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# SEARCHING FOR GENERAL EQUILIBRIUM WITH A REMI MODEL: RURAL-URBAN EFFECTS OF FEDERAL TAXES, ENTITLEMENTS, AND DEFICITS

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Improved information on the regional impacts of federal policies addresses an important need of decision makers, including citizens who make their political choices seriously. Regional variations in the demographic and economic environment lead to regional variations in the impacts of federal policies. For example, the percentage of the population that is elderly and that is poor varies by region; many programs use age and income as factors in determining eligibility and payments. Looking at another important example, regional economies vary in the importance of new investment and of international competition; the change in the real interest rate due to changes in the federal budget deficit will have different impacts in different regions. Little is known about these regional variations because few analysts are studying them.

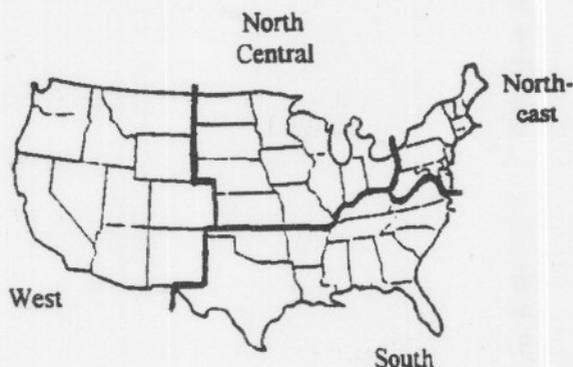
The objective of the work described in this paper is to provide estimates of the regional demographic and economic impacts of current and proposed federal policies. The primary audience consists of decision makers and their staffs at the federal level. An important secondary audience consists of state and local decision makers and of citizens who seek information on federal policies in order to influence policy in an informed manner. Another important audience consists of researchers who seek better methods of sub-national analyses and improved data.

The remainder of this paper will address the research design for this project, the explicit inclusion of the federal budget deficit, a baseline solution, and analyses of alternative policies. The conclusion argues that researchers should do more to develop information on the spatial consequences of federal programs and to disseminate this information.

## Research Design

This research produces information on sub-national regions as traditionally defined and on county groupings representing the rural-urban continuum. The four sub-national regions used in the analysis are shown in Figure 1. They follow the boundaries of four

Figure 1. RUPRI Sub-National Regions



Rural Development Centers who are clientele for this work.

The counties within each sub-national region are partitioned into four categories representing the rural-urban continuum. Nonmetropolitan counties not adjacent to a metropolitan area make up the most rural category. Nonmetropolitan counties adjacent to a metropolitan area make up a rural category which is less remote from a large urban concentration than other nonmetropolitan counties. The central cities of the 32 largest metropolitan areas are represented by 62 densely populated counties and are the most urban category. The remaining metropolitan counties make up a less densely settled urban category.

These categories are proving to be workable, but they have significant problems. I would prefer a definition that treats rural and urban as partitions on a symmetrical continuum rather than the current outdated, urban-centered definition of metropolitan and nonmetropolitan. I am currently exploring the suggestion of John Adams to use relative density within the nation and state, to which I would add a third factor of relative density within a sub-national region such as those in Figure 1.

Several large counties of mixed rural-urban character lessen the distinctions between the categories. For purposes of analyses, we should

partition six large counties in southern California and the four large counties containing Duluth, Phoenix, Reno, and Tucson into their rural and urban parts. We could then treat each part in exactly the same way as we treat other counties in the analysis. The work of John Cromartie and Linda Swanson will be very useful in defining the partitions.

The combination of four sub-national regions and four categories on the rural-urban spectrum yields sixteen county groupings. These are the geographic

Table 1. Selected Descriptive Statistics on the RUPRI County Groupings, percent of U.S.

<u>Population (1994)</u>					
	N.E.	South	N.C.	West	Total
Nonmetro	2.7	8.3	6.3	3.2	20.5
Not Adjacent	0.9	3.4	2.9	1.9	9.1
Adjacent	1.7	5.0	3.3	1.4	11.4
Metro	20.2	23.4	17.3	18.6	79.5
Not Cen City	13.5	17.6	10.6	10.0	51.6
Central City	6.7	5.8	6.7	8.6	27.9
Total	22.9	31.7	23.6	21.8	100.0
<u>Area (square miles)</u>					
	N.E.	South	N.C.	West	Total
Nonmetro	3.3	17.5	17.5	42.5	80.9
Not Adjacent	1.5	8.6	11.8	35.3	57.3
Adjacent	1.8	8.9	5.7	7.2	23.6
Metro	2.3	6.1	3.7	7.0	19.1
Not Cen City	2.2	5.8	3.5	6.4	18.0
Central City	0.1	0.3	0.2	0.6	1.2
Total	5.6	23.6	21.2	49.5	100.0
<u>Counties and County Equivalents</u>					
	N.E.	South	N.C.	West	Total
Nonmetro	4.7	30.5	26.6	11.9	73.8
Not Adjacent	2.0	14.5	16.7	8.9	42.1
Adjacent	2.7	16.0	9.9	3.1	31.7
Metro	4.9	11.4	7.1	2.9	26.2
Not Cen City	4.3	10.8	6.6	2.6	24.2
Central City	0.6	0.6	0.5	0.3	2.0
Total	9.6	41.9	33.7	14.9	100.0

units of analysis. The counties within each grouping do not form a contiguous set which makes this framework different from most other regional studies. Table 1 presents a few descriptive statistics on the county groupings.

A larger number of county groupings than sixteen would be desirable for policy analyses. Budget constraints have prevented an expansion beyond sixteen. The highest priority for expansion is partitioning two or more areas with high concentrations of particularly vulnerable populations, such as the Mississippi Delta and Detroit. The well-being of people in such areas is a particular concern of many people. A second priority is to use smaller sub-national regions than the four now used in order to represent better regional variations.

This work emphasizes insights on the spatial impacts of federal policies. The Rural Policy Research Institute (RUPRI) utilizes the work of other credible sources on national impacts in order to conserve scarce resources and to avoid conflicts peripheral to RUPRI's primary mission. We use the demographic projections of the U.S. Bureau of the Census and the economic and budget projections of the Congressional Budget Office (CBO) for assumed national totals (Day; Congressional Budget Office).

RUPRI purchases the service of building and maintaining the sixteen models for the county groupings from Regional Economic Models, Inc. (REMI). We adopted this approach because we prefer to have RUPRI staff focused on policy analysis and because an established outside vendor could deliver operational models with short notice and on time. The REMI modeling framework is described in Treyz. The models include integrated demographic and economic components. They are a hybrid of input-output, econometric and selected computable equilibrium characteristics. They estimate a series of annual solutions rather than utilize benchmarks. The sixteen models solve interactively with labor moving to county groupings with higher expected returns to labor and with capital flowing to county groupings with high expected returns to investment. The aggregate solution for the U.S. is the sum of the county groupings, that is, the solution is "bottom up" rather than "top down".

