



4.5 Farmland

Since early settlement, agricultural land in Indiana has been, and continues to be, one of the most valuable natural resources within the state. However, there is a continued loss of farmland, specifically prime farmland, as cities expand and rural development for industry and housing becomes more attractive. This trend holds true for Marshall and St. Joseph counties as well. Figures 4.5.20 and 4.5.21 illustrate the historic decline of farmland use in Marshall and St. Joseph counties, respectively, from 1900 to 1997.

Marshall and St. Joseph counties are two of the nine counties that comprise the North Central Agricultural Statistics District in Indiana. Data from the 1997 census of agriculture indicated farmland in Marshall County encompassed 201,637 acres on 865 farms. St. Joseph County farmland included 154,142 acres on 666 farms. The average value per acre for land and buildings in 1997 was \$1,992 for Marshall County (46th in Indiana) and \$2,258 for St. Joseph County (31st in Indiana). Figure 4.5.22 illustrates the average value per acre for Marshall and St. Joseph counties relative to other counties in the agricultural statistics district as well as the state averages.

Typical agricultural commodities produced in Marshall and St. Joseph counties include corn, soybeans, winter wheat and hay. Figure 4.5.23 illustrates corn, soybean and wheat production in 2002 for Marshall and St. Joseph counties as well as the other counties of the North Central Agricultural Statistics District. Marshall and St. Joseph are also two of 40 counties in Indiana where popcorn is produced. Livestock production in Marshall and St. Joseph counties includes cattle (milk and beef), hogs, and sheep. Marshall County ranked 10th in hay production compared to other Indiana counties in 2002, but no higher than 19th for corn, soybeans, or wheat. 1997 agricultural census data also indicate that Marshall County ranked 10th in popcorn production for the state. Additionally, Marshall County ranked 5th in the state for milk cows in 2003 and 4th in the state for sheep in the 1997 census. St. Joseph County has not ranked in the top ten for any crop commodity or livestock for the past seven or more years of data

Total cash receipts (crops and livestock) for Marshall and St. Joseph counties in 2001 were \$62,631,000 and \$61,102,000, respectively, ranking them 34th and 36th in the state. The collective \$123.7 million total cash receipts for Marshall and St. Joseph county crops in 2001 represent 3.8% of the total crop cash receipts (\$3.21 billion) reported for the state in that year. Other income in the form of government payments and imputed income totaled \$18,458,000 for Marshall (37th) and \$17,854,000 for St. Joseph (42nd). An even better indicator of the return on farmland within each county is the crop cash receipts per harvested acre. Based on 1997 Agricultural Census data for crop cash receipts and harvested cropland, Marshall and St. Joseph counties generated an estimated \$356.73/acre and \$407.30/acre, respectively (Figure 4.5.24). Both are slightly above the \$332.41/acre estimate for the counties comprising the North Central Agricultural Statistics District and even higher still than the state average of \$291.41.

Farmland preservation and the conversion of prime and unique farmland to urban development are serious issues in Indiana. Continued population growth, increases in transportation systems and efficiency and communication flexibility are some of the factors which make it increasingly easier to live and work in widely-dispersed communities today. The Hoosier Farmland Preservation Task Force indicates that from 1978 to 1992 an average of 88,714 acres of farmland per year have been lost to other uses (Indiana Land Resources Council, 1999). The Natural Resource Conservation Service (NRCS) estimates that prime and important agricultural soils are being converted at a rate three to four times that of less productive non-prime farmland (United States Department of Agriculture, 2002). In light of this trend, one of the goals of the Farmland Protection Program is to protect and slow the loss of farmland. The concern is not so much the overall acreage of cropland converted to urban development, but the quality and pattern of cropland conversion. Preservation strategies are not intended to be anti-development or anti-growth, but instead to concentrate efforts that will direct industrial, residential and commercial growth to areas less suitable for farming, thus preserving more valuable prime farmland, and ultimately achieve a balanced utilization of rural, suburban and urban land resources (Indiana Land Resources Council, 1999).

