Hon. Dickie Kennemore
Mayor
City of Osceola
PO box 443
Osceola, AR 72370

Dear Mayor Kennemore:

It was a pleasure speaking with you recently. We are pleased to hear about the economic progress occurring in the Osceola area with the new steel mill.

Our firm represents Larry J. Woodard and his affiliated companies. One of his companies purchased over 2,500 acres just outside of Osceola. Our need for a local airport that has an increased runway length and width in Osceola is very real. We and our clients would like to have this access in order to frequent the Osceola, Arkansas airport facility. The pertinent aircraft information is Tail No. N174B, which is a Dassault Falcon 10 jet aircraft that cannot land at Osceola as currently configured. We have been landing at airports with a runway length of at least 5,000 feet and a width of at least 75 feet, but those airports are not within convenient proximity to Osceola. We would be most comfortable with an airport with a runway length of at least 6,000 feet, and a width of at least 100 feet.

Runway improvements are also necessary for our clients, who are likely to charter jet aircraft to the area. Additionally, we are continuing to look for other investments in the area, and see an increased frequency of visits to Osceola – perhaps several per month. Should the improvements be made to the Osceola airport, we anticipate utilizing that airport with approximately 24 landing or take-off events per year.

There are likely other businesses that could use an increase size of runway at the Osceola Municipal Airport. We do business with JP Morgan Private Bank, and since they have been a major lead in the Plum Point Projects nearby, we assume that they

have people and associates that would prosper with an increased runway size and the ability to utilize the Osceola Municipal Airport. Contractors, vendors, investors and business people/clients for the new mill would be able to directly access the Osceola Municipal Airport and the town of Osceola with the increased size of runway.

The new and exciting investments and industries that are coming to Osceola will undoubtedly require many people and utilization of an improved Osceola Municipal Airport.

Please let us know if there is anything we may do to assist you and the city with its attempts to enlarge and improve the current runway size at the Osceola Municipal Airport.

Very truly yours,

STEWART SOKOL & GRAY LLC

Thomas A. Larkin

TAL:sao

LEXICON, INC.
TELEPHONE (501) 490-4200 FAX (501) 490-4411
P.O. BOX 16390 LITTLE ROCK, ARKANSAS 72231

June 20, 2013

Mr. Dickie Kennemore, Mayor
City of Osceola
P.O. Box 443
Osceola, Arkansas 72370

Dear Mayor Kennemore:

It is my understanding that the City of Osceola is pursuing an extension of Runway 01-19 at the Osceola Municipal Airport. Schueck Steel and Prospect Steel's close proximity to Osceola makes it ideal to be able to fly our clients, partners, personnel and supplies in and out of Osceola Municipal Airport. All of our flights utilize corporate jets that are not currently able to land at Osceola due to the existing runway length. Instead they have to land at either Blytheville Airport or Gosnell AeroPlex and then we have to provide transportation to our facility. If the runway was lengthened to 5000 plus feet our company estimates we would average 60 to 100 flights/year. This would be a great benefit to the efficiency of our operations.

Your administration has always been supportive of local businesses like ours and we appreciate your concerns. Please let us know if we can be of any assistance in moving this project forward.

Sincerely,

Thomas B. Schueck
Chairman/CEO

TS/jsa

cc: Governor Mike Beebe

CACHE VALLEY ELECTRIC CO.

875 NORTH 1000 WEST
P.O. BOX 405
LOGAN, UTAH 84323-0405

PHONE (435) 752-6405
FAX (435) 752-9111

26 June 2013

City of Osceola
Mayor Dickie Kennemore
303 W Hale Avenue
Osceola, AR 72370

Re: Osceola Municipal Airport Runway Expansion

Dear Mayor Kennemore,

Cache Valley Electric is a potential electrical contractor for the proposed Big River Steel project in Osceola. We have built and maintained mills in the southern states for over 20 years and have partnered with John Correnti many times, most recently in Columbus, Mississippi. We are excited about this new venture and are confident that it will bring tremendous growth, revenue and opportunity to your city.

In conjunction with the Big River Steel project, we foresee making at least 20 trips per year to Osceola. However, the current runway at the Osceola Municipal Airport is unable to accommodate our corporate plane. When taking into account Osceola's elevation and average summer temperatures, a 5000 ft. runway is required to safety land our Citation Encore. Without a runway expansion, we will be forced to fly into Memphis or Blytheville, hampering our ability to manage this project.

Expanding the Osceola Airport runway would greatly assist the contractors and partners in the Big River Steel project. We also believe that a runway expansion would benefit the municipal and regional economy. Increased traffic would boost the airport's revenue and could spur additional industrial and commercial development. An expansion would send a strong message to companies interested in locating in Osceola that the city is business-friendly. Airport safety could also be greatly improved. I firmly believe that a runway expansion would be of great value, not only to the Big River Steel project, but to future economic development in the region.

