

Estimating the Effects Of Reduced Medicaid Expenditures



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On Human Services

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This testimony is based on a preliminary analysis of the implications of the Governor Taft's budget proposals regarding the Medicaid program in Ohio, for the two year period beginning July 1, 2005 and ending June 30, 2007. The detailed budget contains a number of specific proposals which have differential effects on different Medicaid recipient groups. For instance, changing eligibility criteria will affect young individuals whereas limits on the funding for nursing homes will affect the elderly. This testimony focuses on the overall effects and does not explore the implications of the specific proposals.

1. Proposed Expenditures¹

The Governor's budget for fiscal years 2006 and 2007 proposes Medicaid expenditures of approximately \$9.85 billion in 2006 and \$10.27 billion in 2007 (Table 1). These figures include a federal contribution of approximately 60 cents for every dollar the state spends. The state's share of the expenditures in each of the two years is approximately \$4 billion. Both these annual expenditure figures imply modest increases the over the previous year's funding, but the increase occurs at a reduced rate.

Table 1: Medicaid Expenditures

	SFY2006 (\$)	SHARE	SFY2007 (\$)	SHARE
TOTAL	9,848,953,187		10,270,964,640	
STATE	3,945,500,770	0.4006	4,094,097,431	0.3986
FEDERAL	5,903,452,417	0.5994	6,176,867,209	0.6014

These proposed expenditures (Table 1) include cost management efforts to reduce the projected spending by \$813 million in fiscal year 2006 and \$1.5 billion in fiscal year 2007.

Table 2: Cost Management

	SFY2006 (\$)	SHARE	SFY2007 (\$)	SHARE
TOTAL	813,200,000		1,500,000,000	
STATE	325,760,000	0.4006	597,900,000	0.3986
FEDERAL	487,430,000	0.5994	902,086,000	0.6014

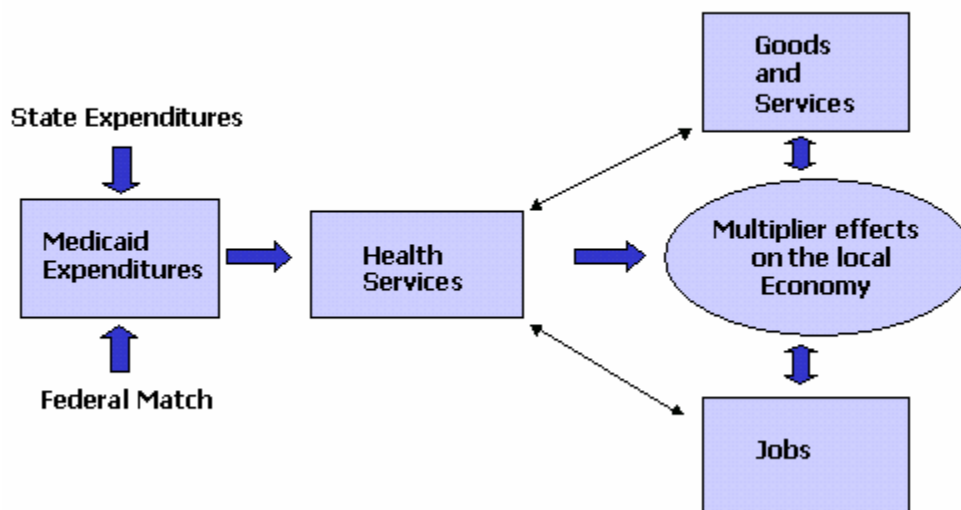
¹ Executive Budget for FYs 2006 and 2007, Special Analyses (Medicaid) p. D-65

As Table 2 shows, the actual savings in the state's expenditures due to the proposed reductions are considerably less because these reductions reflect a loss of the federal matching funds of approximately \$490 million in SFY2006 and \$900 million in SFY2007.

2. Overall Economic Impact

A standard approach to measuring the effect of changes in spending levels is to estimate the "multiplier effect" of each state dollar. The essential logic underlying the multiplier is that whenever a dollar is spent in the economy, additional expenditures are generated that lead to a compounding effect. For instance, the federal government matches every dollar spent by Ohio by approximately \$1.40. These state and federal expenditures make their way through the health services sector of the economy through the provision of healthcare goods and services. These goods and services place demands on other sectors of the economy, generating in turn, jobs and spending on additional goods and services. Figure 1 provides a linear schematic of the cyclical flow of Medicaid dollars through the economy.

Figure 1: Role of Medicaid in the Economy



Estimates of the multiplier effect vary by location, the type of expenditure and sector of the economy. We use a multiplier of 3.18 as our estimate.² One cannot overemphasize the fragile nature of forecasting, and economic forecasting in particular as an inexact science. When working with the same information, forecasters may differ in their assumptions regarding the nature of the economy and may interpret the same results in different ways. Even the best forecasts are merely suggestive of trends. They are best interpreted as indicators of the order of magnitude of the effects rather than precise estimates of the actual size of the effect.

