

1.0 INTRODUCTION

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Each year natural hazards (i.e., severe thunderstorms, tornadoes, severe winter storms, flooding, etc.) cause damage to property and threaten the lives and health of the residents of the Tri-County area. Since 1973, the Tri-County area has been a part of 12 federal disaster declarations. **Figure 1** identifies each declaration including the year the disaster was declared, the counties covered under the declaration and the type of natural hazard that triggered the declaration.

Figure 1 Federal Disaster Declarations: Tri-County Area			
Declaration Number	Year	Natural Hazard(s) Covered by Declaration	County(s) Covered
373	1973	severe storms; flooding	Tazewell & Peoria
438	1974	severe storms; flooding	Tazewell, Woodford & Peoria
583	1979	severe storms; flooding	Tazewell, Woodford & Peoria
674	1982	severe storms; flooding	Tazewell, Woodford & Peoria
735	1985	severe storms; flooding	Tazewell, Woodford & Peoria
871	1990	severe storms; flooding; tornadoes	Tazewell
1469	2003	severe storms; tornadoes	Tazewell & Woodford
1681	2006	severe winter storm	Woodford
1800	2008	severe storms; flooding	Woodford & Peoria
1960	2011	severe winter storm	Tazewell, Woodford & Peoria
4116	2013	severe storms; straight-line winds; flooding	Tazewell, Woodford & Peoria
4157	2013	severe storms; straight-line winds; tornadoes	Tazewell & Woodford

Since 2010, Tazewell and Woodford counties and select participating Peoria County municipalities have experienced 343 natural hazard events including thunderstorms with damaging winds, hail one inch or greater in diameter, lightning strikes, severe winter storms, extreme cold, riverine flooding, flash flooding, tornadoes, drought, excessive heat and landslides. While natural hazards cannot be avoided, their impacts can be reduced through effective hazard mitigation planning.

While natural hazards cannot be avoided, their impacts can be reduced through effective hazard mitigation planning. This prevention-related concept of emergency management often receives the least amount of attention, yet it is one of the most important steps in creating a hazard-resistant community.

What is hazard mitigation planning?

Hazard mitigation planning is the process of determining how to reduce or eliminate the loss of life and property damage resulting from natural hazards. This process helps the participating jurisdictions reduce their risk from natural hazards by identifying vulnerabilities and developing mitigation actions to lessen and sometimes even eliminate the effects of a hazard. The results of this process are documented in a natural hazards mitigation plan.

Why prepare an all hazards mitigation plan?

By preparing, adopting and updating a natural hazards mitigation plan, participating jurisdictions become eligible to apply for and receive federal hazard mitigation funds to implement mitigation actions identified in the plan. These funds can help provide local government entities with the opportunity to complete mitigation projects that would not otherwise be financially possible.

The federal hazard mitigation funds are made available through the Disaster Mitigation Act of 2000, an amendment to the Robert T. Stafford Disaster Relief and Emergency Assistance Act, which provides federal aid for mitigation projects, but only if the local government entity has a Federal Emergency Management Agency (FEMA) approved hazard mitigation plan.

How is this plan different from other emergency plans?

A natural hazards mitigation plan is aimed at identifying projects and activities that can be conducted prior to a natural disaster, unlike other emergency plans which provide direction on how to respond to a disaster after it occurs. This is the second update of the Tri-County hazard mitigation plan which was last updated in 2010. This update describes in detail the actions that can be taken to help reduce or eliminate damages caused by specific types of natural hazards.

1.1 PARTICIPATING JURISDICTIONS

Recognizing the benefits of having an updated natural hazards mitigation plan, the Tri-County Regional Planning Commission invited Tazewell and Woodford counties and all the municipalities within these two counties to participate. In addition, the municipalities within Peoria County were invited to participate since the County chose to prepare its own multi-hazard mitigation plan in 2017 covering just the unincorporated areas of the County. **Figure 2** identifies the participating jurisdictions that are represented in the Plan.