I appreciate your consideration of this request and welcome the opportunity to discuss this matter with you further. Please feel free to contact me with any questions at (435) 752-6405.

Regards,

Jim Laub
President/CEO
Cache Valley Electric

SYSTEMS
CONTRACTING CORPORATION

June 25, 2013

Honorable Mayor Dickey Kennimore

P. O. Box 443

Osceola, Arkansas 72370

Dear Mr. Mayor,

I write this letter to draw your attention to the relatively short length of the runways at the Osceola Airport. In the near future, we plan to visit the area due to the planned construction of the Big River Steel project. During the construction period, we estimate we might land and take-off at the Osceola Airport approximately 30 – 40 times. After the construction, we will most likely visit the site less frequently, but our visits will likely continue well into the future. Unless the runways are extended, it will be necessary for us to land and take-off from an alternate airport, probably Blytheville or West Memphis.

Congratulations to you and the citizens of Osceola and the surrounding area in attracting the Big River Steel project to your area. Hopefully, you will meet with much success in your attempts to solve the problem of the length of the runways at the Osceola Airport.

Best Regards,

C. A. Hays

Charles A. Hays

Chairman & CEO

P.O. Box 11390 • 214 N. Washington, Suite 700 • El Dorado, Arkansas 71730 • (870) 862-1315 • Fax (870) 863-5256

AMERICAN GREETINGS

ONE AMERICAN ROAD
CLEVELAND, OHIO 44144-2398
(216)252-7300 • FAX (216)252-6778

October 16, 2013

Mayor Dickie Kennemore
City Hall
316 West Hale Street
Osceola, Arkansas 72370

Dear Mayor Kennemore,

I am writing in support of your efforts to improve the Osceola Municipal Airport via lengthening of its runway. Being a lifelong resident of Osceola, it has always been my passion to help this community grow. One of the major ingredients for this growth would include an airport that can help attract industries and businesses that in turn attract citizens to Osceola.

In the past, the size of our airport has created situations that were somewhat embarrassing and time restrictive to my staff and myself. On many occasions, we have had to direct corporate visitors to land at nearby municipal airports, arrange for ground transportation, and physically bring our visitors to the plant in Osceola.

For the sake of future opportunities for new and existing industries, I applaud your efforts and pledge my energies to assist you in this effort. Should there be anything I can do to help, please do not hesitate to ask.

Best Regards,

Steve Brothers
Executive Director, Field Service Engineering
American Greetings

LARRY J. WOODARD
21 South Avonlea Circle
The Woodlands, TX 77382

March 3, 2008

The Honorable Dickie Kennemore
Mayor
City of Osceola
P. O. Box 443
Osceola, Arkansas 72370

Dear Mayor Kennemore:

It was great visiting with you, your son and family recently. It sure seemed like a homecoming.

Following up on an issue I raised, one of my companies recently purchased 2,549 acres just outside of Osceola. Our need for a local airport that has an increased runway length and width in Osceola is very real. We and our clients would like to have this access in order to frequent the Osceola, Arkansas airport facility. My company's Tail No. N174B is a Dassault Falcon 10 Jet aircraft that can not land at Osceola as currently configured. We have been landing at airports with a runway length of at least 5,000 feet, and a width of at least 75 feet, but those airports are not within convenient proximity to Osceola. Runway improvements are also necessary for our clients, who are likely to charter jet aircraft to the area. Additionally, I am continuing to look for other investments in the area, and see an increased frequency of my visits to Osceola—perhaps several a month.

There are likely other businesses that could use an increased size of runway at the Osceola Municipal Airport. I do business with JP Morgan Private Bank in New York, and since they are a major lead in the Plum Point Projects nearby, I am sure that they have people and associates that would prosper with an increased runway size and the ability to utilize the Osceola Municipal Airport. Additionally, I understand that a second coal-fired energy plant will be built just outside of Osceola, with a scheduled completion date of approximately 2018. Contractors, vendors, and business people/clients would be able to directly access the Osceola Municipal Airport and the Town of Osceola with the increased size of runway. You might be surprised at the number of people who land in Memphis and drive to Osceola. The new and exciting investments and industries that are coming to Osceola will undoubtedly require many people and utilization of an improved Osceola Municipal Airport.

I look forward to meeting you the next time I am in Osceola. Best regards.