² "Medicaid: Good Medicine for State Economies," *Families USA*, 2004 Update, www.familiesusa.org.

The cost management proposal implies expenditure reductions spread over the two years and different Medicaid funding categories. The federal match varies with type of funding category, however, to obtain an overall picture of the effects, we focus on the overall reduction and estimate the average effect in terms of reduced economic activity and potential jobs lost (Table 3).

Table 3: Economic Effects of Cost Management

	SFY2006 (\$)	SFY2007 (\$)
STATE SHARE	325,760,000	597,900,000
ECONOMIC EFFECT	1,035,000,000	1,901,000,000
JOBS LOST	10,420	19,130

We use the multiplier of 3.18 to estimate an overall effect of the proposed expenditure reductions in state expenditures of approximately \$326 million in SFY2005 and \$598 million in SFY 2006. Table 3 shows the combined effect of approximately \$3 billion reduction in economic activity due to the reduced Medicaid expenditures of a little over \$920 million over the two-year budget period. Again using the multiplier, the number of jobs lost per million dollar reduction in state Medicaid expenditures is estimated to be 31.99.³ The reduction in spending therefore also translates into an estimated loss of approximately 10 thousand jobs in the first year and another 19 thousand in the second year adding to a total of approximately 30 thousand jobs over the two year period. We must emphasize again that these estimates should be viewed as providing an overall assessment of the magnitude of the effect and not necessarily a precise description of the actual consequences.

3. County Level Analysis

The most current information on the distribution of Medicaid recipients and expenditures across the Ohio counties is available for the years 2002 and 2003. We use these overall figures in Table 3 to gain insight into how these reductions translate into consequences at the county level. MAP1 lists all the 88 Ohio counties.

³ Ibid.