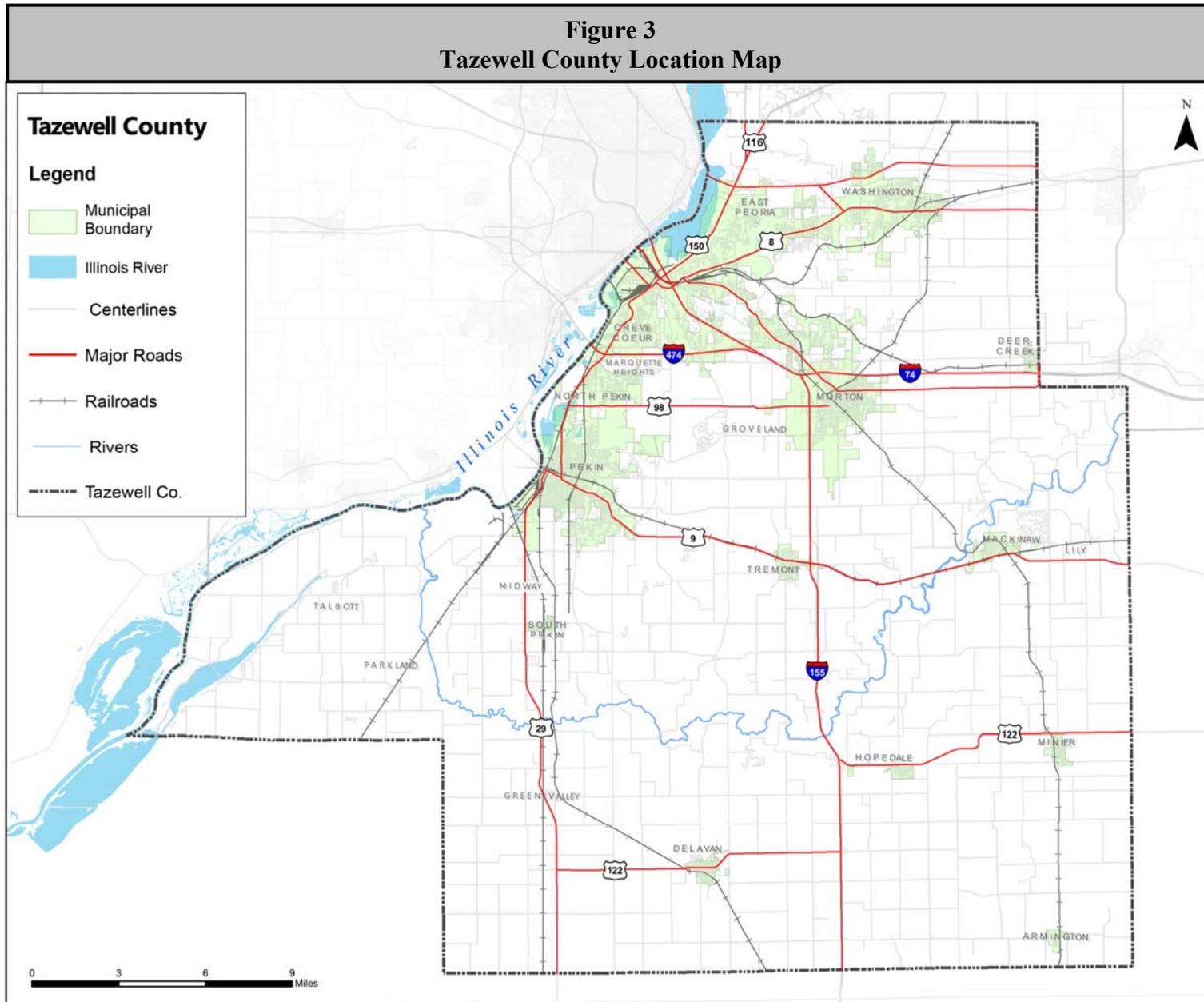
Figure 2 Participating Jurisdictions Represented in the Plan		
<ul style="list-style-type: none"> ❖ Tazewell County <ul style="list-style-type: none"> ➤ East Peoria, City of ➤ Morton, Village of ➤ Pekin, City of ➤ Tremont, Village of ➤ Washington, City of 	<ul style="list-style-type: none"> ❖ Woodford County <ul style="list-style-type: none"> ➤ Eureka, City of ➤ Germantown Hills, Village of ➤ Roanoke, Village of 	<ul style="list-style-type: none"> ❖ Participating Peoria County Municipalities <ul style="list-style-type: none"> ➤ Bartonville, Village of ➤ Chillicothe, City of ➤ Hanna City, Village of ➤ Peoria, City of ➤ Peoria Heights, Village of

The following provides information by county on the geography, topography, economy and population/demographics of the study area as well as land use and development trends.

