Appendix A – Footnote Reference Materials

"10 Things to Know About Urban vs. Rural"
Missouri Census Data Center[1]

Is America becoming more urban? What portion of the population is now living in an urban (vs. rural) setting? With all the debates and discussions related to *urban sprawl*, do we have a way of defining and measuring where and to what extent that phenomenon is taking place? The answers to all of these questions require that we have an agreed upon definition of what it means to be "urban" (or rural, since we presume the two categories to be mutually exclusive and exhaustive, i.e. that every person and piece of land in the nation can be assigned to exactly one category or the other.)

This page will look at the latest official Census Bureau definitions of urban and rural and will identify resources for determining to what degree various geographic areas are classified as being one or the other. We shall also look at how and where to get census and other data that can help us see what differences there may be between the two area types (in terms of how many people, age distributions, income and poverty levels, etc.), and perhaps more importantly, what trends do we see related to them.

It may seem obvious in many cases: central cities are clearly urban, while most farms -- real ones, at least -- are clearly rural. But there is more and more development in places sometimes referred to as "*exurbia*," and in fringe areas located within or adjacent to smaller cities, where the urban/rural classification is much less obvious. Because the definition of this concept is so important, we as a nation feel obligated to keep trying to improve it. This is no doubt a good thing for the sake of having a better measure of what is going on just recently, but it creates problems trying to analyze trends when the definition changes over time.

The current definition of Urban (which is also the definition of rural, since the two are complementary) went into effect with the 2000 decennial census, and is based upon population density data collected in that census. Unless otherwise noted, all references to urban vs. rural in this document will be using this definition.

1. **Urban vs. rural is assigned at the Census Block level.** Census blocks are the smallest geographic units that the Census Bureau recognizes in its geographic scheme. All other geographic areas used in census products can be defined as a collection of (usually, but not always, contiguous) census blocks. Any other kind of geographic area -- a city, county, school district, ZIP code, etc. -- will not necessarily be classified as completely urban or rural.

   For example, Jackson County, Mo is the core county of the Kansas City metropolitan area and would seem to be obviously an "urban county." But according to the 2000 census there were over 26,000 persons (4%) in Jackson county who were living in census blocks classified as rural. Even within the city limits of Kansas City, Mo 1.3% of the population was classified as living in a rural setting.

   If you look at the breakout based on land area instead of population you find that **43.3% of the land area of the city of Kansas City is classified as rural!** (Anyone who has had occasion to use the Kansas City airport, which is over 20 miles from downtown Kansas City and in a very rural setting but is within the city limits, will not be surprised by this statistic.)

[1] **Missouri Census Data Center.** http://mcdc.missouri.edu/TenThings/urbanrural.shtml

2. **There are no counties in Missouri that are 100% urban, except the independent city of St. Louis.** Of the 114 other counties in the state, only 33 are classified as being entirely rural.

3. **97.4% of the land area in the state of Missouri is classified as rural (per the 2000 Census).** But only 30.6% of the population is classified as living in rural areas. Thus, almost 70% of the population of the state lives in about 2.6% of the land. Nationwide, the same 97.4% of the land area is classified as rural, but only about 21% of the population lives in these rural areas.

4. **MABLE/Geocorr can be used to see U/R breakdowns.** This utility application has "Urban-Rural portion (2000)" as a choice on its Source/Target geography menus. Just select your state, select the geographic layer(s) of interest off the Source Geocode(s) menu and choose U/R off the Target Geocode(s) menu. Choose your weighting variable as either population (default) or land area. All of the statistics quoted above regarding what portions of the population and land areas of various geographic entities were generated using MABLE/Geocorr.

5. **The short definition of Urban and Rural.** It appears on a **Census Bureau web page** and is as follows:

   For Census 2000, the Census Bureau classifies as "urban" all territory, population, and housing units located within an urbanized area (UA) or an urban cluster (UC). It delineates UA and UC boundaries to encompass densely settled territory, which consists of:
   - *Core census block groups or blocks that have a population density of at least 1,000 people per square mile and*
   - *Surrounding census blocks that have an overall density of at least 500 people per square mile*

   In addition, under certain conditions, less densely settled territory may be part of each UA or UC.

   The Census Bureau's classification of "rural" consists of all territory, population, and housing units located outside of UAs and UCs. The rural component contains both place and nonplace territory. Geographic entities, such as census tracts, counties, metropolitan areas, and the territory outside metropolitan areas, often are "split" between urban and rural territory, and the population and housing units they contain often are partly classified as urban and partly classified as rural.

6. **Urban is sometimes confused with "metropolitan"** or, more recently, "micropolitan," which is just metropolitan on a smaller scale. But the two concepts are significantly different. Metro and Micropolitan areas are comprised of complete counties; counties on the outer fringes of metro areas ("exurbia") often have the majority of their land areas and significant portions of their populations classified as rural.

   The metropolitan concept has more to do with whether you live in an area where you either within or have access to an urban center. By having access we mean you can commute to work there (this is the primary criteria to being included in a metro area), access their TV and radio stations, subscribe to their newspapers, etc. Urban/rural does not much care about how far away from an urban center you are. It has much more to do with the density of the population in the immediate area around where you live.

   While 30.6% of Missouri's population was classified as living in a rural area in the 2000 census, only about 14% lived outside of any metropolitan or micropolitan area (72.8% lived in metropolitan areas and 13.2% in micropolitan areas.) Notice the implication of these figures: **over 3/4 of the rural population is also metropolitan**. Nationwide we see that only about 25% of the rural population (about 14.6 million persons) lives outside of a metro area. About 51% live in metropolitan statistical areas and 24% in micropolitan statistical areas.

