



# Howell County

MISSOURI



## 2009 All Hazard Mitigation Plan



A part of the State Wide  
All-Hazard Mitigation Planning Project  
Produced by  
South Central Ozark Council of Governments  
A member of Macog  
for the Federal and State Emergency Management Agencies

<b>TABLE OF CONTENTS</b>	
<b>2009 Howell County All-Hazard Mitigation Plan</b>	<b>Page</b>
<b>INTRODUCTION</b>	7
Adoption by Local Governing Bodies	8
Assurance Statements of Compliance with FEMA	8
Planning Process	9
Planning Participation	10
Plan Methodology and Schedule	11
Plan Review and Update Process	14
Acknowledgements	15
<b>SECTION 1</b>	
<b>COMMUNITY PROFILES</b>	16
Howell County Profile	16
History of Development	16
Form of Government	20
Historical Places/Historical Districts/Archeological Sites	20
Endangered Species	21
Geography, Geology, and Climate	23
Topography and Elevation	23
Geology	23
Hydrology	25
Climate and Weather	26
Howell County Soils	27
Demographic Information	27
Media Coverage	29
Media Points of Contact	30
Community Partnerships	30
Significant Cultural/Social Issues	30
Public Awareness	30
Economy, Industry, and Employment	30
Top Employers	32
Labor Force	33
Commutes	33
Existing Regulations	34
Existing Community Plans	34
Howell County Emergency Operations Plan	34
CEDS	34
STIP	34
LTIP	35
Land Use Information	35
Development Trends	37
Floodplain Management	37
Wetland Issues	37
Environmental Issues	37
Identified Assets	37
County Infrastructure	37
Transportation	37
Roadways, Railroad, and Airports	38

Telecommunications	39
Sewer and Water Facilities	39
Utilities and Natural Gas	40
Solid Waste Disposal	40
Law Enforcement	40
Fire Protection	41
Emergency Management	41
Underground Infrastructure	41
Critical or Essential Facilities	42
Medical	42
Schools, Long-Term Care, and Day Care Centers	43
Government Facilities	48
Inventory of Large Employers, Commercial, and Recreational Facilities	50
Large Industrial/Commercial Facilities	50
Recreational Facilities	50
Housing Structures	51
Total Inventory of Structures	51
Estimates of Future Building	51
City/Town/Village Profiles	52
<b>SECTION 2</b>	
<b>Risk Assessment</b>	60
Natural Hazard Identification/Elimination Process	60
Community Wide Hazard Profile and List of Hazards	61
Identified Natural Hazards	62
Tornado	62
Severe Thunderstorm, Hail, and High Wind	68
Flood	74
Severe Winter Weather (Ice, Snow, and Extreme Cold)	81
Drought	87
Heat Wave	90
Earthquake	94
Dam Failure	98
Wildfire	104
Land Subsidence/Sinkholes	110
Disaster Declarations	114
Jurisdictional Hazard Composite Maps	115
Multi-Jurisdictional Risk Assessment Tables	119
Howell County Hazard Identification and Analysis	134
<b>SECTION 3</b>	
<b>City and County Capability Assessments</b>	135
Mitigation Management Policies	135
Existing Plans	135
Mitigation Programs	137
City/County Capabilities	137
Responsibilities and Authorities	138
Intergovernmental and Interagency Coordination	138
Vulnerability Assessments of county Development/Trends	138

Commitments to a Comprehensive Mitigation Program	138
County Laws, Regulations, and Policies Related to Development in Hazard Areas	138
County Laws, Regulations, and Policies Related to Hazard Mitigation in General	138
How Local Risk Assessments are Incorporated and Prioritized into Local Planning	139
Mitigation Funding Options Including Current and Potential Sources	140
How County Government Meets Requirements for Hazard Mitigation Funding	140
Recommendations for Improvements	140
City/Town/Village Policies and Development Trends	142
<b>SECTION 4</b>	
<b>Introduction to Mitigation</b>	143
Definition of Mitigation	143
Mitigation versus Preparedness, Response, and Recovery	144
Mitigation Planning Benefits	144
County Hazard Mitigation Goals, Objectives, Strategy, and Coordination	145
Multi-Jurisdictional Goals and Objectives	146
Evaluation of Goals and Objectives	147
Definition of STAPLEE	147
Strategic Implementation	150
Incorporation of mitigation objectives into existing and future plans or regulations	150
Ensure Implementations through Inclusion in Adoption Resolution	150
Analysis and Prioritization of Mitigation Actions	151
Cost Benefit Review	151
Plan Maintenance Process	151
Future Monitoring, Evaluating, and Updating the Plan	151
Monitoring the Plan	151
Evaluating the Plan	151
Updating the Plan	151
Continued Public Involvement	152
Action Statement	152
Appendix A: Acronyms	173
Appendix B: Definitions	174
Appendix C: Multi-Hazard Mitigation Resource Directory and Bibliography	175
Appendix D: Primary Federal and State Funding Programs	176
Appendix E: Notice to Public	179
Appendix F: Opportunities for Participation	180
Appendix G: Documentation of Public Participation	181
Appendix H: Monitoring and Evaluation	185
Appendix I: Model Resolution	187
Appendix K: Transportation, Floodplain and Key Essential Facilities Maps	188
Appendix L: Meeting Sign-In Sheets	203

## Introduction

Following the severe weather, tornado, and flood disaster that was declared in the spring of 2002 (DR-1412), Missouri's State Emergency Management Agency (SEMA) received flood buyout project proposals from 23 communities across the state. Fortunately, they were able to help some of these communities with federal mitigation grant funding provided through the Federal Emergency Management Agency (FEMA). After November 1, 2004, communities like these will still be eligible for federal disaster public assistance and individual assistance, but will not be eligible for mitigation assistance unless they have an approved hazard mitigation plan on file. For the nearly 1,000 cities and 114 counties in Missouri, mitigation plans will be required for all federally declared disasters such as flood, earthquake, ice storm, tornado, and fire. Under the current rules for federal mitigation funding, local governments will be required to have FEMA approved hazard mitigation plans in place as a condition to receiving future federal mitigation grant funding. These plans must be updated and adopted every five years.

Under the initiative set forth by SEMA, the Missouri Association of Councils of Government (MACOG) agreed to meet the challenge of developing county and municipal plans throughout the state. The 19 regional planning commissions of MACOG provide an effective way for local governments to work together to share technical staff and address common problems in need of an area-wide approach. They also can effectively deliver programs that might be beyond the resources of an individual county or municipal government. The intent of the regional planning commissions in Missouri is to be of service to their member counties and municipalities and to bring an organized approach to addressing a broad cross-section of area wide issues. They also are available to assist their member entities in coordinating the needs of the area with state and federal agencies or with private companies or other public bodies.

As Howell County's population grows and development increase, so does the risk for natural hazards to affect more residents and property. There is no way to predict when natural disasters may occur or to prevent hazard events from occurring. However, the impacts of natural hazard events can be lessened and injuries, loss of life and damages to property can be reduced through prudent actions taken before hazard events occur.

The *Howell County Multi-Jurisdiction All Hazard Mitigation Plan* update represents a multi-jurisdictional approach by Howell County, municipalities and school districts to establish a guide for action that can be undertaken to help reduce the adverse impacts of hazard events and make Howell County safer. This plan only addresses natural hazards that may affect Howell County; man-made or technological hazards are not discussed other than in reference to cascading damages that could result from a natural hazard event. Additionally, levee failure is not included in this plan due to there being no levees located in Howell County. The natural hazards addressed in the plan include:

- Tornado and severe thunderstorms
- Riverine and flash flooding
- Severe winter weather
- Drought
- Heat waves
- Earthquakes
- Dam failure
- Wildfires
- Land subsidence (sinkholes)

The *Howell County Multi-Jurisdictional All Hazard Mitigation Plan* is an updated version of the original 2005 Howell County Multi-Jurisdictional Hazard Mitigation plan developed in conformance with the requirements of the Disaster Mitigation Act of 2000. This act required local governments to develop and approve a natural hazard mitigation plan by November 1, 2004 to be eligible for federally funded mitigation assistance in the future. Mitigation plans will be required to receive mitigation assistance for all federally declared disasters and must be updated every 5 years. In accordance with the act, the local jurisdiction is required to review and revise its plan, and resubmit it for approval with 5 years in order to continue to be eligible for mitigation project grant funding.

In Missouri, SEMA requested the regional planning commissions to work with local governments to develop the hazard mitigation plans. In 2009 Howell County contracted with South Central Ozark Council of Governments to develop the plan update. Upon approval of the *Howell County Multi-Jurisdictional All Hazard Mitigation Plan*, Howell County, Municipalities, and School Districts within the county will continue to be eligible for future mitigation assistance from FEMA and will be able to more effectively carry out mitigation activities to lessen the adverse impact of future natural disasters within the county.

### **Planning Authority**

Section 322 of the Robert T. Stafford Relief and Emergency Assistance Act (Stafford Act), 42 U.S.C. 5165, as amended by the Disaster Mitigation Act of 2000 (DMA) (P.L. 106-390), provides for states, tribes and local governments to undertake a risk-based approach to reducing risks to natural hazards through mitigation planning. FEMA has implemented the various hazard mitigation planning provisions through regulations at 44 CFR Part 201. These reflect the need for states, tribal and local governments to closely coordinate mitigation planning and implementation efforts and describe the requirement for a state mitigation plan as a condition of pre- and post-disaster assistance, as well as the mitigation plan requirement for local and Tribal governments as a condition of receiving FEMA hazard mitigation assistance.

### **Assurance Statements of Compliance with FEMA**

The regulations governing the mitigation planning requirements for local mitigation plans are published under 44 CFR §201.6. Under 44 CFR §201.6, local governments must have a FEMA approved local mitigation plan in order to apply for and receive project grants under the following hazard mitigation assistance programs:

- Hazard Mitigation Grant Program (HMGP)
- Pre-Disaster Mitigation (PDM)
- Flood Mitigation Assistance (FMA)
- Severe Repetitive Loss (SRL)

FEMA may require a local mitigation plan under the Repetitive Flood Claims (RFC) program.

SMCOG staff relied on FEMA's July 1, 2008 publication *Local Multi-Hazard Mitigation Planning Guidance* to meet the mitigation planning requirements. The *Local Multi-Hazard Mitigation Planning Guidance* is an interpretation and explanation for the Local Mitigation regulations at 44 CFR §201.6 and is FEMA's official source for defining the requirements of original and updated local mitigation plans. Additional FEMA resources frequently consulted include *State and Local Mitigation Planning How-to Guides* (FEMA 386-1 through 386-8).

### **Plan Organization and Content**

This plan includes elements and information prescribed by FEMA's July 1, 2008 publication *Local Multi-Hazard Mitigation Planning Guidance*, a guide designed to assist local jurisdictions in defining the requirements for both new and updated mitigation plans.

This plan is divided into six parts including Introduction, Community Profiles, Risk Assessment, Capability Assessment, Mitigation, and Appendices:

- Part I – Introduction: The Introduction provides an overview of the plan's purpose and format, participating jurisdictions, assurances and authorities for development of the plan, and plan preparation methodology and schedule.
- Part II – Community Profile: This element provides a description of the political, natural, cultural, demographic, socio-economic, and developmental characteristics of Howell County and local jurisdictions, including identification of critical facilities and vulnerable populations and facilities that may be affected by a hazard event.

- Part III – Risk Assessment: The Risk Assessment provides an analysis of the natural hazards addressed in the plan, including review of historical disaster events, evaluation of future risk, and assessment by jurisdiction to vulnerability of future hazard events
- Part IV – Capability Assessment: The Capability Assessment discusses the current capabilities of Howell County and local jurisdictions to mitigate the effects of natural hazard events.
- Part V – Mitigation: The Mitigation element describes the range of mitigation categories and activities that may be employed by local jurisdictions, outlines the mitigation goals, objectives, and mitigation strategies development by Howell County, municipalities, and school districts, and provides a matrix that summarizes mitigation strategies, priorities, responsibilities for implementation, and assessment.
- Part VI – Appendices: The Appendices includes the resolutions of plan adoptions from participating jurisdictions, participation documentation, Hazard Identification maps for the county’s municipalities, glossary, acronyms, and references

## Planning Process

In accordance with Missouri’s “sunshine law” (RSMo §610.010, 610.020, 610.023, and 610.024), input from the general public was solicited through media outlets, including public meeting notices published in local newspapers, county commission meeting agendas, and postings on the SCOCOG website. The public was notified of the final plan review meeting by advertisements in the West Plains Daily Quill and the Mountain View Standard, and on the SCOCOG website a week and a half prior to meeting times.

The preliminary draft update was completed using input from the public at the various planning committee meetings held throughout the county. These meetings were scheduled with representatives from each of the county’s participating jurisdiction and were used to collect the most up-to-date local data pertinent to the Plan.

Neighboring jurisdictions were notified via email and letters, a notification was sent to the following entities: West Plains Area Red Cross, Chair of the Region G Homeland Security Oversight Community, West Plains Police Department, West Plains Emergency Management, West Plains Fire Department, Howell County 911 dispatch, Howell County Sheriff’s Department, Brandsville Fire Department, Willow Springs Emergency Management, and local newspapers.

In most cases, SCOCOG staff was responsible for the review and incorporation for revised and updated material in the plan. As new information was incorporated into the plan, updated drafts were distributed electronically and through the mail for review and comment.

## Plan Adoption

To be eligible for mitigation funding, local governments must adopt the FEMA-approved update of the plan. The participation of the local government stakeholders in the planning process is considered crucial to successful implementation of this plan. Each jurisdiction this is seeking approval for the plan must have its governing body adopt the updated plan, regardless the degree of modifications. SCOCOG collaborated with the local governments in Howell County to assure participation in the planning process and the development of a plan that represents the needs and interests of Howell County and its local jurisdictions. Upon FEMA approval of the plan, participating jurisdictions will formally adopt the *Howell County Multi-Jurisdictional All Hazard Mitigation Plan* and the documentation will be placed in Appendix I.

## Multi-Jurisdictional Planning Participation

In order to be included in the plan as a participating jurisdiction, each jurisdiction was required to send a representative to mitigation planning meetings as a minimum requirement. If, however, a representative was not able to attend planning meeting, they were encouraged to arrange for a one-to-one meeting with SCOCOG staff or contact SCOCOG staff to obtain information presented at any of the planning meetings. Although not required, a set of standards for participation were developed in order for each jurisdiction to participate in the planning process and account for the variability of resources within each jurisdiction. This set of standards included: reviewing and commenting on the plan draft materials, submitting insured replacement values and information relating to critical facilities and completing community or district hazard mitigation questionnaires. Jurisdictions that met the minimum requirement and any combination of three standards are considered to have satisfactorily participated in the planning process. Table 1-1 provides a record of participation in the planning process.

Table 1-1 Record of Participation					
Jurisdiction	Plan Update Status	Nature of Participation			
		Attended Meetings	Review/Comment on Draft Material	Submitted Critical Facility Info	Completed Surveys
Howell County	Continuing	X	X	X	X
<b>Municipalities</b>					
Brandsville	Continuing	X	X	X	
Mountain View	Continuing	X	X	X	X
West Plains	Continuing	X	X	X	X
Willow Springs	Continuing	X	X	X	X
<b>School Districts</b>					
Fairview R-XI	New	X	X	-	-
Glenwood R-VIII	New	X	X	-	-
Howell Valley R-I	New	X	X	-	-
Junction Hill R-XII	New	X	X	-	-
Mtn. View - Birch Tree R-III	New	X	X	-	-
West Plains R-VII	New	X	X	-	X
Willow Springs R-IV	New	X	X	-	-
<b>Universities</b>					
Missouri St. Univ. West Plains	New	X	X	X	-

The following jurisdictions satisfied the participation requirements in the planning process and are included in the *Howell County Multi-Jurisdictional All Hazard Mitigation Plan*:

- Howell County
- City of Brandsville
- City of Mountain View
- City of West Plains
- City of Willow Springs
- Fairview R-XI School District
- Glenwood R-VIII School District
- Howell Valley R-I
- Junction Hill R-VII
- Mountain View – Birch Tree R-II School District
- West Plains R-VII School District
- Willow Springs R-IV School District
- Missouri State University-West Plains

Other jurisdictions that participated in the planning process, but are not seeking independent approval include:

- Brandsville Fire Department
- Howell County 911
- Howell County Sheriff's Department
- West Plains Police Department
- West Plains Fire Department
- West Plains Emergency Management
- Willow Springs Emergency Management
- Local Newspapers West Plains Daily Quill and Howell County News

## **Plan Preparation Methodology and Schedule**

In July 2009 SCOCOG entered into cooperative agreements with SEMA and Howell County to prepare this multi-jurisdictional plan for Howell County. Discussions on the development of the *Howell County Multi-Jurisdictional All Hazard Mitigation Plan* update began in July of 2009 with a telephone conference with a representative of the Howell County Commission and local Emergency Management Officials. This meeting was conducted to discuss the timeline for development the hazard mitigation plan, the planning process, identification of stake holders, and community organizations to include in the planning process and a date for the initial multi-jurisdictional meeting to initiate participation of jurisdictions and public entities in the planning process.