RUPRI has chosen to purchase REMI models employing the standard 14 industrial sectors at the single-digit SIC code level. We would prefer 53 sector models--the next step up in the REMI options--except that, with current resources, we prefer to constrain the funds devoted to model purchases in order to devote them to activities directly focused on policy analyses. The major advantage of the 53 sector option to us

would be an explicit medical services industry. Because much of the health sector is subsumed within the government sector, however, the 53 sector option is not as big of improvement as casual observers might expect. With both the 14 and 53 sector models the analyst must carefully specify, external to the model, the sectors being affected by health policy changes.

### **Incorporating the Federal Budget Deficit**

Changes in federal policies typically include two complementary facets. The degree to which both are visible varies from case to case. One facet is the change in a specific program of interest, such as Medicare or Medicaid. The other facet is the change in the federal fiscal situation and programmatic mix which accompanies the specific program at the center of the discussion. For example, a cut in projected Medicare expenditures is associated with a combination of a lower federal budget deficit, lower federal taxes, and increased spending on other federal programs.

Good policy analysis should take into account both facets. Ignoring one facet reduces the scientific rigor of the analysis and leads to erroneous estimates. In addition, citizens and decision makers differ in the relative importance they place on the facets. An analyst who ignores, for example, the positive effects of deficit reduction while focusing on the negative effects of cuts in projected Medicare spending is appropriately viewed as adopting a partisan stance. In RUPRI we seek a long term, constructive, non-partisan engagement with decision makers.

Many local and regional policy analyses have violated this principle. A lack of attention to the effects of changes in the federal budget deficit has been a particular, important problem in many cases.

One of the important strengths of the RUPRI analysis is that it accounts for changes in the federal budget deficit. This is especially important in policy analyses of proposals to lower projected federal budget deficits by cutting projected entitlement spending on the baby boom population when its members become eligible for programs targeted on the elderly.

The particular manner in which RUPRI incorporates the federal budget deficit is applicable to many other modeling situations. The REMI model does not have an explicit federal fiscal component. And in particular, it does not have structural relations which force equilibrium with respect to the acquisition and use of resources by the federal government.

RUPRI incorporates the effects of federal fiscal actions consistent with existing policies (the "baseline" solution) as follows. (The table references

in the remainder of this paragraph refer to Council of Economic Advisors. These tables illustrate the identity being discussed and provide historical data.) First, RUPRI adopts CBO estimates of national GDP and of the federal budget deficit. Second, RUPRI estimates national gross saving by major component for each year in the projection period. These components include the federal budget deficit, federal consumption of fixed capital, state and local government saving, personal saving, and gross business saving (CEA, Table B-32, p. 318).

Third, we estimate the components of national gross investment: gross private domestic investment, gross government investment, net exports, and net foreign investment other than net exports (CEA, Tables B-24 and B-32, pp. 308 and 319). Fourth, having now estimated the investment and net export portions of GDP, we estimate how the remaining portion is divided between consumption and government, taking into account the previously estimated gross government investment (CEA, Tables B-1 and B-20, pp. 280-1 and 304). In conclusion, the estimates of consumption, investment, government, and net exports reflect RUPRI assumptions with regard to the federal budget deficit--as well as numerous other matters.

The analysis of a proposed policy alternative proceeds analogously to the above procedure. The change in the federal budget deficit as well as the programmatic change are introduced explicitly in the formulation of macroeconomic assumptions. In general, this explicit consideration of the change in the federal budget deficit leads to the conclusion that the policy change affects every component of GDP, and often total GDP as well.

The sixteen models for the county groupings must be solved in a manner that preserves the rigor of the structure within the models driving the solution (that is, the rigor of a "bottom up" approach) and that also incorporates the assumptions with respect to national GDP by major component. This is accomplished by solving the system of sixteen models iteratively, making changes in selected assumptions in the models in each iteration, until the summations from the sixteen models match the assumed national totals.

In slightly more detail, the solution procedure flows as follows. First, assumptions are made in the models with respect to demographic variables such as birth rates, death rates, and immigration and with respect to economic variables such as labor force participation, productivity, the cost of capital, exports, imports, and government spending that we believe will lead to national demographic and economic outcomes consistent with our assumptions. Second, we solve the

models as an interactive system and compute sums over the sixteen models to derive national totals. Third, we compare the output of the models with our assumptions. If the output is consistent with our assumptions, we have a satisfactory solution which we proceed to analyze. If the output differs significantly from our assumptions with regard to national totals, we return to step one noted above.

### Baseline Solution

Selected demographic and economic variables from the current baseline solution are presented in Tables 2-8. The reader will find much useful information which is more easily learned from the tables than by attempting a summary in the text. The following are a few highlights rather than a rendition of all that is important.

The baseline solution was developed using the assumption that current policies will continue. Current policies, especially entitlement policies, are widely accepted as not sustainable. Thus, this baseline is emphatically not a forecast. The primary usefulness of the baseline consists of helping to define more precisely the problems we face and serving as a counterfactual in the evaluation of proposed solutions.

The baseline was estimated using the CBO current policy projections as of January, 1998 (CBO). It includes federal budget surpluses in 2001-09, which may not be realized as decision makers are tempted to spend the dollars or reduce taxes. The baseline includes explosive growth of Social Security and Medicare after 2010 as the baby boom generation passes the age of 65; these projected transfers are very likely to be lower than current policy implies. The implications of these and other shifts in policy are appropriately the focus of policy analyses and will be dealt with in the next section.

The distribution of manufacturing employment across the county groupings (Table 6) is heavily managed by RUPRI because the model tended to freeze the spatial distribution as of the mid-1990s. Based in part on conversations with experts, I judged this lack of a continuation of past trends as a function of the inability of the model to explain past trends rather than as a valid indication of shifts in trends. I seek feedback on whether current manufacturing employment is a reasonable baseline.

The overall pattern of growth is a continuation of past trends. Growth rates in metropolitan county groupings tend to exceed those in nonmetropolitan areas. Growth rates in the South and West tend to exceed those in the Northeast and North Central regions.

The projected growth rate of the elderly population (Table 3) in nonmetropolitan county groupings tends to be less than in metropolitan areas. Thus, the degree to which the elderly are disproportionately in rural areas is less in 2020 than now. This shift in the distribution of the elderly has important implications for the analysis of the consequences of changes in Social Security and Medicare projected spending.

The projected rate of growth in jobs (Table 5) in the aggregate of nonmetropolitan areas lags the U.S. growth rate by a roughly constant margin consistent with past experience. This leads to virtually no growth in jobs in the nonmetropolitan area in 2010-20 when projected national job growth slows to less than 0.5 percent per year.

### Analyses of Alternative Policies

The paper now turns to estimates of the consequences of four policy alternatives. The conclusion of the paper contains the implications for further research growing out of these analyses.