MAP 1: Ohio Counties

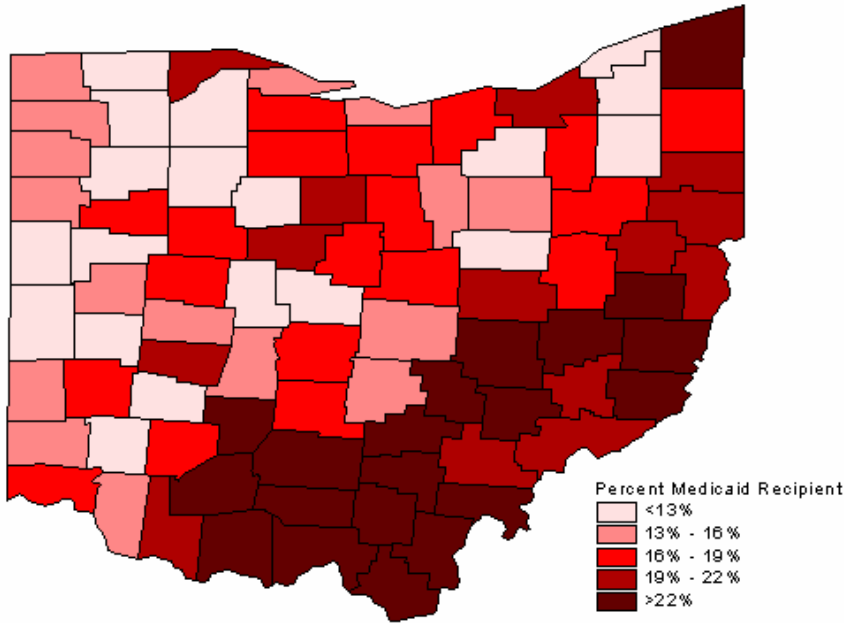


Distribution of Recipients and Expenditures⁴

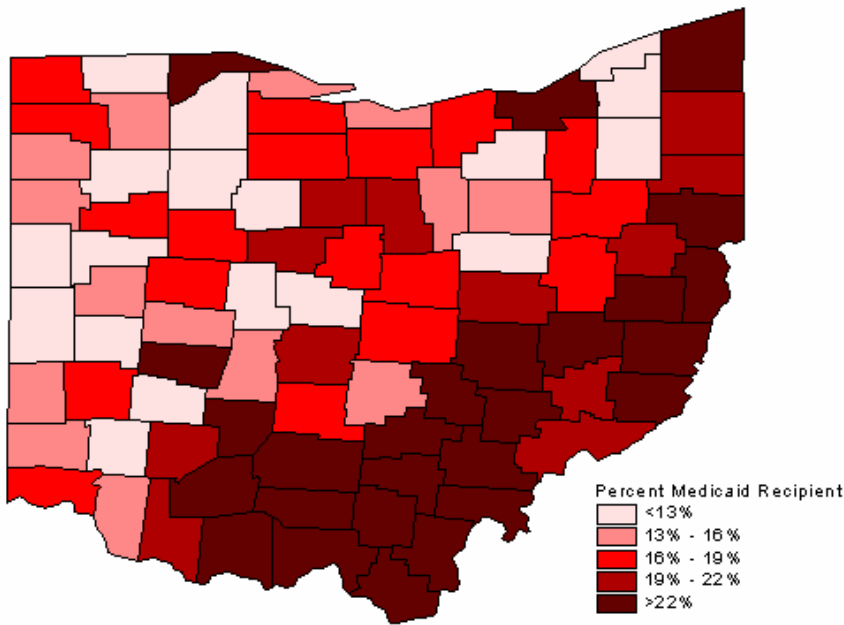
Counties vary in their population’s dependence on Medicaid and other social services. Medicaid served approximately 17% of the state population in SFY2002 and the number rose slightly to 18% in SFY2003. These individuals are not evenly distributed across the state and they make up differing percentages of the county populations. Maps 2 and 3 illustrate the distribution of Medicaid recipients across these counties, which varies from a low of approximately 6% to a high of almost 38% of the county residents

⁴ Data supporting the maps that follow are included in Tables 1-7 of the Appendix

MAP 2: Percentage of County Residents Receiving Medicaid SFY2002



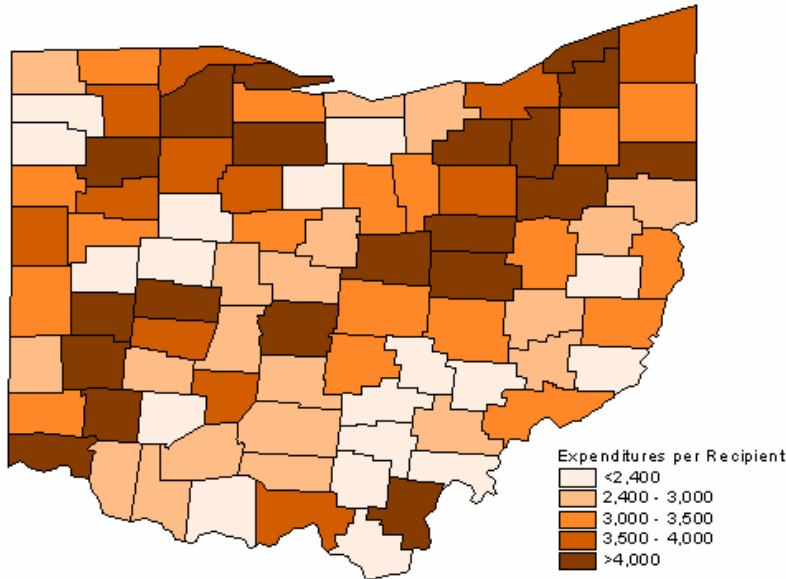
MAP 3: Percentage of County Residents Receiving Medicaid SFY2003



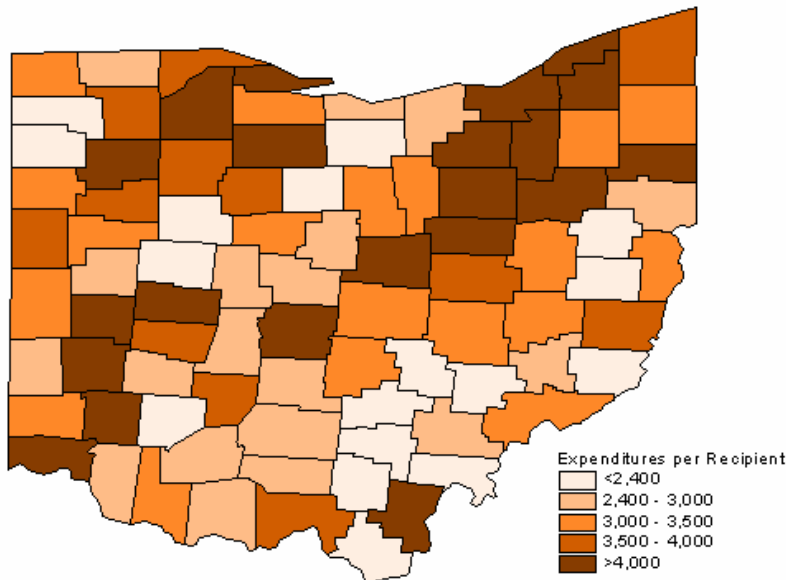
Note the changes in the shading from 2002 to 2003, illustrating the slight but not insignificant changes in the percentage of county residents receiving Medicaid funding. Average expenditures per recipient were \$3,376 in SFY2002 and increased approximately 3% to \$3,479 in SFY2003.

