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One of TACIR's goals is to bring useful information to Tennessee's residents and to everyone who is interested in understanding the challenges public policy makers face. As part of that continuing effort, we have developed a set of indicators that anyone can use to assess what's going on in his or her own county. This report is the third in a series presenting and explaining those indicators. The series is intended to prompt discussion. Your feedback is welcome.

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Personal and Family Economic Well-Being Status and Momentum of Tennessee Counties

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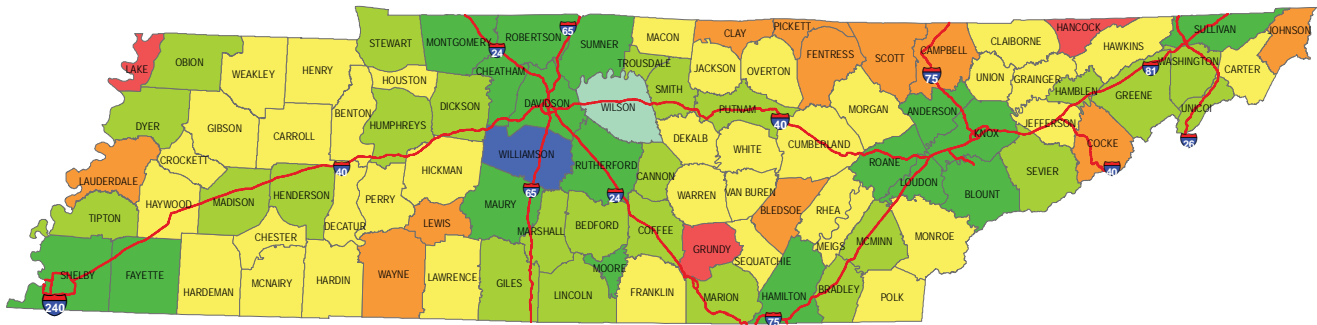
As explained in our first report on Tennesseans' economic well-being (see Fast Facts No. 5-1, May 2008), we have identified 5 readily available, reasonably current measures of personal and family economic well being. And we have devised a way to combine them into a single indicator of current status and an indicator of momentum. We define momentum for this purpose as the speed and direction the status indicator is moving. Most of the data in this update is for 2008 and is three years "newer" than the data in our May 2008 report, so it will reflect some of the effects of the recent recession. Nevertheless, we find little change since our first report and come to the same overall conclusion:

Personal and family economic well-being varies widely across the state, and that is unlikely to change for the foreseeable future.

TACIR's index of personal and family economic well-being, described on page 4, indicates an overall positive trend for personal and family economic well-being compared with our first well-being report. Williamson County—still number one for well-being—has moved up a notch since our first report and is now a perfect 10. The other 17 counties that were above the midpoint of the scale in our first report are still in the same tier in this report. Sullivan County improved its status and moved into this group. Most counties moved a quarter point or less, and none fell more than half a point. Williamson is part of a cluster of counties centered around Nashville that dominates the top ten for this well-being index (see Map 1 on the next page and the list on page 4). There is a similar cluster around Knoxville and a smaller one in the Memphis area. Moore County, home to Jack Daniels, is the only county above the mid-point that is not near one of the state's 4 largest cities.

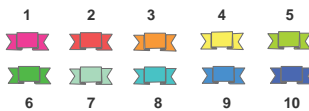
Though the number of counties below the midpoint is almost the same as in our first report, there was some shifting upward, which is an improvement. Although Hancock County is still the bottom-ranked county, it has improved its status more than any other county—nearly a full point. The overall trend for personal and family economic well-being is generally positive compared with our first report, despite the fact that the data behind the index captures the first year of the recent recession. We won't know the full effects of the recession until data through 2009 become available.

**Map 1. Personal and Family Economic Well Being
County Ratings for Current Status (2008)**



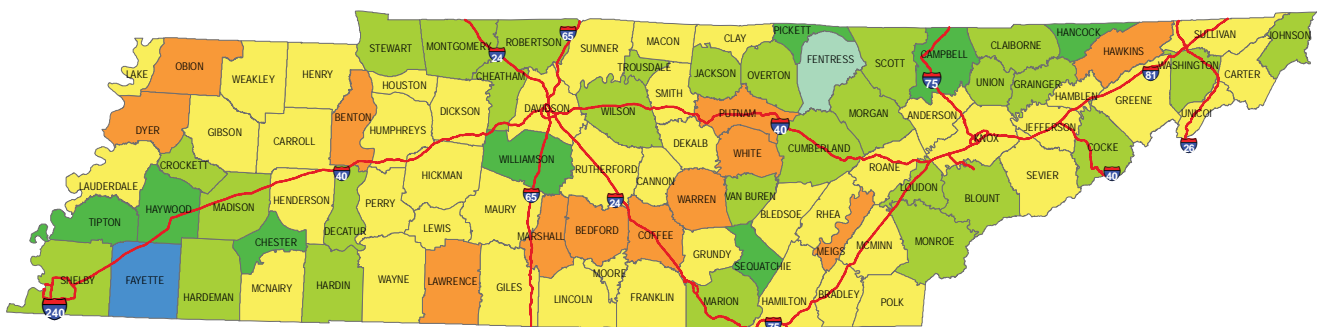
Legend

Ten is the best possible rating.