#### Lower Food Stamp Benefits and Lower Taxes:

Policy makers face a choice of whether to cut welfare benefits in order to lower taxes. They have chosen to do so in the past in the case of Food Stamps and other income maintenance programs.

The option examined here is that of reducing Food Stamp benefits by ten percent in 1999-2005 and simultaneously cutting taxes by an equal amount. The baseline for Food Stamp benefits is that estimated by CBO as of January 1998. Changes in Food Stamp benefits are distributed among geographic areas in the same proportion as benefits were distributed in 1994. Changes in taxes are distributed among geographic areas in the same proportion as total personal income in the baseline projection for the year analyzed.

The estimated consequences of this potential policy change are shown in Table 9 and lead to the following conclusions:

- Rural places and central cities tend to be worse off.
- The South tends to be worse off.
- The portions of metropolitan areas outside of central cities and outside of the South benefit most.
- Including the effects of the tax decrease is essential to an assessment of impacts.
- Total impacts on a regional economy exceed the net direct impact of benefits and taxes.

Higher Food Stamp Benefits and Lower Federal Budget Surpluses: Policy makers face a choice of whether to use the projected budget surplus for increased spending on some programs, such as welfare benefits, or to devote the surpluses to reducing the federal debt or taxes. The option examined here is that of increasing Food Stamp benefits by ten percent in 1999-2005 and simultaneously lowering the federal budget surplus (or increasing the deficit) by an equal amount. Changes in Food Stamp benefits are handled as described in the previous policy scenario. Decreases in the federal surplus (or increases of the deficit) yield increases in the interest rate which affect a wide range of economic variables and these effects vary by geographic area. Aggregate U.S. growth of GDP is slightly slower because the higher interest rate decreases investment and net exports.

The estimated consequences of this potential policy change are shown in Table 10 and lead to the following conclusions:

- Rural places tend to benefit, with the exception of the rural Northeast.
- Central cities tend to benefit, with the exception of those in the West (which may be an anomaly due to the inability to define western central cities, as discussed in "Research Design").
- The South benefits.
- Total impacts on a regional economy may be either positive or negative despite the fact that Food Stamp benefits increase everywhere.
- Including the effects of the change in the federal budget surplus (or deficit) is essential to an assessment of impacts.

Tax Cuts That Eliminate the Projected Budget Surpluses: Policy makers face a choice between using the projected surpluses in the 2001-09 federal budgets for reduction of the federal debt (the baseline alternative), increased programmatic expenditures, or reduced taxes. The option examined here is to decrease taxes by an amount that eliminates the surplus in each year, which is being widely discussed. The decrease in taxes falls short of the projected surpluses because interest on the federal debt is higher when the debt is not reduced. Growth of national GDP is slower because the higher interest rate decreases investment and net exports.

The definition and implementation of a tax cut whose timing and magnitude matches that of the surpluses is extremely problematic. An actual policy proposal might be motivated in part by the projected surpluses but would not likely approximate their scale and timing. As with the first alternative, the change

in taxes is distributed among county groupings based upon the distribution of total personal income.

The estimated consequences of this policy alternative are shown in Table 11 and lead to the following conclusions:

- Jobs and population tend to shift from nonmetropolitan to metropolitan areas.
- The South, which has relatively lower per capita incomes, experiences the largest declines in income, jobs, and gross product—but the losses of population are greatest in the North Central region.
- While the direct impacts of the tax cuts on personal income are positive in every county grouping, estimated per capita personal income falls in all county groupings except two when the loss in budget surplus is taken into account.
- Including the effects of the change in the federal budget surplus is essential to an assessment of impacts.

Lower Social Security Benefits and Lower Federal Budget Deficits: The aging of the baby boom generation leads to rapidly increasing projected budget deficits after 2010. Policy makers face a tradeoff between their commitments to the entitlements of the elderly, the burdens of taxpayers, and the federal debt overhanging the economy.

The option examined here is that of reducing Social Security benefits in 2011-2020 by an amount sufficient to prevent an increase in the ratio of Social Security benefits to GDP projected for 2010. The savings are used to reduce the projected budget deficit. Changes in benefits are distributed among geographic areas in the same proportion as the elderly population for the year analyzed. Reductions in the federal deficit reduce the interest rate which affects a wide range of economic variables, and these effects vary by geographic area. Growth of national GDP is higher because the lower interest rate increases investment and net exports.

The estimated consequences of this policy alternative are shown in Table 12 and lead to the following conclusions:

- All nonmetropolitan regions are worse off despite an improved national economy.
- By 2020 personal income per capita has fallen about \$85 in nonmetropolitan areas while it has risen about \$55 in metropolitan areas.
- About 70,000 jobs have shifted from nonmetropolitan to metropolitan areas. This is sufficient to reduce by about 45 percent the projected growth of jobs in nonmetropolitan areas.

- The disparity between rural and urban impacts seems likely to increase further after 2020. As of 2020 the regional economies are moving towards a new equilibrium rather than at a new equilibrium.
- Including the effects of the reduced deficit is essential to an assessment of impacts.

### Conclusion

As noted in the section on research design, we should take several steps to improve our insights on the spatial consequences of policy choices. We should adopt a definition of rural and urban that reflects a symmetrical continuum rather than use the current out-dated, urban-centered definition of metropolitan and nonmetropolitan. Large counties containing markedly different degrees of rural and urban should be partitioned into their rural and urban portions for purposes of analysis. Geographic areas with high concentrations of vulnerable populations, such as the poor and elderly, should receive greater attention.

The method used in this analysis to incorporate the diffuse effects of a changing federal budget deficit (surplus) is easily transferable to other regional models that produce time series estimates. We should use the method when we are analyzing policy alternatives that imply changing federal budget deficits (surpluses) and when our models do not otherwise accommodate this factor.

The baseline solution is useful in defining problems and serving as a counterfactual in the evaluation of proposed solutions. The baseline in this paper shows that national problems reflect themselves differently in rural, suburban, and central city places. The community of analysts concerned with spatial issues needs a forum for stimulating work on the baseline and debating the merits of alternative baselines. We should mount an exploration of how such a forum should be structured and funded. In the interim, I seek reactions to this baseline.

Large federal programs have a large impact on the spatial distribution of people and economic activity even though these programs have no explicitly spatial component. Federal policy with respect to several, large programs is currently subject to marked change. We should analyze proposed policy changes in the following policy areas in order to inform decision makers and the concerned public about spatial consequences. Widespread, if not universal, sentiment exists that the entitlements of Social Security and Medicare must be cut back after 2010 in order to preserve the fiscal integrity of the federal government.

We are in the midst of a nationwide experiment, with the lives of real people at stake, of how to provide income and employment assistance to low income people. We should add a spatial dimension to the national research endeavor focused on the consequences of different mixes and scales of Temporary Assistance to Needy Families (the successor to Aid to Families with Dependent Children), Medicaid, Earned Income Tax Credit, and Food Assistance. We need sufficient work from diverse people and methods that we can confidently inform policy makers.