SCOCOG began conducting research in July 2009 and updating demographic and community profile information in advance of the initial planning meeting on July 15<sup>th</sup> 2009. At this initial planning meeting, the plan update process was discussed with representatives from each participating jurisdiction and emergency management services and the preliminary community profile updates were distributed for review, participation requirements for entities to be included in the plan and the distinctions between the original plan and the updated version that requires that school districts in particular and other districts participate as stand-alone jurisdictions to maintain eligibility for FEM mitigation grant programs.

SCOCOG staff members Monty Smith and Karen Crow lead the early development of the plan under direction of the Emergency Management Director and the multi-jurisdictional planning committee, which included local elected officials, municipal government staff, county government staff, emergency services personnel, school officials, and employees from the health and social services organizations in the county. Various members of the planning committee met with SCOCOG staff throughout the development stages of the planning process to collaborate on the plan update effort. Participants assisted in data collection; reviewed and revised the Plan's objectives and mitigation strategies; and provided reviews and comments on the plan throughout

the update process. Significant dates in the planning process for the preparation of the *Howell County Multi-Jurisdictional All Hazard Mitigation Plan* are noted below:

Significant Dates in the preparation of the *Howell County Multi-Jurisdictional All Hazard Mitigation Plan* include:

July 1, 2009: Start of the plan update

- SCOCOG staff review of 2005 plan

July 15, 2009: Initial meeting with participating jurisdictions (Meeting sign-in sheet attached)

- Public notice given in local newspapers
- 2005 plan elements reviewed by attendees
- Community Profile and Capability Assessment updates
- Mitigation goal identification

August 7-September 11, 2009: Initial meetings held with remaining participating jurisdictions

- Review of 2005 plan elements
- Gather updated materials

October 2009: SCOCOG presents updated Hazard Mitigation Plan to Howell County officials

- Feedback from participating jurisdiction was incorporated into the plan

March 10, 2010: Draft submitted to SEMA

August 30, 2010: Draft resubmitted to SEMA

November 3, 2010: Draft resubmitted to SEMA/FEMA

July 2011: SCOCOG planning staff changes

October 27, 2011: Final plan draft completed

November 9, 2011: Public hearing to solicit comments and suggestions

The individuals in Table 1-2 participated in the development of the Howell County Multi-Jurisdictional All Hazard Mitigation Plan. Participation in the development of the plan was also accomplished through telephone, fax, and email communications to individual communities and through meetings with community or jurisdiction representatives.

Table 1-2: Hazard Mitigation Plan Meeting Attendance									
Jurisdiction	Representative	6/5/09	6/15/09	8/7/09	8/17/09	9/10/09	9/11/09	5/24/10	6/2/10
EMD	Lloyd Finklea	X							
Presiding Commissioner	Larry Spence	X	X	X					
Assessor	Daniel Franks		X						
911 Coordinator	Steve Gleghorn		X						
Mayor	A.J. Filip					X			

**Table 1-2: Hazard Mitigation Plan Meeting Attendance (continued)**

Alderman	Nancy Burke					X			
City Clerk	Nancy Bailey					X			
EMD	Becky Day					X			
Mayor	Bud Vines		X						
Alderman	Dave Cattell		X						
Alderman	Jim Jenkins		X						
City Admin.	Royce Fugate	X	X						
EMD	Kent Edge		X						
City Engineer	Wes Parks		X						
Police	Charles Brotherton		X						
Fire Chief	Tim Bean		X						
EMD	Shawn Watson				X				
City Clerk	Gena Brook				X				
Superintendent	Fred Czerwonka (WP)		X						
Superintendent	Vivian Williams (FV)		X						
Superintendent	James McCracken (RE)		X						
Superintendent	Jerry Nicholson (MVBT)							X	
Superintendent	Heather Sexton (JH)		X						
Superintendent	Wayne Stewart (GW)								X
Superintendent	Matt Douglas (HV)								X
Directory B.S.S.	Matt Morris (MSU-WP)						X		

*\*Willow Springs School District was contacted via telephone on 9/11/09*

## Plan Review and Update Process

The plan update for all sections of the Plan began with a review of each section from the approved 2005 Howell County Multi-Jurisdiction All Hazard Mitigation Plan and updating information presented in the original plan. For example, Demographic information was updated using Census population estimates and data from the most recent American Community Survey. Original source material of the Community Profile and Risk Assessment sections were reviewed and updated as needed. For example, hypertext links for the Economic and Agricultural Census web pages and MDC wildfire statistics were tested to see if they were up to date and operational. In most cases they were, information available for the period between the 2005 plan preparation and the date of the plan update was incorporated into tables and narratives.

The bulk of revised material was developed from local jurisdiction reviews of initial section drafts and community and school district mitigation questionnaires. Howell County has experienced some growth since the 2005 plan, not only in terms of population, but also its commitment to incorporate mitigation actions and projects set forth in the 2005 plan to reduce the threat of natural hazards to people and property throughout Howell County. Table 1-3 below describes the revisions and updates incorporated into each section of the plan.

Table 1-3: Updates by Section of the 2010 Howell County Hazard Mitigation Plan	
Plan Section	Updated Material
Part I – Introduction	<ul style="list-style-type: none"> <li>• Added public involvement section describing advertised public meetings</li> <li>• Added minimum participation requirements</li> <li>• Included a record of participation describing our each jurisdiction participated in the process</li> <li>• Updated list of plan participants</li> <li>• Updated planning methodology and timeline</li> <li>• Added table of local officials who attended meeting</li> <li>• Updated plan review and update process</li> </ul>
Part II – Community Profile	<ul style="list-style-type: none"> <li>• Updated demographic information</li> <li>• Updated critical, vulnerable, and government facilities information</li> <li>• Incorporated revisions to community profiles as draft sections were reviewed by local officials</li> <li>• Updated state transportation improvement plan</li> <li>• Updated media points of contacts</li> </ul>
Part III – Risk Assessment	<ul style="list-style-type: none"> <li>• Reformatting of entire Risk Assessment section</li> <li>• Included events for each hazard that occurred from 2005-2009</li> <li>• Updated future probability and severity rankings</li> <li>• Incorporated wildland-urban interface map</li> <li>• Included new profile for sinkhole hazard</li> <li>• Added likely locations subsections for each hazard</li> <li>• Developed Hazard Identification and analysis methodology</li> <li>• Added overall summary of hazard vulnerability by jurisdiction</li> </ul>
Part IV – Capability Assessment	<ul style="list-style-type: none"> <li>• Howell County EMD provided updated information from the Emergency Operations Plan</li> <li>• Incorporated new information from community surveys and reviews by local officials</li> </ul>
Part V – Mitigation	<ul style="list-style-type: none"> <li>• Updated mitigation actions development process</li> <li>• Included actions eliminated and reason for removal</li> </ul>

	<ul style="list-style-type: none"><li>• Updated progress made towards mitigation goals from earlier plan</li><li>• Updated cost benefit review method using STAPLEE and simple score analysis</li><li>• Discussed funding sources, lead agencies and status of continuing, revised, and new actions</li></ul>
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## **Acknowledgements**

Several individuals provided valuable assistance throughout the process of development of this hazard mitigation plan for Howell County. Special thanks are given to Howell County officials, the Howell County Emergency Management office, the county's school districts and their representatives, and the cities of Brandsville, Mountain View, West Plains, and Willow Springs.

## Section One

### HOWELL COUNTY PROFILE

#### History of Development

Howell County is in the south central part of the state. The county was formally organized March 2, 1857 and was created from parts of Oregon and Ozark Counties. Howell County was settled by a fur trapper named Adams, who later sold out to Josiah Howell. Howell had migrated here from Tennessee and is credited with being the first permanent settler in the county, which now bears his name. West Plains is the county seat.

The area was settled by the Osage Tribe in 1808. Many Native Americans visited the county frequently for hunting. Today, running North and South is an ancient Native American trail where more than 1,000 prehistoric mounds have been identified. Arrow quarries and campsites are found along valley streambeds. Utilized by Ozark Bluff Dwellers in ancient times, the area was known to Arkansas, Delaware, Shawnee, Osage, and other tribes. The first white settlers arrived in the 1830's, attracted by freedom, plentiful game and fine streams, most settlers relocated from Southern Appalachia.

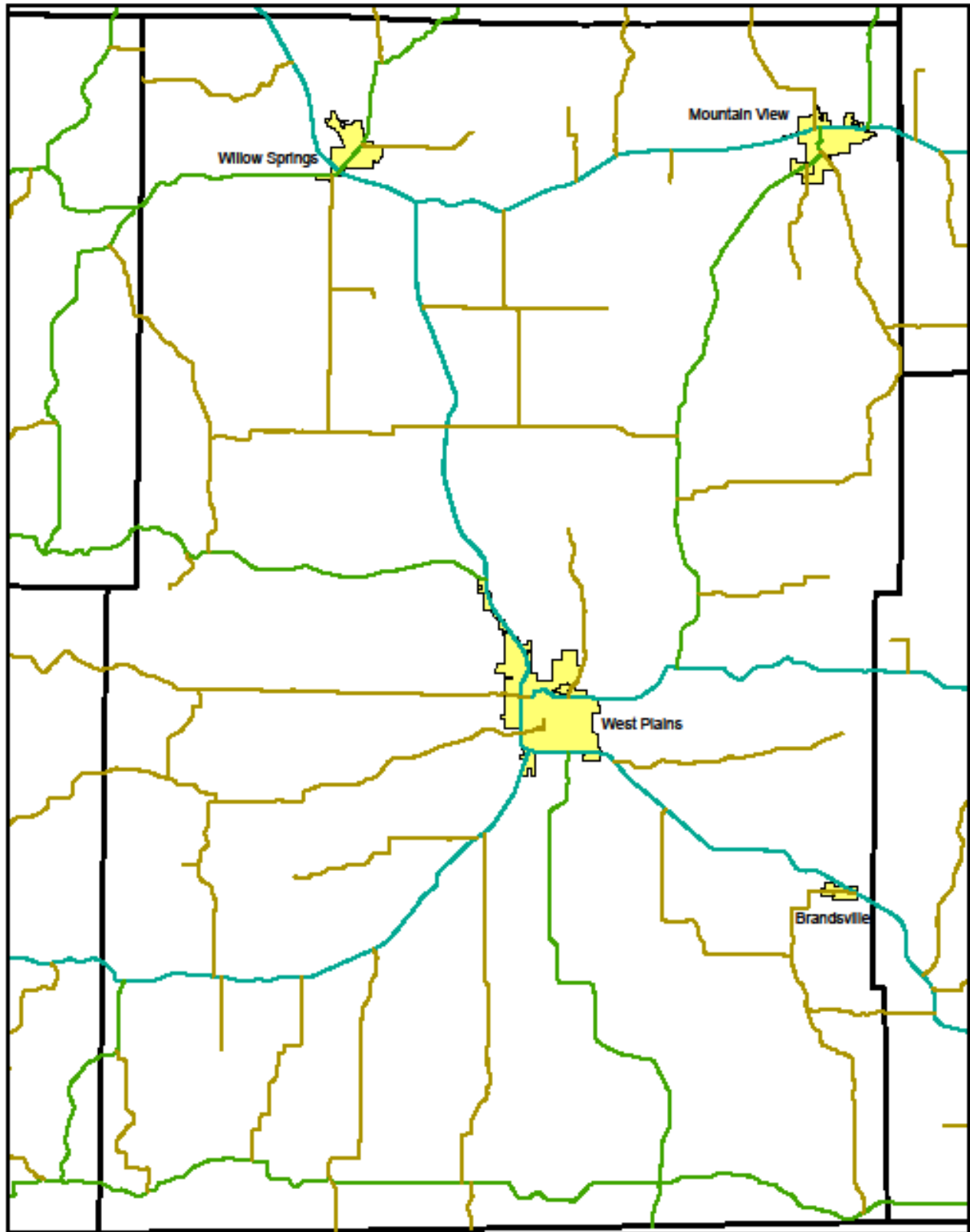
During the Civil War, troops moving through the county lived on the land; roving guerrilla bands burned some homes and mills and killed some heads of households. There were no pitched battles or skirmishes of note. After the war settlers from the same areas came back, many to homestead government land. Many were Union veterans. The county grew as an area of small cotton, grain and livestock farms and West Plains as a trading, banking and judicial center.

The County has experienced many changes in its economy and population since the early 20<sup>th</sup> Century. The 1950's and 1960's saw people moving to large metropolitan areas for employment and opportunity. However, as the 1970's became the 1980's the trend began to reverse itself. The population shift came back to rural areas. A recent survey conducted by the Office of Social and Economic Data Analysis, University of Missouri, shows that a significant portion of this growth is the result of households moving into the county from other counties in Missouri, and several other states to retire in the Ozarks.

Howell County, centered in the Ozarks, offers abundant water, a clean environment, increased economic activity and inexpensive land. Due to the increase in population leading to steady growth in economic activity, new investment and employment in retail trade, manufacturing and other sectors has provided increased household income and wealth for many county residents.

The following page contains a current political map of Howell County.

# Howell County



## Legend

- Lettered Highways
- State Highways
- U.S. Highways

0 5 10 Miles



TABLE 1-1

## Population of Howell County by Decennial Census, Land Area and Population Per Square Mile: 1900 to 2000

	Population <sup>1</sup>	Land Area Sq. Miles	Population Per Sq. Mile
- 1900	21,834	928	24
- 1910	21,065	928	23
- 1920	21,102	928	23
- 1930	19,672	928	21
- 1940	22,270	928	24
- 1950	22,725	928	24
- 1960	22,027	928	24
- 1970	23,521	928	24
- 1980	28,807	928	31
- 1990	31,447	928	34
-2000	37,238	928	40

<sup>1</sup>Source: USDC, Bureau of the Census; MO Office of Administration

<http://www.census.gov/population/www/censusdata/cencounts/files/mo190090.txt>

TABLE 1-2

## Historic Decennial Population Howell County and Incorporated Areas, 1900-2000

Jurisdiction	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000
Brandsville											
West Plains	2,902	2,914	3,178	3,345	4,026	4,918	5,836	6,893	7,741	8,913	10,866
Willow Springs	1,078	1,401	1,441	1,430	1,530	1,914	1,913	2,045	2,215	2,038	2,147
Mountain View	**	552	721	783	725	892	936	1,320	1,664	2,036	2,430
Howell County	21,834	21,065	21,102	19,672	22,270	22,725	22,027	23,521	28,807	31,447	37,238

Source: <http://mcdc2.missouri.edu/trends/historical.shtml> (decennial Population for Cities, except year 2000) and

[http://mcdc2.missouri.edu/websas/dp1\\_2kmenus/mo/](http://mcdc2.missouri.edu/websas/dp1_2kmenus/mo/) (2000 Population for cities)

\*\*Data not available

Howell County covers approximately 928 square miles in the south-central part of Missouri. It has a land area of 594,000 acres. Much of the county is rural in character. As of the 2000 U.S. Census, Howell County has a total population of 37,238. Incorporated subdivisions in Howell County are West Plains (population 10,866), Willow Springs (population 2,147), Mountain View (population 2,430) and Brandsville (population 174). Other towns and settlements in Howell County include Caulfield, Hocomo, Lanton, Moody, Peace Valley, Pomona, Pottersville, Siloam Springs and, South Fork. Counties adjacent to Howell County are Texas County (north), Shannon County (northeast), Oregon County (east), Fulton County Arkansas (south), Ozark County (southwest) and Douglas County (northwest).