We have seen web sites (http://www.nhtsa.dot.gov/people/injury/ems/emstraumasystem03/glossary.htm, just to cite an example), where the definition of Rural is presented as outside of an MSA (Metropolitan Statistical Area). While agencies may find it convenient to use such definitions and while there may be some merit and logic associated with these *alternate* definitions, it is important to keep in mind that these are not the official definitions and their widespread use just contributes to the confusion. It does seem easier and a bit less geeky just to say "rural" instead of "Non-metro." It may be okay until somebody wants to know how many people live in those "rural" areas.

7. **The previous definition of Urban used city limits instead of Urban Clusters.** While the details of how Urbanized Areas changed as part of the new Urban/Rural definition changes for 2000, the concept was pretty much the same. Instead of a requirement for a place (city) of 50,000 or more to form the core of a UA, we now have a more sophisticated way of identifying densely settled population clusters of 50,000 or more.

   So, for example, Jefferson City, MO did not qualify as an Urbanized Area in 1990 because the city had a population of just under 40,000. Under the new criteria, however, the area *does* qualify because it takes into account not just the population living within the city limits, but rather the entire densely settled area that includes most of the city.

   The more important change in the urban/rural definition came in how areas *outside* of UA's were classified. The new geographic entity involved is called an "Urban Cluster." A UC is defined using the same concept as a UA, except that the central population threshold is lowered from 50,000 to 10,000. So, for example, we have a Poplar Bluff (MO) *Micro*politan Area, because that city and its immediate environs has a population over 10,000 (but less than 50,000). This central cluster area has nothing to do with city boundaries, and everything to do with dense population settlement. If you live on the outskirts of Poplar Bluff but are part of either the densely settled core or of the less densely settled adjacent area, then you are within the Urban Cluster -- and hence classified as Urban.

   It has nothing to do with whether or not you live within any city limit. Under the *old definition*, if you lived outside an Urbanized Area ("big city area") then you were classified as urban if and only if you lived within a place of 2,500 or more population. That definition used to work pretty well, when people more or less lived "in town" or out in the "open country." But not any more; people living in unincorporated areas adjacent to smaller towns (such as Poplar Bluff) are living in densely settled areas and should be classified as urban.

   On the other hand, if you live in a small town of 2,500 or more that does not meet the criteria of having a 10,000-person population cluster associated with it, then you are now classified as rural instead of urban under the new definition.

8. **Accessing Census Data for Urban/Rural Components.** The Census Bureau publishes results of the decennial censuses and the American Community Survey for "*Geographic Components*" of geographic areas (usually, only vary large ones such as states, regions and the nation). A geographic component is something such as the urban or rural portion of an area, or the portion within metropolitan statistical areas or within urbanized areas, or within central cities of metropolitan areas, etc. For example, on Summary File 3 for the 2000 Census - the most commonly used data product based on that census - there are geographic component summaries at the state level.

   There are even more such summaries at the nation and U.S. region levels. The MCDC has found that when these geographic component summaries are intermixed with complete-geographic-area

summaries they can sometimes be a nuisance and cause confusion. So we separated out the geographic component summaries and created datasets named **usgeocomps** in both our sf32000 and sf32000x (standard extract) filetype directories. The codes for the urban and rural components (i.e. the values of the *geocomp* variable on the summary observations) are "01" and "43," respectively. So (for those of you familiar with our Uexplore/Dexter system), to see summary data for the rural portion of Missouri, you would navigate (via uexplore) to the sf32000x subdirectory, and select the usgeocomps.sas7bdat file. Within Dexter, you would filter based on the value of State (=29) and GeoComp (=43).

You can also **access summaries for such geographic components through American FactFinder**. For example, if you choose the AFF "Data Sets" option and then choose the 2000 Decennial Census and Summary File 3 and Detailed Tables with a geographic summary level of state or above, then after your output is displayed (I know, not too cool) they provide a little menu bar that lets you "change your results." If you click on the "Options" pull-down you are presented with a "Geographic Components" choice. Follow the menus and make your choices. It's really pretty easy to generate tables for urban and rural portions of states and the nation.

Understand, what this means is that you can get all the other detailed tables, things such as income measures, poverty level tables, housing value medians and distributions, propensity to live in mobile homes, etc. -- all this broken down not just by urban and rural but also by various subcategories of urban and rural, such as "Urban - in urbanized area - not in a central place" (which is what you might think of as "suburban").

Of course, if all you are interested in is how many persons and/or households within an area are classified as being urban and rural, that can be readily accessed from tables on files such as SF3. In our standard extracts based on Summary File 3 data (filetype sf32000x) we include the variables *urban, rural, InUAs* (living in Urbanized Areas), *InUCs* (living in Urban Clusters), *OnFarms* (persons living on farms), *UrbanHUs* (urban housing units) and *RuralHUs*. There are corresponding Pct variables for each of these items; e.g. *PctUrban* has the value of *Urban* as a percentage of the total population. All of these items, are derived from tables on Summary File 3. The definitions can be viewed in the **online metadata**.

The data can be viewed within our **standard sf3-based demographic profiles**. We did not include any urban/rural data on our standard extracts based on Summary File 1 in the 2000 census because, although the tech documentation told us the data would be avaiable in Tables P2 and H2, the reality was that when those files were released those tables were not ready yet because it took so long for the Bureau to do the GIS-based processing that would permit assigning values to those tables. You can access those tables via American FactFinder, however.

Geographic Component summaries on census summary files is not new. Such summaries have always been published by the Bureau, although the number of categories has increased. Urban and Rural have always been the most important and widely accessed categories. Keep in mind, however, that the definitions have changed over time so the data are not entirely comparable.