Finally, we should mount a public education effort on the spatial consequences of public policy issues now hotly debated, such as entitlement and welfare policy. I agree with someone who said, "In the political process it is often true that by the time most people think they know what game is being played, the real players have pocketed their winnings and gone home." I fear this is happening as we speak with regard to entitlement policy and welfare reform.

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Table 2. Past and Projected Population Assuming Current Policies Continue, 1980-2020

Area	Population (thou.)				Share of U.S. (%)		Annual Rate of Change (%)		
	1980	1997	2010	2020	1997	2020	1980-97	1997-10	2010-20
United States	227,257	267,984	299,144	324,557	100.00	100.00	0.97	0.85	0.82
Rural-Urban County Groupings of the U.S.									
Nonmetro Not Adjacent to Metro	22,706	23,744	24,554	25,500	8.86	7.86	0.26	0.26	0.38
Nonmetro Adjacent to Metro	27,263	30,326	32,449	33,851	11.32	10.43	0.63	0.52	0.42
Metro Other Than Central City	112,075	140,011	160,630	175,955	52.25	54.21	1.32	1.06	0.92
Central City of Large Metro	65,213	73,905	81,511	89,252	27.58	27.50	0.74	0.76	0.91
Sub-National Regions of the U.S.									
Northeast	56,594	60,080	62,804	66,673	22.42	20.54	0.35	0.34	0.60
South	68,325	86,365	100,171	109,388	32.23	33.70	1.39	1.15	0.88
North Central	58,920	62,426	66,646	70,002	23.29	21.57	0.34	0.50	0.49
West	43,418	59,115	69,523	78,495	22.06	24.19	1.83	1.26	1.22
County Groupings by Rurality and Region									
Nonmetro Not Adjacent to Metro									
Northeast	2,344	2,351	2,358	2,499	0.88	0.77	0.02	0.02	0.58
South	8,464	8,838	9,185	9,426	3.30	2.90	0.25	0.30	0.26
North Central	7,788	7,651	7,655	7,680	2.86	2.37	-0.10	0.00	0.03
West	4,109	4,904	5,356	5,895	1.83	1.82	1.05	0.68	0.96
Nonmetro Adjacent to Metro									
Northeast	4,232	4,629	4,852	5,104	1.73	1.57	0.53	0.36	0.51
South	11,780	13,129	14,062	14,625	4.90	4.51	0.64	0.53	0.39
North Central	8,541	8,789	9,084	9,229	3.28	2.84	0.17	0.25	0.16
West	2,709	3,779	4,451	4,893	1.41	1.51	1.98	1.27	0.95
Metro Other Than Central City									
Northeast	32,175	35,607	37,399	39,565	13.29	12.19	0.60	0.38	0.56
South	35,764	48,437	58,073	64,371	18.07	19.83	1.80	1.41	1.03
North Central	25,297	28,480	31,427	33,591	10.63	10.35	0.70	0.76	0.67
West	18,839	27,487	33,731	38,428	10.26	11.84	2.25	1.59	1.31
Central City of Large Metro									
Northeast	17,842	17,493	18,195	19,505	6.53	6.01	-0.12	0.30	0.70
South	12,317	15,961	18,851	20,966	5.96	6.46	1.54	1.29	1.07
North Central	17,295	17,506	18,480	19,502	6.53	6.01	0.07	0.42	0.54
West	17,760	22,945	25,985	29,279	8.56	9.02	1.52	0.96	1.20

Detail may not sum to totals due to rounding.

Source: Rural-urban and regional policy impacts model of RUPRI, developed with assistance from Regional Economic Models, Inc.

Table 3. Past and Projected Population of Age 65 and Over Assuming Current Policies Continue, 1980-2020

Area	Population of Age 65 and Over (thou.)				Share of U.S. (%)		Annual Rate of Change (%)		
	1980	1997	2010	2020	1997	2020	1980-97	1997-10	2010-20
United States	25,660	33,966	38,902	52,735	100.00	100.00	1.66	1.05	3.09
Rural-Urban County Groupings of the U.S.									
Nonmetro Not Adjacent to Metro	2,993	3,535	3,567	4,400	10.41	8.34	0.98	0.07	2.12
Nonmetro Adjacent to Metro	3,544	4,468	4,693	5,814	13.15	11.02	1.37	0.38	2.17
Metro Other Than Central City	11,824	17,304	20,852	28,863	50.95	54.73	2.27	1.45	3.30
Central City of Large Metro	7,299	8,703	9,864	13,761	25.62	26.09	1.04	0.97	3.39
Sub-National Regions of the U.S.									
Northeast	6,868	8,285	8,887	11,648	24.39	22.09	1.11	0.54	2.74
South	7,748	10,867	12,700	16,994	31.99	32.23	2.01	1.21	2.96
North Central	6,712	8,238	9,040	11,978	24.25	22.71	1.21	0.72	2.85
West	4,333	6,620	8,349	12,218	19.49	23.17	2.52	1.60	3.88
County Groupings by Rurality and Region									
Nonmetro Not Adjacent to Metro									
Northeast	289	347	345	440	1.02	0.83	1.08	-0.04	2.46
South	1,123	1,287	1,292	1,536	3.79	2.91	0.81	0.03	1.74
North Central	1,176	1,292	1,231	1,446	3.80	2.74	0.55	-0.37	1.62
West	405	609	699	978	1.79	1.85	2.43	1.07	3.42
Nonmetro Adjacent to Metro									
Northeast	554	686	711	916	2.02	1.74	1.27	0.28	2.57
South	1,532	1,930	2,001	2,396	5.68	4.54	1.37	0.28	1.82
North Central	1,151	1,335	1,378	1,699	3.93	3.22	0.88	0.24	2.12
West	307	517	603	803	1.52	1.52	3.11	1.19	2.91
Metro Other Than Central City									
Northeast	3,704	4,868	5,444	7,245	14.33	13.74	1.62	0.86	2.90
South	3,872	6,029	7,341	10,029	17.75	19.02	2.64	1.53	3.17
North Central	2,472	3,423	4,126	5,758	10.08	10.92	1.93	1.45	3.39
West	1,775	2,984	3,941	5,831	8.79	11.06	3.10	2.16	4.00
Central City of Large Metro									
Northeast	2,320	2,384	2,387	3,047	7.02	5.78	0.16	0.01	2.47
South	1,221	1,621	2,066	3,033	4.77	5.75	1.68	1.88	3.91
North Central	1,913	2,188	2,305	3,075	6.44	5.83	0.79	0.40	2.92
West	1,845	2,510	3,106	4,606	7.39	8.73	1.83	1.65	4.02

Detail may not sum to totals due to rounding.