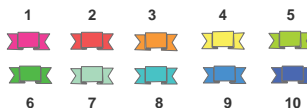
As noted in our first report on *Tennesseans' economic well-being*, momentum among the counties is insufficient to improve the status of the counties below the middle any time soon. The number of counties with momentum ratings below 4.0 decreased from 13 in our first report to 12 in this one, which is a small change, but a good one. Five counties (Anderson, Hickman, Lake, McMinn and Sullivan) moved up and out of this group, but 4 others (Bedford, Lawrence, Meigs, and White) moved into it. Of the group that moved from below 4.0 to above it, only Sullivan County had enough momentum to move up a tier in the status rankings. Its status score improved by 0.4 points, enough to move it above the midpoint for status, but only because it was already very close. By contrast, Fayette County, with a momentum score of 9.9, is still in the first tier above the midpoint for current status, the same tier as in our first report. So even its outstanding momentum was not enough to move its well-being to the next level in just three years.

**Map 2. Personal and Family Economic Well Being
County Ratings for Momentum (1989-2008)**



Legend

Ten is the best possible rating.



Personal and Family Economic Well-Being

	Current Status		Momentum	
	10-pt Scale	Rank	10-pt Scale	Rank
Tennessee	6.0		5.1	
Anderson County	6.1	13	4.0	82
Bedford County	5.1	34	3.8	88
Benton County	4.1	79	3.6	92
Bledsoe County	3.7	88	4.5	59
Blount County	6.3	8	5.2	31
Bradley County	5.7	20	4.1	78
Campbell County	3.9	84	6.3	6
Cannon County	5.0	39	4.9	41
Carroll County	4.9	48	4.9	40
Carter County	4.1	78	4.8	50
Cheatham County	6.7	5	5.3	30
Chester County	4.8	52	6.0	9
Claiborne County	4.0	81	5.8	12
Clay County	3.6	90	4.5	61
Cocke County	3.7	86	5.2	32
Coffee County	5.3	28	3.5	93
Crockett County	4.8	49	5.4	27
Cumberland County	4.9	46	5.7	16
Davidson County	6.6	6	4.8	48
Decatur County	4.7	55	5.5	21
DeKalb County	4.5	60	4.7	53
Dickson County	5.6	25	4.8	49
Dyer County	5.0	43	3.9	87
Fayette County	6.3	11	9.9	1
Fentress County	3.6	89	7.5	2
Franklin County	4.9	45	4.5	63
Gibson County	4.9	47	4.1	79
Giles County	5.0	41	4.2	73
Grainger County	4.3	70	5.7	17
Greene County	5.1	37	4.8	47
Grundy County	2.7	93	4.3	71
Hamblen County	5.1	33	4.1	77
Hamilton County	6.3	7	4.9	44
Hancock County	2.0	95	6.5	4
Hardeman County	4.4	66	5.6	20
Hardin County	4.4	67	5.9	11
Hawkins County	4.5	61	3.3	95
Haywood County	4.2	72	6.6	3
Henderson County	5.0	42	4.9	43
Henry County	4.7	56	4.6	57
Hickman County	4.5	63	4.0	83
Houston County	4.2	77	4.2	72
Humphreys County	5.7	22	4.4	68
Jackson County	4.1	80	5.0	37
Jefferson County	4.8	50	4.5	60
Johnson County	3.3	92	5.8	14
Knox County	6.3	10	4.8	51