TABLE 1-3

## Howell County Population Density, 2000 Census

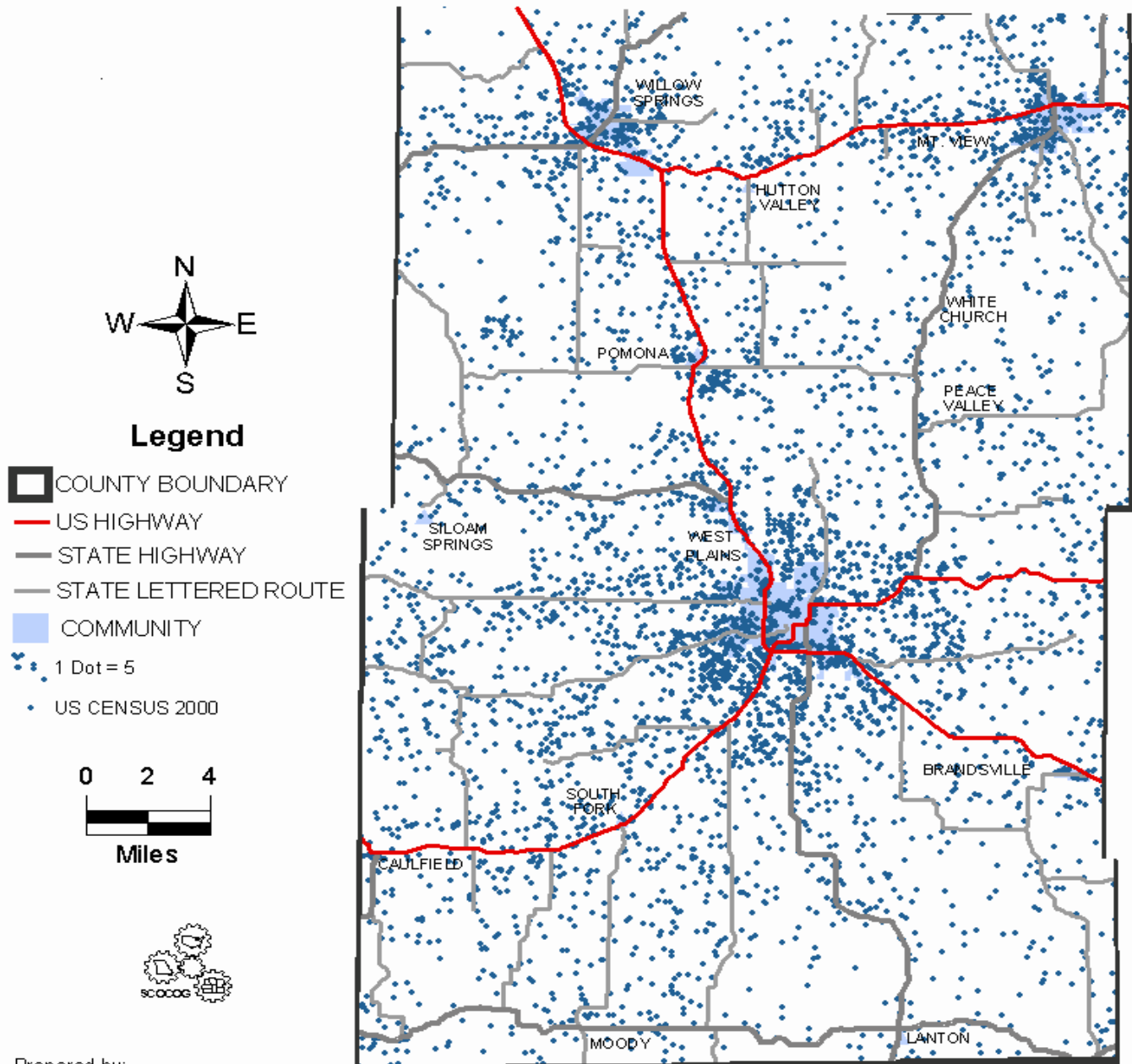
Population Density	Number	Percent
Total Persons	37,238	100
Urban Population	10,027	26.9
In Urban Clusters	10,027	26.9
Rural Population	27,211	73.1
Persons on Farms	2,227	6.0
Persons Per Square Mile (2000 square miles)	40.1	-

Source: [http://mcdc2.missouri.edu/websas/dp3\\_2kmenus/mo/Counties.html](http://mcdc2.missouri.edu/websas/dp3_2kmenus/mo/Counties.html)

Population density is the number of persons living within a unit of land area. The number of people (on average) living on a square mile of land would be a measure of population density. It is most frequently calculated by dividing the population of a specific geographic area (such as a county) by the surface area. The map below shows the population density per square mile for Howell County:

Figure 1-2

## HOWELL COUNTY POPULATION DENSITY, 2000



Prepared by:  
 South Central Ozarks Council of Governments  
 Not to be used for legal purposes

## Form of Government

The county government consists primarily of a three member commission with a presiding commissioner and two associate commissioners. Commissioners are elected for four year terms. The county clerk, circuit clerk and recorder, treasurer, collector, assessor, prosecuting attorney, sheriff, circuit judge, public administrator and coroner are also elected for four year terms. The circuit judge is elected for six year terms.

## Historical Places/Historical Districts/Archeological Sites

Howell County has several sites recorded on the National Register for Historic Places. The sites are listed below. There are no archeological sites listed for Howell County.

### **Courthouse Square Historic District**, (added 2003-**District**-#03000651)

Address: Roughly bounded by Broadway, Grove St., Court Sq. and Washington Ave., West Plains

Historic Significance: Event, Architecture/Engineering Architect, Builder, or Engineer: Hawkins, Earl, Britton, L.H.

Architectural Style: Italianate, Queen Anne

Area of Significance: Commerce, Politics/Government, Architecture

Period of Significance: 1875-1899, 1900-1924, 1925-1949, 1950-1974

Owner: **Private, Local Gov't**

Historic Function: Commerce/Trade/Government

Historic Sub-function: City Hall, Courthouse, Financial Institution, Professional, Specialty Store

Current Function: Commerce/Trade, Government, Recreation and Culture

Current Sub-function: City Hall, Financial Institution, Professional, Specialty Store, Theater

### **Elledge Arcade Building**, (added 2001-**Building**-#01000011) Address: 28 Court Sq. and Elledge Arcade, West Plains

Historic Significance: Event, Architecture/Engineering Architect, Builder, or Engineer: Skillman, Issac, Bishop, S.A. Architectural Style: Other

Area of Significance: Architecture, Commerce

Period of Significance: 1900-1924, 1925-1949, 1950-1974

Owner: **Private**

Historic Function: Commerce/Trade, Healthcare

Historic Sub-function: Business, Clinic, Specialty Store

Current Function: Domestic, Vacant/Not in Use, Work in Progress

Current Sub-function: Single Dwelling

### **Smith, W.J. and Ed, Building**, (added 2001-**Building**-#1000012) Also known as **H.P. Authorson Meat Market** Address: 109-113

Washington Ave., West Plains Historic Significance: Event, Architecture/Engineering Architect, Builder, or Engineer: Smith, W.J. Architectural Style: Italianate, Other

Area of Significance: Commerce, Architecture

Period of Significance: 1875-1899, 1900-1924, 1925-1949, 1950-1974

Owner: **Private**

Historic Function: Commerce/Trade, Domestic

Historic Sub-function: Hotel, Single Dwelling, Specialty Store

Current Function: Vacant/Not in Use, Work in Progress

### **West Plains Bank Building**, (added 2001-**Building**-#1000013) Address: 107 Washington Ave., West Plains

Historic Significance: Event, Architecture/Engineering

Architectural Style: Italianate

Area of Significance: Commerce, Architecture

Period of Significance: 1875-1899

Owner: **Private**

Historic Function: Commerce/Trade

Historic Sub-function: Hotel, Single Dwelling, Specialty Store

Current Function: Vacant/Not in Use, Work in Progress

Source: <http://www.nationalregisterofhistoricplaces.com/mo/state.html>

## Endangered Species

As it is with all states, the fate of animals and plants in Missouri seems to hang in the balance. While no definitive work exists which identifies the numbers and kinds of plants and animals in the Region or for Howell County which are endangered, comprehensive studies have been done at the State level.

## U.S. Fish and Wildlife Species Reports Listings and occurrences for Missouri

### Notes:

- This report shows the listed species associated in some way with this state.
- This list does not include experimental populations and similarity of appearance listings.
- This list includes non-nesting sea turtles and whales in State/Territory coastal waters.
- This list includes species or populations under the sole jurisdiction of the National Marine Fisheries Service. Click on the highlighted scientific names below to view a Species Profile for each listing.

### Summary of Animals listings:

TABLE 1-4	
Animal species listed in this state and that occur in this state (18 species)	
Status	Species
E	Bat, gray ( <a href="#">Myotis grisescens</a> )
E	Bat, Indiana ( <a href="#">Myotis sodalis</a> )
E	Bat, Howell big-eared ( <a href="#">Corynorhinus (=Plecotus) townsendii ingens</a> )
E	Beetle, American burying ( <a href="#">Nicrophorus americanus</a> )
T	Cavefish, Howell ( <a href="#">Amblyopsis rosae</a> )
E	Cavesnail, Tumbling Creek ( <a href="#">Antrobia culveri</a> )
T	Darter, Niangua ( <a href="#">Etheostoma nianguae</a> )
E	Higgins eye (pearlymussel) ( <a href="#">Lampsilis higginsii</a> )
T	Madtom, Neosho ( <a href="#">Noturus placidus</a> )
E	Mapleleaf, winged Entire; except where listed as experimental populations ( <a href="#">Quadrula fragosa</a> )
E	Mucket, pink (pearlymussel) ( <a href="#">Lampsilis abrupta</a> )
E	Mussel, scaleshell ( <a href="#">Leptodea leptodon</a> )
E	Pearlymussel, Curtis ( <a href="#">Epioblasma florentina curtisii</a> )
T	Plover, piping except Great Lakes watershed ( <a href="#">Charadrius melodus</a> )
E	Pocketbook, fat ( <a href="#">Potamilus capax</a> )
E	Shiner, Topeka ( <a href="#">Notropis topeka (=tristis)</a> )
E	Sturgeon, pallid ( <a href="#">Scaphirhynchus albus</a> )
E	Tern, least interior pop. ( <a href="#">Sterna antillarum</a> )

TABLE 1-5	
Animal species listed in this state that do not occur in this state (1 species)	
Status	Species
E	Wolf, gray Lower 48 States, except where delisted and where EXPN. Mexico. ( <a href="#">Canis lupus</a> )

TABLE 1-6	
Animal listed species occurring in this state that are not listed in this state (2 species)	
Status	Species
E	Dragonfly, Hine's emerald ( <a href="#">Somatochlora hineana</a> )
E	Woodpecker, red-cockaded ( <a href="#">Picooides borealis</a> )

**Summary of Plant Listings:**

TABLE 1-7	
Plant species listed in this state and that occur in this state (9 species)	
Status	Species
T	Aster, decurrent false ( <a href="#">Boltonia decurrens</a> )
T	Bladderpod, Missouri ( <a href="#">Lesquerella filiformis</a> )
E	Clover, running buffalo ( <a href="#">Trifolium stoloniferum</a> )
T	Milkweed, Mead's ( <a href="#">Asclepias meadii</a> )
T	<a href="#">Geocarpon minimum</a> (No common name)
T	Orchid, western prairie fringed ( <a href="#">Platanthera praeclara</a> )
T	Pogonia, small whorled ( <a href="#">Isotria medeoloides</a> )
E	Pondberry ( <a href="#">Lindera melissifolia</a> )
T	Sneezeweed, Virginia ( <a href="#">Helenium virginicum</a> )

TABLE 1-8	
Plant species listed in this state that do not occur in this state (1 species)	
Status	Species
T	Orchid, eastern prairie fringed ( <a href="#">Platanthera leucophaea</a> )

Source:  
[http://animals.about.com/gi/o.htm?zi=1/XJ&zTi=1&sdn=animals&cdn=education&tm=11&f=10&su=p897.8.336.ip\\_&tt=2&bt=1&bts=1&st=34&zu=http%3A//ecos.fws.gov/tess\\_public/StateListingAndOccurrence.do%3Fstate%3DMD](http://animals.about.com/gi/o.htm?zi=1/XJ&zTi=1&sdn=animals&cdn=education&tm=11&f=10&su=p897.8.336.ip_&tt=2&bt=1&bts=1&st=34&zu=http%3A//ecos.fws.gov/tess_public/StateListingAndOccurrence.do%3Fstate%3DMD)

## GEOGRAPHY, GEOLOGY & CLIMATE

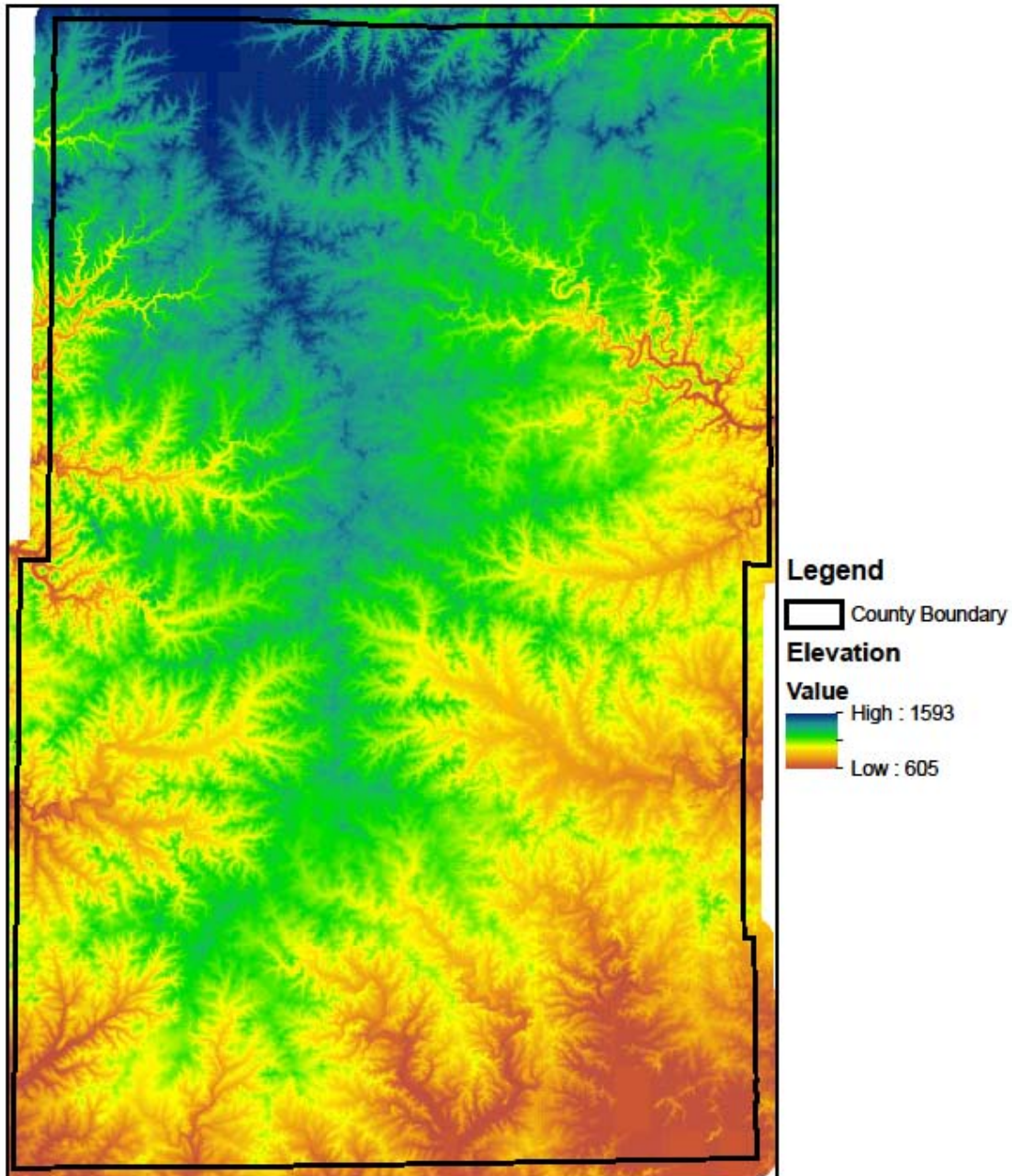
### Topography and Elevation

Howell County is located in the south central portion of Missouri, in an area referred to as the Ozark Uplands. This part of Missouri is comprised partially of the largest of the gentle arches in the American mid- continent - the Ozark Plateau. It has the largest outcrop of Ordovician-age rocks in the country.

Elevations in Howell County range from approximately 1,560 feet located at King Mountain east of Willow Springs, to the lowest elevation above sea level of about 620 feet located in the southeast edge of the county along Myatt Creek.

**Figure 1-3**

### Howell County Elevation



Map produced by South Central Ozark Council of Governments on January 14, 2011 and is reference only. Information provided by [www.msdis.missouri.edu](http://www.msdis.missouri.edu) and is accurate as of map creation date.

0 3.5 7 Miles



## Geology

Howell County is situated above one of the most karst areas in the Howell region with numerous sinkholes, losing streams, caves and other features characteristic to the karst topography. Howell County is further situated on three formations found within the Ordovician System: The Smithville, Powell, Cotter, and Jefferson City formations, along with the Roubidoux and Gasconade Formations; The Gasconade Formation occurs along the bottomlands along the Eleven Point River in the northern portion of the county. The formations in the Ordovician System are some of the oldest in the United States, having been formed between 504 and 438 million years ago.