9. **Urban and Rural does not get updated in the ACS. The American Community Survey** provides us with summaries of larger geographic areas throughout the decade. You might expect to be able to get geocomp summary data (see previous item) that would allow us to find out how many people now live in urban vs. rural areas, and what their characteristics are. You might especially think this because the Bureau does indeed publish geocomp summaries based on the ACS, and urban and rural are among the geographic component categories. For example, I can go to AFF (American FactFinder), choose Data Sets, and ask to see data from the 2005 ACS for the state of Missouri. I can

ask to see detailed table B01003 (Total Population) and have that table displayed. ("Total" pop in the 2005 ACS is actually just total pop living in households, but that's a different discussion.) One that table is displayed we can (as already mentioned, above) use the Options on the menu that appears above the output, and from that choose to see Geographic Components, including Urban and Rural. From this I can determine that the Bureau is reporting 1,803,146 (+/- 16,836 using the MOE figure) living in households in rural portions of Missouri. Unfortunately, this looks a little better than it really is. How does the Bureau assign the urban vs. rural characteristic to the ACS survey records?

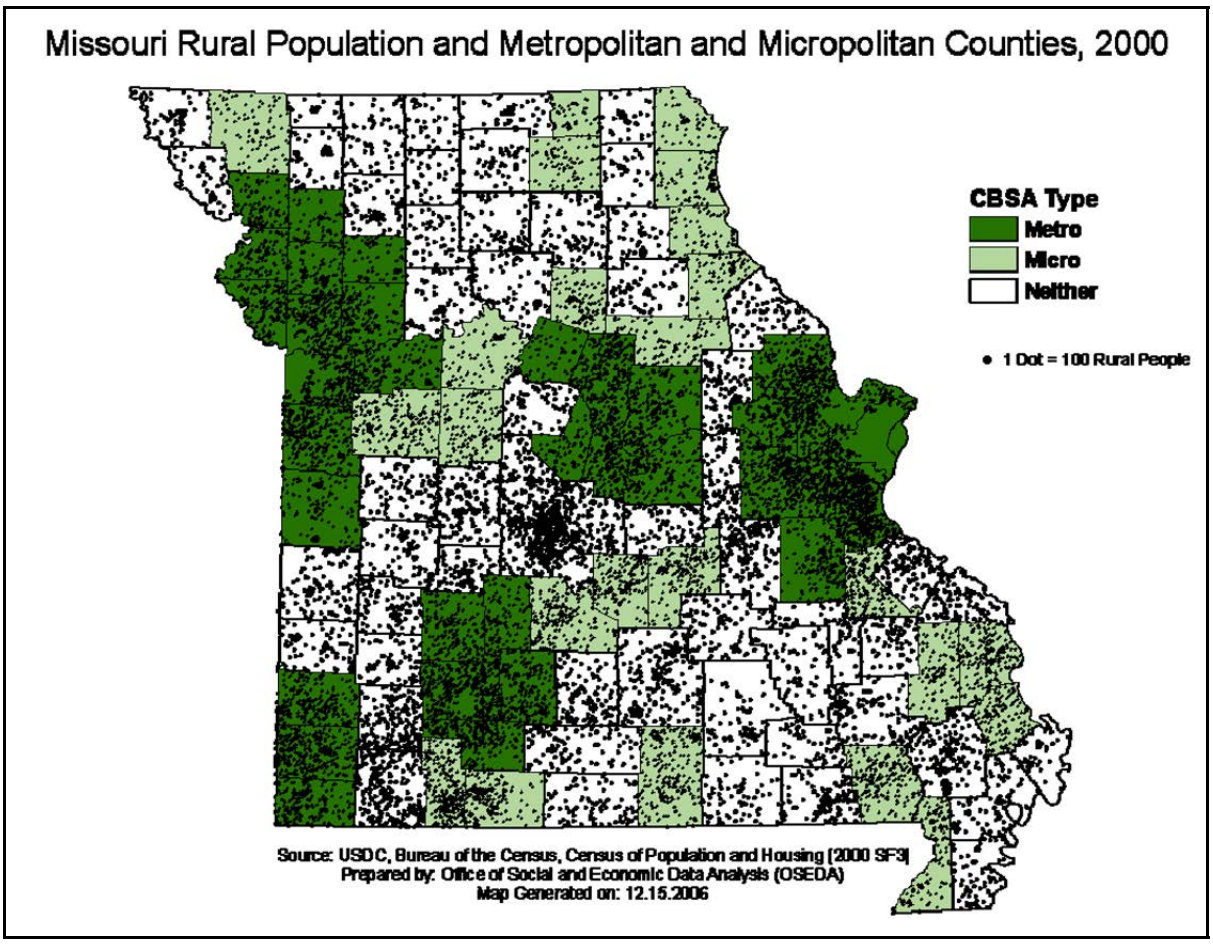
The answer is that they geocode the address of the survey respondent, attaching (among other things) the 2000 census block. Then they assign the urban/rural code to the household/person based upon the code assigned to that census block *as of 2000*. Why not use the urban/rural code assigned to that block based on **2005** data? Because *that data does not exist*. See item 4 in our **Ten Things to Know about the American Community Survey - 2005 Edition** document.

The ACS is not about head counts, it is about characteristics of persons and households. In order to define a census block as being urban or rural would require having a complete set of current block population counts which would then have to be used as input to the Bureau's very sophisticated GIS-based program that examines complex density patterns in order to make the category assignments. So, how am I to interpret the 1,803,146 persons in "rural areas"? If this number is higher than the comparable figure from the 2000 Census, does it mean that people are moving from urban to rural areas? If by "rural area" you mean an area that was classified as rural in 2000, based on 2000 data patterns, then the answer is probably yes.