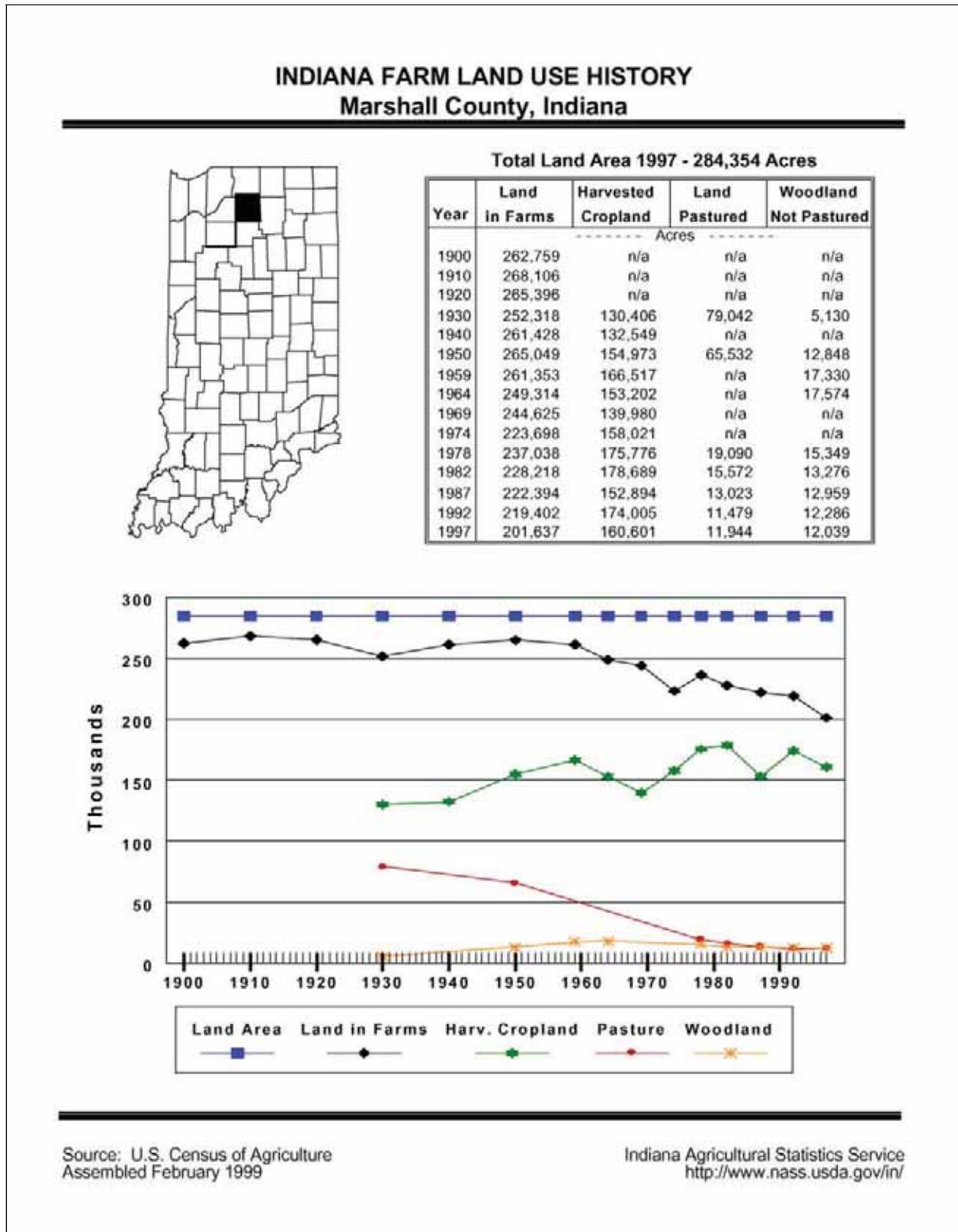


Figure 4.5.20: Farm Land Use History for Marshall County, Indiana

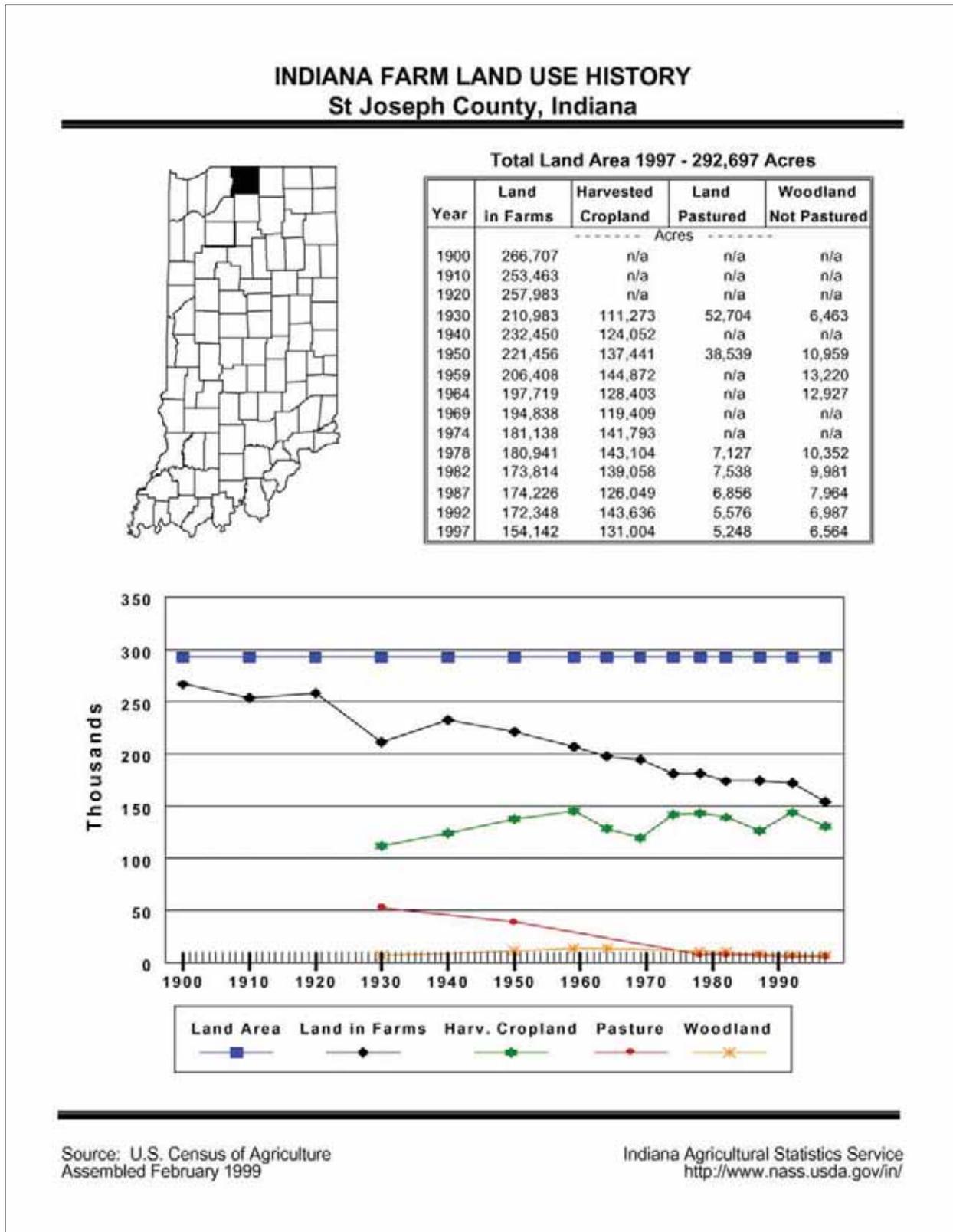


Figure 4.5.21: Farm Land Use History for St. Joseph County, Indiana



As defined by the United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), prime farmland is “land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber and oilseed crops, and that is available for these uses (i.e., land that could be cropland, pastureland, rangeland, forest land or other land, but not urban built-up land or water).” It has the combination of soil properties, growing season and moisture supply needed to produce sustained high yields of crops in an economic manner if it is treated and managed according to acceptable farming methods. In general, prime farmland has an adequate and dependable water supply from precipitation or irrigation, a favorable temperature and growing season, an acceptable level of acidity or alkalinity, an acceptable content of salt or sodium and few or no rocks. Its soils are permeable to water and air. Prime farmland is not excessively eroded or saturated with water for long periods of time, and it either does not flood frequently during the growing season or it is protected from flooding (SSM, USDA Handbook No. 18, October 1993).