Very truly yours,

STEWART SOKOL & GRAY LLC

Thomas A. Larkin

TAL:mvm

W:\Work\Clients W-Z\Woodard, Larry\Island 34\CORRESPONDENCE\Dickie Kennemore3.wpd

ZACHRY

August 21, 2006

The Honorable Dickie Kennemore
Mayor, City of Osceola
P.O. Box 443
Osceola, Ar 72370

Subject: Plum Point Energy Project
Osceola, AR

On past occasions our company has flown our corporate jet to bring team members to the Plum Point jobsite in Osceola. We have had to land in Blytheville because the Osceola strip is too short, and jet fuel is not available. Should the Osceola airport runway be extended as necessary to land our craft, and jet fuel is available, we would prefer to land there due to its proximity to the site. As you know, this project will last for approximately four years, and we expect to make numerous trips in our corporate jet to the site over that period of time.

Very truly yours,

Robert Kalt

Robert Kalt
Senior Vice President, Manager

To Whom It May Concern:

Viskase Companies Inc. has been located in the Osceola area since 1977 and has had numerous visitors and company executives fly in on corporate jets for business and had to use an alternate airport due to the length of the Osceola Airport runway. In December 2005 Viskase had investment bankers fly in for the day and they had to use the Gosnell airport, this was very inconvenient. There is no doubt that if the Osceola runway were to be lengthened that it would benefit Viskase and the community in the future.

Dennis Brune, Plant Manager
Viskase Companies Inc.
Osceola, AR

ock Chevrolet-Pontiac-Buick-Cadillac Co., Inc.
2900 South Division / P.O. Box 448, Blytheville, AR 72316
Phone: (870) 763-5700 Toll Free: (800) 318-7406
Fax: (870) 762-1294

Dickie Kennemore, Mayor
City of Osceola
P.O. Box 443
Osceola, Ark., 72370

Dear Mayor Kennemore;

As you know, our automobile dealership operates several sales locations in three states, one of which is in Osceola. We, also, own two twin engine aircraft which we use to travel to our different business sites. These aircraft are a King Air and a 340A Cessna. Presently, we cannot land these aircraft in Osceola because the insurance company will not covers us, since the length of the runway is only thirty eight hundred feet. Consequently, we support you in your efforts to expand and lengthen the runway at the Osceola airport. When this is accomplished, we estimate that we would use your airport at least weekly and sometime more, resulting in an as much as seventy five landing a year.

If there is any thing else that we can do to support this effort, please let me know, since this project is very important to Carlock Motors, Inc.

Sincerely,

Grover Carlock

CREATIVE FOODS LLC

February 27, 2006

Mayor Dickie Kennemore
Osceola City Hall
Osceola, AR. 72370

Mayor,

I would like to offer support for your plans to lengthen the runway at the Osceola Airport. In the past I have had to direct visitors using private planes to use the airfields in Blytheville. Being able to land here would be a welcomed convenience for Creative Foods.

I have been following with great interest the growth of Osceola in recent years. As you know we are expanding our product line and increasing the volume of our company. We will be starting this line in March with 40 new employees. The expansion encourages our supplies to make trips to our plant on a regular basis.

Please keep me informed of your progress.

Sincerely,

Mart Massey
President, CEO

DENSO

DENSO MANUFACTURING ARKANSAS, INC.
1487 West Keiser
Suite 2
Osceola, Arkansas 72370

February 3, 2004

Mr. Dickie Kennemore
Mayor
City of Osceola
P.O. Box 443
Osceola, AR 72370

Dear Mayor Kennemore:

It is my understanding that the City of Osceola is considering expansion of the current airstrip. We commend the city for its vision to investigate strategies to improve the transportation infrastructure. As you're aware, DMAR's commitment to customers' delivery schedules makes it imperative that good transportation systems be in place, including air support. Due to the nature of our business, often we must make last minute shipments or dispatch associates to our customer's locations and reduce travel time to and from our Battle Creek plant. In our industry, time is always of the essence.

Since last April, DENSO has dispatched several private airplanes to Osceola to conduct routine business. When we held our groundbreaking ceremony at Osceola, we would have benefited too from being able to land in Osceola as opposed to the Blytheville Aeroplex.

Thank you for the information on the proposed airstrip expansion. We certainly appreciate your efforts on this important issue. Please continue to let us know of the progress that you are making to that end, as we have high interest in utilizing this.

Your truly,

Jerry McGuire
President

Please let me know whether there is anything I may do to assist you and the City with its attempts to enlarge and improve the current runway size at the Osceola Municipal Airport.

Again, it was so nice speaking to you about your Dad, as I bought my first home from him in Lepanto for $500 down and a $60.15 per month payment. This was an excellent first home for my family.