But this does not (necessarily, or even probably) mean that we are abandoning urban settings to live in more rustic ones. That may be what we wanted to do, but what happens when people from urban areas move to areas that used to be rural but that are adjacent to urban areas, those areas are converted from rural to urban. It is just that we do not measure and recognize this conversion until after the next decennial census. Of course, it is always possible that in some areas it may have gone the other way, that some blocks formerly classified as urban have now become rural. But anyone who follows development patterns in the U.S. knows that this sort of change is almost unheard of, barring a natural or man-made disaster.

Bottom line on this point is that the figures for the rural portions of states and the nation that come from the ACS are probably counting too many people as being rural, with the corresponding under-counting of the urban portions. If you are studying urban sprawl and you want to use ACS data to look at how much land area has been converted from rural to urban as the result of sprawl, you should NOT be looking at the ACS geocomp summaries for Urban vs. Rural.

10. **A Picture of Rural Population in Missouri.** This map shows you what we were talking about in Item 6, above. Most of the rural population of Missouri (which is not at all an unusual state in terms of such things) lives in metropolitan or micropolitan areas. The figure we cited above that less than 3% of the land area of Missouri was classified as urban can be seen in this map. Although it does not display urban population explicitly, we know that it can only exist in an Urbanized Area or Urban Cluster.



Urbanized Areas/Urban Clusters and Metropolitan/Micropolitan areas are very closely linked, with the UA/UC just being the densely settled core area of the metro/micro area.

Urban territories on this map are green areas with no black dots. The St. Louis and Kansas City core areas are by far the largest such areas in Missouri. Most of the really dense clusters of black dots (rural population) are within the green areas, especially the dark green (Jefferson and Franklin counties just south and southwest of St. Louis, for example).

The biggest cluster of dots in a non-metro-micro (white on the map) area is in the Lake of the Ozarks region, an area inhabited by early retirees and others seeking to get away from the big city. This area is only marginally classified as rural; with growth in the Osage Beach/Lake Ozark area this decade it is very likely that after the 2010 census we'll have a Lake of the Ozarks micropolitan area and Urban Cluster, which will result in a large portion of the area's population being reclassified as urban.

What many people think of when they think of a rural lifestyle is one where going "into town" involves a significant journey that may only happen maybe once a week or less. But that is really not the case with a great majority of the rural population now (if you are looking for that group, the better category would be persons living in the white areas of the map -- i.e., outside any Metro or Micropolitan area).

The majority of the rural population today (in Missouri, at least) may have septic tanks and may not have access to city utilities and other services, but they do live within an easy drive of some population center, and the large majority, we suspect, have easy access to a Super WalMart. Most do *not* live on farms (only

about 2.5% of Missouri's population lived on farms in 2000; that comes to about 1 of every 12 rural residents). Most live in areas that look very much like suburbs or in small towns like Hermann or Osage Beach. (The latter small-town residents were actually classified as urban under the prior definition.)

The author acknowledges the valuable contribution of Lance Huntley, OSEDA, who produced the map in item 10.

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Missouri Population by County Charts[2]

Figure 2
Missouri Population by County
Top-Ten Largest Projected Numeric Increases
2000 through 2030

Rank		County	Population		30-Year Change	
Numeric Increase	Percent Increase		2000	2030	Numeric	Percent
1	4	St. Charles	283,893	499,126	215,233	75.8%
2	8	Clay	184,006	300,021	116,015	63.0%
3	16	Greene	240,391	329,825	89,434	37.2%
4	1	Christian	54,285	131,066	76,781	141.4%
5	10	Boone	135,454	204,264	68,810	50.8%
6	22	Jefferson	198,099	260,276	62,177	31.4%
7	52	Jackson	654,880	714,467	59,587	9.1%
8	7	Cass	82,092	136,933	54,841	66.8%
9	2	Lincoln	38,944	91,294	52,350	134.4%
10	12	Jasper	104,686	152,490	47,804	45.7%

Figure 3
Missouri Population by County
Top-Ten Largest Projected Numeric Decreases
2000 through 2030

Rank		County	Population		30-Year ChanQe	
Numeric Decrease	Percent Decrease		2000	2030	Numeric	Percent
1	25	St. Louis	1,016,300	956,817	-59,483	-5.9%
2	1	New Madrid	19,760	12,554	-7,206	-36.5%
3	18	Dunklin	33,155	28,765	-4,390	-13.2%
4	9	Pemiscot	20,047	16,447	-3,600	-18.0%
5	3	Iron	10,697	7,494	-3,203	-29.9%
6	7	Linn	13,754	10,696	-3,058	-22.2%
7	21	Saline	23,756	21,140	-2,616	-11.0%
8	4	Chariton	8,438	6,172	-2,266	-26.9%
9	2	Gentry	6,861	4,759	-2,102	-30.6%
10	13	Wayne	13,259	11,200	-2,059	-15.5%

[2] Missouri Office of Administration. The Missouri Population Projections 2000-2030- Population Trends

Figure 4
Missouri Population by County
Top-Ten Largest Projected Percentage Increases
2000 through 2030

Rank		County	Population		30-Year Change	
Percent Increase	Numeric Increase		2000	2030	Percent	Numeric
1	4	Christian	54,285	131,066	141.4%	76,781
2	9	Lincoln	38,944	91,294	134.4%	52,350
3	15	Warren	24,525	46,241	88.5%	21,716
4	1	St. Charles	283,893	499,126	75.8%	215,233
5	14	Webster	31,045	53,282	71.6%	22,237
6	12	Taney	39,703	68,041	71.4%	28,338
7	8	Cass	82,092	136,933	66.8%	54,841
8	2	Clay	184,006	300,021	63.0%	116,015
9	11	Platte	73,781	114,904	55.7%	41'123
10	5	Boone	135,454	204,264	50.8%	68,810