Source: Rural-urban and regional policy impacts model of RUPRI, developed with assistance from Regional Economic Models, Inc.

Table 4. Past and Projected Gross Product Assuming Current Policies Continue, 1998 dollars, 1980-2020

Area	Gross Product (bil.)				Share of U.S. (%)		Annual Rate of Change (%)		
	1980	1997	2010	2020	1997	2020	1980-97	1997-10	2010-20
United States	5,360.8	8,363.7	11,027.6	12,876.6	100.00	100.00	2.65	2.15	1.56
Rural-Urban County Groupings of the U.S.									
Nonmetro Not Adjacent to Metro	407.8	630.5	822.9	950.9	7.54	7.38	2.60	2.07	1.46
Nonmetro Adjacent to Metro	469.7	754.7	1,002.2	1,159.2	9.02	9.00	2.83	2.21	1.47
Metro Other Than Central City	2,483.0	4,144.8	5,527.4	6,487.8	49.56	50.38	3.06	2.24	1.61
Central City of Large Metro	2,000.4	2,833.8	3,675.0	4,278.6	33.88	33.23	2.07	2.02	1.53
Sub-National Regions of the U.S.									
Northeast	1,353.2	1,929.6	2,389.8	2,717.2	23.07	21.10	2.11	1.66	1.29
South	1,581.9	2,606.4	3,525.0	4,157.5	31.16	32.29	2.98	2.35	1.66
North Central	1,332.0	2,005.3	2,646.2	3,069.6	23.98	23.84	2.44	2.16	1.50
West	1,093.7	1,822.3	2,466.6	2,932.3	21.79	22.77	3.05	2.36	1.74
County Groupings by Rurality and Region									
Nonmetro Not Adjacent to Metro									
Northeast	38.8	59.7	76.6	88.8	0.71	0.69	2.57	1.94	1.49
South	143.3	225.8	296.6	341.3	2.70	2.65	2.71	2.12	1.42
North Central	136.2	206.8	271.8	312.1	2.47	2.42	2.49	2.12	1.39
West	89.5	138.2	178.0	208.7	1.65	1.62	2.59	1.97	1.61
Nonmetro Adjacent to Metro									
Northeast	72.4	112.5	143.8	165.3	1.35	1.28	2.63	1.90	1.41
South	203.5	322.3	424.9	490.0	3.85	3.81	2.74	2.15	1.44
North Central	141.9	228.7	310.8	359.9	2.73	2.80	2.85	2.39	1.48
West	51.9	91.1	122.7	144.0	1.09	1.12	3.37	2.32	1.61
Metro Other Than Central City									
Northeast	705.7	1,096.4	1,356.5	1,540.9	13.11	11.97	2.63	1.65	1.28
South	827.6	1,421.6	1,943.9	2,309.6	17.00	17.94	3.23	2.44	1.74
North Central	536.2	867.1	1,170.7	1,373.0	10.37	10.66	2.87	2.34	1.61
West	413.6	759.6	1,056.4	1,264.4	9.08	9.82	3.64	2.57	1.81
Central City of Large Metro									
Northeast	536.4	661.0	812.9	922.3	7.90	7.16	1.24	1.60	1.27
South	407.5	636.8	859.6	1,016.5	7.61	7.89	2.66	2.34	1.69
North Central	517.7	702.6	892.9	1,024.6	8.40	7.96	1.81	1.86	1.38
West	538.7	833.4	1,109.5	1,315.3	9.96	10.21	2.60	2.23	1.72

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Detail may not sum to totals due to rounding. The value of the RUPRI model deflator for 1998 differs slightly from that of the CBO deflator.  
 Source: Rural-urban and regional policy impacts model of RUPRI, developed with assistance from Regional Economic Models, Inc.

Table 5. Past and Projected Jobs Assuming Current Policies Continue, 1980-2020

Area	Jobs (thou )				Share of U.S. (%)		Annual Rate of Change (%)		
	1980	1997	2010	2020	1997	2020	1980-97	1997-10	2010-20
United States	113,726	152,786	185,758	194,156	100.00	100.00	1.75	1.51	0.44
Rural-Urban County Groupings of the U.S.									
Nonmetro Not Adjacent to Metro	10,314	12,901	14,838	14,913	8.44	7.68	1.33	1.08	0.05
Nonmetro Adjacent to Metro	11,640	14,962	17,456	17,539	9.79	9.03	1.49	1.19	0.05
Metro Other Than Central City	53,899	77,670	95,893	101,059	50.84	52.05	2.17	1.63	0.53
Central City of Large Metro	37,873	47,252	57,571	60,645	30.93	31.24	1.31	1.53	0.52
Sub-National Regions of the U.S.									
Northeast	28,296	33,756	39,628	40,869	22.09	21.05	1.04	1.24	0.31
South	33,501	48,481	59,594	62,605	31.73	32.24	2.20	1.60	0.49
North Central	29,152	37,522	44,468	45,338	24.56	23.35	1.50	1.32	0.19
West	22,776	33,026	42,068	45,344	21.62	23.35	2.21	1.88	0.75
County Groupings by Rurality and Region									
Nonmetro Not Adjacent to Metro									
Northeast	980	1,219	1,418	1,453	0.80	0.75	1.29	1.17	0.24
South	3,597	4,457	5,045	4,994	2.92	2.57	1.27	0.96	-0.10
North Central	3,713	4,466	5,060	4,987	2.92	2.57	1.09	0.97	-0.15
West	2,023	2,759	3,315	3,479	1.81	1.79	1.84	1.42	0.48
Nonmetro Adjacent to Metro									
Northeast	1,776	2,238	2,643	2,702	1.46	1.39	1.37	1.29	0.22
South	4,958	6,264	7,176	7,144	4.10	3.68	1.38	1.05	-0.04
North Central	3,695	4,637	5,381	5,324	3.03	2.74	1.34	1.15	-0.11
West	1,211	1,823	2,256	2,369	1.19	1.22	2.44	1.65	0.49
Metro Other Than Central City									
Northeast	15,507	19,669	23,010	23,688	12.87	12.20	1.41	1.21	0.29
South	17,572	27,118	34,060	36,260	17.75	18.68	2.59	1.77	0.63
North Central	11,779	16,491	20,092	20,787	10.79	10.71	2.00	1.53	0.34
West	9,042	14,392	18,731	20,324	9.42	10.47	2.77	2.05	0.82
Central City of Large Metro									
Northeast	10,033	10,630	12,557	13,026	6.96	6.71	0.34	1.29	0.37
South	7,375	10,642	13,313	14,207	6.97	7.32	2.18	1.74	0.65
North Central	9,964	11,928	13,935	14,240	7.81	7.33	1.06	1.20	0.22
West	10,501	14,052	17,766	19,172	9.20	9.87	1.73	1.82	0.76

Detail may not sum to totals due to rounding.