In terms of expenditures per individual, the population of Medicaid recipients is also not uniform across these counties. Expenditures per individual recipient are higher in counties with a higher concentration of aged, blind or disabled recipients than in those with high concentrations of young children and their parents. Maps 4 and 5 show the distribution of per capita expenditures, which range from a low of \$1,400 to a high of \$8,500.

MAP 4: Per Capita Expenditures SFY2002



MAP 5: Per Capita Expenditures SFY2003

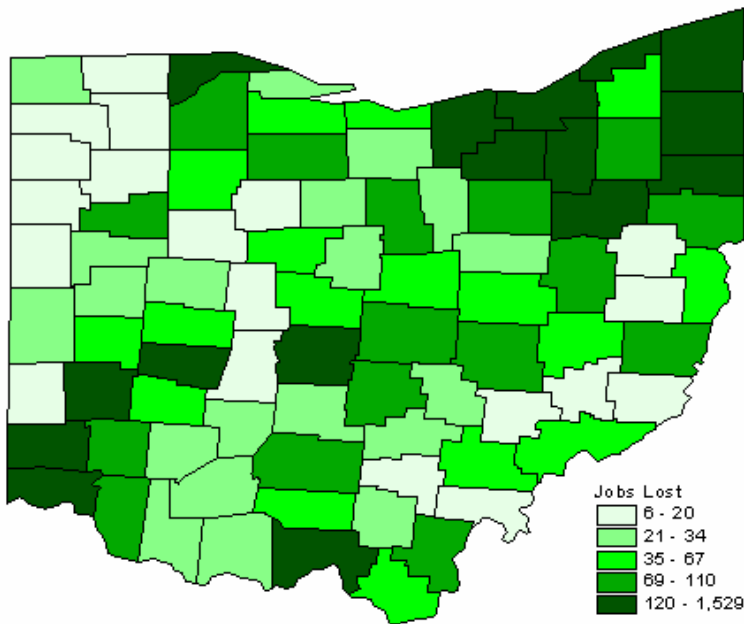


Economic Consequences

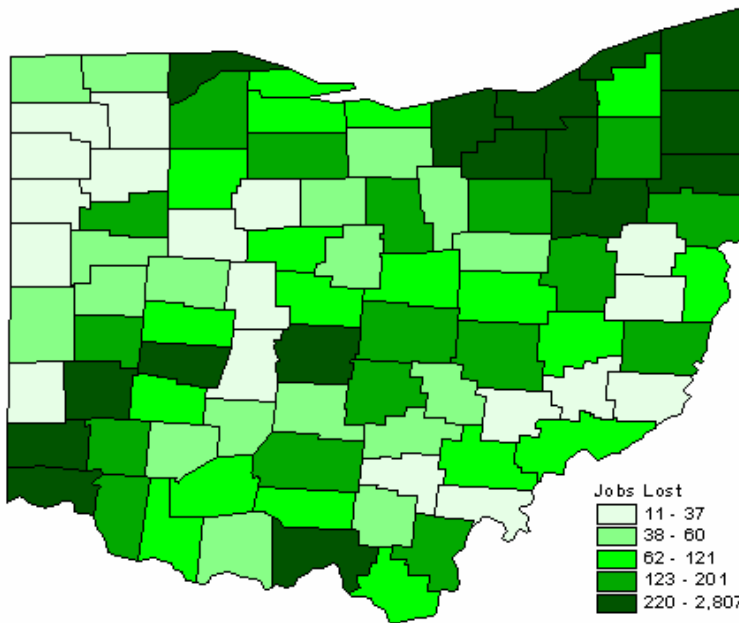
Economic vitality is not evenly distributed across the state. The numbers in Table 3 document the total effect of reduced expenditures on the whole state economy. The following maps illustrate how the effect on different parts of the state will vary depending upon with their level of poverty or dependence on the health care industry.

Maps 6 and 7 show the distributions of the jobs lost across the counties. Clearly, the counties with the greatest economic activity will lose the most jobs. As is to be expected, the majority of the job losses are likely to occur in the most densely populated counties.