1.1.1 TAZEWELL COUNTY

COUNTY PROFILE

Tazewell County is located in central Illinois and is part of the Peoria-Pekin Metropolitan Statistical Area (MSA), which also includes Woodford and Peoria counties. The County covers approximately 658 square miles. **Figure 3** provides a location map of Tazewell County and the



participating municipalities. The topography is generally flat to moderate sloping with the areas adjacent to streams and drainage ways gently sloping to very steep. The County is located between the metropolitan areas of Peoria and Bloomington-Normal and is bounded to the north by Woodford County, to the east by McLean County, to the south by Logan and Mason counties, and to the west by the Illinois River. The City of Pekin is the county seat.

Tazewell County has traditionally been known for its agriculture history and economy. According to the 2012 Census of Agriculture, there were 942 farms in Tazewell County occupying approximately 81% (337,376 acres) of the total land area in the County. The major crops include corn, soybeans, vegetables, pumpkins and popcorn while the major livestock includes hogs and pigs, sheep and lambs and turkeys. The County ranks 1st in the State for pumpkins, 2nd for vegetables and popcorn, 25th for corn and 26th for soybeans. In terms of livestock, the County ranks 7th for sheep and lambs, 8th for turkeys and 34th for hogs and pigs. Tazewell County ranks 18th in crop cash receipts and 24th in livestock cash receipts.

Manufacturing is the largest industry in Tazewell County. A total of 15,427 jobs in manufacturing exist in the county or 27% of the workforce. The top three private sector companies in Tazewell County are Caterpillar with 3,710 employees, Walmart with 1,351 employees, and Farmers Insurance with 1,260 employees. According to U.S. Cluster Mapping the top traded economic cluster in the County is distribution and electronic commerce with 3,720 jobs in 2016.

Figure 4 provides demographic data on the County and each of the participating municipalities along with information on housing units and assessed values. The assessed values are for all residential structures and associated buildings (including farm homes and buildings associated with the main residence.) The assessed value of a residence in Tazewell County is approximately one-third of the market value.

Figure 4 Demographic Data by Participating Jurisdiction – Tazewell County						
Participating Jurisdiction	Population (2010)	Projected Population (2025)	Total Area (Sq. Miles) (2010)	Number of Housing Units (2010)	Housing Unit Density (Units/ Sq. Mile) Rounded Up	Total Assessed Value of Housing Units (2016)
Tazewell County (unincorporated)	25,755	25,953	586.280	10,285	18	\$408,622,464
East Peoria	23,402	23,582	22.144	10,590	531	\$307,711,479
Morton	16,267	16,392	12.997	6,973	539	\$345,125,877
Pekin	34,094	34,356	15.137	14,714	1,011	\$318,602,708
Tremont	2,236	2,253	0.944	942	---	\$34,645,060
Washington	15,134	15,250	8.187	6,189	757	\$289,130,261

Sources: Illinois Department Public Health, Population Projects for Illinois Counties 2010 to 2025.
 Tazewell County Assessments Office.
 U. S. Census Bureau, 2010 Census U.S. Gazetteer Files.
 U.S. Census Bureau, American FactFinder.

LAND USE AND DEVELOPMENT TRENDS

Population growth and economic development are two major factors that trigger changes in land use. Tazewell County is the largest county by area in the Tri-County region and has a high percentage of farmland. As discussed previously, approximately 81% of the land area within the County is used for farming practices. Agriculture is and will continue to be a major industry within the County and a vital part of the County's economy.