Figure 5
Missouri Population by County
Top-Ten Largest Projected Percentage Decreases
2000 through 2030

Rank		County	Population		30-Year Change	
Percent Decrease	Numeric Decrease		2000	2030	Percent	Numeric
1	2	New Madrid	19,760	12,554	-36.5%	-7,206
2	9	Gentry	6,861	4,759	-30.6%	-2,102
3	5	Iron	10,697	7,494	-29.9%	-3,203
4	8	Chariton	8,438	6,172	-26.9%	-2,266
5	14	Holt	5,351	4,094	-23.5%	-1,257
6	27	Worth	2,382	1,826	-23.3%	-556
7	6	Linn	13,754	10,696	-22.2%	-3,058
8	13	Sullivan	7,219	5,822	-19.4%	-1,397
9	4	Pemiscot	20,047	16,447	-18.0%	-3,600
10	15	Atchison	6,431	5,280	-17.9%	-1,151

WHERE WE PLAY

Ozark Trail – Sections

The Ozark Trail is divided into 13 sections roughly between 10 to 40 miles in length. Each section provides its own unique experience with deep Ozark woodlands, clear running streams and open glade areas for panoramic views of the surrounding landscapes. A brief description of each section follows:

Courtois Section: This 45-mile section has trailheads in the Huzzah Conservation Area, at Harmon Springs, on Highway 8 and at Hazel Creek. All have limited parking. The trail uses the western half of the Berryman loop trail. The trail from Harmon Springs to Hazel Creek is popular with mountain bikers and equestrians. Trail uses: Hiking, mountain biking and equestrian use.

Trace Creek Section: Located southwest of Potosi, the 26-mile section has trailheads at Hazel Creek campground and Highway A, both with limited parking. The trail leads through dense forests into shaded hollows and across ridge tops. Trail uses: Hiking, mountain biking and equestrian use

Taum Sauk Section: The 35-mile stretch is considered one of the best trails in Missouri, taking hikers over ancient mountains with grand vistas, through glades, past the state's highest waterfall and highest point and to scenic shut-ins. Trailheads are at Highway A, Johnson's Shut-Ins State Park, Taum Sauk Mountain State Park and Highway 21. Trail uses: Hiking only

Marble Creek Section: This is a pleasant, 10-mile hike and an excellent mountain bike trip. The trail, named after the colorful deposits of dolomite, leads users around Crane Lake. Trailheads are at Crane Lake and Marble Creek campground. Trail uses: Hiking, mountain biking and equestrian use

Wappapello Section: This 35-mile section runs from Sam A. Baker State Park to Lake Wappapello, ending at Hendrickson. It follows the St. Francis River for 15 miles through woodlands and bottoms. Trailheads are located at Highway 143, Highway 34, Highway FF at Little Kake Creek and Highway O in Hendrickson. Trail uses: Hiking, mountain biking and equestrian use.

Victory Section: Named for the old Victory School, the trail is 18 miles long and incorporates a portion of the Victory horse trail between Elsinore and Hendrickson. Trailheads are located on Highway 172, at Wrangler, Upalika Pond, Walton Chapel and Brushy Creek. Trail uses: Hiking, mountain biking and equestrian use

Karkaghne Section: This 29-mile-long trail runs just below the ridge tops at its snakes from Oates to Highway 72, dipping into the valleys as it crosses the West Fork of the Black River. The southern end of the trail has a spur to Grasshopper Hollow, a large fen complex. Trailheads are on Highway J, at Sutton Bluff and at Blair Creek. Trail uses: Hiking, mountain biking and equestrian use.

Middle Fork Section: The 24-mile-long trail crosses many brooks and streams in the upper basin of the Middle Fork of the Black River. The northern trailhead is on Highway DD, with another on Highway J. Trail uses: Hiking, mountain biking and equestrian use

Blair Creek Section: The trail runs for 26 miles, passing through the Roger Pryor Pioneer Backcountry on its way to the Current River at Owl's Bend. It offers outstanding views from the bluffs over the river. Trailheads are at Highway P and Owl's Bend. Trail use: Hiking only.

Current River Section: The trail begins at the Current River and leads toward Stegall Mountain, offering 30 miles of outstanding scenery. The features include a scenic shut-ins on Rocky Creek and mountaintop glades. Trailheads are located at Owl's Bend, Powder Mill Ferry, Peck Ranch and Highway 60. Trail uses: Hiking only.

Between the Rivers Section: The trail runs 30 miles from Highway 60, winding through several small tributaries that feed the Current River. It climbs onto a major ridge that divides the watersheds of the Current and Eleven Point rivers. Trailheads are on Highway 60 and at the Sinking Creek lookout tower. Trail uses: Hiking, mountain biking and equestrian use

Eleven Point Section: Great views and a visit to the sparkling Eleven Point River make this 29-mile section a favorite. Trailheads are at Greer Springs campground and McCormack Lake. Trail uses: Hiking, mountain biking and equestrian use.

North Fork Section: This recently opened section is 27 miles long and leads into the Devil's Backbone Wilderness Area. The trailheads are at Pomona, Highway CC and Devil's Backbone. Trail uses: Hiking, mountain biking and equestrian use

For more information on the Ozark Trail, including detailed maps and information on each section, visit ozarktrail.com.