My Best Regards,

Larry

Your Friend, Larry J. Woodard

Appendix C

Appendix D

OSCEOLA MUNICIPAL AIRPORT
PROPERTY ACQUISITION

PROJECT BUDGET

ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	TOTAL COST
1	PROPERTY ACQUISITION - FEE SIMPLE	ACRE	100	$5,500.00	$550,000.00
2	PROPERTY ACQUISITION - EASEMENT	ACRE	15	$1,500.00	$22,500.00
5	GOLF COURSE RELOCATION (2 HOLES)	LUMP SUM	100%	$491,136.36	$491,136.36

TOTAL ESTIMATED PROJECT COST	**$1,063,636.36**
CLOSING COST AND CONTINGENCIES (10%)	**$106,363.64**
TOTAL ESTIMATED PROJECT COST	**$1,170,000.00**

OSCEOLA MUNICIPAL AIRPORT
UTILITY RELOCATION

PROJECT BUDGET

ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	TOTAL COST
1	TRANSMISSION LINE RELOCATION	L.S.	100%	$1,500,000.00	$1,500,000.00
2	SANITARY SEWER FORCE MAIN	L.F.	13,500	$50.00	$675,000.00
3	NATURAL GAS LINE	L.F.	13,409	$30.00	$402,270.00

TOTAL ESTIMATED COST	**$2,577,270.00**
CONTINGENCIES (10%)	**$422,730.00**
TOTAL ESTIMATED PROJECT COST	**$3,000,000.00**

OSCEOLA MUNICIPAL AIRPORT
GRADING AND DRAINAGE CONSTRUCTION

ENGINEER'S OPINION OF PROBABLE COST

ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	ESTIMATED UNIT PRICE	ESTIMATED AMOUNT
1	SITE PREPARATION	L.S.	100%	$286,939.35	$286,939.35
2	TRENCH AND EXCAVATION SAFETY SYSTEMS	L.S.	100%	$1,000.00	$1,000.00
3	EMBANKMENT CONSTRUCTION	C.Y.	175,000	$7.50	$1,312,500.00
4	UNCLASSIFIED EXCAVATION	C.Y.	50,000	$3.50	$175,000.00
5	UNDERCUT AND BACKFILL	C.Y.	25,000	$8.00	$200,000.00
6	TEMPORARY EROSION CONTROL AND STORM WATER POLLUTION PREVENTION PLAN	L.S.	100%	$50,000.00	$50,000.00
7	18" REINFORCED CONCRETE PIPE, CLASS IV	L.F.	200	$55.00	$11,000.00
8	18" RCP FLARED END SECTION	EACH	4	$1,500.00	$6,000.00
9	24" REINFORCED CONCRETE PIPE, CLASS IV	L.F.	171	$65.00	$11,115.00
10	24" RCP FLARED END SECTION	EACH	2	$2,000.00	$4,000.00
11	30" REINFORCED CONCRETE PIPE, CLASS IV	L.F.	190	$75.00	$14,250.00
12	30" RCP FLARED END SECTION	EACH	4	$2,250.00	$9,000.00
13	36" REINFORCED CONCRETE PIPE, CLASS IV	L.F.	800	$85.00	$68,000.00
14	36" RCP FLARED END SECTION	EACH	4	$2,500.00	$10,000.00
15	REINFORCED CONCRETE BOX CULVERT	L.F.	200	$750.00	$150,000.00
16	CLASS B BEDDING	C.Y.	800	$25.00	$20,000.00
17	CONCRETE PILOT CHANNEL	L.F.	1,000	$55.00	$55,000.00
18	RIPRAP WITH FILTER BLANKET	S.Y.	350	$50.00	$17,500.00
19	SEEDING	ACRE	60.0	$1,500.00	$90,000.00

ESTIMATED TOTAL CONSTRUCTION COST	**$2,491,304.35**
ENGINEERING AND CONTINGENCIES (15%)	**$373,695.65**
TOTAL ESTIMATED PROJECT COST	**$2,865,000.00**

GARVER

OSCEOLA MUNICIPAL AIRPORT
RUNWAY PAVING CONSTRUCTION

ENGINEER'S OPINION OF PROBABLE COST

ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	ESTIMATED UNIT PRICE	ESTIMATED AMOUNT
1	SITE PREPARATION	L.S.	100%	$347,836.96	$347,836.96
2	TRENCH AND EXCAVATION SAFETY SYSTEMS	L.S.	100%	$1,000.00	$1,000.00
3	TEMPORARY EROSION CONTROL AND STORM WATER POLLUTION PREVENTION PLAN	L.S.	100%	$20,000.00	$20,000.00
4	EXISTING PAVEMENT DEMOLITION	S.Y.	31,700	$5.00	$158,500.00
5	EARTHWORK	C.Y.	5,000	$10.00	$50,000.00
6	SHOULDER EMBANKMENT CONSTRUCTION	S.Y.	15,000	$7.50	$112,500.00
7	8" SOIL CEMENT BASE COURSE	S.Y.	45,000	$8.50	$382,500.00
8	6" CRUSHED AGGEGATE BASE COURSE	S.Y.	45,000	$12.00	$540,000.00
9	4" BITUMINOUS PAVEMENT	S.Y.	43,500	$25.00	$1,087,500.00
10	RUNWAY AND TAXIWAY MARKINGS	S.F.	17,500	$1.50	$26,250.00
11	SODDING	S.Y.	20,000	$5.00	$100,000.00