MAP 6: Estimated Number of Jobs Lost SFY2006

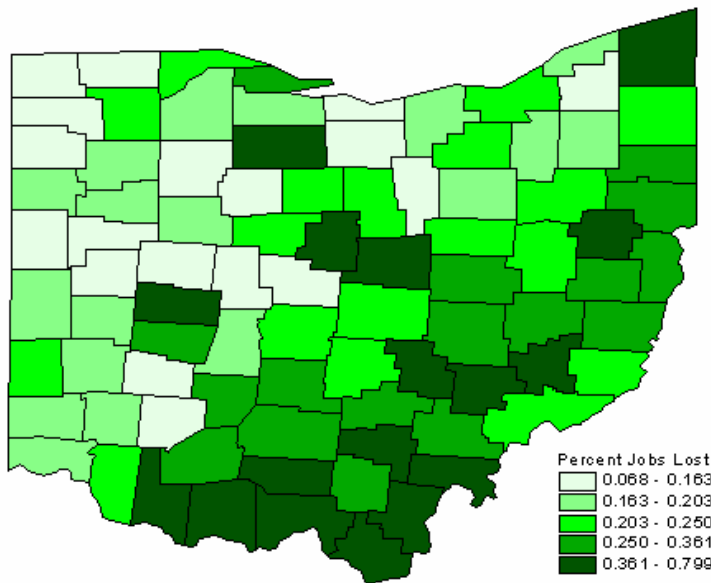


MAP 7: Estimated Number of Jobs Lost SFY2007

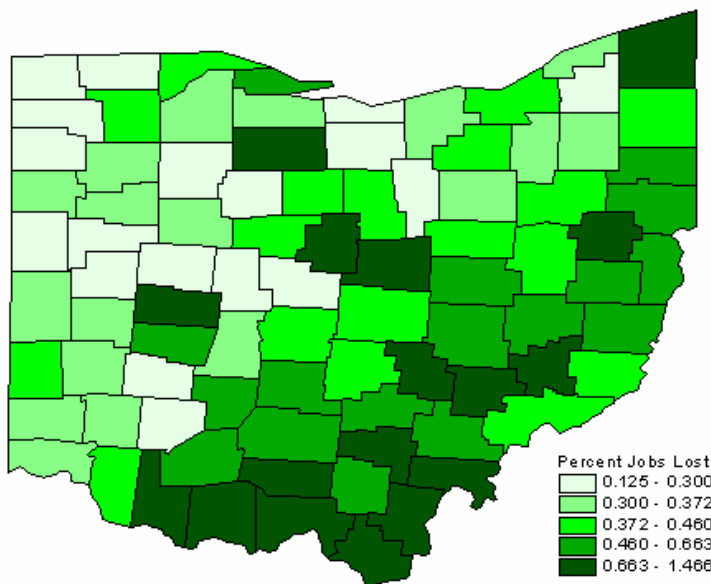


However, these more populated counties, due to the diversity of economic opportunity, are best able to cope with the loss. Maps 8 and 9 likely provide a better picture of the consequences of the loss in jobs by showing the percentage of jobs lost in each county due to the cutbacks in Medicaid spending. Using the number of jobs reported in the 2002 County Business Patterns data, the projected average percentage of jobs lost is estimated to be approximately 0.3% in SFY2006 and 0.5% in SFY2007. In SFY2006, the percentage of jobs lost varies from approximately 0.07% (0.1% in SFY2007) in Delaware County to almost 0.8% (1.5% in SFY2007) in Gallia County. The counties that are the hardest hit are some of the poorer counties in the southern and southeastern parts of the state.