The City of East Peoria has become a regional retail hub, offering a wide selection of nationally recognized retailers and restaurants. It is also home of the Per-A-Dice Hotel and Casino. Pekin, Morton, and Washington are communities of choice for family living. The County is also home to Illinois Central College's main campus in East Peoria, as well as their south campus in Pekin.

Between 2000 and 2010 the population increased by 5% from 128,485 to 135,394. This growth is part of a larger trend. U.S. Census Bureau records indicate that between 1900 and 2000, the population of Tazewell County increased over 300% from 33,221 to 128,485. All of the participating municipalities have experienced increases in their populations, some significantly, since 2000. Washington had the largest increase of 40% from 10,841 to 15,134. Tremont's population increased by 10% from 2,029 to 2,236; Morton increased by 7% from 15,198 to 16,267; East Peoria increased by 3% from 22,638 to 23,402 and Pekin increased by 1% from 33,857 to 34,094.

According to the Tazewell County Community Development Administrator, no substantial changes in development have occurred within hazard prone areas of the County that have impacted its overall vulnerability since the first Plan update was approved. In terms of the participating jurisdictions, none have experienced substantial changes in development that have impacted their overall vulnerability since the first Plan update was approved with the exception of East Peoria according to the Tri-County Regional Planning Commission.

Between 2012 and 2017 sixteen commercial development projects, seven of them multi-tenant, the East Peoria City Hall and the East Peoria Library/Civic Plaza were constructed in the Levee District of East Peoria. These structures are protected from the 1% annual chance flood (100-year flood) by a provisionally-accredited levee. While the levee reduces the risk of flooding, it cannot eliminate all flood risk. The USACE's Levee Safety Senior Oversight Group considers the risk associated with this levee to be low. This change in development has the potential to increase the City's vulnerability to flooding along the riverfront if a flood overtops or breaches the levee allowing floodwaters to inundate the protected areas behind. No other substantial changes in development have occurred in hazard prone areas that would increase or decrease the City's vulnerability since the last Plan update was completed.

There are no large-scale economic initiatives underway in the County. Substantial changes in land use (from forested and agricultural land to residential, commercial and industrial) are not anticipated within the County in the immediate future. No sizeable increases in residential or commercial/industrial developments are expected within the next five years.

1.1.2 WOODFORD COUNTY

COUNTY PROFILE

Woodford County is located in central Illinois and is part of the Peoria-Pekin Metropolitan Statistical Area (MSA), which also includes Tazewell and Peoria counties. The County covers approximately 542 square miles. **Figure 5** provides a location map of Woodford County and the participating municipalities. The topography is generally flat to moderate sloping with the areas adjacent to streams and drainage ways gently sloping to very steep. The County is located between the metropolitan areas of Peoria and Bloomington-Normal and is bounded to the north by Marshall and LaSalle counties, to the east by Livingston County, to the south by McLean and Tazewell counties, and to the west by the Illinois River. The City of Eureka is the county seat.