In 1997, 12.9 million acres of Indiana were considered rural prime farmland, placing it eighth in the country in total acreage of this resource. Only three states have more than 50% of their land area classified as prime farmland: Indiana, Illinois and Iowa (Indiana Land Resources Council, 1999). In fact, at 58%, Indiana ranks second only to Illinois in the percent of its land that is considered prime farmland. However, with 124,200 acres of prime farmland converted to developed land from 1992 to 1997, Indiana ranks second in the highest percent of prime farmland conversion in the nation and seventh in the average annual rate (24,800 acres/year) of prime farmland converted to developed land (United States Department of Agriculture, 1997). Eighty-four percent of Indiana’s prime farmland in 1997 was utilized for cropland, 6% was devoted to pastureland, and the remaining 10% was in the form of forestland, Conservation Reserve Program (CRP) land or miscellaneous rural land.

Twenty-nine of the 56 mapped soil series for Marshall County are prime farmland soils with an additional six soil series considered state important. Collectively, these soils comprise 80% of the county. The predominant prime farmland soils for Marshall County in descending order include: Rensselaer, Crosier, Riddles, Brookston, Gilford, Metea and Oshtemo. All other prime farmland soil series individually comprise less than 3% of the county. Houghton and Adrian muck soils are the principal state important soils of the county.