Missouri Natural Areas and Wild Areas[3]

Missouri Natural Area	State Park Location	Acreage
Babler Southwoods Hollow	Babler State Park	17 acres
Bennett Spring Hanging Fen	Bennett Spring State Park	5.35 acres
Big Oak Tree	Big Oak Tree State Park	940 acres
Big Sugar Creek	Cuivre River State Park	56 acres
Botkins Pine Woods	Hawn State Park	30 acres
Chariton River Hills (Bee Trace)	Long Branch State Park	384.4 acres
Chariton River Hills (West Char.)	Long Branch State Park	44.4 acres
Coakley Hollow Fen	Lake of the Ozarks State Park	4 acres
Coonville Creek	St. Francois State Park	49 acres
Cordgrass Bottoms	Pershing State Park	80 acres
Des Moines River Ravines	Battle of Athens State Historic Site	40 acres
Elephant Rocks	Elephant Rocks State Park	7 acres
Elk River Breaks Woodland	Big Sugar Creek State Park	1,613 acres
George A. Hamilton Forest	Cuivre River State Park	40 acres
Graham Cave Glades	Graham Cave State Park	81.5 acres
Grand Gulf*	Grand Gulf State Park	60 acres
Ha Ha Tonka Karst	Ha Ha Tonka State Park	70 acres
Ha Ha Tonka Oak Woodland	Ha Ha Tonka State Park	953 acres
Johnson's Shut-Ins	Johnson's Shut-Ins State Park	180 acres
JSI Dolomite Glade	Johnson's Shut-Ins State Park	18 acres
JSI Fen	Johnson's Shut-Ins State Park	8 acres
LaMotte Sandstone Barrens	Hawn State Park	81 acres
Lincoln Hills	Cuivre River State Park	1,872 acres
Locust Creek	Pershing State Park	330 acres
Meramec Mosaic	Meramec State Park	831 acres
Meramec Upland Forest	Meramec State Park	461 acres
Montauk Upland Forest	Montauk State Park	40 acres
Mudlick Mountain	Sam A. Baker State Park	1,370 acres
Orchid Valley	Hawn State Park	120 acres
Oumessourit (including Van Meter Forest)	Van Meter State Park	300 acres
Pickle Creek	Hawn State Park	58 acres
Pin Oak Slough	Knob Noster State Park	4 acres
Regal Tallgrass Prairie (East Drywood, Hunkah, Tzi-Sho)	Prairie State Park	3,646 acres
Roaring River Cove Hardwoods	Roaring River State Park	120 acres
St. Francois Mountains	Taum Sauk Mountain State Park	5,428 acres
Vancill Hollow	Trail of Tears State Park	300 acres
Vilander Bluff	Onondaga Cave State Park	206 acres
Washington State Park Hardwoods	Washington State Park	68 acres
**L-A-D Foundation owns Grand Gulf Natural Area, DNR manages the site*		
Total	**37 Natural Areas**	**19,855.65 acres**
L-A-D Foundation	**1 Natural Area**	**60.00 acres**
TOTAL ACRES		**19,915.65 acres**

[3] Missouri State Parks. http://mostateparks.com/page/57888/missouri-state-park-designated-natural-areas.

Missouri Wild Land	State Park Location	Acres
Big Sugar Creek	Cuivre River State Park	1,675
Coonville Creek	St. Francois State Park	2,256
East Fork	Johnson's Shut-Ins State Park	1,110
Gans Creek	Rock Bridge Memorial State F	720
Goggins Mountain	Johnson's Shut-Ins State Park	5,000
Indian Creek	Trail of Tears State Park	1,300
Mudlick Mountain	Sam A. Baker State Park	4,420
Northwoods	Cuivre River State Park	1,082
Patterson Hollow	Lake of the Ozarks State Park	1,275
Roaring River Hills	Roaring River State Park	2,075
Whispering Pine	Hawn State Park	2,080
Total		**22,993**

Missouri State Parks - Inventory of Facilities

Parte Name	Bask	ElectJ1c	EI W	SIEIW	Eq	Wl	ADA	Group camp	Lodging	Marina/ 81	OWiin	Fishing	Boating	Swtmmlg	Trais	Bi<lngTrails	ATVTrais	Picnic Sites	Picnic Shelter
Arrow Rock State Historic Site	12	34		1			3				■	I/R		-n				■ O	
Battle of Athens State Historic S te	14	19								RA		R			■			■	O
Battle of Carthage State Historic Site																			
Battle of Island Mound State Historic Site																			
Battle of Lexington State Historic Site														-n				■	
Benr.ett Spring State Park	15	128		48			11		C/OT		■	R/S	CR	p	■			■	O
Big Lake State Parte	ta	S?					4		C/OT	1\A	■	L	C	o /P				■	O
Big Oak Tree State Park										RA		L			-n			■	O
Big Sugar Creek State Parte															■				
BolliQger Mill State Historic Site																		■	
Boone•s Uck State Historic Site															I				O
Bothwell Lodge State Historic Site															■	MB		■	O
Castlewood State Park												R		■	-IE	MB		■	O
Clark's Hill/Norton State Historic Site														-n					
Confederate Memorial State Historic Site												■						■	
Crowder State Park	10	31					2					L		B	-IE	MB		■	O/E
Cuivre River State Park	41	20		31	13	5	6			RA		I/R		-16	o'BPIE			■	O
Current River State Park																			
Deutschheim State Historic Site																			
Dillard Mill State Historic Site												5			■			■	
Dr_ Edmund A.Babler MemorialState Pari<	30	43					4								-IE	HS		■	
																			O
																		■	O
Edward "Ted" and Pat Jones-Confluence Point State Park																			
Elephant Rocks State Pari<												L			I				
Felix Valle House State Historic Site																			
Finger Lakes State Park	19	16					2			RA				8		MB	■	■	
First Missouri State Capitol State Historic Site																			
Fort Davidson State Historic Site																			O
Gen.John J.Pershing Boyhood Home State Historic Site																		■	
Gov.DanielDunklin's Grave State Historic Site																			
Graham Cave State Park	34	18								RA		R			-II			■	O
Grand Gulf State Park															-II			■	
Ha Ha Tonka State Park												L		■	-11/BP			■	O
Harrv S Tnuman Birthplace State Historic Site																			
Harry S Truman State Park	71	127					11			M/RA		L	BR	-16	■			■	O
Hawn State Park	19	26				5	4								-niB			■	O
Hunter-Dawson State Historc Site																			
Illinivek Village State Historic Site															I			■	
Jefferson Landing State Historic Site																			
Jewell Cemetery State Historic Site																			
Johnson's Shut-Ins State Park	14	21		19	8	14	5	■	CC			UR		■	-niBPIE			■	DIE
Katy TrailState Park															-niE	MB/HS			
Knot> Noster State Park	27	41					4					I/S			-IE	MB		■	
																		■	O
Lake of the Ozarks State Park	62	127					10		OT	M/RA	■	L	BR	CR/BR 18	-niBPIE	MB		■	O
Lake Wappapello State Park	4	70					3		C/CC	RA		L						■	
Lewis and Clark State Pari<	7	62					3			RA		■		B					O