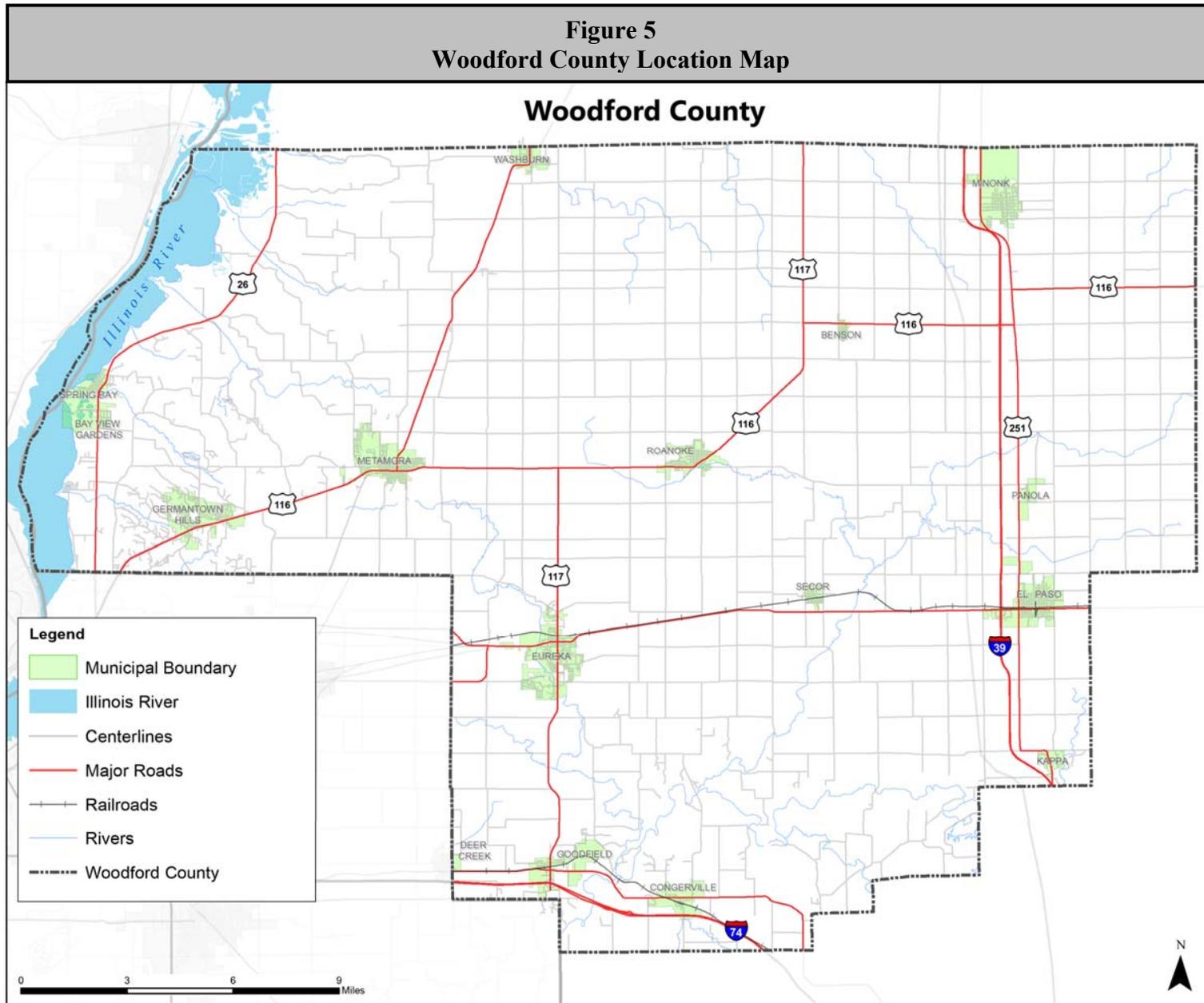
Woodford County has traditionally been known for its prime agricultural land and family farms. According to the 2012 Census of Agriculture, there were 958 farms in Woodford County occupying almost 96% (322,983 acres) of the total land area in the County. The major crops include corn and soybeans while the major livestock includes hogs and pigs, roosters, pullets for laying and layers. The County ranks 23rd in the State for corn and 28th for soybeans. In terms of livestock, the County ranks 1st for roosters, for pullets for laying, 7th for layers and 13th for hogs and pigs. Woodford County ranks 22nd in crop cash receipts and 18th in livestock cash receipts.

Woodford County is home to Eureka College, the college home of President Ronald Reagan. Manufacturing in the County does not have a large base; however, manufacturing is the largest industry in Woodford County. A total of 2,516 jobs in manufacturing exist in the county or 23% of the workforce. The top three private sector companies in in Woodford County are Eureka Community Unit School District 140 with 260 employees, Parsons Company with 221 employees, and CNH America LLC with 208 employees. According to U.S. Cluster Mapping the top traded economic cluster in Woodford County is distribution and electronic commerce with 976 jobs in 2016.

Figure 6 provides demographic data on the County and each of the participating municipalities along with information on housing units and assessed values. The assessed values are for all residential structures and associated buildings (including farm homes and building associated with the main residence.) The assessed value of a residence in Woodford County is approximately one-third of the market value.