In St. Joseph County, 45 of the 167 mapped soil series are prime farmland soils with an additional 14 considered state important. Collectively these soils comprise 64% of the county. For St. Joseph County, the predominant prime farmland soils include: Crosier, Brookston, Rensselaer, Coupee, Oshtemo and Riddles-Oshtemo. Houghton, Adrian, Maumee and Antung are the principal state important muck soils for the county.

Today, the US 31 study area remains largely agricultural or wooded with the exception of the south side of South Bend and other localized development. The majority of the farmland conversion that has taken place in the study area over the past several decades occurs along, or in close proximity to US 31 or major intersecting roads. The towns of Lakeville and LaPaz represent the greatest concentration of development between Plymouth and South Bend. A review of the study area suggests that there is no one location that is currently experiencing large scale development resulting in farmland loss. However, continued growth south of South Bend and US 20 will ultimately cause additional farmland loss in the future.

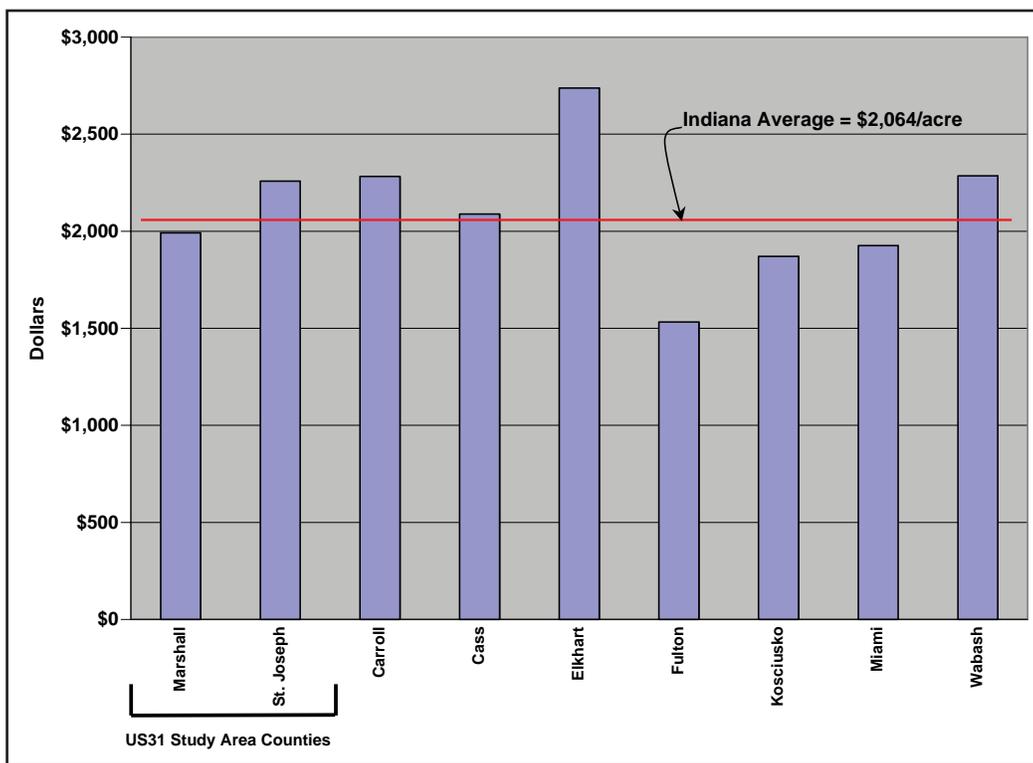


Figure 4.5.22: 1997 Average Value of Farmland Per Acre for Marshall and St. Joseph Counties and North Central Agricultural District