Source: Rural-urban and regional policy impacts model of RUPRI, developed with assistance from Regional Economic Models, Inc.

Table 6. Past and Projected Manufacturing Jobs Assuming Current Policies Continue, 1980-2020

Area	Manufacturing Jobs (thou.)				Share of U.S. (%)		Annual Rate of Change (%)		
	1980	1997	2010	2020	1997	2020	1980-97	1997-10	2010-20
United States	20,777	19,600	18,601	15,915	100.00	100.00	-0.34	-0.40	-1.55
Rural-Urban County Groupings of the U.S.									
Nonmetro Not Adjacent to Metro	1,617	1,944	2,063	1,823	9.92	11.45	1.09	0.46	-1.23
Nonmetro Adjacent to Metro	2,456	2,829	2,960	2,603	14.43	16.36	0.84	0.35	-1.28
Metro Other Than Central City	10,244	9,976	9,480	8,116	50.90	51.00	-0.16	-0.39	-1.54
Central City of Large Metro	6,460	4,852	4,099	3,375	24.76	21.21	-1.67	-1.29	-1.92
Sub-National Regions of the U.S.									
Northeast	5,658	3,792	2,967	2,367	19.35	14.87	-2.33	-1.87	-2.23
South	5,754	6,360	6,444	5,674	32.45	35.65	0.59	0.10	-1.26
North Central	6,123	6,144	6,149	5,311	31.35	33.37	0.02	0.01	-1.45
West	3,242	3,305	3,042	2,565	16.86	16.12	0.11	-0.64	-1.69
County Groupings by Rurality and Region									
Nonmetro Not Adjacent to Metro									
Northeast	170	159	153	132	0.81	0.83	-0.39	-0.30	-1.47
South	761	902	942	833	4.60	5.23	1.00	0.33	-1.22
North Central	520	696	778	691	3.55	4.34	1.73	0.86	-1.18
West	165	187	190	167	0.95	1.05	0.74	0.12	-1.28
Nonmetro Adjacent to Metro									
Northeast	408	348	323	274	1.78	1.72	-0.93	-0.57	-1.63
South	1,159	1,331	1,388	1,233	6.79	7.75	0.82	0.32	-1.18
North Central	728	944	1,038	913	4.82	5.74	1.54	0.73	-1.27
West	160	206	211	183	1.05	1.15	1.50	0.18	-1.41
Metro Other Than Central City									
Northeast	3,539	2,499	1,978	1,578	12.75	9.92	-2.03	-1.78	-2.23
South	2,926	3,254	3,285	2,899	16.60	18.22	0.63	0.07	-1.24
North Central	2,665	2,842	2,871	2,489	14.50	15.64	0.38	0.08	-1.42
West	1,115	1,381	1,346	1,150	7.05	7.23	1.27	-0.20	-1.56
Central City of Large Metro									
Northeast	1,541	786	513	383	4.01	2.41	-3.88	-3.23	-2.88
South	908	873	829	709	4.45	4.45	-0.23	-0.40	-1.55
North Central	2,210	1,662	1,462	1,218	8.48	7.65	-1.66	-0.98	-1.81
West	1,802	1,531	1,295	1,065	7.81	6.69	-0.95	-1.28	-1.94

Detail may not sum to totals due to rounding.

Source: Rural-urban and regional policy impacts model of RUPRI, developed with assistance from Regional Economic Models, Inc.

Table 7. Past and Projected Total Personal Income Assuming Current Policies Continue, 1998 dollars, 1980-2020

Area	Total Personal Income (bil.)				Share of U.S. (%)		Annual Rate of Change (%)		
	1980	1997	2010	2020	1997	2020	1980-97	1997-10	2010-20
United States	4,478.9	6,909.5	8,841.0	10,525.2	100.00	100.00	2.58	1.91	1.76
Rural-Urban County Groupings of the U.S.									
Nonmetro Not Adjacent to Metro	346.3	480.7	573.7	650.4	6.96	6.18	1.95	1.37	1.26
Nonmetro Adjacent to Metro	425.9	622.1	763.3	867.0	9.00	8.24	2.25	1.59	1.28
Metro Other Than Central City	2,226.3	3,630.7	4,724.7	5,668.0	52.55	53.85	2.92	2.05	1.84
Central City of Large Metro	1,480.3	2,176.2	2,779.4	3,339.8	31.49	31.73	2.29	1.90	1.85
Sub-National Regions of the U.S.									
Northeast	1,192.8	1,767.7	2,155.1	2,522.1	25.58	23.96	2.34	1.54	1.58
South	1,195.5	2,007.1	2,623.0	3,124.2	29.05	29.68	3.09	2.08	1.76
North Central	1,153.2	1,619.7	2,001.6	2,314.0	23.44	21.98	2.02	1.64	1.46
West	937.4	1,515.1	2,061.3	2,564.9	21.93	24.37	2.86	2.40	2.21
County Groupings by Rurality and Region									
Nonmetro Not Adjacent to Metro									
Northeast	35.6	49.4	59.4	69.1	0.71	0.66	1.95	1.43	1.53
South	115.2	164.2	195.0	216.0	2.38	2.05	2.11	1.33	1.02
North Central	122.4	163.2	187.1	204.9	2.36	1.95	1.71	1.06	0.92
West	73.1	103.9	132.2	160.4	1.50	1.52	2.09	1.87	1.95
Nonmetro Adjacent to Metro									
Northeast	70.6	102.9	124.8	144.8	1.49	1.38	2.24	1.50	1.50
South	166.6	253.3	308.6	346.1	3.67	3.29	2.49	1.53	1.15
North Central	141.3	189.1	228.4	254.9	2.74	2.42	1.73	1.46	1.10
West	47.4	76.8	101.5	121.2	1.11	1.15	2.89	2.16	1.80
Metro Other Than Central City									
Northeast	686.7	1,049.4	1,281.4	1,501.8	15.19	14.27	2.53	1.55	1.60
South	640.1	1,145.7	1,528.7	1,842.0	16.58	17.50	3.48	2.24	1.88
North Central	500.9	740.2	946.0	1,113.9	10.71	10.58	2.32	1.91	1.65
West	398.6	695.4	968.6	1,210.3	10.06	11.50	3.33	2.58	2.25
Central City of Large Metro									
Northeast	400.0	566.1	689.6	806.4	8.19	7.66	2.06	1.53	1.58
South	273.5	443.9	590.7	720.1	6.43	6.84	2.89	2.22	2.00
North Central	388.6	527.2	640.0	740.2	7.63	7.03	1.81	1.50	1.47
West	418.2	639.0	859.1	1,073.0	9.25	10.19	2.52	2.30	2.25

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Detail may not sum to totals due to rounding. The value of the RUPRI model deflator for 1998 differs slightly from that of the CBO deflator.  
 Source: Rural-urban and regional policy impacts model of RUPRI, developed with assistance from Regional Economic Models, Inc.

