

COMMUNITY BACKGROUND

Champaign County is a metropolitan county located in the Grand Prairie Natural Division of East-Central Illinois approximately 130 miles south of Chicago [See Figure 1]. The County is fairly large, encompassing approximately 1,000 square miles and extending approximately 34.75 miles from 39°52' to 40°25' north latitude and 27.75 miles from 87°55' to 88°28'30" east longitude. The County contains thirty municipalities (See App.) including the cities of Champaign and Urbana and is home to the University of Illinois [See Map No. 1].

NATURAL SETTING

The landscape of Champaign County is generally flat with minor relief created by the Gifford, Champaign-Urbana-Pesotum-West Ridge, and Rantoul-Cerro Gordo morrainal systems. The County is blessed with extremely high quality soils, more than 90% being classified as prime farmland. The soils while highly productive require significant drainage and the County is criss-crossed by a network of drain tiles and artificial drainage ditches in addition to its natural streams (many of which have been channelized).

The County straddles the drainage divide between the Upper Mississippi and Ohio River watersheds. It is drained principally by four major rivers.

- The Sangamon River and its tributaries drain the northwest and western parts of the County. It enters Champaign County in the northwest corner and flows south and southwest exiting the County at a point approximately two miles southwest of the Village of Mahomet where it continues southwest and west to join the Illinois River.

- The Kaskaskia River drains the west central and southwest parts of the County. It has its origins on the Champaign Moraine between Champaign and Mahomet and flows south exiting the County at a point about five miles west of the Village of Pesotum emptying, ultimately into the Mississippi River.
- The Embarras River drains the south central part of the County with its origins on the moraines in Champaign and Urbana. It exits the County just north of Villa Grove in Douglas County and is tributary to the Wabash River.
- The Salt Fork of the Vermilion River comprises the largest watershed in the County. It drains the northeast and eastern area of the County rising on the Gifford and Cerro Gordo Murraines east of Rantoul and exiting the County approximately one mile north of the Village of Homer.

In addition the Little Vermilion River drains a relatively small area in the Southeast part of the County and a small area in the northeast corner of the County is drained by the Middle Fork of the Vermilion River. The Vermilion and Little Vermilion Rivers are also tributary to the Wabash River.

CLIMATE AND WEATHER

Champaign County has a continental climate regime characterized by cold winters and hot summers. Seasonal high temperatures range from an average of 32.3° in January to 85.5° in

July. The average annual rainfall (1961-1990) is 39.67 inches per year and occurs predominantly in the spring and summer. The County experiences intense Type II rainfall events that can deliver extreme rains over small areas, sometimes exceeding 6" in 24 hours albeit over small areas. The maximum 24-hour recorded rainfall at the Urbana weather station is 4.61 inches.

The prevailing wind in the County is generally from the Southwest to South in all months except January when winds tend to come from the west. The County tends to be windy with average wind speeds over 5 mph in all months except August. Wind gusts in excess of 50 mph are recorded in all months and tornados and other destructive winds are not uncommon. Storms track generally from the Southwest or West.

The County experiences an average of 22 inches of snow annually. The snow combined with the relatively high winds and open landscape can result in whiteout conditions and frequently creates drifts that can close rural roads for up to 24 hours. Additionally the County averages three instances of freezing precipitation each year which can lead to power outages and hazardous driving conditions. The County also experiences periodic major ice storms.

SETTLEMENT PATTERNS AND LAND USE

The landscape of Champaign County is dominated by cash grain agriculture, comprising approximately 90% of the land area of the County. Urban development has occurred at varying densities and is

concentrated in and around the County's municipalities. A low density pattern of housing is found in wooded areas along the Sangamon River north and south of the Village of Mahomet and along the Salt Fork of the Vermilion River below its confluence with the Spoon River Ditch. Industrial land use is concentrated to the west of Champaign, in the north central Champaign-Urbana area, on the west side of Rantoul and on the former Chanute Air Force Base on the South Side of Rantoul. Commercial Land uses are concentrated along the I-74 corridor in Champaign and Urbana as well as central areas of the two cities and outlying communities with lesser concentrations along South Neil St. (U.S. Rt. 45) in Champaign and the Village of Savoy, on the west side of Champaign, and in the southeast part of Urbana.