MAP 8: Estimated Percentage of Jobs Lost SFY2006



MAP 9: Estimated Percentage of Jobs Lost SFY2007



Dependence on Poverty and the Healthcare Sector

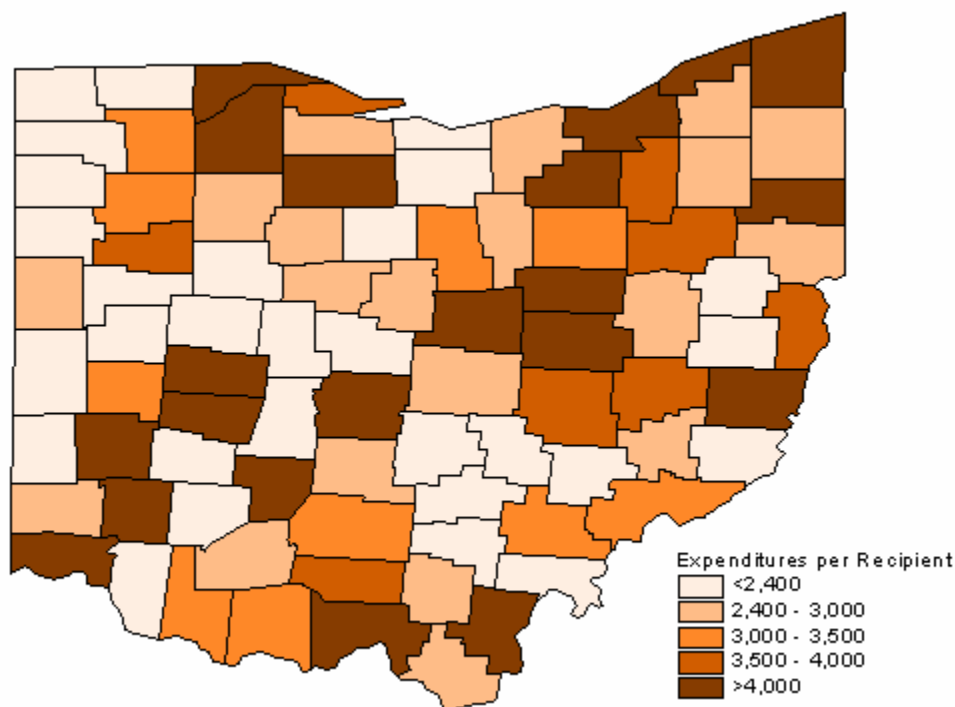
As noted earlier, there are some counties in Ohio where as much as 38% of the population receives some form of Medicaid assistance. In some of these counties, the dependence on public assistance is substantial and goes beyond healthcare and associated services. Similarly, the size and role the health services sector plays in the local economy also varies considerably across the counties. The Census Bureau reports economic activity data for all of the various sectors of the economy. The “health care and social assistance” sector includes all public and private healthcare establishments as

well as other care facilities.⁵ These data provide indicators of the dependence of the county on the health services sector.

We constructed two dependence indices that indicate county concentrations of the population reliant on the government and the county specialization in the healthcare sector relative to the state’s level of concentration or specialization.⁶ The Poverty Index was constructed to reflect county level data measuring transfer payments, the number of households below 100% of the poverty level and Medicaid expenditures on county residents. The Health Index, reflecting dependence on the health services sector, is based on county level data from County Business Patterns measuring the number of establishments in the healthcare sector, the employment in these establishments, and the associated payroll. The values for each of these indices range from approximately 0.5 to 2, providing another indication of the diversity across the state in terms of levels of poverty and extent of the role that healthcare services play in the local economy. A value of 1 indicates that the county is just as “dependent” as the rest of the state.

These indices are used to weight the Medicaid expenditures per recipient in each county (Maps 10, 11, 12, and 13). Weighting the expenditures in this manner arguably provides a better indication of the impacts of expenditures changes on various counties.

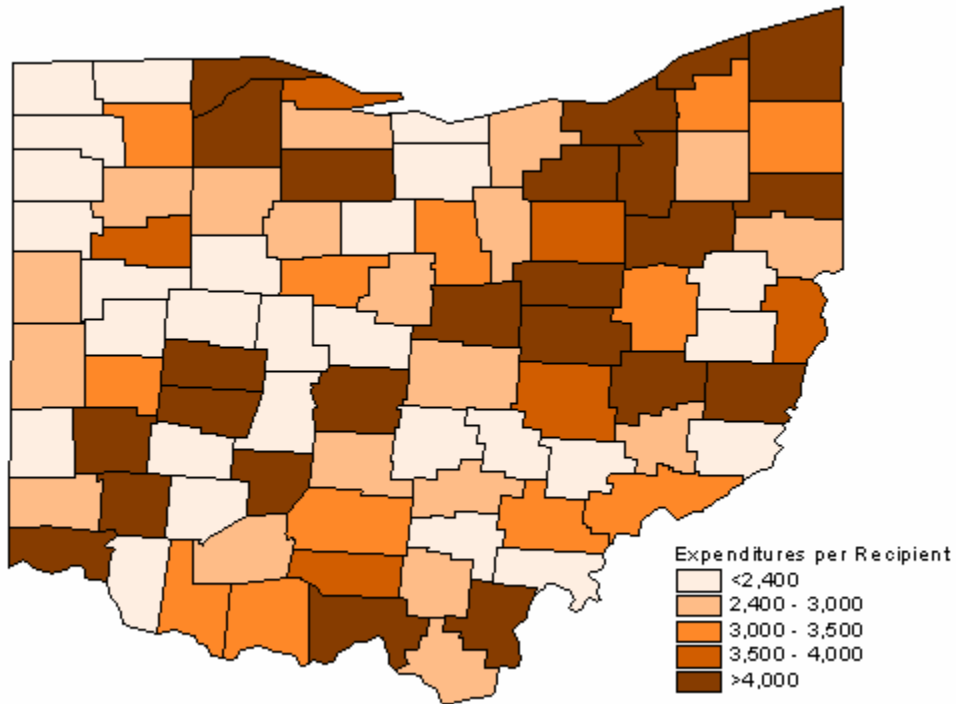
MAP 10: Expenditures per Recipient Weighted by Poverty Index SFY2002