	Current Status		Momentum	
	10-pt Scale	Rank	10-pt Scale	Rank
Lake County	2.2	94	4.1	76
Lauderdale County	3.9	85	4.2	75
Lawrence County	4.7	57	3.9	85
Lewis County	3.9	82	4.4	67
Lincoln County	5.1	36	4.4	66
Loudon County	6.3	12	5.4	26
McMinn County	5.2	32	4.2	74
McNairy County	4.5	65	4.7	54
Macon County	4.2	73	4.5	62
Madison County	5.7	23	5.2	34
Marion County	5.0	38	5.5	25
Marshall County	5.1	35	3.3	94
Maury County	6.0	18	4.8	52
Meigs County	4.3	71	3.7	91
Monroe County	4.8	54	5.4	28
Montgomery County	6.0	17	5.4	29
Moore County	6.0	19	4.5	64
Morgan County	4.2	75	5.0	36
Obion County	5.3	29	3.7	90
Overton County	4.3	69	5.5	22
Perry County	4.2	76	4.4	70
Pickett County	3.7	87	6.1	8
Polk County	4.5	62	4.6	56
Putnam County	5.0	44	3.9	86
Rhea County	4.8	51	4.5	65
Roane County	6.1	14	4.9	45
Robertson County	6.1	15	5.2	35
Rutherford County	6.8	4	4.4	69
Scott County	3.4	91	5.6	19
Sequatchie County	4.8	53	6.0	10
Sevier County	5.3	30	4.9	42
Shelby County	6.3	9	5.5	23
Smith County	5.6	26	4.9	46
Stewart County	5.5	27	5.5	24
Sullivan County	6.1	16	4.1	81
Sumner County	6.9	3	4.9	39
Tipton County	5.6	24	6.3	7
Trousdale County	5.0	40	5.2	33
Unicoi County	5.3	31	4.6	55
Union County	4.3	68	5.7	15
Van Buren County	4.5	64	5.8	13
Warren County	4.6	58	3.9	84
Washington County	5.7	21	5.0	38
Wayne County	3.9	83	4.5	58
Weakley County	4.5	59	4.1	80
White County	4.2	74	3.7	89
Williamson County	10.0	1	6.4	5
Wilson County	7.3	2	5.6	18

Note: Rankings are based on unrounded ratings. Ties would occur only if the unrounded ratings were identical.

Personal and Family Economic Well-Being

Top Ten Counties for Current Status

- 1 Williamson
- 2 Wilson
- 3 Sumner
- 4 Rutherford
- 5 Cheatham
- 6 Davidson
- 7 Hamilton
- 8 Blount
- 9 Shelby
- 10 Knox

Top Ten Counties for Momentum

- 1 Fayette
- 2 Fentress
- 3 Haywood
- 4 Hancock
- 5 Williamson
- 6 Campbell
- 7 Tipton
- 8 Pickett
- 9 Chester
- 10 Sequatchie

This is just one way to look at the economic well-being of people and families across the state's 95 counties. We offer it as a basis for discussion and thought. Comments about it are welcome.

The next in the series will be economic activity across the counties.

What goes into TACIR's indicator of personal and family economic well-being?

There are two readily available measures of income for Tennesseans at the county level: income per capita and median household income. Both measures are estimates, provided by the federal government. Neither measure is a perfect measure of local income, and so combining them, if a way can be found to do that, makes sense. In addition, there are poverty rates for each county. Those rates are available for all residents and for children (ages 5 to 17). TACIR's indicator of personal and family economic well-being includes all four of those measures plus wages. Using wages is a little tricky because people travel across county lines for work. But most people work in their own county, so we chose to include them.

How does TACIR combine all of those different measures into one?

It's not easy, but it's not highly technical. If you've had a college course in statistics, you probably know how. And if you have an ordinary spreadsheet package like Excel, you can easily do it. Some high school math classes include these methods. Each of the measures is on a different scale. Some are in dollars, and some are percentages. One is for a whole household, two are for individuals, and the poverty measures are for families. Poverty is measured that way based on the reasonable assumption that families share financial resources.

One way to combine these measures would be simply to rank the counties for each one and then combine, maybe average, the rankings. But rankings fail to indicate how far apart the actual numbers are. Another way to combine them, admittedly more complicated, is to use a statistical measure called the standard deviation to determine how far each county is from the average of all counties. You can subtract the figure for each county by the average and divide the difference by the standard deviation to get something that is arbitrarily called a z-score. Z-scores show how far a number is from the average. Z-scores for different measures—like per capita income and percent of children living with families that are poor—can be combined and they still show how close or far apart the original numbers are.

That sounds complicated. How does TACIR make it easy to understand?

We take those z-scores and average the five figures for each county then convert the result to a rating on a ten-point scale. A ten is the top of the heap. A one is at the bottom. But there may or may not be a ten or a one. That depends on how spread out the counties are to begin with. Take poverty, for example. Theoretically, it's possible for a county to have no one who's poor. It would be at 0%, and that would be a ten. It's equally possible (theoretically) for everyone in a county to be poor. That county would be at 100%, and it would get a one. But no Tennessee county is at 100%, and none is at 0%. The counties' poverty rates are more clumped than that. And the amount of change in the counties' poverty rates as time goes by is even more clumped. So counties' ratings on a ten-point scale would be equally clumped around the middle. By allowing the data itself to determine how to spread the counties over the ten-point scale, we are able to show how similar and how different they are.