## Hydrology

...is defined as the science of water, its properties, phenomena, and distribution over the earth's surface. The underground and surface water resources found in Howell County are very much connected as a result of the karst topography of the county and region. There are seven identified watersheds in the county, each having their own unique drainage feature – creek or river – that flow toward larger rivers and final destinations out of the county. These watersheds and their attributes are shown below:

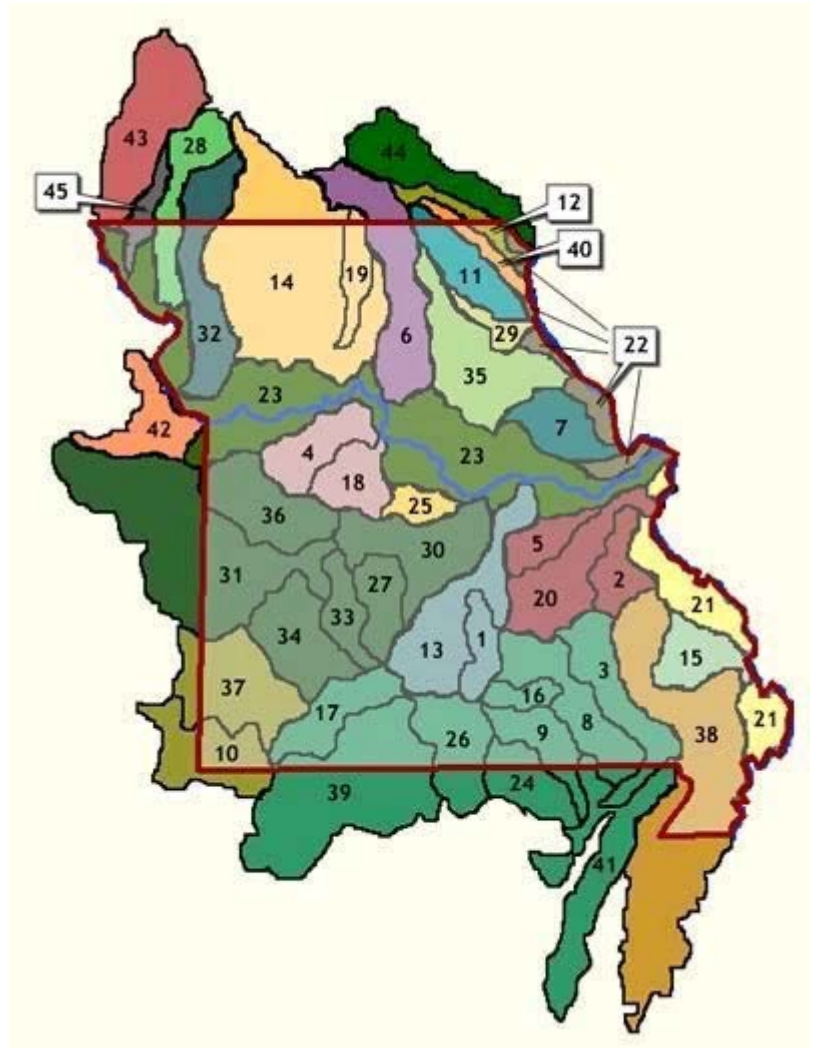
<b>Watershed</b>	<b>Location</b>	<b>Flow Direction</b>	<b>Tributary To</b>
Indian Creek	Extreme Northwest Corner	West	North Fork River
Jacks Fork	Extreme Northern Edge	North	Jacks Fork River
Eleven Point	Northeast-Central	Southeast	Eleven Point River
North Fork	Northwest	Southwest	North Fork River
Dry Creek	West-Central	West	North Fork River
Middle Fork	West Central	East	Eleven Point River
North Fork	West Central	West	North Fork River
Spring Creek	South West	West	North Fork River
Howell Creek	East Central	Southeast	Warm Fork River
Bennets River/Bayou	Extreme Southwest	Southwest	North Fork River
South Fork/Spring Creek	South Central	South	South Fork River
Myatt Creek	South East	South	Spring River

Source: <http://mdc.mo.gov/fish/watershed/>

**Missouri Watersheds Map**

1. [BIG PINEY RIVER](#)
2. [BIG RIVER](#)
3. [BLACK RIVER](#)
4. BLACKWATER RIVER
5. [BOURBEUSE RIVER](#)
6. [CHARITON RIVER](#)
7. [CUIVRE RIVER](#)
8. [CURRENT RIVER](#)
9. [ELEVEN POINT RIVER](#)
10. [ELK RIVER](#)
11. [FABIUS RIVER](#)
12. [FOX RIVER](#)
13. [GASCONADE RIVER](#)
14. [GRAND RIVER](#)
15. [HEADWATER DIVERSION](#)
16. [JACKS FORK RIVER](#)
17. [JAMES RIVER](#)
18. [LAMINE RIVER](#)
19. [LOCUST CREEK](#)
20. [MERAMEC RIVER](#)
21. MISSISSIPPI RIVER, LOWER\*
22. MISSISSIPPI RIVER, UPPER\*
23. MISSOURI RIVER\*
1. [CROOKED RIVER](#)
2. [BLUE RIVER](#)
24. [SPRING RIVER](#)
25. [MOREAU RIVER](#)
26. [NORTH FORK WHITE RIVER](#)
27. [NIANGUA RIVER](#)
28. [NODAWAY](#)
29. [NORTH RIVER](#)
30. [OSAGE RIVER, EAST](#)
31. [OSAGE RIVER, WEST](#)
32. [PLATTE RIVER](#)
33. [POMME de TERRE RIVER](#)
34. [SAC RIVER](#)
35. [SALTRIVER](#)
36. [SOUTHGRANDRIVER](#)
37. [SPRINGRIVER](#)
38. [ST.FRANCISRIVER](#)
39. [WHITERIVER](#)
40. [WYACONDARIVER](#)
41. CACHE RIVER \*
42. LOWER KANSAS RIVER \*
43. NISHNABOTNA RIVER \*
44. LOWER DES MOINES RIVER \*
45. TARKIO RIVER\*

**Figure 1-4**



Watersheds grouped by color represent the larger watershed to which they belong. Watersheds denoted by letters represent sub-basins of watersheds immediately above.

\* No Watershed Inventory and Assessment planned at this time.

Source: <http://mdc.mo.gov/fish/watershed/>

Potable water is obtained from deep wells for the most part for homes and business in Howell County. Community wells providing water for the cities are drilled to a depth of around 1,200 – 1,500 feet and sometimes deeper, and are cased as deep as 500+feet.

Private wells serving rural residents are more shallow, some as shallow as 50' with very little if any casing for the old wells. Many of the older private wells around the county are producing water that cannot meet today's maximum containment levels set by the health department. Several are being replaced with new, deeper and more expensive wells, while other homes are connected to the rural water supply district where service is available. Some households rely on water that is hauled in on truck from other wells, and there are still households that get their water from open springs and nearby rivers.

The water and hydrological system found in Howell County is very fragile and is vulnerable and effected by surface water influences. Careful planning to protect the ground water in Howell County and throughout the Howells is now common knowledge among community leaders and citizens alike.

### Climate and Weather

Howell County's average annual rainfall through the reporting years of 1971-2000 period was 46.29 inches. The average monthly maximum temperature occurs in July and is 89.5° F, while the minimum low temperature of 20° F occurs in January.

TABLE 1-10													
Normal Temperatures, Near West Plains, Missouri, 1971-2000													
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Max °F	42.8	49.3	58.6	68.6	76.1	83.9	89.5	88.7	80.6	70.8	57.0	46.2	67.7
Mean °F	31.4	36.9	45.5	55.0	63.7	71.9	77.1	75.9	68.0	57.0	45.2	35.3	55.2
Min °F	20.0	24.4	32.4	41.4	51.3	59.8	64.7	63.0	55.3	43.2	33.3	24.3	42.8

Source: <http://cdo.ncdc.noaa.gov/cgi-bin/climatenormals/climatenormals.pl>  
 Select "Monthly Station Climate Summaries for West Plains, Missouri"

TABLE 1-11													
Normal Precipitation, Near West Plains, Missouri (Mean), 1971-2000													
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Inch	2.60	3.0	4.80	4.35	4.62	4.33	3.13	3.16	4.02	3.40	4.91	3.97	46.29

Source: <http://cdo.ncdc.noaa.gov/cgi-bin/climatenormals/climatenormals.pl>  
 Select "Monthly Station Climate Summaries for West Plains, Missouri"

## Howell County Soils

According to records available to the National Resources Conservation Service, the University of Missouri, in connection with the United States Department of Agriculture (USDA) published the first Missouri soil survey in 1902. This survey, conducted in Howell County, was the earliest recorded NRCS publication. The last county soil survey was finished in 2002 with the final soil sample taken from the lawn of the Missouri Governor's Mansion during the "Last Acre Ceremony." Over 5,000 soil types have been identified and mapped over the past 100 years.

Howell County soils include some 88 soil types. Soil characteristics and types range from the very rich fertile soils known as Secesh-Tilk soils to the very harsh and acidic soils such as Bender-Moko soils.

Howell County's major land types include three major characteristics which include strongly sloping cherty land with red clay subsoils, gently sloping uplands with red clay subsoils, level and gently sloping uplands, and cherty gently sloping to steep timbered uplands. Less than 10% of the remaining land area is bottom and terrace land contains the richest soils.

## Year 2000 Demographic Information

Howell County is one of more than 3,000 counties and county equivalents in the United States. It has 928 sq. miles in land area and a population density of 40.1 people per square mile. In the last three decades of the 1900s its population grew by 58.3%. On the 2000 census form, 98.4% reported only one race, with 0.3% of these reporting African- American. The population of this county is 1.2% Hispanic (of any race). The average household size is 2.47 persons compared to an average family size of 2.94 persons. There are 38,561 people, 14,969 households, and 10,593 families residing within the county. There are 17,381 housing units at an average density of 41 people per sq. mile. There are 4,368 households out of which 29.2% contain children under the age of 18. 56.1% are married couples living together, 10.2% have a female householder with no husband present, and 29.2% are non-families. In the county the population is spread out with 7.5% under the age of 18, 75% from 18 to 65, 17.5% who are 65 years of age and older. The median age is 39.6 years. The median income for a household in the county is \$32,145, and the median income for a family is \$37,553. The per capita income for the county is \$16,591. 20.3% of the population and 16% of families are below the poverty line. The following table presents a more detailed look at the county's demographics:

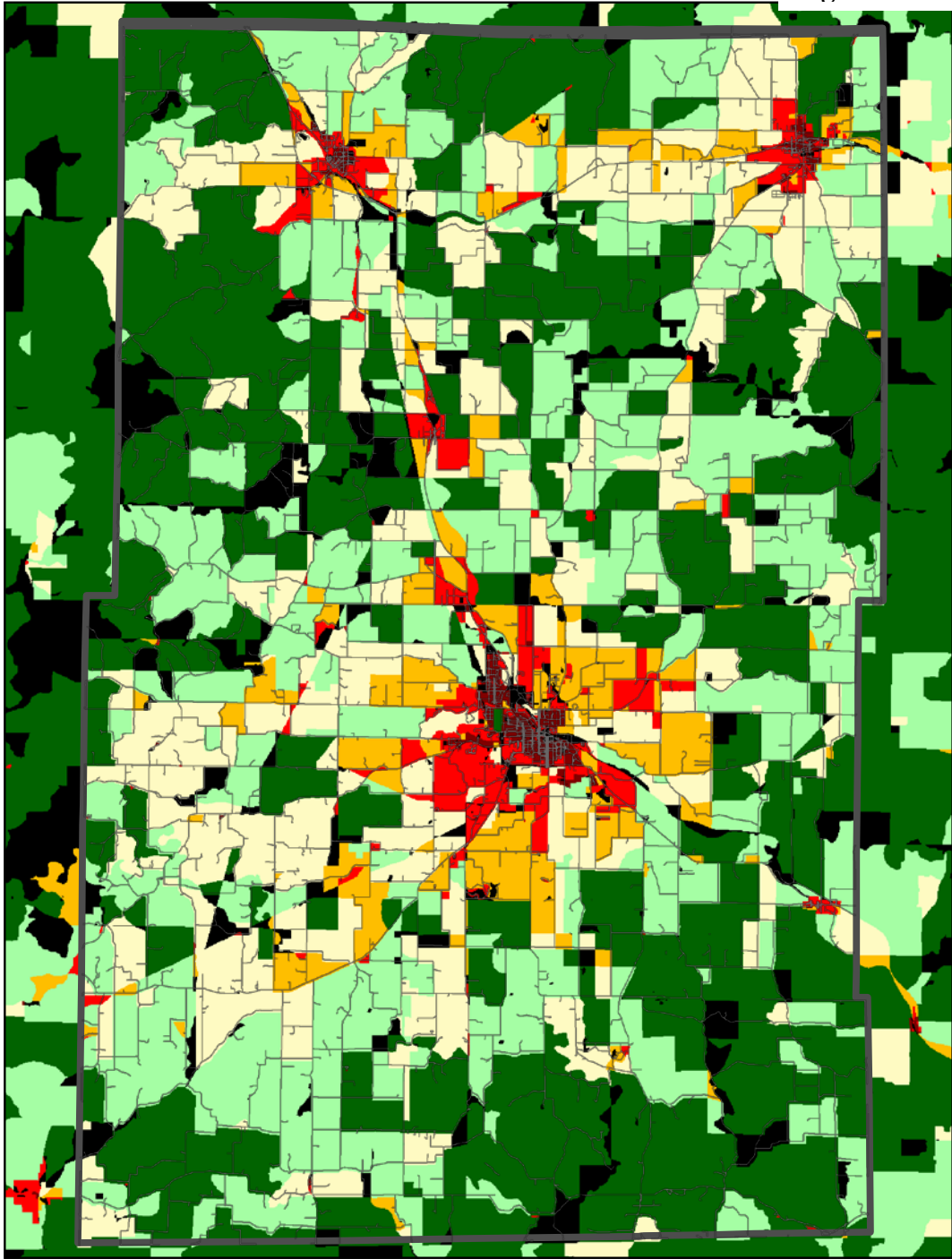
Source: *American FactFinder*

TABLE I-12				
Annual Change in Population, 1990 to 2009				
Howell County, MO				
Year	Pop at Start of Yr	Pop at End of Yr	Actual Population Change	% Actual Chg
1990-2009	31,624	38,921	7,297	23.07
1990-2000	31,624	37,232	5,608	17.73
1990-1995	31,624	34,890	3,266	10.33
1995-2000	34,890	37,232	2,342	6.71
2000-2009	37,232	38,921	1,689	4.54
2000-2005	37,232	38,066	834	2.24
2000-2003	37,232	37,327	95	0.26
2003-2006	37,327	38,309	982	2.63
2006-2009	38,309	38,921	612	1.60
2006-2007	38,309	38,540	231	0.60
2007-2008	38,540	38,968	428	1.11
2008-2009	38,968	38,921	47	-0.12

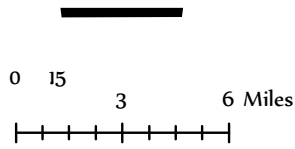
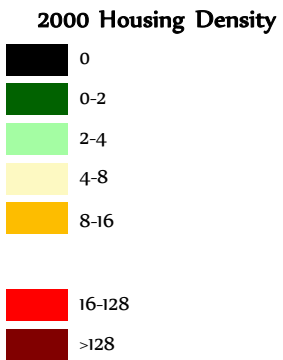
Source: [http://mcdc.missouri.edu/cgi-bin/broker?\\_PROGRAM=websas.poptrends\\_menu.sas&\\_SERVICE=appdev&st=](http://mcdc.missouri.edu/cgi-bin/broker?_PROGRAM=websas.poptrends_menu.sas&_SERVICE=appdev&st=)

# Howell County Housing Density

Figure 1-5



## Legend



State of Missouri  
Prepared by South Central Ozarks Council of Governments  
Not to be used for legal purposes.

In recent years, the rate of population growth has accelerated significantly, particularly in the open country areas. A recent survey conducted by the Office and Social and Economic Data Analysis, University of Missouri, shows that a significant portion of this growth is the result of households moving to the country from Missouri and several other states to retire in the Ozarks. Starting in 1990, population growth began to accelerate again. In-migration of retirees and employment growth in manufacturing, retail trade, and services provided the impetus for the growth.

### **Media Coverage**

Howell County lies within the West Plains EAS operational area. The primary EAS radio station for Howell County is KWPM 1450 (AM) 93.9 (FM) in West Plains. The primary EAS television stations for the county are:

KYTV-TV, Channel 3 (NBC), Springfield, Missouri KOLR-TV, Channel 10 (CBS), Springfield, Missouri KSFX-TV, Channel 27 (FOX), Springfield and KSPR-TV, Channel 33 (ABC), Springfield.

Residents of Howell County are within range of an area transmitter for broadcasts of the NOAA Weather Radio network and operated by the National Weather Service. Severe weather updates, including tornado and severe thunderstorm warnings, flash flood warnings, and other 24-hour weather advisories are broadcast by the NWS for the affected area. The signal is received by special weather radio units activated when a severe weather bulletin is broadcast. These receivers are available to local emergency officials, schools, and the general public from many retail/wholesale stores carrying radios. Special new models can be coded to activate only for weather warnings in the immediate area (up to eight counties). There are transmitters and towers currently in West Plains, Gainesville and Summersville, which provide signal coverage for Howell and surrounding counties. Tower sites in other parts of the state provide similar multi-county coverage. Several satellite and cable companies provide television services to the residents of Howell County, and can be monitored in the event of an emergency.

In the event all local emergency communications capability is lost, Howell County can still remain in contact with the State Emergency Management Agency (SEMA) by utilizing the Farm Bureau satellite communications network. Through an agreement with SEMA, the Missouri Farm Bureau has granted the use of its satellite communications system to local emergency management organizations in the event all other communications are inoperable.