POPULATION

The County's 1990 population was 173,025 and is believed to be near this number at present. The total population fluctuates by approximately 20,000 (11.5%) with the ebb and flow of the student population at the University of Illinois. Approximately two thirds of the County's population (117,000) is concentrated roughly in the center of the County in the cities of Champaign and Urbana, the adjacent Village of Savoy and the surrounding built-up unincorporated area. Other major population concentrations are found in the Village of Rantoul (17,200) in the north-central part of the County and in and around the Village of Mahomet (8,440) on the western edge of the County. Altogether approximately 20% of the County population resides in unincorporated areas, however two thirds of this population is found in the built-up areas surrounding

Champaign, Urbana and Mahomet. The remaining unincorporated areas are home to approximately 12,000 people.

HOUSING

The housing stock in Champaign County is comprised predominantly of single family detached houses. As of 1994 single family detached units constituted 61% of all housing units. Units in 1-4 unit structures accounted for 12% and the remaining 27% were units in structures containing more than 5 units. The housing stock in unincorporated areas of the county is overwhelmingly single family. Eighty four percent of unincorporated area housing was comprised of single family units in 1994 and only slightly more than 8% of multi-unit housing was located in unincorporated areas; 77% of multi-family units are located in Champaign and Urbana.

Champaign County housing is fairly new in keeping with the enormous postwar growth in the County. Only 22% of the housing stock was built before 1950 with over two thirds of that built prior to World War II. Approximately 57% was built between 1950 and 1979 and over 21% was built since 1980.

ECONOMIC BASE

The Economy of Champaign County is dominated by the government sector, specifically the University of Illinois. The government sector in 1994 accounted for 37% of County earnings and 36% of non-farm employment. In terms both of earnings and employment the government sector is followed by the services, retail, manufacturing and wholesale sectors. This pattern is reflected in the County's largest employers. The county's

ten largest employers are listed in Table 1.

TRANSPORTATION

The County is traversed by three interstate highways (I-57, running north to Chicago and south to Effingham and points south; I-74 running northwest to Bloomington and Peoria and east to Danville, Indianapolis and points southeast; and I-72 running generally west to Decatur and Springfield). The County is also traversed by U.S. Routes 45, 136 and 150 and by Illinois Routes 10, 47, 49, and 130). Three major railroads also cross the county (Illinois Central, Union Pacific, and Norfolk Southern). The County is served by the U. of I. Willard Airport, one of seven Class A airports in Illinois and by two general service airports, Frasca Field in Urbana and the Rantoul Airport.

UTILITIES

ELECTRICITY

Champaign County is served by four electric utilities [See Map No. 2]. In addition the Village of Rantoul operates its own municipal utility and the University of Illinois provides its own electric power. Apart from the University's Abbot Power Plant and a small peaking plant in Rantoul no utilities operate generating stations in the County. The utilities and their service areas include:

- Illinois Power Company (IPC) serves the largest number of customers in the County. Its service area encompasses the central third of the county and includes the cities of Champaign and Urbana; the Villages of Mahomet, Thomasboro, Royal, Bondville, St. Joseph and Ogden; and the

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Table 1: Champaign County Largest Employers

Employer	Sector	Employees
University of Illinois	Government/State	19,548
Carle Clinic	Services/Medical	2,426
Carle Foundation Hospital	Services/Medical	2,027
Kraft Foods, Inc.	Manufacturing/Nondurable	1,800
County Market	Retail/Food	1,500
Covenant Medical Center	Services/Medical	1,450
Super Valu/J.M. Jones	Wholesale/Food	1,100
C.U.S.D. #4	Government/Local	1,000
U.S.A. C.E.R.L.	Government/Federal	1,000
Parkland College	Government/Local	950

Source: *Top Employers Directory*, Greater Champaign-Urbana Economic Partnership, January 1996

unincorporated settlements of Seymour and Mayview.

unincorporated settlements of Dewey and Penfield.

- The Eastern Illini Electric Cooperative (EIEC) serves a large part of the rural areas of the County lying north and south of the IPC service area. The EIEC service area does not include any incorporated municipalities in Champaign County.
- The Central Illinois Public Service Company (CIPS) serves large areas along the north and south parts of the county. CIPS serves a large share of the incorporated villages including: Foosland, Fisher, Ludlow, Gifford, Sadorus, Tolono, Pesotum, Broadlands, Allerton, and Longview and the

- The Central Illinois Light Company (CILCO) serves relatively small areas in the southwestern part of the County and in the eastern part of the County including the villages of Ivesdale, Philo, Sidney and Homer.

