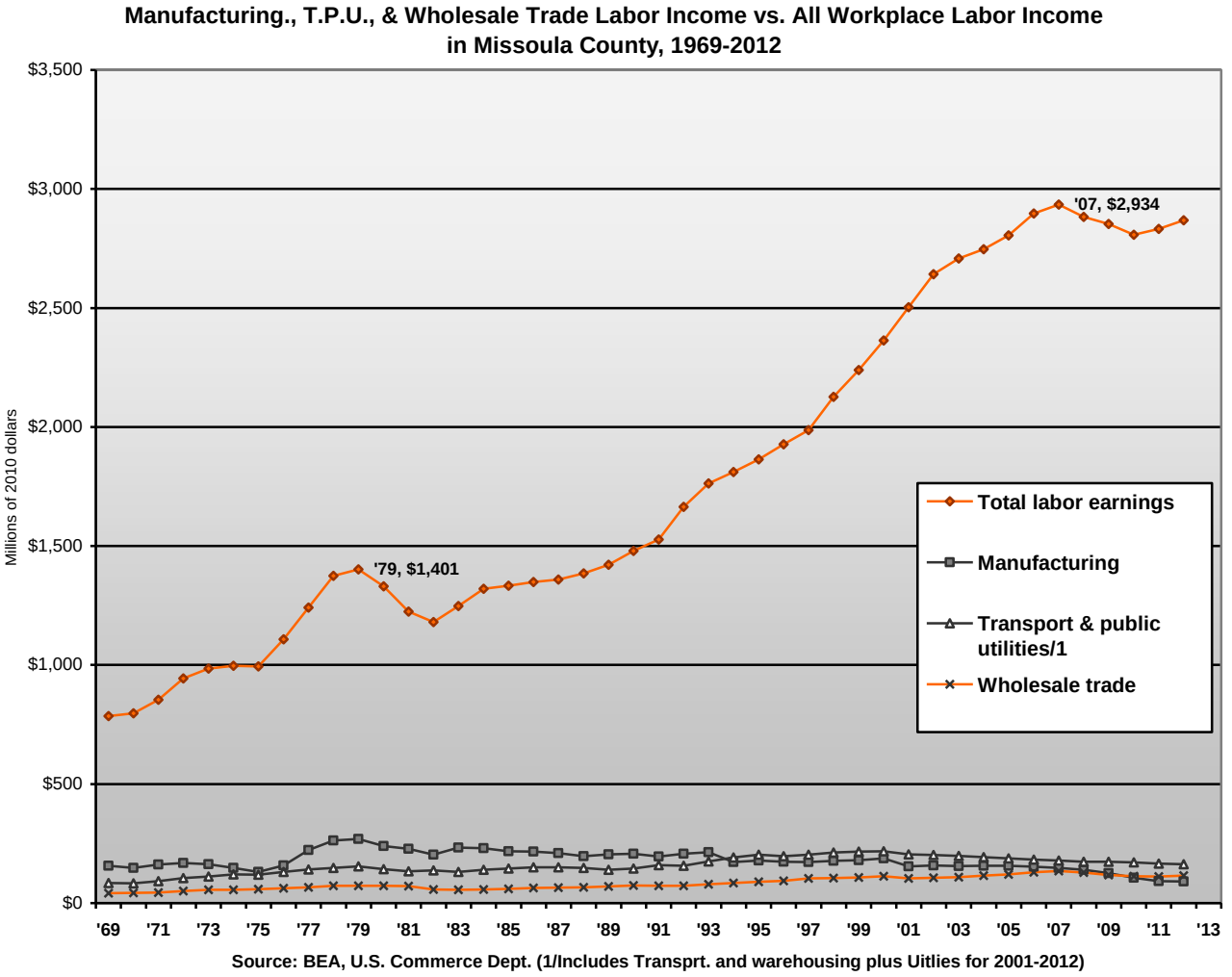
D. Trends in Labor Earnings among Key Industries in Missoula County

By combining data for the 1969 to 2000 period that uses the SIC industry codes with data for 2001 through 2012 that uses the NAICS industry codes, the long term dependency of Missoula's changing economy on several industries, including manufacturing, can be examined. The chart compares labor earnings generated by manufacturing, transportation and utilities, and wholesale trade over time to overall labor earnings for Missoula's economy as a whole. Firms and establishments within these three sectors all have varying needs for sites to operate comparable to what is found on industrially zoned lands.

As can be seen, the overall economy of Missoula County, as measured by total labor earnings generated by it, has grown steadily over time with a couple exceptions. In the early '80s during a nation-wide recession spurred by rapidly rising energy costs and high interest rates total labor earnings in Missoula County fell. The housing industry took a hit at that time and this impacted Missoula's wood products sector. After hitting bottom in 1982, labor earnings then grew each year until 2008, one year after the onset of the most recent national recession.