### **Media Points of Contact**

#### **Radio Stations:**

KWPM 1450 AM-KSPQ 93.9 FM, West Plains

KMAC 99.7 FM, Gainesville KKDY 102.5 FM, West Plains KKOZ 1430 AM, Ava

#### **Television Stations:**

KYTV-TV, Channel 3 (NBC), Springfield, Missouri KOLR-TV, Channel 10 (CBS), Springfield, Missouri KSFX-TV, Channel 27 (FOX), Springfield, Missouri KAIT-TV, Channel 8 (ABC), Jonesboro, Arkansas KOZK-TV, Channel 21 (PBS) Springfield  
KSPR-TV, Channel 33 (ABC), Springfield

#### **Cable Television Companies:**

Charter Cable

#### **Newspapers**

Howell County Times Daily Quill, West

Plains South Missourian News

Willow Springs Community and Business News

## Community Partnerships

Mutual aid agreements already exist between most of the county and city departments and/or agencies and are used on a regular basis. In addition, effective mutual aid agreements are in place with surrounding jurisdictions. The county and its cities collaborate on numerous issues such as infrastructure, law enforcement and emergency services. MoDOT and the county and cities collaborate concerning transportation issues. Missouri Department of Conservation and local firefighters work together to safeguard the county's forested areas.

## Significant Cultural/Social Issues

Regional economic growth has brought both opportunities and challenges for the county. Increased population and higher incomes will lead to new demands for both public and private sectors. For example, increased housing starts in the countryside will place new pressures on water and sewage treatment systems. Local governments will need to play a more active role in developing public infrastructure for increased growth to assure drinking water quality, sufficient law enforcement, and adequate transportation and communication systems for Howell County. There are other concerns that the county residents and public officials must address to maintain economic gains and enhance the quality of life in the county over the next ten years. Local employers and county groups must continue to work closely with educational institutions in the area to enhance the quality of labor available to area businesses and firms. Also, Residents of Howell County must continue to work together as one community to enhance economic development, elementary and secondary education, quality health care and an excellent quality of life for all who live and work in the region.

## Public Awareness

The initial meetings for Howell County were held July 1, 2010. Representatives and local residents from the county and all incorporated areas were invited to participate in the process of updating the current hazard mitigation plan. There were several changes to the current hazard mitigation plan suggested by the meeting participants, which were duly noted. A second series of meetings was scheduled for August 6, 2010, in order to note any additional changes needed. The plan update process was presented to local civic leaders and other participants at the meeting, and comments were elicited. Prior to the meetings, local media was contacted, but no media personnel were present. The local newspapers, however, carried reports of the meetings.

## Economy, Industry & Employment

### Primary Industries

**Note: Due to the 2010 Census, this section will be updated at the time of the next revision.**

In Howell County in 2009 manufacturing was the largest of 20 major sectors, with 2,963 employees and 77 establishments. It had an average wage per job of \$29,827. Per capita income grew by 7.2% between 1991 and 2001 (adjusted for inflation). Table 1-13 indicates Howell County's Economic Indicators, while Table 1-14 illustrates the employment by category, as reported by the Bureau of Labor Statistics. The second major job category was the retail trade sector, followed by accommodation/food services.

	<b>Number</b>	<b>Percent</b>
Civilian Labor Force	16,828	100
Employed	15,758	54.8
Unemployed	1,070	3.7
Per Capita Income (dollars)	\$13,959	X
Individuals below poverty level (2000)	6,809	18.7

*(X) Not applicable.*

Source: *American FactFinder*

TABLE 1-14

**Annual Industry Distribution of Jobs and Avg. Wage in 2009 , Howell County  
(Includes Private, Federal, Local and State Government Data)**

	Total Number of Establishments	Total Number of Employees	Aggregate Annual Average Wage Per Job
Total Covered Employment and Wages	1,170	14,370	27,498
Private	1,073	12,476	26,928
Agriculture, Forestry, Hunting	11	25	36,580
Mining	3	ND	ND
Construction	4	50	24,031
Manufacturing	77	2,963	29,827
Wholesale Trade	58	483	35,167
Retail Trade	212	2,126	20,757
Transportation, Warehousing	11	135	40,958
Utilities	13	ND	ND
Information	24	181	30,807
Finance and Insurance	63	356	49,849
Real Estate, Rental, Leasing	41	111	21,788
Professional, Technical Services	59	600	36,949
Mgmt. of Companies, Enterprises	4	53	62,803
Administrative, Waste Services	31	288	18,016
Educational Services	24	ND	ND
Healthcare, Social Assistance	128	ND	ND
Arts, Entertainment, Recreation	14	111	12,013
Accommodation and Food Services	74	1,238	11,659
Other Services, Except Public Administration	136	415	14,470
Public Administration	35	755	38,261

Source: US Bureau of Labor Statistics(BLS)

<http://www.bls.gov/cew/#databases>

2009 Data may be preliminary or not disclosed

ND = Not shown to avoid disclosure of confidential information.

## TOP EMPLOYERS

The top employers for the county are: Schools, trailer, equipment & parts manufacturers, restaurants, department stores, convenience stores, wood products manufacturers, retail grocers, churches and home health services.

TABLE I-15			
Missouri Employer Locator, 50-99 Employees			
Howell County			
Business Name	Location	City	Number of Employees
Air Evac EMS	US. Highway 63	West Plains	50-99
Al-Amody Marilyn	Davis Dr.	West Plains	50-99
Arm Enterprises Inc	State Route V	Mountain View	50-99
Bay Creek Mfg	E 4 <sup>th</sup> St.	Mountain View	50-99
Burton Creek Rural Clinic	N Kentucky Ave #1	West Plains	50-99
Cloud 9 Ranch Club	West Hwy 160	Caulfield	50-99
Colton's Steak House & Grill	Preacher Roe Blvd	West Plains	50-99
Country Mart	N Kentucky Ave	West Plains	50-99
Fairview School District	State Route K	West Plains	50-99
Family Services Div	Division Dr	West Plains	50-99
Howell-Oregon Electric Co-Op	US Highway 63	West Plains	50-99
ISI	Gibson St.	West Plains	50-99
KKDY	E US Highway 160	West Plains	50-99
Landmark Bank	W 6 <sup>th</sup> St	Mountain View	50-99
Lee's Curtain	Missouri Ave.	West Plains	50-99
Liberty Senior High School	Highway 60 E	Mountain View	50-99
McDonald's	Porter Wagoner Blvd	West Plains	50-99
Mountain View City Hall	N Oak St	Mountain View	50-99
Mountain View Elem School	N Elm St	Mountain View	50-99
Ozark Sheltered Industries	County Road 1330	Pomona	50-99
Ozarks Med Ctr Rehab. Svc.	N Kentucky Ave	West Plains	50-99
Richards R-V School Dist.	County Road 1710	West Plains	50-99
Riverways Home Care	E Main St	West Plains	50-99
Riverways of Ozarks Med Ctr.	E Main St	West Plains	50-99
Royal Oak Enterprises	State Route ZZ	West Plains	50-99
Ruby Tuesday	Worley Drive	West Plains	50-99
Ryan's Buffet & Bakery	Preacher Roe Blvd	West Plains	50-99
South Central Career Center	E Olden Street	West Plains	50-99
Timberland Pallet & Lumber	US. Highway 160	West Plains	50-99
Transportation Dept	Springfield Rd	Willow Springs	50-99
Walmart	W US Hwy 160	Mountain View	50-99
West Plains Bank & Trust	Court Sq	West Plains	50-99
West Plains Brdg & Grading	Imperial Ctr	West Plains	50-99
West Plains Civic Ctr	Saint Louis St	West Plains	50-99
West Plains Middle School	E Olden St	West Plains	50-99
Willow Care Nursing Home	Kentucky Ave	Willow Springs	50-99
Willow Health Care, Inc	N Kentucky Ave	Willow Springs	50-99
Willow Springs High School	W 4 <sup>th</sup> St	Willow Springs	50-99
Willow West Ass. Living	State Rt 76	Willow Springs	50-99
Ziggie's Café	Porter Wagoner Blvd	West Plains	50-99

Source: <http://www.missourieconomy.org/Employers/default.aspx>

## Incommuting and Outcommuting

Incommuters are people who live outside of the county, but whose place of employment is within the county. Outcommuters are residents of Howell County who work outside the county. The table below illustrates the county worker commuting patterns while traveling to jobs in other counties. Most of those commuters work in Howell and Douglas counties. Commuters living outside of the county but working in the county are at 63.9%. The average travel time to the workplace is 24.7 minutes.

TABLE 1-16					
Count of Workers Commuting From Missouri Counties (Workplace Sort)					
Each Flow Represents at Least .5% of All Trips Originating in the Missouri County					
Work Flows From Howell County	Total work trips originating	Work Flows Into (County R):	# of Work Flows	% of ALL trips originating in Howell County and ending in (County R)	% of ALL trips ending in Howell County originating in (CountyR)
<b>Howell Co. MO</b>	<b>3,765</b>	Howell Co. MO	13,969	90.0	81.4
		Oregon Co. MO	779	20.7	4.5
		Texas Co. MO	609	6.7	3.5
		Shannon Co. MO	581	18.8	3.4
		Ozark Co. AR	391	10.4	2.3
		Fulton Co. AR	236	5.3	1.4
		Douglas Co. MO	225	4.2	1.3

Source: Missouri Census Data Center

2000 County to County Workflow Reports

<http://mcdc2.missouri.edu/data/workflow/Reports/>

TABLE 1-17					
Count of Workers Commuting Into Missouri Counties (Resident Sort)					
Each Flow Represents at Least .5% of All Trips Ending in the Missouri County					
Work Flows Into Howell County	Total Work Trips Ending In Howell	Work Flows From (CountyR)	Work Flows	% Of ALL Trips Ending In Howell County	% Of ALL Trips Originating In Howell County
<b>Howell Co. MO</b>	<b>2,414</b>	Howell Co. MO	2,125	81.4	90.0
		Oregon Co. MO	711	4.5	20.7
		Texas Co. MO	391	3.5	6.7
		Shannon Co. MO	201	3.4	18.8
		Ozark Co. AR	88	2.3	10.4
		Fulton Co. AR	82	1.4	5.3
		Douglas Co. MO	41	1.3	4.2
		Wright Co. MO	118	0.7	1.6

Source: Missouri Census Data Center

2000 County to County Workflow Reports

<http://mcdc2.missouri.edu/data/workflow/Reports/>

### **Codes/Regulations such as Building, Storm water, Fire, Zoning**

Missouri state law dictates the powers and structure of county governments. The County has floodplain regulations. Third-class counties in Missouri do not have building codes. Currently, there are no storm water, fire or zoning codes/regulations in place for Howell County. Restrictions on hazardous waste storage, treatment and disposal are based upon current Federal and State regulations.

### **Existing Community Plans**

#### **Howell County Emergency Operations Plan (EOP)**

This plan establishes policies and procedures which will allow the respective governments of Howell County and its municipalities to save lives, minimize injuries, protect property, preserve functioning civil government, and maintain economic activities essential to their survival and recovery from natural and technological hazards. The plan has been updated as of July, 2010. The chief elected official is ultimately responsible for emergency management activities within the boundaries of the jurisdiction.

The Presiding Commissioner of Howell County is responsible for those activities in the unincorporated areas of the county and in those incorporated communities which do not have a local emergency management organization (See Title XI, Division 10, and Chapter II, of the Missouri Code of Regulation). The chief elected official of each municipality (i.e., Mayor) has a similar responsibility within their corporate boundaries. These officials can delegate their authority but never their responsibility.

Howell County emergency management is set up along the following functional lines: direction and control; communications and warning; emergency public information; damage assessment; law enforcement; fire and rescue; civil disorder; hazardous material response, public works; evacuation; in-place shelter; reception and care; health and medical terrorism response, and resource and supply. This plan also defines lines of succession for continuity of government during a disaster as well as preservation of records and the logistics of administrative functions such as procedures for obtaining temporary use of facilities. The EOP is reviewed and revised yearly.

#### **Comprehensive Economic Development Strategy (CEDS):**

The 2007 CEDS plan provides demographic, economic and environmental analysis of Howell County. It also includes detailed information on infrastructures and resources available.

#### **State Transportation Improvement Plan (STIP):**

The Missouri Highways and Transportation Commission approved plans on September 18, 2008 to improve 802 of Missouri's lowest-rated bridges in five years, starting with 100 structures that will be under construction early next year. The Missouri Department of Transportation, though, will manage the Safe & Sound Bridge Improvement Program differently than the Design-Build-Finance-Maintain contract that was envisioned when the program was launched two years ago. The commission decided to conclude the procurement process that had previously identified Missouri Bridge Partners (MBP) as the apparent best-value proposer, citing the turmoil in the financial markets which made the proposal unaffordable, and directed MoDOT to move forward with alternative methods to deliver Safe & Sound.

There will be 554 bridge replacements included in a single design-bid-build package to be advertised in the fall of 2008 and awarded in late Spring 2009. The remaining 248 bridges to be improved will be contracted using a modified design-bid-build approach, where projects are grouped by type, size or location to accelerate construction schedules. MoDOT plans to issue bonds to pay for the project with annual payments of approximately \$50 million as budgeted previously. With finance charges, it's estimated that MoDOT's new plan will be \$300-\$500 million cheaper than the MBP proposal.

### Local Transportation Improvement Plan (LTIP), 2011-2015

- Pavement improvements from Rte. JJ to County Road 6070.
- Pavement improvements from Rte. 63 South to the Arkansas State Line.
- Pavement improvements on westbound lanes from the Rte. 60/Bus.60 ramp to the Texas County Line.
- Pavement improvements on southbound and northbound lanes from Rte. N to Rte. 14.
- Capacity improvements to complete four-lane undivided roadway from Rte. 160 to Bus. 63 South
- Pavement improvements from the Rte. 60/63 interchange to County Road 4490.

### Land Use Information

Howell County, Missouri is comprised of 593,282 acres. Farmland in Howell County totals 386,796 acres (approximately 71%) according to the 2007 U.S. Census of Agriculture.

Total Croplands accounted for 21.5 % of the farmland; (83,313 acres), while harvested cropland makes up 12.5%, (48,417 acres). Woodland, pastured and un-pastured, account for the balance. The map on the following page illustrates the County's landcover and landuse.

The remaining non-farm acreage in Howell County is made up of lands inside municipalities, state and federally owned forests, properties, highways and other public properties.

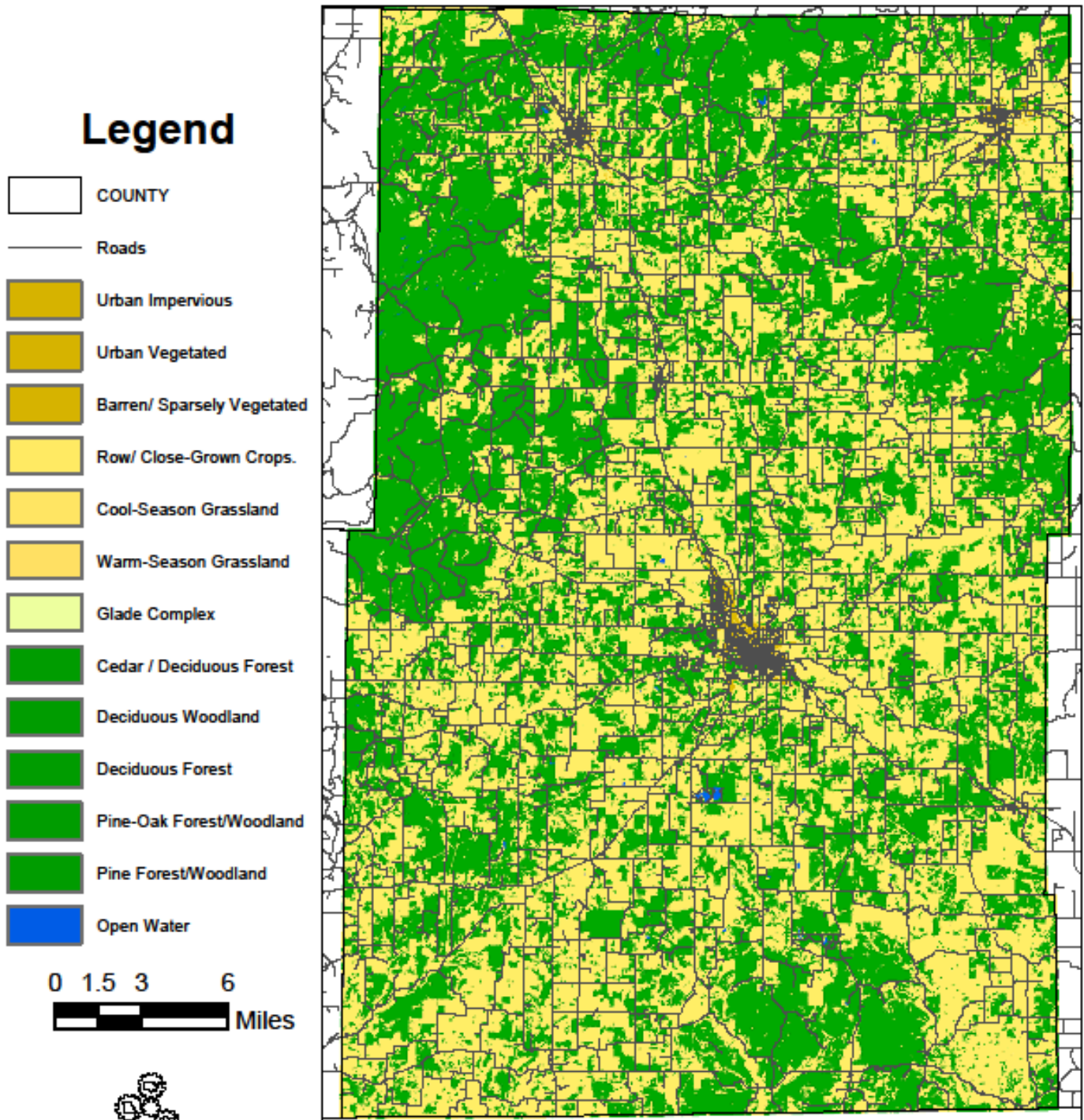
Except for a few areas out in the county, most of the densely developed areas of the county are inside the incorporated communities of West Plains, Willow Springs, Mountain View and Brandsville. The overall population density is 40.1/sq mi (5/km<sup>2</sup>).