ESTIMATED TOTAL CONSTRUCTION COST	**$2,826,086.96**
ENGINEERING AND CONTINGENCIES (15%)	**$423,913.04**
TOTAL ESTIMATED PROJECT COST	**$3,250,000.00**

GARVER

OSCEOLA MUNICIPAL AIRPORT
TAXIWAY AND APRON PAVING CONSTRUCTION

ENGINEER'S OPINION OF PROBABLE COST

ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	ESTIMATED UNIT PRICE	ESTIMATED AMOUNT
1	SITE PREPARATION	L.S.	100%	$335,934.78	$335,934.78
2	TRENCH AND EXCAVATION SAFETY SYSTEMS	L.S.	100%	$1,000.00	$1,000.00
3	TEMPORARY EROSION CONTROL AND STORM WATER POLLUTION PREVENTION PLAN	L.S.	100%	$30,000.00	$30,000.00
4	EXISTING PAVEMENT DEMOLITION	S.Y.	22,000	$5.00	$110,000.00
5	EARTHWORK	C.Y.	10,000	$10.00	$100,000.00
6	SHOULDER EMBANKMENT CONSTRUCTION	S.Y.	12,000	$7.50	$90,000.00
7	8" SOIL CEMENT BASE COURSE	S.Y.	52,000	$8.50	$442,000.00
8	6" CRUSHED AGGEGATE BASE COURSE	S.Y.	52,000	$12.00	$624,000.00
9	4" BITUMINOUS PAVEMENT	S.Y.	50,500	$25.00	$1,262,500.00
10	RUNWAY AND TAXIWAY MARKINGS	S.F.	10,000	$1.50	$15,000.00
11	SODDING	S.Y.	24,000	$5.00	$120,000.00

ESTIMATED TOTAL CONSTRUCTION COST	**$3,130,434.78**
ENGINEERING AND CONTINGENCIES (15%)	**$469,565.22**
TOTAL ESTIMATED PROJECT COST	**$3,600,000.00**

GARVER

OSCEOLA MUNICIPAL AIRPORT
TAXIWAY AND APRON LIGHTING CONSTRUCTION

ENGINEER'S OPINION OF PROBABLE COST

ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	ESTIMATED UNIT PRICE	ESTIMATED AMOUNT
1	SITE PREPARATION	L.S.	100%	$76,450.00	$76,450.00
2	TRENCHING FOR DIRECT-BURIED CABLE AND BARE COUNTERPOISE	L.F.	15,000	$3.00	$45,000.00
3	No. 8 AWG, 5 kV, L-824C CABLE, INSTALLED IN TRENCH, DUCT BANK OR	L.F.	17,500	$2.00	$35,000.00
4	No. 6 AWG SOLID, BARE COUNTERPOISE WIRE, INSTALLED IN TRENCH, ABOVE THE DUCT BANK OR CONDUIT, INCLUDING GROUND RODS AND GROUND CONNECTORS	L.F.	17,500	$2.00	$35,000.00
5	No. 6 AWG STRANDED, INSULATED EQUIPMENT GROUND, INSTALLED IN DUCT BANK OR CONDUIT, INCLUDING GROUND RODS AND GROUND	L.F.	18,000	$2.00	$36,000.00
6	CONCRETE ENCASED, ELECTRICAL DUCT BANK, 4-WAY 4"C	L.F.	100	$40.00	$4,000.00
7	CONCRETE ENCASED, ELECTRICAL DUCT BANK, 2-WAY 4"C	L.F.	200	$35.00	$7,000.00
8	CONCRETE ENCASED, ELECTRICAL DUCT BANK, 2-WAY 2"C	L.F.	90	$25.00	$2,250.00
9	CONCRETE ENCASED, ELECTRICAL DUCT BANK, 1-WAY 2"C	L.F.	100	$20.00	$2,000.00
10	NON-ENCASED, ELECTRICAL DUCT BANK, 4-WAY 4"C	L.F.	150	$20.00	$3,000.00
11	NON-ENCASED, ELECTRICAL DUCT BANK, 1-WAY 2"C	L.F.	80	$10.00	$800.00
12	NON-ENCASED, ELECTRICAL CONDUIT, 1-WAY 2"C	L.F.	17,500	$6.00	$105,000.00
13	CONCRETE ENCASED, ELECTRICAL JUNCTION STRUCTURE, L-867 CLASS 1, SIZE 16" DIAMETER BY 24" DEPTH, INSTALLED	EA.	6	$1,000.00	$6,000.00
14	PRECAST CONCRETE ELECTRICAL HANDHOLE, INTERIOR DIMENSIONS 2'L x 3'W x 3'D, INSTALLED	EA.	6	$5,000.00	$30,000.00
15	L-861T BASE MOUNTED LED TYPE TAXIWAY EDGE LIGHT, INSTALLED	EA.	190	$1,000.00	$190,000.00
16	L-858 BASE MOUNTED, LED TYPE, 1-MODULE GUIDANCE SIGN, INSTALLED	EA.	8	$3,000.00	$24,000.00
17	L-858 BASE MOUNTED, LED TYPE, 3-MODULE GUIDANCE SIGN, INSTALLED	EA.	5	$4,500.00	$22,500.00
18	THIRD PARTY INSURANCE	L.S.	100%	$1,000.00	$1,000.00