Table 8. Past and Projected Personal Income per Capita Assuming Current Policies Continue, 1998 dollars, 1980-2020

Area	Personal Income per Capita (dollars)				Ratio to U.S.		Annual Rate of Change (%)		
	1980	1997	2010	2020	1997	2020	1980-97	1997-10	2010-20
United States	19,708	25,783	29,554	32,429	1.000	1.000	1.59	1.06	0.93
Rural-Urban County Groupings of the U.S.									
Nonmetro Not Adjacent to Metro	15,253	20,243	23,365	25,506	0.785	0.786	1.68	1.11	0.88
Nonmetro Adjacent to Metro	15,621	20,513	23,522	25,612	0.796	0.790	1.62	1.06	0.85
Metro Other Than Central City	19,864	25,931	29,413	32,213	1.006	0.993	1.58	0.97	0.91
Central City of Large Metro	22,700	29,445	34,098	37,420	1.142	1.154	1.54	1.13	0.93
Sub-National Regions of the U.S.									
Northeast	21,077	29,422	34,315	37,828	1.141	1.166	1.98	1.19	0.98
South	17,497	23,240	26,185	28,561	0.901	0.881	1.68	0.92	0.87
North Central	19,572	25,945	30,033	33,056	1.006	1.019	1.67	1.13	0.96
West	21,589	25,629	29,649	32,676	0.994	1.008	1.01	1.13	0.98
County Groupings by Rurality and Region									
Nonmetro Not Adjacent to Metro									
Northeast	15,186	21,007	25,179	27,660	0.815	0.853	1.93	1.40	0.94
South	13,616	18,583	21,235	22,914	0.721	0.707	1.85	1.03	0.76
North Central	15,714	21,328	24,436	26,681	0.827	0.823	1.81	1.05	0.88
West	17,796	21,178	24,687	27,205	0.821	0.839	1.03	1.19	0.98
Nonmetro Adjacent to Metro									
Northeast	16,675	22,220	25,722	28,364	0.862	0.875	1.70	1.13	0.98
South	14,146	19,292	21,943	23,665	0.748	0.730	1.84	1.00	0.76
North Central	16,545	21,515	25,148	27,617	0.834	0.852	1.56	1.21	0.94
West	17,482	20,331	22,794	24,780	0.789	0.764	0.89	0.88	0.84
Metro Other Than Central City									
Northeast	21,342	29,471	34,262	37,958	1.143	1.170	1.92	1.17	1.03
South	17,898	23,653	26,324	28,615	0.917	0.882	1.65	0.83	0.84
North Central	19,801	25,989	30,102	33,162	1.008	1.023	1.61	1.14	0.97
West	21,160	25,301	28,714	31,494	0.981	0.971	1.06	0.98	0.93
Central City of Large Metro									
Northeast	22,418	32,359	37,901	41,345	1.255	1.275	2.18	1.22	0.87
South	22,207	27,814	31,334	34,346	1.079	1.059	1.33	0.92	0.92
North Central	22,469	30,115	34,634	37,957	1.168	1.170	1.74	1.08	0.92
West	23,549	27,847	33,060	36,648	1.080	1.130	0.99	1.33	1.04

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Detail may not sum to totals due to rounding. The value of the RUPRI model deflator for 1998 differs slightly from that of the CBO deflator.  
 Source: Rural-urban and regional policy impacts model of RUPRI, developed with assistance from Regional Economic Models, Inc.

Table 9. Estimated Impacts of a Ten Percent Reduction of Food Stamp Benefits in 1999-2005 Accompanied by a Tax Cut of Equal Value, all dollar figures in 1998 dollars

County Groupings by Rurality and Region	Direct Policy Impacts in 1999 (million dollars)			Changes from Current Policies in 2005 as a Result of the Policy Change					
	Food Stamp Benefits	Taxes	Net Financial Gain	Personal Income (mil. dol.)	Jobs (units)	Gross Product (mil. dol.)	In-Migra- tion (persons)	Popu- lation (thou.)	Pers. Inc. per Cap. (dollars)
<b>Nonmetro Not Adjacent to Metro</b>									
Northeast	-21	-13	-8	-14	-141	-6	-14	-0.21	-4
South	-90	-43	-47	-82	-933	-41	-98	-1.33	-6
North Central	-42	-43	1	-1	-13	0	-6	0.06	0
West	-36	-27	-9	-17	-219	-10	-24	-0.31	-2
<b>Nonmetro Adjacent to Metro</b>									
Northeast	-26	-27	1	2	-15	-1	-4	0.04	0
South	-117	-67	-50	-87	-931	-41	-96	-1.31	-4
North Central	-43	-50	7	12	143	4	17	0.34	0
West	-24	-21	-4	-6	-79	-3	-8	-0.11	-1
<b>Metro Other Than Central City</b>									
Northeast	-154	-276	121	196	1,842	92	132	2.40	3
South	-343	-310	-33	-78	-913	-48	-54	-1.62	-1
North Central	-141	-198	58	107	1,319	60	127	1.90	2
West	-153	-189	36	95	996	50	117	1.44	2
<b>Central City of Large Metro</b>									
Northeast	-202	-149	-54	-98	-769	-43	-84	-1.00	-3
South	-145	-119	-25	-55	-656	-37	-48	-0.87	-2
North Central	-160	-139	-22	-41	-411	-21	-32	-0.39	-2
West	-146	-171	25	68	778	45	75	0.97	2
<b>U.S. Total</b>	<b>-1,842</b>	<b>-1,842</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.00</b>	<b>0</b>

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Notes:

The direct impacts in 2000-2005 are similar to those in 1999.  
Detail may not sum to totals due to rounding.

Source:

Rural-urban and regional policy impacts model of the Rural Policy Research Institute, developed with assistance from Regional Economic Models, Inc.

Table 10. Estimated Impacts of a Ten Percent Increase of Food Stamp Benefits in 1999-2005 Accompanied by a Decrease in the Budget Surplus of Equal Value, all dollar figures in 1998 dollars

County Groupings by Rurality and Region	Direct Policy Impacts in 1999 (mil dol) Food Stamp Benefits	Changes from Current Policies in 2005 as a Result of the Policy Change					
		Personal Income (mil. dol.)	Jobs (units)	Gross Product (mil. dol.)	In-Migra- tion (persons)	Popu- lation (thou.)	Pers. Inc. per Cap. (dollars)
<b>Nonmetro Not Adjacent to Metro</b>							
Northeast	21	14	144	5	22	0.22	4
South	90	79	885	40	100	1.27	6
North Central	42	-3	-56	-2	-6	-0.14	0
West	36	17	244	11	25	0.31	2
<b>Nonmetro Adjacent to Metro</b>							
Northeast	26	-2	1	-1	9	-0.04	0
South	117	84	868	40	110	1.25	4
North Central	43	-18	-250	-12	-15	-0.47	-1
West	24	5	57	3	6	0.08	1
<b>Metro Other Than Central City</b>							
Northeast	154	-191	-1,779	-94	-95	-2.11	-3
South	343	77	863	52	-46	1.43	1
North Central	141	-129	-1,777	-94	-140	-2.43	-2
West	153	-93	-957	-53	-141	-1.37	-2
<b>Central City of Large Metro</b>							
Northeast	202	112	1,071	68	114	1.33	4
South	145	66	875	55	46	1.03	2
North Central	160	38	365	19	43	0.29	2
West	146	-56	-555	-35	-32	-0.66	-1
<b>U.S. Total</b>	<b>1,842</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.00</b>	<b>0</b>

Notes:

The direct impacts in 2000-2005 are similar to those in 1999.  
Detail may not sum to totals due to rounding.