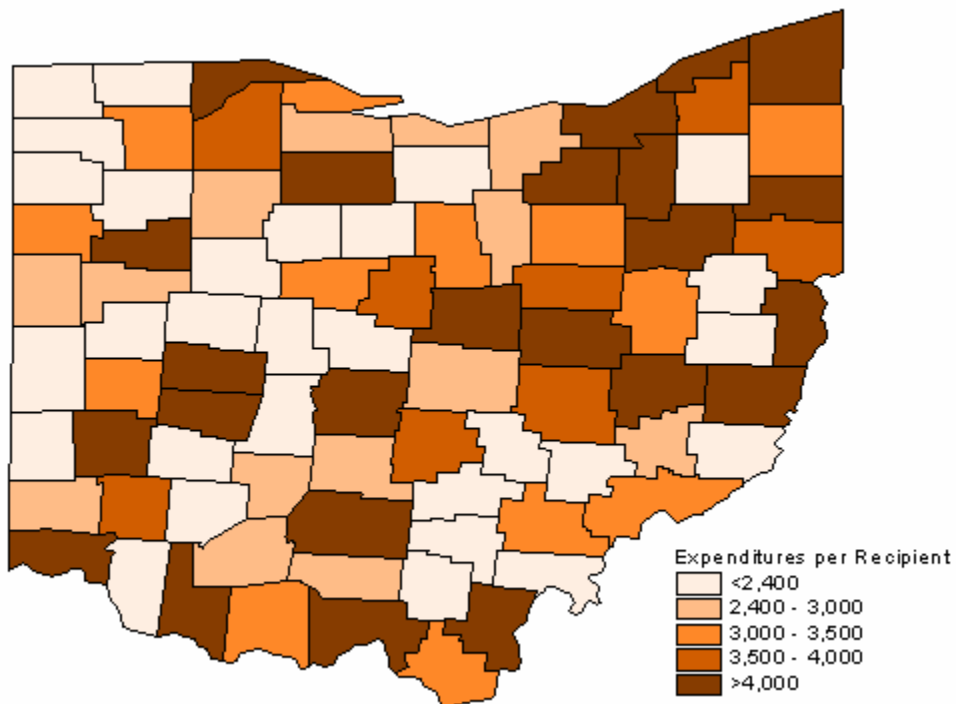
⁵ Census Bureau: 2002 County Business Patterns for Ohio, NAIC = 62.

⁶ For details on how the indices were constructed see R. Greenbaum and A. Desai (2003) “Uneven Burden: Economic Analysis of Medicaid Expenditure Changes in Ohio. <http://www.ppm.ohio-state.edu/ppm/medicaid.pdf>.

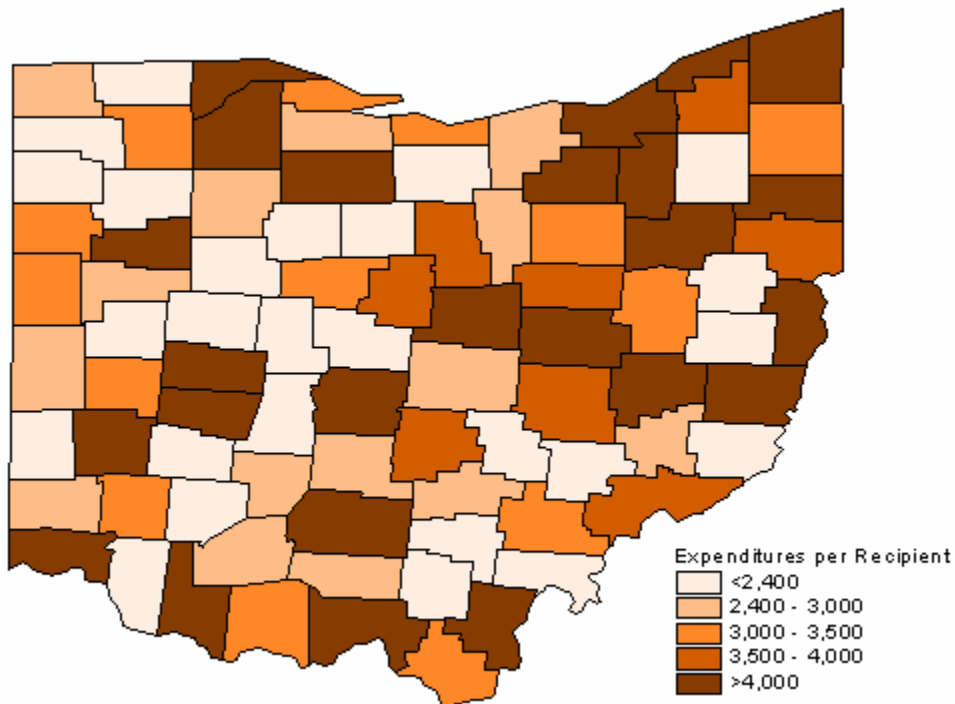
MAP 11: Expenditures per Recipient Weighted by Poverty Index SFY2003