TABLE 1-18	
Land in Farms According to Use (Acres)	
Land in Farms	385,188
Total Cropland	83,313
Harvested Cropland	48,417
Croplands Used Only for Pasture or Grazing	29,065
Woodland, Pastured	38,496
Woodland, Not Pastured	71,326

Source: 2007 USDA Census of Agriculture

Figure 1-6

# HOWELL COUNTY LANDUSE AND LANDCOVER



Prepared by SCOCOG with data provided by USGS.  
Not to be used for legal purposes.



## **Development Trends**

Community, economic and human resource development projects are underway in this largest of Missouri counties. All six of the incorporated communities in Howell County are highly active in these areas. Howell County acknowledges some of their planning needs in the 2007 Comprehensive Economic Development Strategy. The improvement priorities listed in the CED are: To support efforts aimed at business retention and expansion, the development of new enterprises, and ensure the availability of appropriate technical assistance and financial resources, to provide support and assist in planning and implementing local and regional economic development projects and initiatives, initiate activities and assist communities in efforts to improve the region as a good place to live and work, support the efforts of the local WIB and the States' programs to develop the regions most important resource: the workforce, and support efforts and programs which showcase the region as a desirable area to locate businesses and industry as well as an excellent place to visit and live. With these improvements Howell County can continue to improve upon the daily life of its county residents.

## **Floodplain Management and NFIP Participation**

Howell County and all jurisdictions participate in the National Flood Insurance Program. The county has been mapped by FEMA; therefore the flood areas in rural unincorporated portions of the county have been identified. Participating cities and villages administer the floodplain management programs through their respective codes and ordinances.

## **Wetland Issues**

At the present time there are not any known pressing wetland issues in Howell County. Wetlands in the county occur on private as well as publicly owned lands. The U.S. Army Corps of Engineers evaluates proposed construction activities which would negatively impact wetlands and issues 404 permits when necessary to protect the wetland areas.

## **Environmental Concerns**

Howell County is home to many livestock operations with most being beef and some dairy farms common to this part of the Howells. Most of the homes and business in the rural areas of the county rely on septic tanks for domestic wastes or lagoons for agricultural waste retention and treatment. The larger communities in the county have central sewer collection system where most of the homes and businesses are required to connect to the system and the waste is then treated by mechanical treatment plants owned and operated by the community. All areas of the county area considered as attainment areas as required by the Clean Air Act and are therefore exempt from the "Conformity Rule" of the Clean Water Act of 1977. There are currently no identified bodies of water in Howell County listed on the State's Section 303(d) as being impaired.

## **IDENTIFIED ASSETS County Infrastructures**

This section will provide a survey of existing fixed assets such as infrastructures, critical facilities, employment centers, commercial centers, and recreation centers. These facilities may require special consideration during a natural disaster.

Infrastructures include Recreation Facilities, Transportation, Utilities, Key Community Facilities, Natural Gas, Solid Waste Disposal, Law Enforcement, Fire Protection, Emergency Medical Services and Emergency Management.

## **Transportation**

Howell County's municipalities maintain roads and streets within city limits, while the county maintains roads for non-incorporated townships; the state maintains state-owned roads and bridges. The Howell County Townships and municipalities are responsible for their respective roads and bridges.

## Roadways, Railroads, & Airports

Howell County's transportation network is comprised of federal and state highways, county and city roads and streets and local community owned airports. There are 407 miles of state maintained highways in the county, 1,101 miles of county maintained roads, and approximately 132 city owned street miles in the incorporated jurisdictions.

Roadways continue to be the main source of transportation for facilitating movement of people and goods. MoDOT provides and maintains all federal and state roads in the county. The major transportation arteries within Howell County are U.S. Route 160 and U.S. Route 63

(US 160) is a 1,465 mile (2,358 km) long east-west United States highway primarily in the Midwestern United States. The western terminus of the route is at U.S. Route 89 5 miles (8 km) west of Tuba City, Arizona. The eastern terminus is at U.S. Route 67 and Route 158 southwest of Poplar Bluff, Missouri.

In Missouri, U.S. Route 160 enters Missouri west of Mindenmines. At Lamar, it intersects U.S. Route 71. It goes southeast towards Springfield, where it intersects Interstate 44 and U.S. Route 60. It goes south out of Springfield into Nixa as Massey Boulevard, then turns east and intersects U.S. Route 65 north of Branson. It continues east to West Plains, where it intersects U.S. Route 63, then ends southwest of Poplar Bluff at an intersection with U.S. Route 67.

In Willard, Missouri, US 160 runs on a bypass along the western and southern edge of town. The old alignment through Willard is now U.S. Route 160 Business.

*Source: [http://en.wikipedia.org/wiki/U.S.\\_Route\\_160](http://en.wikipedia.org/wiki/U.S._Route_160)*

U.S. Route 63. is a 1,286-mile (2,070 km) long north-south United States highway primarily in the Midwestern United States. The southern terminus of the route is at Interstate 20 in Ruston Louisiana. The northern terminus is at U.S. Route 2 in Benoit, Wisconsin, about 60 miles (97km) east of Duluth, Minnesota.

In Missouri, U.S. Route 63 enters the state at Thayer and has alternating passing lanes from Thayer to West Plains. From West Plains through Cabool, the road (concurrent with U.S. 60 from Willow Springs to Cabool) is four lanes. North of Cabool to its concurrency with US 50, US 63 mainly follows two-lane pavement, with alternating passing lanes added between Houston and Licking, and truck passing lanes added in other locations. Through Jefferson City up until Kirksville (excepting downtown Macon, where it returns to two-lane pavement), this highway remains on four-lane divided highway with some freeway sections in Jefferson City and Columbia. North of Kirksville, the highway is two lanes until the Iowa border.

*Source: [http://en.wikipedia.org/wiki/U.S.\\_Route\\_63](http://en.wikipedia.org/wiki/U.S._Route_63)*

The Burlington-Northern/Santa Fe Railroad traverses the county north from the southeast corner northwesterly to the northwest corner of the Howell/Texas County line, providing rail loading/unloading at Brandsville, West Plains and Willow Springs.

There are three community-owned FAA registered airports and one heliport in Howell County: Howell Valley Airport, Mountain View Airport, Willow Springs Memorial Airport and Ozarks Medical Center Heliport

Howell Valley Airport is located two miles southeast from the central business district. The General specs for Howell Valley Airport runway are as follows: **ID:** '15/33, **Length:** 2400 ft, **Width:** 30 ft, **Runway Surface Type Condition:** Grass, Sod.

*Source <http://www.city-data.com/airports/Howell-Valley-Airport-West-Plains-Missouri.html#88MO>*

Mountain View Airport is located one mile southwest from the central business district. The General specs for Mountain View Airport runway are as follows: **ID:** '10/28, **Length:** 5005 ft, **Width:** 75 ft, **Runway Surface Type Condition:** Asphalt or bituminous concrete, good condition, **Edge Lights Intensity:** Medium

*Source: <http://www.city-data.com/airports/Mountain-View-Airport-Mountain-View-Missouri.html>*

Willow Springs Memorial Airport is located one mile east of the central business district. The General specs for Willow Springs Memorial Airport runway are as follows: **ID:** '17/35, **Length:** 3502 ft, **Width:** 60 ft, **Runway Surface Type Condition:** Asphalt or bituminous concrete, good condition, **Edge Lights Intensity:** Medium

*Source: <http://www.city-data.com/airports/Willow-Springs-Memorial-Airport-Willow-Springs-Missouri.html>*

Ozarks Medical Center Helipad is located two miles southeast of the corporate limits of town. The General specs for Ozarks Medical Center heliport runway are as follows: **ID:** 'H1, **Length:** 35 ft, **Width:** 35 ft, **Runway Surface Type** Portland cement concrete.

*Source: <http://www.city-data.com/airports/Ozarks-Medical-Center-Heliport-West-Plains-Missouri.html>*

### Public Transportation

Transportation for the City of West Plains and surrounding jurisdictions is controlled by private transportation services.

### Telecommunications

New services are continuing to develop and grow in the county, providing an enhanced quality of life for residents. The following table lists communication facilities. It is not all-inclusive, but represents the majority of the county's communications infrastructure:

TABLE I-19	
Howell County Telecommunications	
Television Communications	Location
KYTV TV, Channel 3 (NBC)	Springfield, Missouri
KOLR TV, Channel 10 (CBS)	Springfield, Missouri
KSFX TV, Channel 27 (FOX)	Springfield, Missouri
KAIT TV, Channel 8 (ABC)	Jonesboro, Arkansas
KSPR TV, Channel 33 (ABC)	Springfield, Missouri
KOZK-TV, Channel 21 (PBS)	Springfield, Missouri
Telecommunications Service Providers	
CenturyLink	No Local Offices
Wireless Communications Companies	
Alltel communications	Various Locations
U.S. Cellular	Various Locations
Cingular	Various Locations
Many Other Wireless Communications Providers	Various Locations
Long Distance Carriers	
AT&T	No Local Offices
MCI	No Local Offices
Sprint	No Local Offices
Centurylink	No Local Offices
Internet Service Providers	
CenturyLink (T-1 lines and DSL)	No local Offices
GOIN	West Plains
FIDNET	West Plains
MediaCom	No Local Offices
Numerous dial-up service providers	Various Locations

**Sewer & Water facilities**

The Howell County Public Water Supply Districts provides water services to approximately 4,000 residents residing within its unincorporated areas. The majority of the county's water needs are met either by public water services within incorporated jurisdictions or by private wells. Virtually all wastewater needs in the rural areas of the county are handled by individual septic tanks and lagoons, while the city of West Plains, Willow Springs, Brandsville and Mountain View provide sewer service.

**Utilities & Natural Gas**

Natural gas is provided by Southern Missouri Gas Co., while propane is provided by Brotherton Propane. Electricity is provided by White River Electric Coop. and Howell-Oregon Electric Coop.

**Solid Waste Disposal**

In 1993 Howell County joined the South Central Solid Waste Management District which serves the surrounding seven county area. The district was created to help reduce solid waste (at least 40%) going to the landfill. Through their efforts controlling solid waste continues to increase. Today there is only one operating landfill within the entire South Central Solid Waste Management District. Each county, including Howell County, has a recycling program which offers drop sites and programs to help reduce waste.

**Law Enforcement**

The Howell County Sheriff's Department provides law enforcement to the unincorporated areas of the county, as well as those incorporated communities which do not have their own law enforcement agency. The municipal police departments provide law enforcement in incorporated cities. The Sheriff's Department and the municipal police department maintain mutual aid agreements with one another.

Outside law enforcement resources (federal, state, and other local agencies) are available to support law enforcement operations in Howell County and will respond when needed. The Howell County Sheriff's Department, as well as the Police and Fire Departments, are jointly responsible for the search and rescue function in Howell County and its municipalities.

The Howell County Jail, with a capacity of eight, is the only incarceration facility in the county; Procedure for evacuating the jail has been developed and are maintained at that facility.

## Fire Protection

There are 14 fire department districts serving Howell County. The fire services primarily receive calls through their fire phones. These fire services maintain mutual aid agreements, and concur with the State Fire Marshall's Mutual Aid System. Search and rescue for Howell County is primarily provided by the county fire and law enforcement agencies. The fire departments work with the Sheriff's Office during major search and rescue operations. Fire personnel are trained in hazardous materials incidents, first-responder, and weather spotting. The following fire protection resources exist within the county:

<b>FDID</b>	<b>Dept. Name</b>	<b>Location</b>	<b>Stations</b>	<b>Vehicles (Pumpers, Tankers, Rescue)</b>
04607	Brandsville Fire Protection District	Brandsville	1	2
04610	Caulfield Membership Fire Dept	Caulfield	1	2
04602	Eleven Point Rural Fire Dept	Willow Springs	1	2
04606	Howell County Rural Fire District #1	West Plains	2	4
04603	Lanton Volunteer Fire Department	Lanton	1	3
04611	Moody Volunteer Fire Department	Moody	1	4
04612	Mountain View Vol Fire Dept	Mountain View	1	5
04609	Peace Valley-White Church Fire Protection Association	Peace Valley	1	3
04613	Pomona Fire Protection District	Pomona	1	3
04604	Pottersville Fire Dept	Pottersville	1	2
04605	Pumpkin Center Fire Dept	West Plains	1	3
04601	West Plains Fire and Rescue.	West Plains	1	3
04608	Willow Springs City Fire Department	Willow Springs	1	6
04614	Willow Springs Rural Fire Association	Willow Springs	1	2
		<b>Totals:</b>	<b>15</b>	<b>44</b>

Source: Missouri Division of Fire Safety

<http://www.dfs.dps.mo.gov/Fire%20Departments%20by%20county.pdf>

## Emergency Management

Emergency calls are taken by the Howell County E-911 Dispatch Center. The center is staffed on a 24-hour basis by dispatch personnel. Howell County has an Emergency Operations Plan; it was developed and is maintained as required by local executive order, pursuant to Missouri State Law, Chapter 44, RSMo, and Federal Emergency Management Agency (FEMA) guidelines. The County employs an emergency management director whose responsibilities include the training and education activities for all emergency personnel, communications center personnel, county officials and the general public. The sheriff's department is staffed on a 24-hour basis by dispatch personnel. The incorporated cities' police Departments also have 24-hour dispatching capabilities.

## Underground Infrastructure

Due to security concerns, underground utilities are not mapped in this plan. According to the Missouri One Call System, the following companies maintain underground utility lines within Howell County, and are member of Missouri One Call. This information is posted on the Missouri One Call website at <http://www.motcall.com>. Emergency information concerning these utility lines is contained in the county's Emergency Operations Plan.

TABLE 1-21	
Missouri One Call Members by County	
Howell	
ACS/Prepass	Pomona Water Department
Boycom Cable	Sho-Me Technologies
Centurylink	Southern Missouri Natural Gas
Charter Communications	
City of Mountain View	
City of West Plains	
City of Willow Springs	
Howell-Oregon Electric CoOp	
Howell-Oregon PWSD 2	
MoDot District 9	
NuStar Pipeline Company, LP	
Peace Valley Telephone	

## Inventory of Critical/Key/Essential Facilities

These facilities will include medical facilities, schools, long-term care facilities, day care centers and government structures. The facilities listed represent resources for care and shelter as well as populations requiring a higher level of care and installations critical to community services.

### Medical Facilities

There are two hospitals located in Howell County, Ozarks Medical Center in West Plains and St. Francis Hospital in Mountain View. Residents also rely on medical facilities in Springfield to the west, Rolla to the northeast, Mountain Home to the south, and Houston, Missouri to the north and east. Public Health for Howell County is the responsibility of the Howell County Health Department, located in West Plains. The Health Department operates multiple health related programs, and it has built an active and thriving working relationship with area schools, businesses, other state agencies and surrounding Health Departments. This expansion in capacity has increased the programs offered and services received by clients over the past several years. The department tracks communicable diseases, provides immunizations, investigates environmental concerns with water and food supplies and other applicable health matters.