Source:

Rural-urban and regional policy impacts model of the Rural Policy Research Institute, developed with assistance from Regional Economic Models, Inc.

Table 11. Estimated Impacts of Tax Cuts That Eliminate the Projected Federal Budget Surpluses in 2001-2009, all dollar figures in 1998 dollars

County Groupings by Rurality and Region	Direct Impacts of Tax Cuts In Selected Years (million dollars)		Changes from Current Policies in 2010 as a Result of the Policy Change					
	2004	2007	Personal Income (mil. dol.)	Jobs (units)	Gross Product (mil. dol.)	In-Migra- tion (persons)	Popu- lation (thou.)	Pers. Inc. per Cap. (dollars)
<b>Nonmetro Not Adjacent to Metro</b>								
Northeast	-380	-585	-111	-617	-100	134	-1.35	-33
South	-1,259	-1,928	-544	-7,535	-572	-456	-10.37	-35
North Central	-1,233	-1,863	-458	-5,378	-435	567	-9.59	-29
West	-824	-1,279	-287	-3,379	-285	-834	-2.54	-42
<b>Nonmetro Adjacent to Metro</b>								
Northeast	-798	-1,227	-142	655	-70	557	-0.98	-24
South	-1,972	-3,036	-781	-10,376	-785	-1,488	-13.03	-35
North Central	-1,472	-2,257	-324	-1,929	-348	1,592	-10.25	-7
West	-628	-981	-311	-4,293	-313	-488	-3.60	-51
<b>Metro Other Than Central City</b>								
Northeast	-8,128	-12,539	286	27,087	595	2,929	18.16	-9
South	-9,390	-14,735	-2,468	-36,754	-3,467	-8,274	1.36	-43
North Central	-5,929	-9,233	-266	9,478	-707	7,113	-12.44	3
West	-5,831	-9,243	-750	-4,188	-1,074	-2,520	17.15	-37
<b>Central City of Large Metro</b>								
Northeast	-4,362	-6,744	-108	9,620	277	-1,593	4.19	-15
South	-3,605	-5,666	-377	-3,108	-783	-635	0.78	-21
North Central	-4,090	-6,302	46	12,368	-64	3,491	-4.81	12
West	-5,215	-8,230	422	18,347	433	-93	27.34	-19
<b>U.S. Total</b>	<b>-55,117</b>	<b>-85,849</b>	<b>-6,174</b>	<b>0</b>	<b>-7,700</b>	<b>0</b>	<b>0.00</b>	<b>-21</b>

Notes:

The tax cuts grow from zero in 2000 in a jagged upward path to a peak in 2007 and then decline to zero in 2010. The year 2004 is typical of the average cut in taxes in 2001-2009 and 2007 shows the year of maximum tax cuts. The changes in federal taxes are distributed among geographic areas in the same proportion as total personal income in the baseline projection for the year analyzed.

Detail may not sum to totals due to rounding. The value of the RUPRI deflator for 1998 differs slightly from that of the CBO deflator.

Source:

Rural-urban and regional policy impacts model of the Rural Policy Research Institute, developed with assistance from Regional Economic Models, Inc.

Table 12. Estimated Impacts of a Reduction of Social Security Benefits in 2011-2020 Accompanied by a Reduction in the Federal Budget Deficit of Equal Value, all dollar figures in 1998 dollars

County Groupings by Rurality and Region	Direct Impacts of Social Security Cuts in Selected Years (million dollars)		Changes from Current Policies in 2020 as a Result of the Policy Change					
	2015	2020	Personal	Jobs	Gross	In-Migra-	Popu-	Pers. Inc.
			Income (mil. dol.)	(units)	Product (mil. dol.)	tion (persons)	lation (thou.)	per Cap. (dollars)
<b>Nonmetro Not Adjacent to Metro</b>								
Northeast	-516	-1,070	-232	-1,780	28	-357	-3.29	-57
South	-1,877	-3,736	-1,362	-13,299	-378	-1,893	-17.00	-103
North Central	-1,781	-3,519	-1,204	-13,569	-252	-1,385	-13.79	-109
West	-1,089	-2,379	-536	-6,548	-211	-920	-7.13	-58
<b>Nonmetro Adjacent to Metro</b>								
Northeast	-1,069	-2,228	-420	-3,379	79	-593	-4.78	-56
South	-2,916	-5,830	-1,926	-18,504	-526	-2,549	-23.25	-94
North Central	-2,032	-4,132	-946	-8,076	216	-882	-5.95	-85
West	-919	-1,953	-549	-5,398	-145	-1,037	-8.27	-70
<b>Metro Other Than Central City</b>								
Northeast	-8,298	-17,620	2,967	15,084	2,763	2,654	18.71	58
South	-11,321	-24,391	-2,152	-42,125	-1,376	-6,310	-57.90	-8
North Central	-6,423	-14,001	1,571	18,016	3,050	1,606	29.52	18
West	-6,303	-14,181	2,006	7,918	1,516	-522	5.48	48
<b>Central City of Large Metro</b>								
Northeast	-3,573	-7,410	3,741	15,795	1,382	3,692	14.86	160
South	-3,292	-7,379	2,783	20,990	1,893	2,956	21.79	97
North Central	-3,517	-7,476	3,059	18,915	2,575	3,068	27.62	103
West	-4,971	-11,202	3,540	15,960	2,062	2,472	23.38	92
<b>U.S. Total</b>	<b>-59,897</b>	<b>-128,507</b>	<b>10,361</b>	<b>0</b>	<b>12,676</b>	<b>0</b>	<b>0.00</b>	<b>32</b>

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Notes:

The cuts in Social Security (the direct impacts) grow from zero in 2010 in a smooth path to the amount shown for 2020. The years 2015 and 2020 are presented so the reader can infer the magnitude of the cuts in each of the years 2011-2020. The cuts are calculated so as to prevent Social Security expenditures from rising above the fraction of GDP estimated for 2010.

Detail may not sum to totals due to rounding.

Source:

Rural-urban and regional policy impacts model of the Rural Policy Research Institute, developed with assistance from Regional Economic Models, Inc.