ESTIMATED TOTAL CONSTRUCTION COST	**$625,000.00**
ENGINEERING AND CONTINGENCIES (20%)	**$125,000.00**
TOTAL ESTIMATED PROJECT COST	**$750,000.00**

OSCEOLA MUNICIPAL AIRPORT
RUNWAY LIGHTING CONSTRUCTION

ENGINEER'S OPINION OF PROBABLE COST

ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	ESTIMATED UNIT PRICE	ESTIMATED AMOUNT
1	SITE PREPARATION	L.S.	100%	$98,000.00	$98,000.00
2	L-802A, HIGH INTENSITY, AIRPORT ROTATING BEACON, IN PLACE	EA.	1	$15,000.00	$15,000.00
3	BEACON TOWER, IN PLACE	EA.	1	$40,000.00	$40,000.00
4	L-807, LED TYPE 12-FOOT WIND CONE WITH SEGMENTED CIRCLE, IN PLACE	EA.	1	$20,000.00	$20,000.00
5	L-806, LED TYPE, 8-FOOT SUPPLEMENTAL WIND CONE, IN PLACE	EA.	2	$15,000.00	$30,000.00
6	TRENCHING FOR DIRECT-BURIED CABLE AND BARE COUNTERPOISE	L.F.	12,000	$3.00	$36,000.00
7	No. 8 AWG, 5 kV, L-824C CABLE, INSTALLED IN TRENCH, DUCT BANK OR	L.F.	20,000	$2.00	$40,000.00
8	No. 6 AWG SOLID, BARE COUNTERPOISE WIRE, INSTALLED IN TRENCH, ABOVE THE DUCT BANK OR CONDUIT, INCLUDING GROUND RODS AND GROUND CONNECTORS	L.F.	16,000	$2.00	$32,000.00
9	No. 6 AWG STRANDED, INSULATED EQUIPMENT GROUND, INSTALLED IN DUCT BANK OR CONDUIT, INCLUDING GROUND RODS AND GROUND	L.F.	5,000	$2.00	$10,000.00
10	CONSTRUCTION OF AIRPORT TRANSFORMER VAULT AND FOUNDATION	L.S.	100%	$60,000.00	$60,000.00
11	INSTALLATION OF AIRPORT TRANSFORMER VAULT EQUIPMENT IN PLACE	L.S.	100%	$75,000.00	$75,000.00
12	CONCRETE ENCASED, ELECTRICAL DUCT BANK, 4-WAY 4”C	L.F.	350	$40.00	$14,000.00
13	CONCRETE ENCASED, ELECTRICAL DUCT BANK, 2-WAY 4”C	L.F.	90	$35.00	$3,150.00
14	CONCRETE ENCASED, ELECTRICAL DUCT BANK, 2-WAY 2”C	L.F.	90	$25.00	$2,250.00
15	CONCRETE ENCASED, ELECTRICAL DUCT BANK, 1-WAY 2”C	L.F.	350	$20.00	$7,000.00
16	NON-ENCASED, ELECTRICAL DUCT BANK, 1-WAY 2”C	L.F.	260	$10.00	$2,600.00
17	NON-ENCASED, ELECTRICAL CONDUIT, 1-WAY 2”C	L.F.	20,000	$6.00	$120,000.00
18	CONCRETE ENCASED, ELECTRICAL JUNCTION STRUCTURE, L-867 CLASS 1, SIZE 16” DIAMETER BY 24” DEPTH, INSTALLED	EA.	8	$1,000.00	$8,000.00
19	PRECAST CONCRETE ELECTRICAL HANDHOLE, INTERIOR DIMENSIONS 2’L x 3’W x 3’D, INSTALLED	EA.	16	$5,000.00	$80,000.00
20	L-862 BASE MOUNTED RUNWAY EDGE LIGHT, INSTALLED	EA.	48	$1,250.00	$60,000.00
21	L-862E BASE MOUNTED RUNWAY THRESHOLD LIGHT, INSTALLED	EA.	16	$1,250.00	$20,000.00
22	L-850C LOW PROFILE BASE MOUNTED INPAVEMENT RUNWAY EDGE LIGHT, INSTALLED	EA.	4	$4,000.00	$16,000.00
23	L-880 PRECISION APPROACH PATH INDICATOR SYSTEM, INSTALLED	EA.	2	$25,000.00	$50,000.00
24	L-849A, LED TYPE, RUNWAY END IDENTIFIER LIGHT SYSTEM, INSTALLED	EA.	1	$11,000.00	$11,000.00