MAP 12: Expenditures per Recipient Weighted by Health Index SFY2002



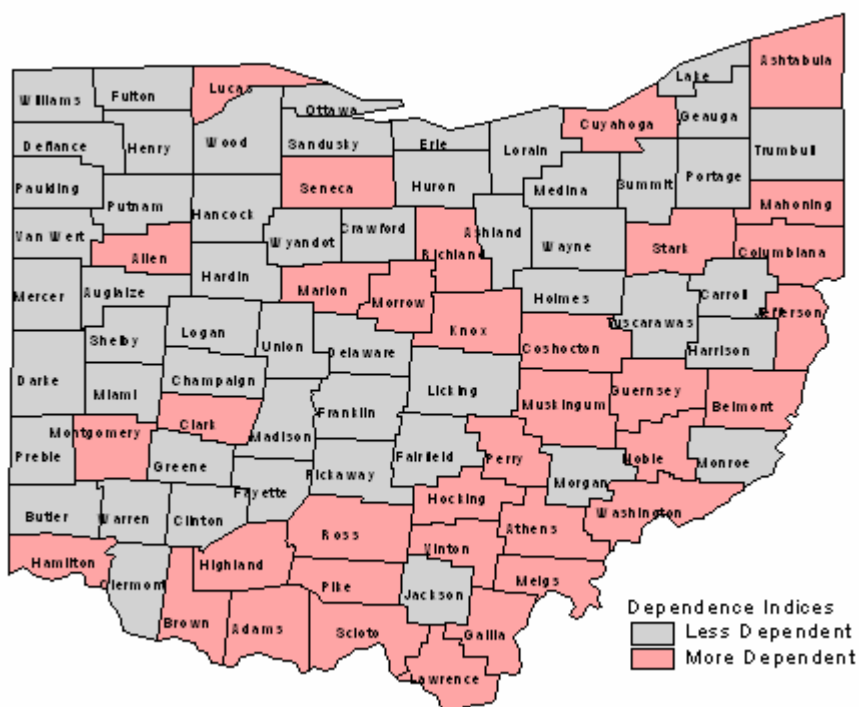
MAP 13: Expenditures per Recipient Weighted by Health Index SFY2003



The two maps together show how the counties will experience the burden of the proposed cuts. The counties in the northwest are not poor, but some of them do have considerable healthcare services activity. Hence, these counties will suffer some hardship as Medicaid dollars are reduced. However, the effect on these counties will not be as severe as that encountered by the counties in the south and the southeast that are both dependent on healthcare and are poor.

We combine the two indices into one and simply report the counties that are more or less vulnerable, than the state average vulnerability, in MAP 14. Regardless of how we choose to measure, it is apparent that the eastern half of the state will feel the effects of any reductions in Medicaid expenditures more severely than the western half.

MAP 14: County Vulnerability to Medicaid Cuts



4. Conclusion

Analyzing the specific effects of reduced Medicaid spending, in the absence of any other changes, suggests that the state economy suffer in terms of reduced economic activity and jobs lost. We estimate reduced economic activity of about \$3 billion and an expected loss of approximately 30 thousand jobs over the two year period. However, the reduced spending by the government also has other consequences, some positive and others negative, hence the precise effects of such changes can only be measured and understood some time after they have been implemented.

However, we can be more confident about the differential consequences of the proposed changes on the counties. Because of differences in distribution of the population and the healthcare industry across the state, the impact of reductions in Medicaid expenditures will likely vary across the state. The analysis gives a sense of which counties are likely to be affected the most by the reduced expenditures.

DATA SOURCES

Measure	Year	Source
Residents	2002 / 2003	Decennial Census
Medicaid Recipients	2002 / 2003	ODJFS (Quarterly Average)
Medicaid Expenditures	2002 / 2003	ODJFS
Jobs	2002	County Business Patterns
Income Taxes	200?	Ohio Department of Development
Average Income Tax per Return	200?	Ohio Department of Development
Transfer Payments	2002	Ohio Department of Development
House Holds in Poverty	2000	Decennial Census
Total Households	2000	Decennial Census
Healthcare Establishments	2002	County Business Patterns
Total Establishments	2002	County Business Patterns
Healthcare Payroll	2002	County Business Patterns
Total Payroll	2002	County Business Patterns
Healthcare Employment	2002	County Business Patterns
Total Employment	2002	County Business Patterns