NATURAL GAS

Natural gas is provided in most Champaign County municipalities and in some unincorporated settlements. Some rural residences have natural gas taps if they are located along the route of a natural gas pipeline. Illinois Power provides natural gas in the following municipalities: Champaign, Urbana, Mahomet, Ogden, Royal, and Savoy and to the

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following unincorporated areas, Seymour, Rising and Staley. CILCO provides natural gas to the following municipalities: Allerton, Broadlands, Homer, Ivesdale, Longview, Pesotum, Philo, Sadorus, Sidney, St. Joseph, and Tolono. Northern Illinois Gas Company serves the municipalities of Rantoul, Fisher, Ludlow, Gifford, Thomasboro, and the unincorporated settlements of Dewey and Penfield. Most rural homesites and farms rely on propane provided by a number of private suppliers.

The Peoples Gas, Light & Coke Company maintains an underground gas storage reservoir, the Manlove Storage Field, in bedrock below parts of Newcomb Township. The company has developed a Disaster and Emergency Action Plan for this facility.

WATER SUPPLY

Champaign County is entirely dependent on groundwater. Large areas of the county have access to an abundant and relatively secure supply in the Mahomet-Teays Aquifer or from aquifers in the Glasford formation. The southeastern quadrant of the county has very limited supplies of groundwater and many rural homes rely on shallow dug or bored wells that are subject to supply interruptions in extreme dry weather conditions. The preponderance of the county population in incorporated municipalities or surrounding built-up areas is served by municipal water utilities or other public water utilities.

Municipalities operating their own water utilities include the Villages of Rantoul, Broadlands, Fisher, Gifford, Homer, Ivesdale, Longview, Ludlow, Mahomet, Ogden, Pesotum, Royal, Sadorus, Thomasboro, and

Tolono. The cities of Champaign and Urbana and the Villages of Bondville, Savoy and St. Joseph together with the unincorporated settlement of Seymour and surrounding built-up areas are served by the Northern Illinois Water Company (NIWC). Additionally the Villages of Philo and Sidney obtain water from NIWC but operate their own distribution systems.

Three public water districts provide water in built-up unincorporated areas including the Sangamon Valley Public Water District serving the area northeast of Mahomet and the Penfield and Dewey Public Water Districts serving those respective communities. The remaining population of the county relies on private wells including the village of Foolsland.

Private community water supplies serve the Prairieview Estates, Country Manor, Country View Estates and Young's Hillcrest mobile home parks. Private wells, of course, can not function without electricity so these supplies are subject to disruption if the electrical power supply is interrupted.

SEWAGE TREATMENT

Most built-up areas of the County are served by public sanitary sewer systems. The Urbana-Champaign Sanitary District (UCSD) serves its name sake cities along with the Village of Savoy and surrounding unincorporated areas. The District operates two treatment plants one in Urbana discharging to the Saline Ditch and one southwest of Champaign discharging to the Copper Slough (tributary to the Kaskaskia River). While the UCSD operates treatment plants and maintains certain trunk sewers most collector and local sewers are maintained by municipalities.

In addition the University of Illinois maintains

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its own sewers and several larger private developments maintain their own sewer lines. Several larger industries operate pretreatment systems for industrial wastes entering the UCSD/municipal system including KRAFT Inc., and Clifford Jacobs Forge.

In addition to the UCSD the villages of Rantoul, Fisher, Gifford, Mahomet, Ogden, St. Joseph and Tolono operate municipal sanitary sewer systems. The Sangamon Valley Public Water District operates a sanitary sewer system serving an area northeast of Mahomet. The remaining villages and unincorporated areas rely on private on-site wastewater systems. A small number of properties in municipalities with sewer systems also continue to operate onsite systems.

Soils in Champaign County are generally limited in their capacity to accommodate soil absorption systems due to low percolation rates and high water table conditions. As a consequence of these soil limitations aeration type onsite systems have become increasingly popular. These systems use electrically operated motorized areators which do not function if the electrical power supply is interrupted.

TELEPHONE

Telephone service in most of the county is provided by Ameritech with small areas being served by GTE Inc. In addition several companies provide cellular telephone and personal communication services in the county including [list to be added]. A total of 11 cellular telephone towers have been built in unincorporated areas of the County.

CABLE TELEVISION

Cable television services are available in most municipalities in the County and in the unincorporated settlements of Seymour and Penfield. Cable television is also available in built-up unincorporated areas surrounding Champaign and Urbana and in the area northeast of Mahomet.

PUBLIC SAFETY AND EMERGENCY SERVICES

POLICE SERVICES

Several municipalities in the County operate full time police departments including smaller communities contract with the Champaign County Sheriff's Department to provide police services including: Savoy, Philo, Sidney, and

Champaign, Urbana, Rantoul, Fisher, Mahomet Gifford, Tolono, and Homer. Several other St. Joseph. The Sheriff provides police services in all unincorporated areas.