ESTIMATED TOTAL CONSTRUCTION COST	**$850,000.00**
ENGINEERING AND CONTINGENCIES (20%)	**$170,000.00**
TOTAL ESTIMATED PROJECT COST	**$1,020,000.00**

OSCEOLA MUNICIPAL AIRPORT
FENCING CONSTRUCTION

ENGINEER'S OPINION OF PROBABLE COST

ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	ESTIMATED UNIT PRICE	ESTIMATED AMOUNT
1	SITE PREPARATION	L.S.	100%	$48,500.00	$48,500.00
2	7-FT. CHAIN LINK FENCE, WITH BARBED WIRE EXTENSION	L.F.	23,500	$15.00	$352,500.00
3	PEDESTRIAN GATE, INSTALLED	EA.	6	$750.00	$4,500.00
4	AUTOMATIC SLIDING CANTILEVER GATE, INSTALLED	EA.	2	$15,000.00	$30,000.00
5	MANUAL SWING GATE, INSTALLED	EA.	4	$3,000.00	$12,000.00
6	DITCH STRUCTURE	L.F.	150	$150.00	$22,500.00
7	DRAINAGE STRUCTURE	EA.	2	$15,000.00	$30,000.00

ESTIMATED TOTAL CONSTRUCTION COST	**$500,000.00**
ENGINEERING AND CONTINGENCIES (20%)	**$100,000.00**
TOTAL ESTIMATED PROJECT COST	**$600,000.00**

GARVER

OSCEOLA MUNICIPAL AIRPORT
ENTRANCE ROAD CONSTRUCTION

ENGINEER'S OPINION OF PROBABLE COST

ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	ESTIMATED UNIT PRICE	ESTIMATED AMOUNT
1	SITE PREPARATION	L.S.	100%	$91,623.91	$91,623.91
2	TRENCH AND EXCAVATION SAFETY SYSTEMS	L.S.	100%	$1,000.00	$1,000.00
3	EARTHWORK	C.Y.	20,000	$6.00	$120,000.00
4	UNDERCUT EXCAVATION	C.Y.	1,000	$10.00	$10,000.00
5	8" SOIL CEMENT SUBGRADE	S.Y.	6,900	$8.50	$58,650.00
6	6" CLASS 7 BASE COURSE	S.Y.	6,900	$12.00	$82,800.00
7	4" BITUMINOUS PAVEMENT	S.Y.	6,400	$25.00	$160,000.00
8	CURB AND GUTTER	L.F.	5,000	$12.50	$62,500.00
9	24" REINFORCED CONCRETE PIPE, CLASS III	L.F.	210	$100.00	$21,000.00
10	24" RCP FLARED END SECTION	EACH	4	$1,800.00	$7,200.00
11	CLASS B BEDDING	C.Y.	80	$30.00	$2,400.00
12	TEMPORARY EROSION CONTROL	L.S.	100%	$15,000.00	$15,000.00
13	PAVEMENT MARKING	L.S.	100%	$10,000.00	$10,000.00
14	SEEDING	ACRE	5.0	$2,000.00	$10,000.00

TOTAL ESTIMATED PROJECT COST	**$652,173.91**
ENGINEERING AND CONTINGENCIES (15%)	**$97,826.09**
TOTAL ESTIMATED PROJECT COST	**$750,000.00**

GARVER

OSCEOLA MUNICIPAL AIRPORT
UTILITY CONSTRUCTION

ENGINEER'S OPINION OF PROBABLE COST

ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	ESTIMATED UNIT PRICE	ESTIMATED AMOUNT
1	SITE PREPARATION	L.S.	100%	$43,833.33	$43,833.33
2	6" WATER LINE CONSTRUCTION	L.F.	2,500	$50.00	$125,000.00
3	FIRE HYDRANTS	EACH	4	$5,000.00	$20,000.00
4	4" SANITARY SEWER FORCE MAIN	L.F.	2,500	$30.00	$75,000.00
5	MANHOLE CONSTRUCTION	EACH	8	$4,000.00	$32,000.00
6	PACKAGE PUMP STATION	L.S.	100%	$75,000.00	$75,000.00
7	ELECTRICAL SERVICE CONSTRUCTION	L.S.	100%	$150,000.00	$150,000.00