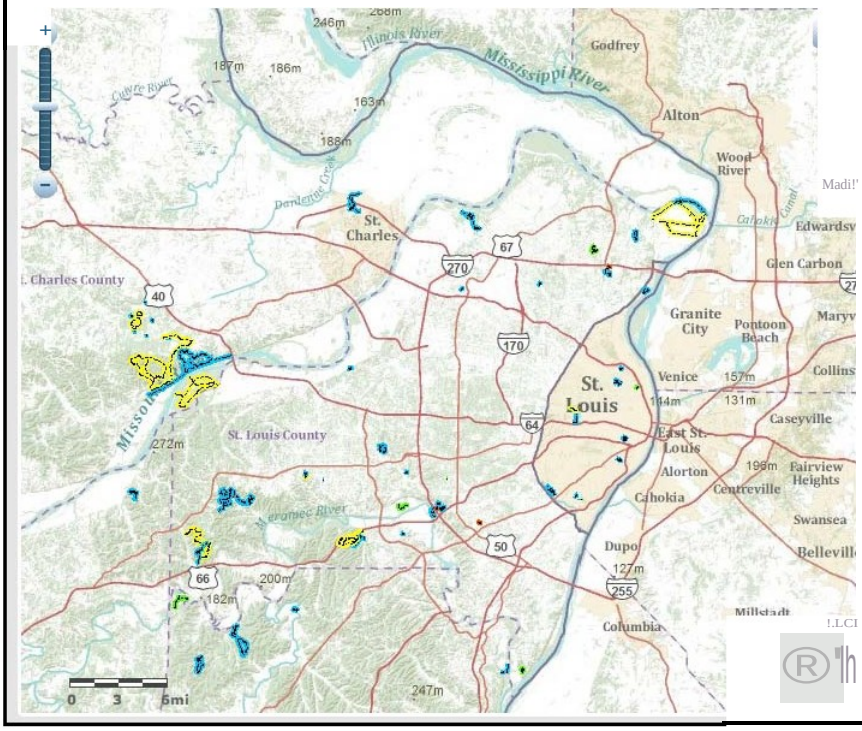
Missouri State Parks – Inventory of Facilities

Pari< Name	Bask:	Electric	EIW	S/EIW	Eq	WI	NJA	Group Camp	Lodging	Marina/	Dining	Fishing	Boating	Swimming	Trails	Biking Trails	ATV Trails	Picnk: Sites	Picnk: Shetter
Locust Creek Covered Bridge State Historic Site												L							
Long Branch State Park	9	63				9	4			M/RA		L		o iB	■			■	
Mark Twain Birthplace State Historic Site												L			■				
																			O
Mastodon State Historic Site															on			■	O
Mark Twain State Park	22	75					6		CC	RA		L		o iB	■			■	OlE
Meramec State Park	5()	124	14	21			10	■	ClOT	RA	■	R	CR	■	on/BP			■	O
Missouri Mines State Historic Site																			
Montauk State Park	31	123					8		C/OT		■	I/R/5			■			■	O
Morris State Park															• I				
Nathan Boone Homestead State Historic Site															on			■	
Onondaga Cave State Park	19		47				3			RA		L/R		■	■	MB		■	O
Osage Village State Historic Site																			
Pershing State Park	12	26					2					L/5			oniBP			■	O/E
Pomme de Terre State Park	41	192	20				9			M/RA	■		BR	•16	■			■	O
Prairie State Park	2											L			•18			■	O
Roaring River State Park	45	137		2			10		ClOT		■	R		o iP	on			■	O
Robertsville State Park	12	14					2			RA		R			■			■	O
Rock Bridge Memorial State Park												5			on/IE	MB		■	O
Rock Island Trai State Park																			
Route 66 State Park										RA		R			•IE	HS			
											■			■					■	
Roger Pryor Pioneer Backcountry															o/8P				
																			O
~~Sam A. Baker State Park~~	~~47~~	~~140~~			~~21~~		~~10~~		~~C~~	~~RA~~			~~CR~~						
Sandy Creek Covered Bridge State Historic Site														■				■	
												R			o/8IE	HS			O
Sappington Cemetery State Historic Site																			
Scott Joplin House State Historic Site																			
St.Francois State Park	47	63					6					R/5		■	o/118PIE			■	O
St.Joe State Park	35	40			25		5			RA		L		B	o/8PIE	MB/H5	■		O
Stockton State Park	14	60				5	5		CC/OT	M/RA	■	L	BR	o iB	■			■	O
Table Rock State Park	43	78	41				6			M/RA	•	L	CR/BR	•	•	MBIHS		•	O
Taum Sauk Mountain State Park						12									•ISPIE			■	
Thomas Hart Benton Home and Studio State Historic Site																			
Thousand Hills State Park	15	42					3		OT	M/RA	■	■	CR/BR	B	o/8P	MB/H5		■	OlE
Towosahgy State Historic Site																			
Trail of Tears State Pari<	35	10	7				1			RA		I/R/5		B	o/8PIE			■	O
Union Covered Bridge State Historic Site																			
Van Meter State Park	9	12					1					■			on			■	O
Wakonda State Park	12	65	4				4		OT	RA	■	L	CR/BR	B	■	MB		■	
														■	■			■	
																		■	