FIRE PROTECTION

Champaign, Urbana, Rantoul and the University of Illinois operate full time professional fire departments. The remainder of the County is served by a system of volunteer

Table 2: Champaign County Fire Protection Services

Department / District	Station Location(s)	Ambulance	ISO Rating
Champaign FD	City of Champaign (4), one planned	No	2
Urbana FD	City of Urbana (3)	No	3
Rantoul FPD	Village of Rantoul (2)	No	5
Univ. of Ill. FD	City of Urbana	No	5
Allerton FPD	Village of Allerton, Vermillion Co.	No	8
Broadlands-Longview FPD	Village of Broadlands	No	8/9
Carrol FPD	Urbana Township	No	7
Corn Belt FPD	Village of Mahomet	Yes	6/9
Eastern Prairie FPD	Hensley Township	No	7/9
Edge-Scott FPD	Urbana Township	No	4/9
Gifford FPD	Village of Gifford	No	8/9
Homer FPD	Village of Homer (2)	No	7/9
Ivesdale FPD	Village of Ivesdale	No	8
Ludlow FPD	Village of Ludlow	No	8/9
Northern Piatt FPD	Village of Mansfield, Piatt Co.	?	7/9
Ogden-Royal FPD	Village of Ogden, Village of Royal	No	8/9
Pesotum FPD	Village of Pesotum	No	8/9
Philo FPD	Village of Philo	No	7
Sadorus FPD	Village of Sadorus	Yes	8
Sangamon Valley FPD	Villages of Fisher and Foosland, Dewey	Yes, Fisher	7/9
Savoy FPD	Village of Savoy	No	7/8/9
Scott FPD	Village of Bondville, Seymour	No	6/7/10
Sidney FPD	Village of Sidney	No	7/8/9
St. Joseph-Stanton FPD	Village of St. Joseph	No	7/9
Thomasboro FPD	Village of Thomasboro	No	7/8/9
Tolono FPD	Village of Tolono (2)	Yes	6/10
Villa Grove FPD	Village of Villa Grove, Douglas County	?	

fire protection districts [See Map No. 3].
Table 2 lists the fire departments/districts,
and lists their ISO ratings.

Ambulance Services

Two private ambulance services are available in Champaign County, Arrow Ambulance and Pro Ambulance both located in Champaign. In addition Arrow Ambulance bases ambulances at the Cornbelt FPD(Mahomet), Sadorus FPD, Tolono FPD and Sangamon Valley FPD (Fisher). Both Arrow and Pro Ambulance provide Advanced Life Support (ALS) service.

Emergency Dispatch

Champaign County has an Enhanced 911 service, the Metropolitan Computer Aided Dispatch (METCAD). This is available to all residents of the County except the Village of Rantoul. Rantoul receives and dispatches its own calls. All others are handled by METCAD.

Emergency Service and Disaster Agencies

Champaign County maintains a full time ESDA office which is responsible for the planning, response and recovery or emergency and disaster situations that occur in the County.

REGULATORY JURISDICTIONS

ZONING

The entirety of Champaign County is zoned. The Champaign County Zoning Ordinance became effective October 10, 1973 and was last amended on February 18, 1997 (excluding map amendments). The County exercises zoning jurisdiction in all unincorporated areas and in

two unzoned municipalities, Foosland and Longview. The remaining 28 municipalities have zoning ordinances and exercise exclusive zoning jurisdiction within their corporate limits.

County zoning changes (to the map or text) that would affect the 1½ mile extraterritorial area surrounding a zoned municipality are subject to protest by the municipality [See Map No. 4]. Such a municipal protest would require a 3/4 majority vote of the County Board for the amendment to become effective.

The County Zoning Ordinance permits residential development using private wells and onsite wastewater systems on lots as small as one acre throughout the County. Development served by private well and onsite wastewater systems are permitted on lots as small as 30,000 square feet in an area of approximately 50,000 acres located predominantly in the Champaign-Urbana area. Most residential development in the County proceeds under residential classifications at gross densities of 2 to 3 units per acre and is served by public water and sewer systems. Relatively small areas are zoned for commercial or industrial use lying, for the most part, north of the city of Urbana and west of the City of Champaign.