Local physician offices and primary care clinics are listed below:

- Ozark Area Care and Counseling-West Plains
- South Central Public Health Services Group-West Plains
- Burton Creek Medical Clinic-West Plains
- Dialysis Clinic Inc.-West Plains
- Family Clinic Inc.-West Plains
- Community Health Clinic-Mountain View
- St. John's Medical Clinic-Mountain View
- Urgent Care Clinic of Ozarks Medical Center-West Plains
- Valley Medical Center-Willow Springs
- St. John's Medical Clinic-Willow Springs
- Willow Springs Medical Clinic-Willow Springs

**Ambulance Services:**

- Air Evacuation Life-team, West Plains
- Mountain View-Summersville Ambulance Service
- St. John's Ambulance Service, Mountain View
- South Howell County Ambulance Service
- Willow Springs Ambulance Service

**Available Hospitals:**

- Ozarks Medical Center, West Plains
- St. Francis Hospital, Mountain View
- Baxter County Regional Medical Center, Mountain Home
- St. John's Regional Health Center-Springfield
- Phelps County Regional Medical Center, Rolla
- Texas County Memorial Hospital, Houston

**Schools, Long-Term Care Facilities and Day Care Centers**

Approximately 6,866 students attend various preschool, elementary, middle, junior high or high schools in the area. Local Public school districts include:

- Fairview R-XI School District
- Glenwood R-VIII School District
- Howell Valley R-I School District
- Junction Hill C-12 School District
- Mountain View-Birch Tree R-III School District
- Richards R-V School District
- West Plains R-VII School District
- Willow Springs R-IV School District

Long-term facilities are likely to be more impacted in a natural disaster. Adult Care facilities offer services to those who need retirement, assisted living, intermediate care and continuing care. Residents may have mobility and/or cognition issues which require special consideration. Child day care centers also represent a population in need of special consideration. Most child care centers serve children from ages two through five. These facilities represent specialized mitigation needs. The table on the following page, although not all-inclusive, details some of the current schools, child day care centers, and residential facilities within the county:

TABLE 1-22

## Some Howell County Facilities Requiring Special Consideration

Facility Name	Location	City	Occupants (Student and Staff)
<b><i>Schools:</i></b>			
Fairview Elementary	4036 State Rte K	West Plains	623
Glenwood Elementary	10286 State Rte 17	West Plains	328
Howell Valley Elementary	6461 State Rte ZZ	West Plains	232
Junction Hill C-12 Elementary	8004 County Rd 3010	West Plains	239
Liberty Senior High	1 Hwy 60 East	Mountain View	449
Liberty Middle	1 Hwy 60 East	Mountain View	299
Birch Tree Elementary	Old Hwy 60 East	Birch Tree	152
Mountain View Elementary	314 N Elm St	Mountain View	609
Richards Elementary	3461 County Rd 1710	West Plains	460
West Plains Sr. High	602 E Olden	West Plains	2,573
South Central Career Ctr.	610 E Olden	West Plains	29
West Plains Middle	730 E Olden	West Plains	601
West Plains Elementary	1136 Allen St	West Plains	710
South Fork Elementary	3209 US Hwy 160	West Plains	153
<b><i>Nursing and Residential Facilities:</i></b>			
Al-Amody Marilyn	210 Davis Dr.	West Plains	-
Brook Haven Healthcare	1410 N. Kentucky Ave.	West Plains	120-
Lamplight Village	309 Locust St.	West Plains	32
National Health Care	211 Davis Dr.	West Plains	118
Pleasant Valley Manor	213 Davis Dr.	West Plains	57
Mountain View Health Care	1211 N. Ash	Mountain View	90
Willow Care Nursing Home	S. Hwy 76	Willow Springs	-
West Vue Nursing Center	210 Davis Dr.	West :Plains	120
<b><i>Child Care Centers &amp; Preschools:</i></b>			
Little Angels Daycare & Preschool	202 Walnut St.	West Plains	-
Circus-Circus Daycare Center	1016 St. Louis St.	West Plains	24
Kid Kountry Preschool and Daycare	122 SE Jackson	Mountain View	-
Lambs For The Lord	2507 Railroad Dr.	Willow Springs	-
Leaps and Bounds Learning Center	604 Woodland Ave	West Plains	-
Learning Tree Child Care Center	995 Preacher Roe	West Plains	120
Little Red Firehouse Preschool & Daycare	319 Pierce	West Plains	38
Ozark Action Inc. West Plains Training Center	1687 U.S. Hwy 160	West Plains	-
Wonderland Preschool & Day Care Center	704 E. Main	West Plains	-
<b><i>Universities:</i></b>			
Missouri State University West Plains	128 Garfield	West Plains	-

Source: SCOCOG

Figure 1-7

# SITES THAT MAY REQUIRE MITIGATION MEASURES

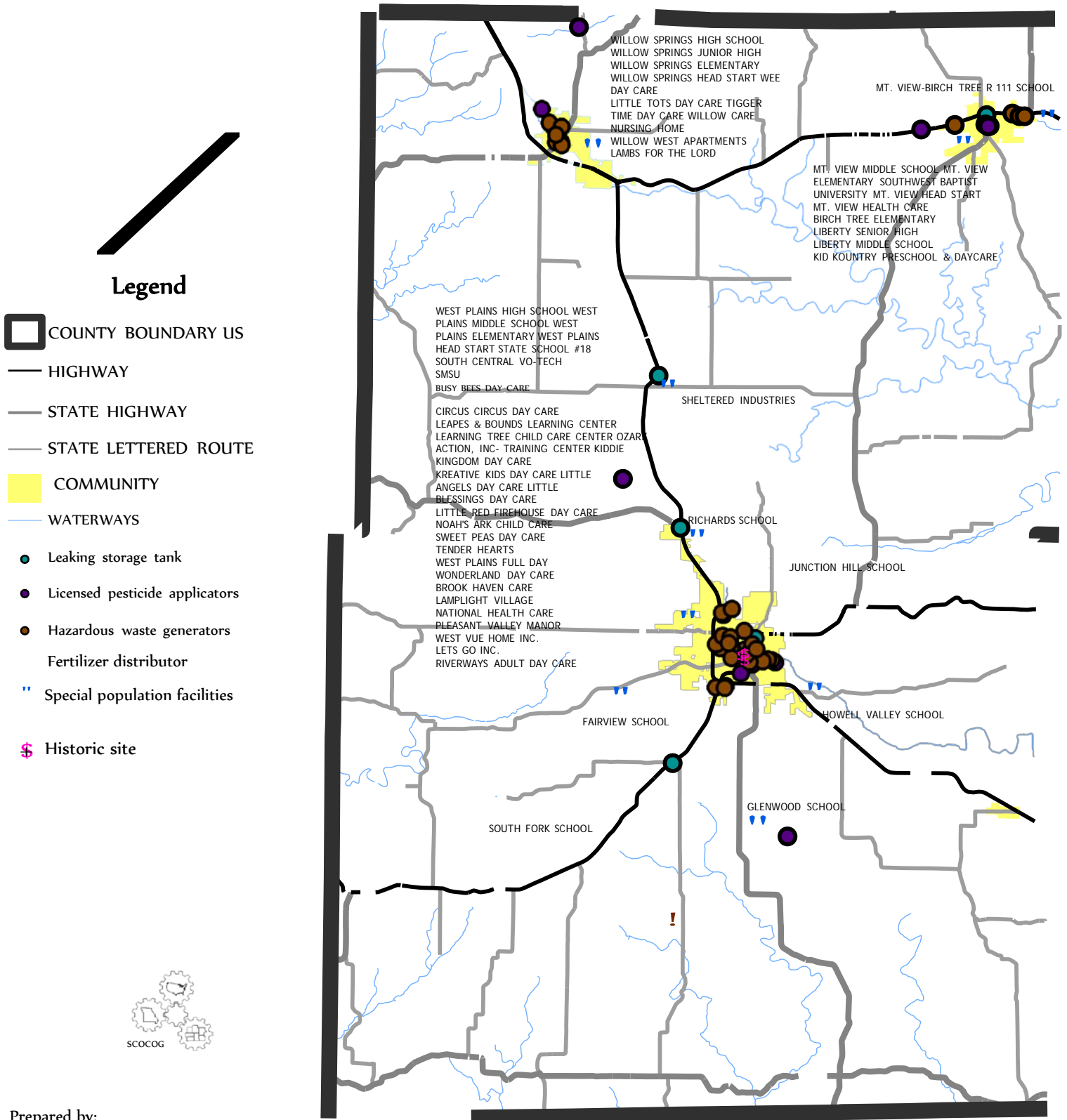
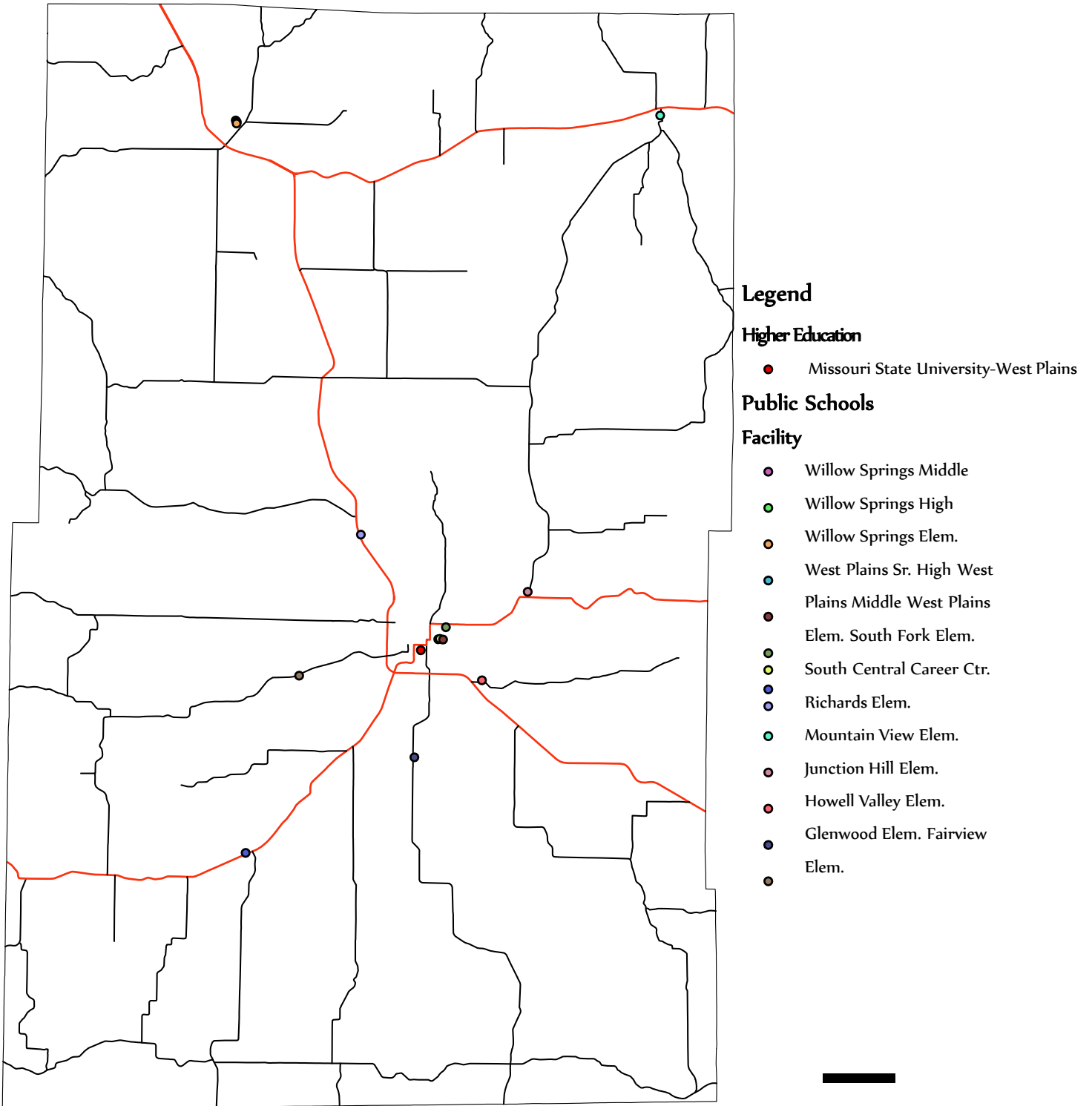


Figure 1-8

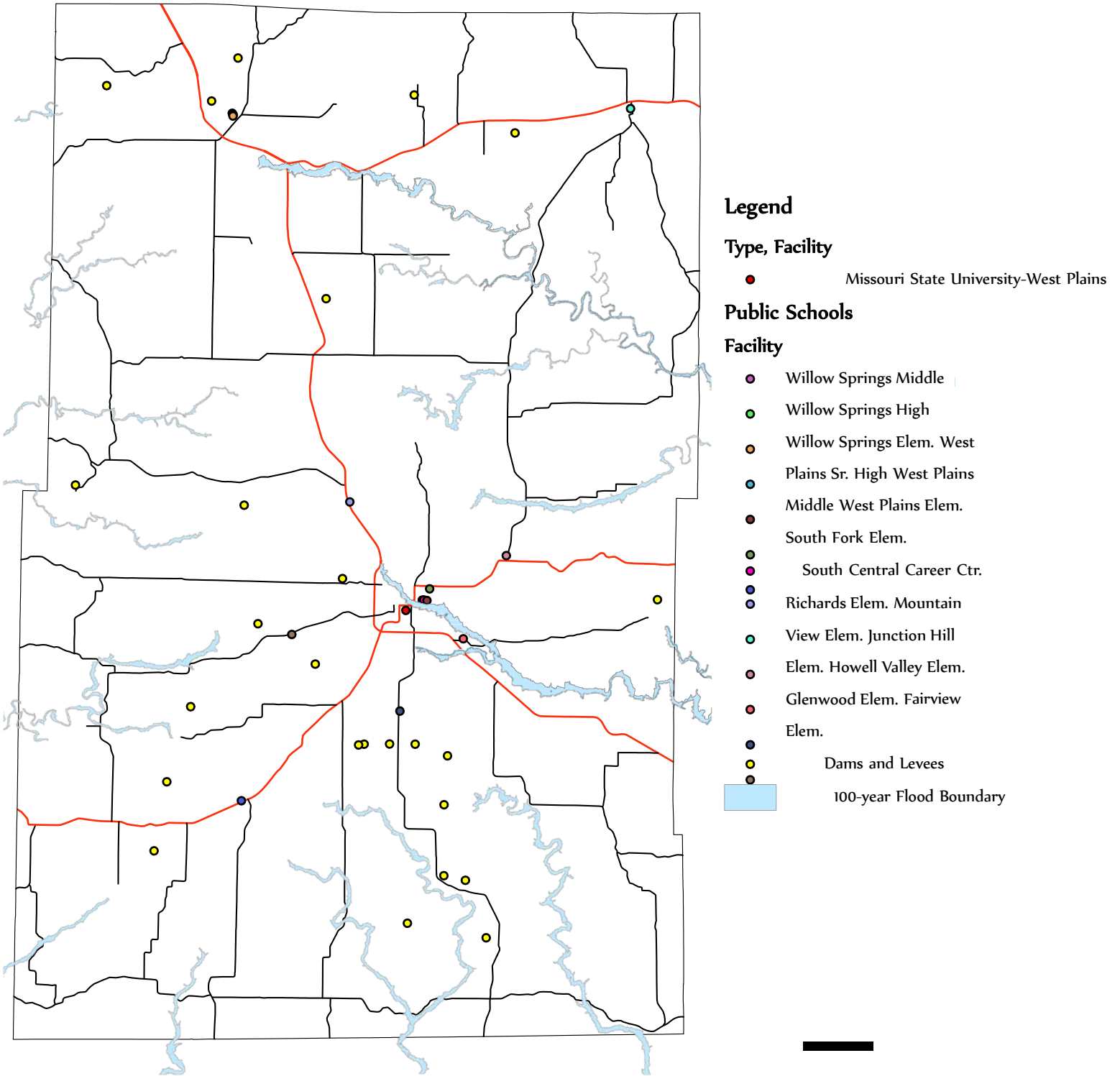
# Learning Institutions- Howell County



Map created on May 12, 2010 by South Central Ozark Council of Governments and is for reference only.  
Data provided by [www.msdis.missouri.com](http://www.msdis.missouri.com) and is current as of the map creation date.

Figure I-9

# Learning Institutions in Relation to Dams, Levees, and Floodplains - Howell County



Map created on May 12, 2010 by South Central Ozark Council of Governments and is for reference only.  
Data provided by [www.msdis.missouri.com](http://www.msdis.missouri.com) and is current as of the map creation date.