LAND USE AND DEVELOPMENT TRENDS

Population growth and economic development are two major factors that trigger changes in land use. Woodford County is largely rural with a growing bedroom community population. Agricultural dominates the majority of Woodford County land use. As discussed previously, approximately 96% of the land area within the County is used for farming practices. Agriculture is and will continue to be a major enterprise within the County and a vital part of the County's economy.



**Figure 6
Demographic Data by Participating Jurisdiction – Woodford County**

Participating Jurisdiction	Population (2010)	Projected Population (2025)	Total Area (Sq. Miles) (2010)	Number of Housing Units (2010)	Housing Unit Density (Units/ Sq. Mile) Rounded Up	Total Assessed Value of Housing Units (2016)
Woodford County (unincorporated)	14,955	15,998	524.014	5,755	12	\$260,938,760
Eureka	5,295	5,664	3.071	2,023	670	\$58,089,549
Germantown Hills	3,438	3,678	1.673	1,218	749	\$81,900,782
Roanoke	2,065	2,209	0.961	867	---	\$22,289,797

Sources: Illinois Department Public Health, Population Projects for Illinois Counties 2010 to 2025.
 Woodford County Supervisor of Assessments.
 U. S. Census Bureau, 2010 Census U.S. Gazetteer Files.
 U.S. Census Bureau, American FactFinder.

Between 2000 and 2010 the population increased by 9% from 35,469 to 38,664. This is part of a larger trend. U.S. Census Bureau records indicates that between 1900 and 2000, the population of Woodford County increased by 62% from 21,822 to 35,469. All of the participating municipalities have experienced increased in their populations since 2000. Germantown Hills had the largest increase of 62.9% from 2,111 to 3,438 while Eureka increased by 8.7% from 4,871 to 5,295 and Roanoke increased by 3.6% from 1,994 to 2,065.

No substantial changes in development within hazard prone areas have occurred within Woodford County that have impacted its overall vulnerability since the first Plan update was approved according to the Woodford County Emergency Management Agency Director with the exception of the buyout of twelve homes located in floodways between 2013 and 2015. In terms of the participating jurisdictions, none have experienced substantial changes in development that have impacted their overall vulnerability since the first Plan update was approved according to the Tri-County Regional Planning Commission.

There are no large-scale economic initiatives underway in the County. Substantial changes in land use (from forested and agricultural land to residential, commercial and industrial) are not anticipated within the County in the immediate future. No sizeable increases in residential or commercial/industrial developments are expected within the next five years.

1.1.3 PEORIA COUNTY (INCLUDING THE PARTICIPATING MUNICIPALITIES)

COUNTY PROFILE

An overview of Peoria County is being provided given the interconnectedness between the participating municipalities and Peoria County. This information is necessary for the reader when evaluating the natural hazards and mitigation actions contained later in this Plan.

Peoria County is located in central Illinois and is home to the region’s metropolitan center, the City of Peoria. Peoria County is part of the Peoria-Pekin Metropolitan Statistical Area (MSA),

which also includes Tazewell and Woodford counties. The County covers approximately 631 square miles. **Figure 7** provides a location map of Peoria County and the participating municipalities. The topography is generally flat to moderate sloping with the areas adjacent to streams and drainage ways gently sloping to very steep. The County is bounded to the north by Stark and Marshall counties, to the east by Illinois River, to the south by Fulton County and to the west by Knox County. The City of Peoria is the county seat.

Agriculture has played a major role in making Peoria what it is today and is still the largest land use in the County. According to the 2012 Census of Agriculture, there were 917 farms in Peoria County occupying approximately 63% (250,263 acres) of the total land area in the County. The major crops include corn, soybeans, and forage-land used for all hay and haylage, grass silage and greenchop while the major livestock includes hogs and pigs, cattle and calves, layers and broilers. The County ranks 35th in the State for 45th in the state forage-land used for all hay and haylage, grass silage and greenchop, 45th for corn and 53rd for soybeans. In terms of livestock, the County ranks 12th for broilers, 26th for layers, 35th for horses, 36th for cattle and calves and 51st for hogs and pigs. Peoria County ranks 35th in crop cash receipts and 46th in livestock cash receipts.