Wallace State Park	35	42	4	4			L								OlE
Washington State Park	26	24		3	C	RA	R	CR	oiP	o/BP					O
Watkins Mill State Park	22	74		5		RA	L		oiB	•IE	HS	■			O
Watkins Woolen Mill State Historic Site							L			■					
Weston Bend State Park	4	32		2			R			■	H5	■			OlE

Managed Trails, ~~Missouri Department of Conserva\tQ,t')~~ Iscreen View

This map displays trails on the Missouri Department of Conservation Management Areas.



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Legend

MDC Tra IS

Area Access Trail

Disabled Accessible Trail

Hiking Trail

MultiUse Trail

Missouri Department of Conservation Map

U.S. Corps of Engineers Maps

U.S. Army Corps of Engineers - Missouri

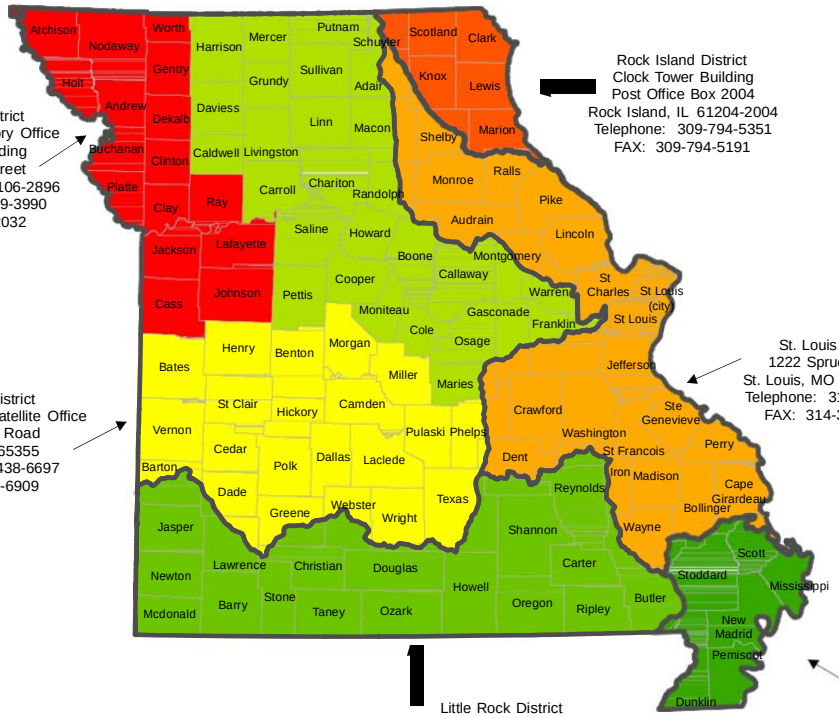
Recreation Area	Camping	Lodging	Showers	Boat Ramps	Marina	Gas	Picnic Area \ Shelter	Playground	Swimming Area	Fishing Facilities	Trails	Golf Course	Amphitheater	Grocery / Snack Bar
Blue Springs Lake	X			X	X	X	X			X				
Bull Shoals Lake	X			X	X		X	X	X	X	X		X	
Clearwater Lake	X		X	X	X		X	X	X		X			
Harry S. Truman Lake	X	X	X	X	X	X	X	X	X	X		X	X	
Illinois River - Riverlands		X		X							X			
Kanawha River - London Pool							X							
Long Branch Lake	X		X	X	X	X	X	X	X	X	X			
Longview Lake	X			X	X		X					X		
Mark Twain Lake	X	X	X	X	X	X	X	X	X	X	X		X	
Mississippi River - Upper	X	X	X	X	X	X	X	X		X	X			
Pomme De Terre Lake	X		X	X	X	X	X	X	X	X	X		X	
Smithville Lake	X	X	X	X	X	X	X	X	X	X	X	X	X	
Stockton Lake	X		X	X	X		X	X	X	X	X		X	
Table Rock Lake	X		X	X	X	X	X	X	X	X	X		X	X
Wappapello Lake	X	X	X	X	X	X	X	X	X	X	X		X	X

U.S. Army Corps of Engineers Districts in the State of Missouri

Kansas City District
Missouri State Regulatory Office
221 Bolivar Street, Suite #103
Jefferson City, MO 65101
Telephone: 573-634-2248
FAX: 573-634-7960

Kansas City District
Kansas City Regulatory Office
700 Federal Building
601 East 12th Street
Kansas City, MO 64106-2896
Telephone: 816-389-3990
FAX: 816-389-2032

Kansas City District
Truman Regulatory Satellite Office
15837 Truman Road
Warsaw, MO 65355
Telephone: 660-438-6697
FAX: 660-438-6909



Rock Island District
Clock Tower Building
Post Office Box 2004
Rock Island, IL 61204-2004
Telephone: 309-794-5351
FAX: 309-794-5191

St. Louis District
1222 Spruce Street
St. Louis, MO 63103-2833
Telephone: 314-331-8575
FAX: 314-331-8741

Little Rock District
Post Office Box 867
Little Rock, AR 72203-0867
Telephone: 501-324-5295
FAX: 501-324-6013

Memphis District
167 North Main, B202
Memphis, TN 38103-1894
Telephone: 901-544-3473
FAX: 901-544-0211