COMPREHENSIVE PLANS

Hazard Mitigation Plan
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Champaign County has not adopted a comprehensive plan but in 1977 adopted a set of *Land Use Goals & Policies*. Except in the most general terms these goals and policies do not address natural hazards or hazard mitigation. Municipalities have authority to adopt comprehensive plans within 1½ miles of their corporate limits. The following municipalities have adopted such plans: Champaign, Urbana, Rantoul, Mahomet, St. Joseph, Savoy, Tolono and Philo. The Village of Fisher is in the process of adopting a comprehensive plan including its extraterritorial area. [See Map No. 4]

SUBDIVISION

Champaign County and most municipalities in the County have adopted subdivision regulations within their corporate territories. The municipalities noted above that have adopted comprehensive plans exercise subdivision jurisdiction within their 1½ mile extraterritorial jurisdiction. The Village of Fisher intends to exercise extraterritorial subdivision jurisdiction. [See Map No. 4]

In most case where extraterritorial subdivision jurisdictions overlap the municipalities involved have adopted intergovernmental agreements to define the extent of their jurisdiction and to establish annexation limits. Such agreements exist for Champaign/Savoy; Champaign/Urbana and Urbana/Savoy. The City of Champaign, the County and the Village of Mahomet are engaged in planning study that is expected to produce a similar agreement between Mahomet and Champaign.

BUILDING CODES

Most of the larger municipalities in the County have adopted building codes but many of the

smaller ones have not. In addition the County has not adopted a building code. The County does however require that manufactured housing set up on individual lots meet the applicable Federal or State construction requirements. Also a copy of the report form required by the *Illinois Mobile Home Tie Down Act* is a prerequisite for a Certificate of Compliance (occupancy) for new manufactured homes set up outside manufactured home parks. No requirements are imposed on manufactured homes set up in manufactured home parks.

The following Communities have adopted building codes: Champaign, Urbana, Rantoul, Ludlow, Mahomet, St. Joseph, Savoy, Philo and Pesotum. It has become common for municipalities to require code compliance for projects in unincorporated areas that are subject to annexation agreements but this is generally only an issue for Champaign and Urbana and to a lesser extent Mahomet and Savoy.

The only building codes enforced in unincorporated areas are those promulgated by the State of Illinois to the extent that they apply and are enforced by State agencies. No significant state regulations apply to most private development except the requirements of the *Private Sewage Disposal Licensing Act* and the *Illinois Well Code*. The County is also required to enforce the *Illinois Accessibility Code* with respect to handicap accessibility. In most cases (except very small projects) a set of drawings signed and sealed by an Illinois licensed architect or engineer is required to demonstrate compliance with the Accessibility Code.

STORMWATER MANAGEMENT REGULATIONS

Most municipalities in the County have adopted regulations requiring stormwater detention to limit the increase in runoff from large storm events. Typically these regulations require that the runoff from a "50 year" (2% probability) storm event not exceed that of "5 year" (20% probability) storm event if the site were in row crop agricultural use, or a comparable formulation. This standard means that site runoff will not increase over predevelopment conditions for any significant storm event although small runoff flows may occur when otherwise there would have been no runoff at all.

These regulations usually also contain provisions related to the protecting existing surface and subsurface drainage facilities, preventing ponding and other drainage problems and preventing erosion and sedimentation. Stormwater management regulations typically are adopted as part of municipal subdivision regulations. Champaign County adopted an interim stormwater management policy on December 17, 1991 which is incorporated by reference into the county subdivision regulations and, in limited ways, in the county Zoning Ordinance.

FLOOD HAZARD REGULATION / NATIONAL FLOOD INSURANCE PROGRAM

Eight municipalities in Champaign County, including all those with significant flood hazards, presently participate in the National Flood Insurance Program and have adopted Flood Hazard Area Regulations. These include Champaign, Urbana, Foosland, Fisher, Mahomet, St. Joseph, Sidney and Broadlands.

The communities that do not participate do not have any significant flood hazard areas although they may be subject to localized ponding that can damage property.

Champaign County joined the National Flood Insurance Program in 1974 and adopted its first floodplain regulations in 1978. The current Special Flood Hazard Area Ordinance was adopted on January 17, 1984 and has been subsequently amended. The County's Flood Insurance Rate Maps (Community No. 170894) were published on March 1, 1984.

The preponderance of the County is mapped in unnumbered A zones and no flood profiles or flood elevations were provided except for short reaches of the Sangamon River near Mahomet, the Copper Slough and Phinney Branch (tributary to the Kaskaskia River) near Champaign, the Saline Ditch (tributary to the Salt Fork) near Urbana and the Salt Fork near St. Joseph. No floodways have been mapped except along the reaches of the Copper Slough, Phinney Branch and Saline Ditch noted above.

The County administers its flood hazard regulations based upon estimates of the 100 year elevation made on a case by case basis using the best available information.