## Government Facilities

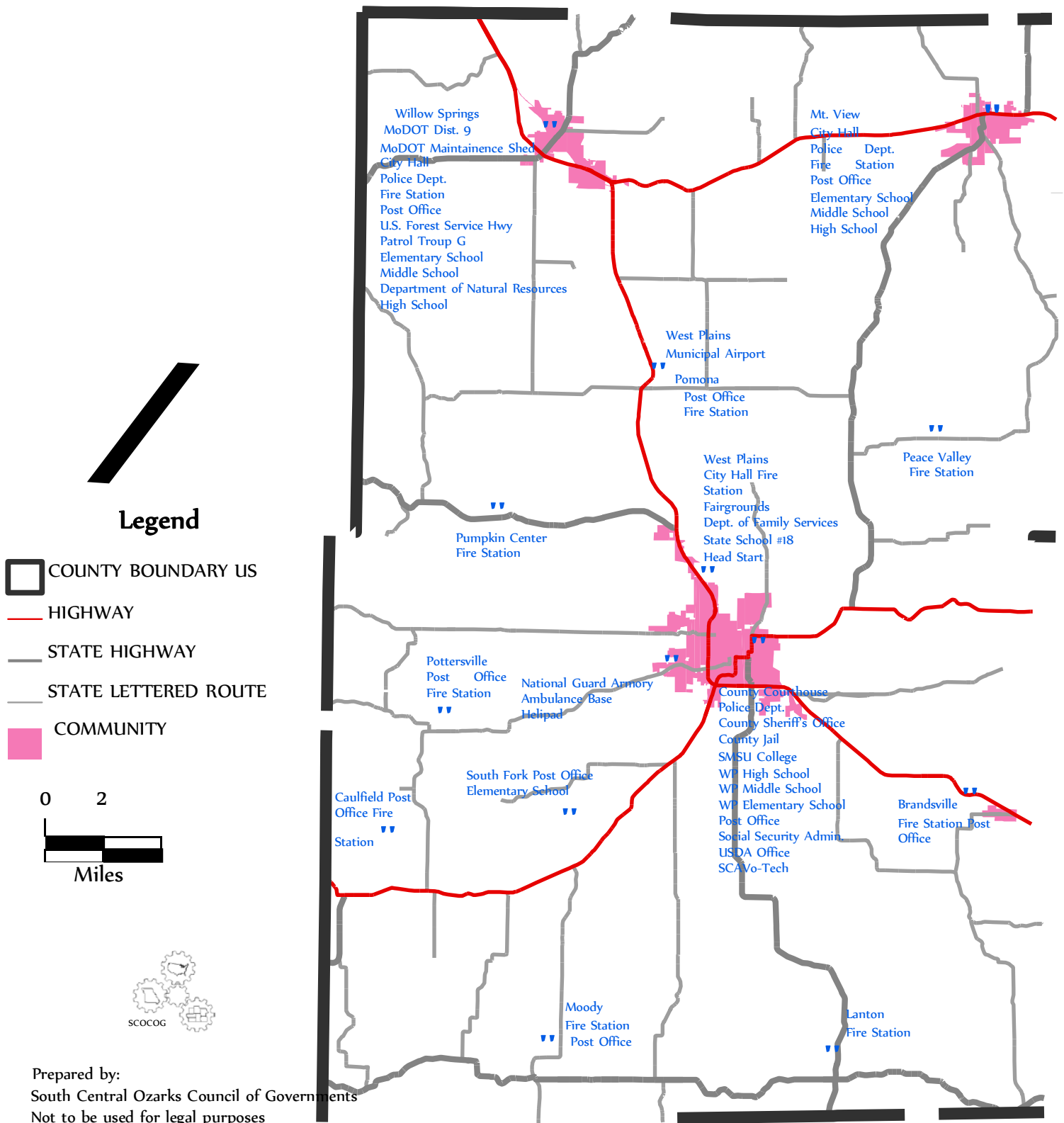
Government owned facilities include county and city government centers, police stations, fire stations, ambulance bases and the county's Emergency Operations Center. The following table and map details these facilities:

TABLE 1-23	
Howell County Government Facilities	
Structure	Location
U.S. Post Office	Brandsville
City Hall	Brandsville
Fire Station	Brandsville
U.S. Post Office	Mountain View
City Hall	Mountain View
Police Department	Mountain View
Fire Stations 1 & 2	Mountain View
Airport	Mountain View
Ambulance Base	Mountain View
U.S. Post Office	West Plains
City Hall	West Plains
Fire Station, 320 E. Broadway	West Plains
West Plains Municipal Airport	Pomona
Police Department	West Plains
West Plains Fairgrounds	West Plains
Ambulance Base/Helipad	West Plains
Missouri State University Campuses	West Plains
Missouri National Guard Armory	West Plains
Missouri Family/Social Services	West Plains
Missouri Social Security Admin.	West Plains
Missouri Dept. of Conservation	West Plains
USDA Field Office	West Plains
Howell County Sheriff's Dept./Jail	West Plains
Howell County Courthouse/Offices	West Plains
U.S. Post Office	Pomona
Fire Station	Pomona
Fire Station	Peace Valley
U.S. Post Office	Caulfield
Fire Station	Caulfield
U.S. Post Office	Pottersville
Fire Station	Pottersville
U.S. Post Office	Moody
Fire Station	Moody
Fire Station	Lanton
Fire Station	South Fork
U.S. Post Office	Willow Springs
Police Dept.	Willow Springs
City Hall	Willow Springs
Airport	Willow Springs
Fire Station	Willow Springs
Missouri State Highway Patrol Troop G Headquarters	Willow Springs
Missouri Dept. of Transportation District 9	Willow Springs
U.S. Forest Service	Willow Springs

Source: Howell County EOP

Figure 1-10

# HOWELL COUNTY GOVERNMENT BUILDINGS



Prepared by:  
South Central Ozarks Council of Governments  
Not to be used for legal purposes

## Inventory of Large Industrial/Commercial and Recreation Facilities

Relevant facilities include those which concentrate large groups of people together in a single location.

### Large Industrial/Commercial Facilities

There are several large industrial, retail and commercial facilities located within the county:

TABLE 1-24		
Large Industrial/Commercial Facilities (250+ Employees)		
Howell County		
Business Name	Product	City
Armstrong Wood Products.	W. Thornburgh St.	West Plains
DRS Technologies, Inc..	McDaniel St.	West Plains
Invensys Appliance Controls	Allen St.	West Plains
Mountain View Fabricating	E. U.S. Hwy 60	Mountain View
Ozarks Medical Center	N. Kentucky Ave.	West Plains
Regal-Beloit Corp.	Lanton Rd.	West Plains
Systems & Electronics Inc.	McDaniel St.	West Plains
Wal Mart Supercenter	Preacher Roe Blvd.	West Plains

Source: SCOCOG

### Recreational Facilities

The following table lists the parks/centers in Howell County which can accommodate large groups of people. Recreational facilities are sensitive to mitigation planning due to their need of adequate warning systems and the potential availability of temporary shelter during or after a disaster. There are several facilities/parks designated for recreational use in the county.

TABLE 1-25		
Howell County Recreational Facilities		
Parks/Centers	Facilities	Location
West Park	Walking Trail, Pavilion	Mtn. View
Veteran's Park	Amphitheater, Playground	Mtn. View
Wayside Park	Playground, Bathrooms, Baseball Fields, Pool, Tennis Courts	Mtn. View
Heart of the Ozarks Fairgrounds	Arena, Outbuildings	West Plains
West Plains Motor Speedway	Arena Seats up to 17,000, RV Camp Sites	West Plains
West Plains Civic Center	2,900 Seat Arena	West Plains
Peoples/Aquatic Center	2 Pools, Pavilion, Tennis/Basketball Courts, Batting Cages	West Plains
Buck Park	2 Pavilions, Bathrooms	West Plains
Evans Complex	Sports Fields	West Plains
Skateboard Park	Skateboard Ramps	West Plains
City Park	Pavilion, Pool	Willow Springs
Booster Field	Sports Field, Tennis Courts, Pavilion, Playground	Willow Springs

## Housing Structures

Howell County has a total of 5,114 housing units; 100% are rural units, 77.2% are occupied, 81.6% are owner-occupied, 74.6% are single family units, 25.4 % are mobile homes and 1.9% are multi-family units. With a total of 3,950 households and 1,164 vacant housing units, the county would have a 22.8% margin of available housing, to help accommodate those in need of temporary housing in the event of a disaster. Of the county's 5,114 housing units, 16.3% are more than 50 years old. The average structure is 29.5 years old.

TABLE 1-26	
Howell County Housing Structures, 2000	
Households in 2000	Number
Total Households	3,950
Family Households (families)	2,857
Married with Own Children Under 18 Years	818
Married Couple Family	2,455
Female Householder, No Husband Present	271
With Own Children Under 18 Years	818
Non-family Households	1,093
Householders Living Alone	964
Average Household Size	2.40
Average Family Household Size	2.81
Housing Units in 2000	Number
Total Housing Units	5,114
Occupied Housing Units	3,950
Vacant Housing Units	1,164
Renter Occupied	737
For Seasonal, Recreational or Occasional Use	525

Source: U.S. Census

[http://factfinder.census.gov/servlet/QTTTable?\\_bm=y&-geo\\_id=05000US29153&-qr\\_name=DEC\\_2000\\_SF1\\_U\\_DPI&-ds\\_name=DEC\\_2000\\_SF1\\_U&-lang=en&-redoLog=false&-sse=on](http://factfinder.census.gov/servlet/QTTTable?_bm=y&-geo_id=05000US29153&-qr_name=DEC_2000_SF1_U_DPI&-ds_name=DEC_2000_SF1_U&-lang=en&-redoLog=false&-sse=on)

## Total Inventory of Structures

The total Howell County assessed valuation for 2010 including both real estate and personal property, and state assessment was \$387,109,602, according to the Howell County Assessor's Office Therefore, the average assessed valuation was \$16,536 per parcel countywide. Rural parcels accounted for 70% of the county's real estate value while incorporated parcels totaled 30%. The value of the average incorporated parcel (including real estate and personal property) was assessed at \$16,767 (NOTE THIS FIGURE IS REAL PROPERTY ONLY AND DOES NOT INCLUDE ANY STATE ASSESSED VALUE).

## Estimate of Future Building Inventories including: Residential, Business, Governmental, and Critical Infrastructure

The following tables provide a historic overview of housing characteristics from the years 1990 to 2000 for Howell County. Between 1990 and 2000, Howell County's Housing Units have increased by 3,014, or approximately 23%. It can be surmised that future growth will continue at approximately the same rate, notwithstanding sudden and severe demographic changes. Business, government and critical infrastructure information will be added before the next scheduled AHMP update.

TABLE 1-27	
UNITS IN STRUCTURE, 1990	
Subject	Number
Total Housing Units	13,326
<b>UNITS IN STRUCTURE</b>	
1-unit detached	10,119
1-unit attached	77
2 to 4 units	658
5 to 9 units	159
10 or more units	319
Mobile home, trailer, or other	1,994

Source: [U.S. Census](#)

DP-4. Profile of Selected Housing Characteristics: 2000  
 Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data  
 Geographic Area: Howell County, Missouri

TABLE 1-28	
UNITS IN STRUCTURE, 2000	
Subject	Number
Total housing units	16,340
<b>UNITS IN STRUCTURE</b>	
1-unit, detached	11,555
1-unit, attached	137
2 units	360
3 or 4 units	535
5 to 9 units	194
10 to 19 units	36
20 or more units	266
Mobile home	3,225
Boat, RV, Van, etc.	32

Source: [U.S. Census](#)

TABLE 1-29						
Annual New Privately-Owned Residential Building Permits Howell County, Missouri ( 1990)						
Item	Estimates with Imputation			Reported only		
	Buildings	Units	Construction Costs	Buildings	Units	Construction Costs
Single Family	44	44	2,521,900	41	41	2,396,900
Two Family	3	6	114,000	3	6	114,000
Three and Four Family	4	16	325,000	4	16	325,000
Five or More Family	1	6	120,000	1	6	120,000
Total	52	72	3,080,900	49	69	2,955,900

Source: U.S. Bureau of the Census <http://censtats.census.gov/bldg/bldgprmt.shtml>

TABLE 1-30						
Annual New Privately-Owned Residential Building Permits Howell County, Missouri (2009)						
Item	Estimates with Imputation			Reported only		
	Buildings	Units	Construction Costs	Buildings	Units	Construction Costs
Single Family	20	20	1,918,999	20	20	1,918,999
Two Family	6	12	505,000	6	12	505,000
Three and Four Family	0	0	0	0	0	0
Five or More Family	0	0	0	0	0	0
Total	26	32	\$2,423,999	26	32	\$2,423,999

Source: U.S. Bureau of the Census <http://censtats.census.gov/bldg/bldgprmt.shtml>

**CITY, TOWN, VILLAGE PROFILES (Year 2000 Census)**

The tables below provide a comparison of characteristics with Howell County's incorporated and unincorporated areas, as of the 2000 U.S. Census:

<b>TABLE 1-31</b>	
<b>PROFILE, CITY OF BRANDSVILLE</b>	
Total Population	174
Classification	City-Fourth Class
Leadership Structure	Mayor/Council
Median Household Income, Year 2000	\$27,188
Total Housing Units	65
Housing Unit, Median Year Built	1962
Median Gross Rent	\$285
Median owner-occupied housing value	\$36,700
Master Plan	None
Emergency Operations Plan	Yes
Zoning Regulations	None
Building Regulations	None
Subdivision Regulations	None
Stormwater Regulations	None
Floodplain Regulations	Yes
Water Service	Public Water Supply #2
Sewer Service	Brandsville
Electric Service	Howell-Oregon Electric Coop.
Fire Service	Brandsville
Ambulance Service	South Howell County Ambulance
Rivers and Streams	None
Major Arterials	State Highway 63

TABLE 1-32

## PROFILE, CITY OF MOUNTAIN VIEW

Total Population	2,430
Classification	City-Fourth Class
Leadership Structure	Mayor/Council
Median Household Income, Year 2000	\$22,308
Total Housing Units	1,187
Housing Unit, Median Year Built	1972
Median Gross Rent	\$299
Median owner-occupied housing value	\$59,600
Master Plan	Yes
Emergency Operations Plan	Yes
Zoning Regulations	Yes
Building Regulations	Yes
Subdivision Regulations	Yes
Stormwater Regulations	None
Floodplain Regulations	Yes
Water Service	Mountain View
Sewer Service	Mountain View
Electric Service	Mountain View
Fire Service	Mountain View
Ambulance Service	St. Francis Hospital
Rivers and Streams	Jam Up Creek
Major Arterials	State Highways 17, 60

**TABLE 1-33**

**PROFILE, CITY OF WEST PLAINS**

Total Population	10,866
Classification	City-Third Class
Leadership Structure	Mayor/Council
Median Household Income, Year 2000	\$24,122
Total Housing Units	4,991
Housing Unit, Median Year Built	1968
Median Gross Rent	\$356
Median owner-occupied housing value	\$70,300
Master Plan	Yes
Emergency Operations Plan	Yes
Zoning Regulations	Yes
Building Regulations	Yes
Subdivision Regulations	Yes
Stormwater Regulations	Yes
Floodplain Regulations	Yes
Water Service	West Plains
Sewer Service	West Plains
Electric Service	West Plains
Fire Service	West Plains
Ambulance Service	South Howell County Ambulance
Rivers and Streams	Mustin Creek, Howell Creek
Major Arterials	State Highway 160, 63,17

TABLE 1-34

## PROFILE, CITY OF WILLOW SPRINGS

Total Population	2,147
Classification	County-fourth class
Leadership Structure	Mayor/Council
Median Household Income, Year 2000	\$19,894
Total Housing Units	1,027
Housing Unit, Median Year Built	1959
Median Gross Rent	\$211
Median owner-occupied housing value	\$49,400
Master Plan	Yes
Emergency Operations Plan	Yes
Zoning Regulations	Yes
Building Regulations	Yes
Subdivision Regulations	Yes
Stormwater Regulations	None
Floodplain Regulations	Yes
Water Service	Willow Springs
Sewer Service	Willow Springs
Electric Service	Willow Springs
Fire Service	Willow Springs
Ambulance Service	Willow Springs
Rivers and Streams	Eleven Point River
Major Arterials	State Highways 60,63

**TABLE I-35**

**PROFILE, ALL CITIES**

Total Population	15,617
Classification	Various
Leadership Structure	Various
Median Household Income, Year 2000	\$23,378
Total Housing Units	7,270
Housing Unit, Median Year Built	1965
Median Gross Rent	\$288
Median owner-occupied housing value	\$54,000
Master Plan	3 Yes, 1 No
Emergency Operations Plan	Yes, All 4
Zoning Regulations	3 Yes, 1 No
Building Regulations	2 Yes, 2 No
Subdivision Regulations	3 Yes, 1 No
Stormwater Regulations	1 Yes, 3 No
Floodplain Regulations	Yes, All 4
Water Service	3 Cities Provide Service
Sewer Service	4 Cities Provide Service
Electric Service	3 Cities Provide Service
Fire Service	Yes, All 4
Ambulance Service	3 Cities Provide Service
Rivers and Streams	Howell Creek, Mustin Creek, Jam Up Creek
Major Arterials	State Highways 60,63,17,160

**TABLE 1-31**

**PROFILE, HOWELL COUNTY**

Total Population	37,238
Classification	County- Third Class
Leadership Structure	Commisionner/Associates
Median Household Income, Year 2000	\$25,628
Total Housing Units	16,340
Housing Unit, Median Year Built	1970
Median Gross Rent	\$350
Median owner-occupied housing value	\$67,700
Master Plan	None
Emergency Operations Plan	Yes
Zoning Regulations	None
Building Regulations	None
Subdivision Regulations	None
Stormwater Regulations	None
Floodplain Regulations	None
Water Service	Yes
Sewer Service	No
Electric Service	Howell-Oregon Electric Coop.
Fire Service	Yes
Ambulance Service	Howell County Ambulance
Rivers and Streams	Eleven Point River, Howell Creek, Mustin Creek, Spring Creek, Stoney Point Creek
Major Arterials	State Highways 60,63,160,17,14,76,137,142