TOTAL ESTIMATED CONSTRUCTION COST	**$520,833.33**
ENGINEERING AND CONTINGENCIES (20%)	**$104,166.67**
TOTAL ESTIMATED PROJECT COST	**$625,000.00**

GARVER

OSCEOLA MUNICIPAL AIRPORT
TERMINAL AREA CONSTRUCTION

ENGINEER'S OPINION OF PROBABLE COST

ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	ESTIMATED UNIT PRICE	ESTIMATED AMOUNT
1	TERMINAL BUILDING	S.F.	2,500	$150.00	$375,000.00
2	12 BAY T-HANGAR	L.S.	1	$500,000.00	$500,000.00
3	COMMUNITY HANGAR	S.F.	10,000	$60.00	$600,000.00
4	FUEL FARM RELOCATION AND ADDITION	L.S.	100%	$175,000.00	$175,000.00

TOTAL ESTIMATED CONSTRUCTION COST	**$1,650,000.00**
ENGINEERING AND CONTINGENCIES (20%)	**$330,000.00**
TOTAL ESTIMATED PROJECT COST	**$1,980,000.00**

OSCEOLA MUNICIPAL AIRPORT
TERMINAL AREA CONSTRUCTION - PHASE 3

ENGINEER'S OPINION OF PROBABLE COST

ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	ESTIMATED UNIT PRICE	ESTIMATED AMOUNT
1	12 BAY T-HANGAR	L.S.	1	$500,000.00	$500,000.00
2	COMMUNITY HANGAR	S.F.	10,000	$60.00	$600,000.00
3	TERMINAL APRON EXPANSION	L.S.	100%	$500,000.00	$500,000.00

TOTAL ESTIMATED CONSTRUCTION COST	**$1,600,000.00**
ENGINEERING AND CONTINGENCIES (20%)	**$320,000.00**
TOTAL ESTIMATED PROJECT COST	**$1,920,000.00**

Appendix E

Big River Steel Celebrates Grand Opening, LEED Certification

By: Ellen Lampe (http://www.arkansasmatters.com/meet-the-team/ellen-lampe/553510113) | (mailto:elampe@kark.com)

Posted: Mar 01, 2017 06:00 PM CST
Updated: Mar 01, 2017 09:04 PM CST

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OSCEOLA, Ark. (News release) – As part of its grand opening ceremony, Big River Steel announced that it has been recognized as the first steel production facility to be LEED (Leadership in Energy and Environmental Design) certified based on its environmental sustainability efforts and energy efficiency performance.

Achieving LEED certification for its steel-making process puts Big River Steel in the unique position of being the first producer of steel in the world to be LEED certified by the U.S. Green Building Council, which developed the LEED rating system.

LEED is internationally recognized and the most widely used green building rating system developed by the U.S. Green Building Council (USGBC), that evaluates buildings and process loads that are designed, constructed, maintained and operated with a focus on environmental and human health attributes. Big River Steel's commitment to sustainable principles allowed it to benefit from a campus approach to LEED certification which documented site-wide sustainable performance.

Big River Steel's Flex Mill™, a steel mill that combines the wide product mix and superior grade capabilities of a more traditional integrated steel mill with the nimbleness and technological advancements of the newer more technologically-advanced mini mills, broke ground in July 2014 and began production in 2016. Working with the environmental and energy consultants at Emerald Built Environments throughout the build process kept sustainability at the forefront of priorities.

"Respecting the environment and safeguarding the welfare of our team members while building a profitable enterprise is at the core of what it means to be a Flex Mill™. As more steel consumers look to source from steel producers that not only recycle but also do so with a focus on sustainability, Big River Steel will be well positioned," said Dave Stickler, chief executive officer of Big River Steel.

Working with Big River Steel's lead technology supplier, SMS group headquartered in Germany, Emerald Built Environments and Big River Steel processing engineers analyzed and modeled the Flex Mill's™ operations compared to other steel production facilities to determine the energy efficiency of Big River Steel's production process. The use of variable speed motors throughout the compact strip production (CSP) process along with the installation of a comprehensive set of energy saving tools throughout the operation were the major factors that led to Big River Steel being the first steel making facility to earn a LEED certification.

"Big River Steel has shown tremendous leadership with their innovative work and technological advances in sustainable practices through the use of LEED," said Mahesh Ramanujam, president and CEO of the U.S. Green Building Council. "Industrial facilities have become a cornerstone for the green building movement thanks to the growing adoption of LEED and sustainable practices in this sector."

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