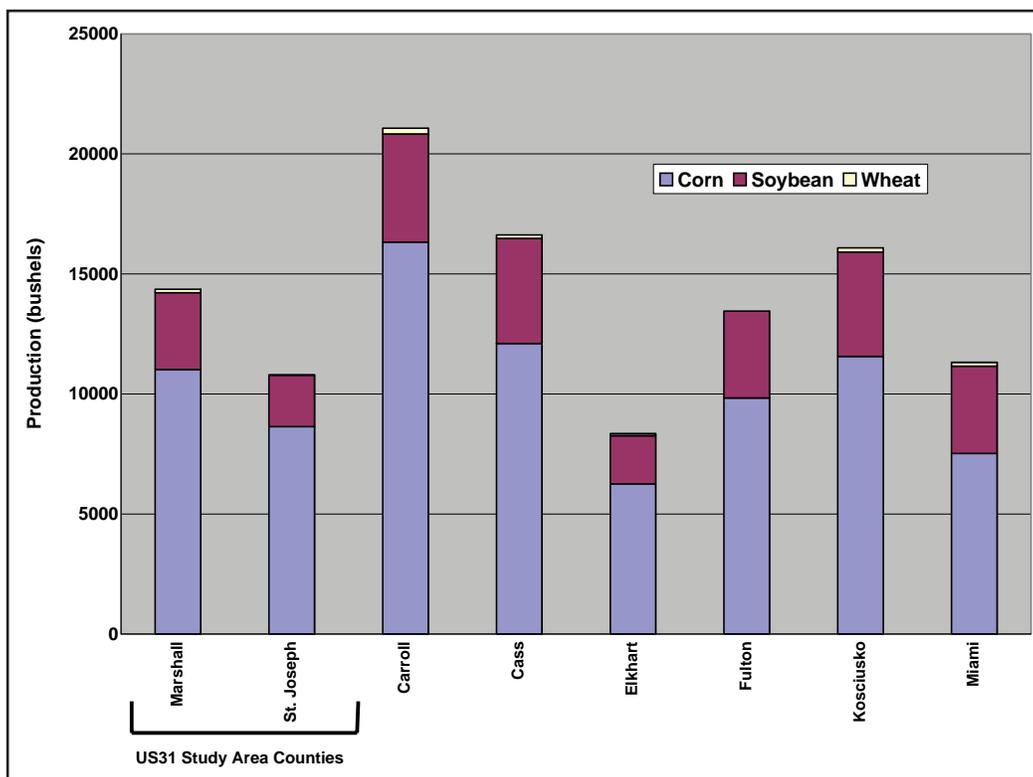


Figure 4.5.23: 2002 Crop Production for Marshall and St. Joseph Counties and North Central Agricultural District

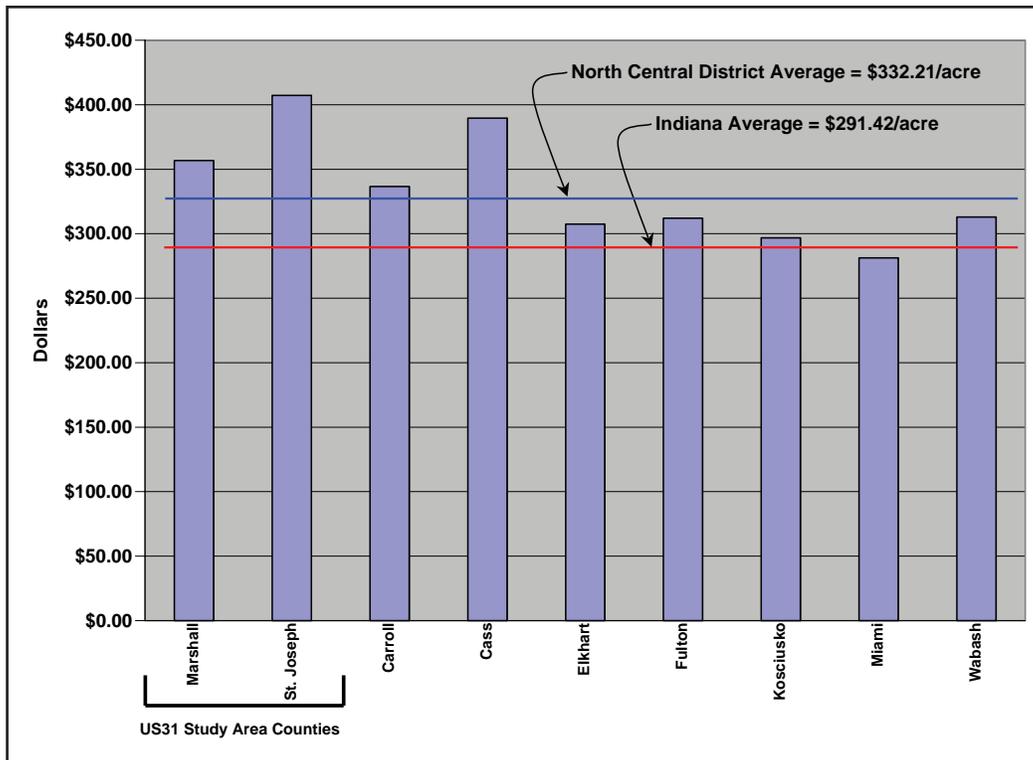


Figure 4.5.24: 1997 Crop cash Receipts Per Acre Harvested for Marshall and St. Joseph counties and North Central Agricultural Statistics District Counties