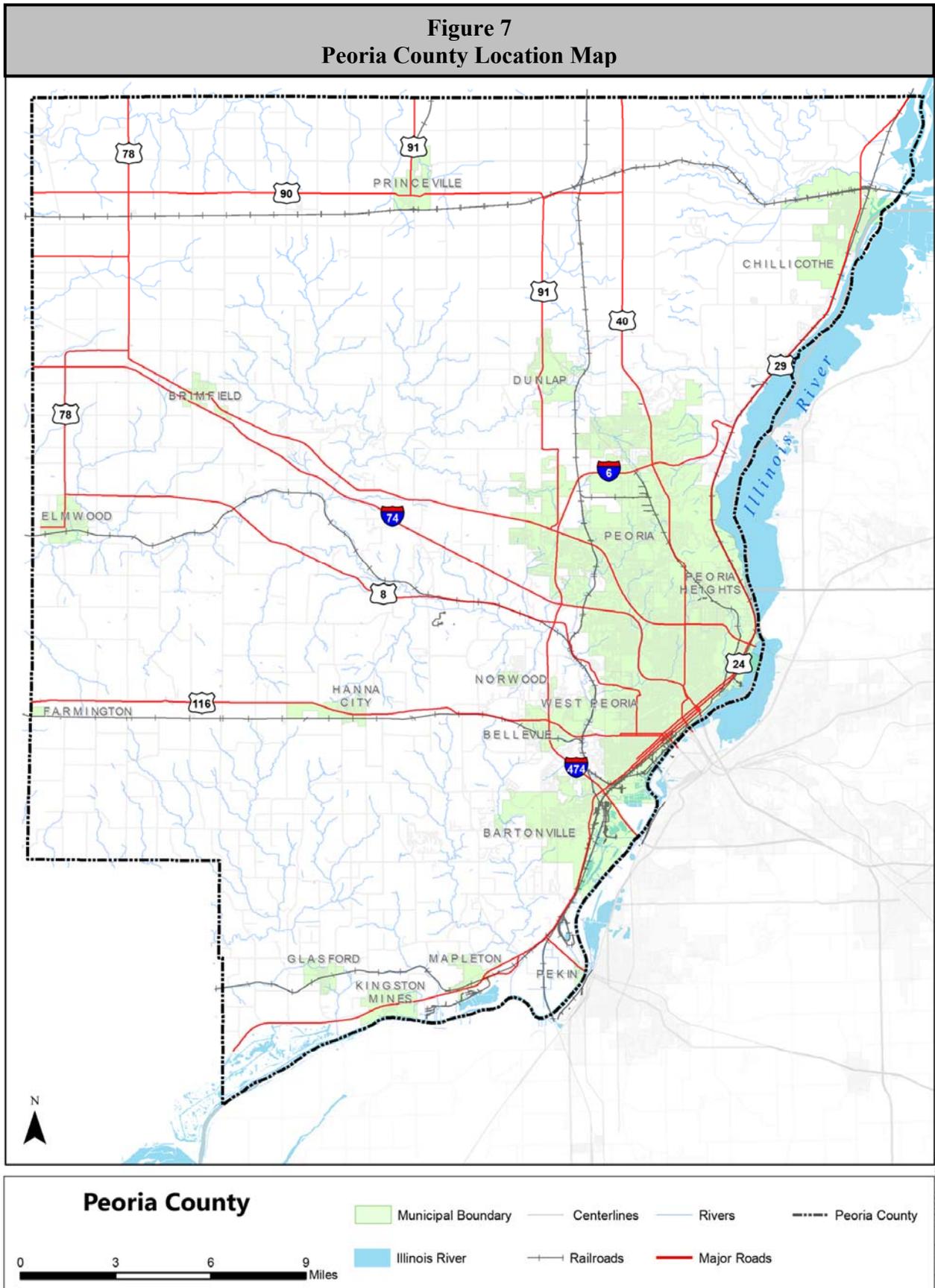
Naturally, residents and visitors alike equate Peoria with Caterpillar Inc., but the region also boasts the USDA's National Center for Agricultural Utilization Research Lab, a renowned medical community with the only Level 1 trauma center in the Tri-County region, and many innovative high-tech firms. The Peoria Next Innovation Center, a technology business incubator, is leading the region's growth in its manufacturing economy through innovation and improving the manufacturing process.

With the presence of Caterpillar Inc., one would equate the largest industry in Peoria County as manufacturing. However, the largest industry in Peoria County is actually health care and social services with 24,327 jobs or 24% of the workforce. The top three private sector companies in Peoria County are Caterpillar Inc. with 8,157 employees, OSF Saint Francis Medical Center with 5,800 employees, and Unity Point Health Methodist with 2,979 employees. According to US cluster Mapping, the top traded economic cluster is Business Services with 20,957 jobs in 2016.

Figure 8 provides demographic data on each of the participating Peoria County municipalities along with information on housing units and assessed values. The assessed values are for all residential structures and associated buildings. The assessed value of a residence in Peoria County is approximately one-third of the market value.

LAND USE AND DEVELOPMENT TRENDS

Population growth and economic development are two major factors that trigger changes in land use. Peoria County is the largest county by population in the Tri-County region and is home to the region's metropolitan center, the City of Peoria. As discussed previously, approximately 63% of the land area within the County is used for farming practices. Agriculture is an important part of the County's economy and will continue to be a key enterprise.



**Figure 8
Demographic Data for Participating Peoria County Municipalities**

Participating Jurisdiction	Population (2010)	Projected Population (2025)	Total Area (Sq. Miles) (2010)	Number of Housing Units (2010)	Housing Unit Density (Units/ Sq. Mile) Rounded Up	Total Assessed Value of Housing Units (2016)
Bartonville	6,471	6,338	8.612	2,812	327	\$71,993,160
Chillicothe	6,097	5,972	5.416	2,719	502	\$75,928,298
Hanna City	1,225	1,200	0.478	584	---	\$15,185,830
Peoria	115,007	112,649	50.227	52,621	1,048	\$1,372,986,619
Peoria Heights	6,156	5,962	6.973	3,093	444	\$72,652,006

Sources: Illinois Department Public Health, Population Projects for Illinois Counties 2010 to 2025.
Tazewell County Assessments Office.
U. S. Census Bureau, 2010 Census U.S. Gazetteer Files.
U.S. Census Bureau, American FactFinder.

The City of Peoria is primarily known for heavy manufacturing with the strong presence of Caterpillar Inc. and Komatsu Mining Division; however, it is also home of USDA’s National Center for Agriculture Utilization Research Lab, a renowned medical community, and several post-secondary educational institutions. The County is home to Bradley University, Illinois Central College’s Downtown and North campuses, Robert Morris College, Midstate College and the University of Illinois College of Medicine.

Between 2000 and 2010 the population increased by 2% from 183,433 to 186,494. U.S. Census Bureau records indicate that between 1900 and 2000, the population of Peoria County has increased over 107% from 88,608 to 183,433. All of the participating municipalities, with the exception of Peoria Heights, experienced increases in their populations since 2000. Hanna City had the largest increase of 21% from 1,013 to 1,225. Bartonville’s population increased by 3% from 6,310 to 6,471; Chillicothe increased by 2% from 5,996 to 6,097 and Peoria increased by 2% from 112,936 to 115,007. Peoria Heights population decreased by 8% from 6,635 to 6,087.

According to the Tri-County Regional Planning Commission no substantial changes in development within hazard prone areas have occurred within the participating Peoria County municipalities that have impacted their overall vulnerability since the first Plan update was approved, with the exception of Peoria. In 2017 the Riverfront Village Platform and parking deck, which housed three restaurants and 200 parking spaces and was located in the floodplain of the Illinois River, was demolished and replaced with green space. This change in development decreased the City’s vulnerability to flooding along the riverfront. No other substantial changes in development have occurred in hazard prone areas that would increase or decrease the City’s vulnerability since the last Plan update was completed.

With the exception of a small housing development being built in Peoria Heights, there are no large-scale economic initiatives underway in the participating municipalities. Substantial changes in land use (from forested land to residential, commercial and industrial) are not anticipated within the participating municipalities in the immediate future. No sizeable increases in residential or commercial/industrial developments are expected within the next five years.