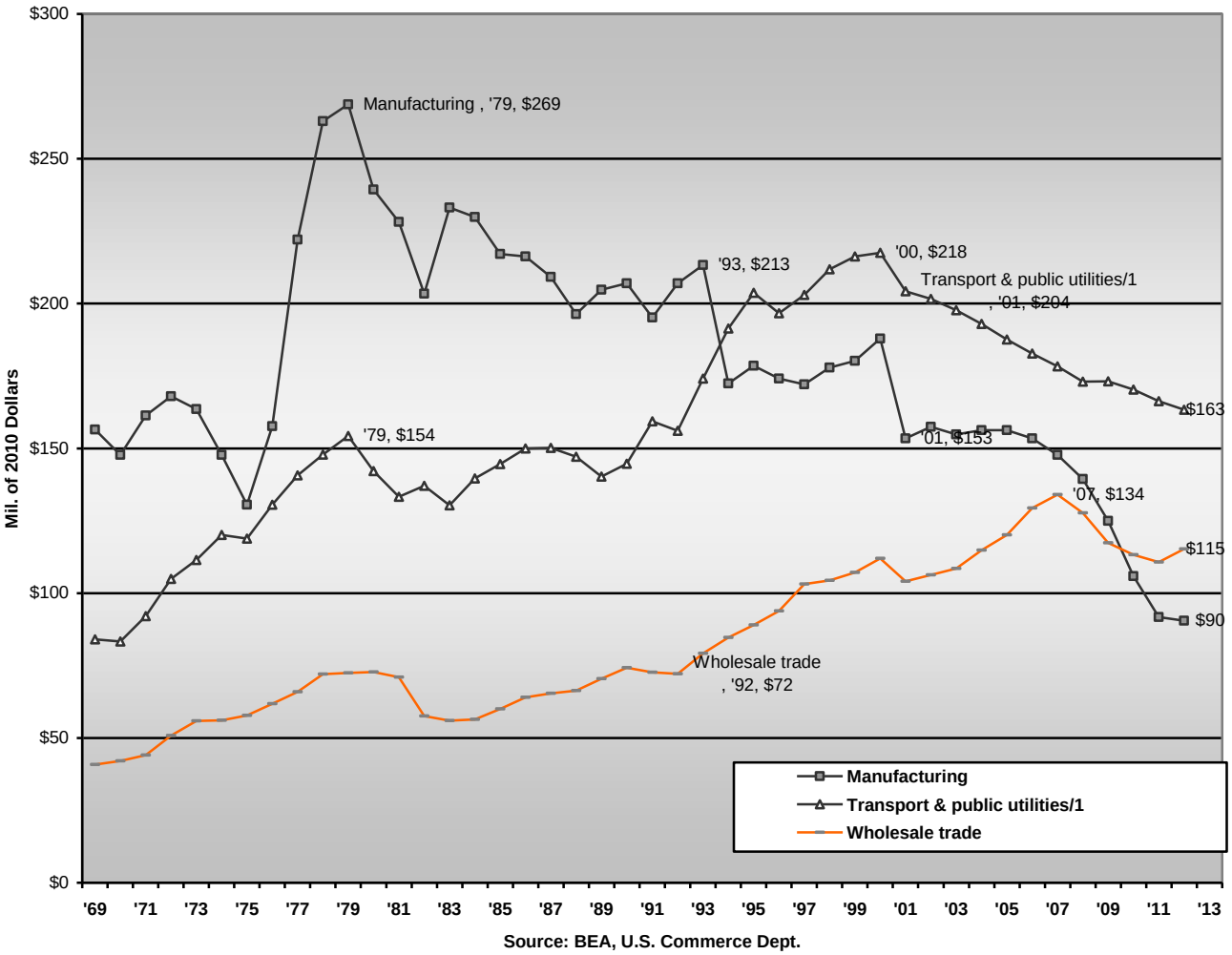
County-wide labor earnings continued to fall in 2009 and 2010, before recovery began in 2011. In the chart above, the growing separation between the line measuring total labor earnings and labor earnings in manufacturing, transportation and utilities, and wholesale trade clearly indicate how the area economy has grown away from its more narrow dependence on these sectors dating back to the early '70s. A closer view of how these three sectors have changed over time can be seen in focusing only on them, which is done in the next chart.

D. Long-term Labor Income Trends in Manufacturing, Transportation and Utilities, and Wholesale Trade in Missoula County

Labor earnings for manufacturing, transportation and public utilities, and wholesale trade are focused upon in the chart. Labor earnings for manufacturing rose sharply in the '70s and hit their all-time peak for Missoula County in 1979 at $269 mil. (2010 inflation-adjusted dollars). Much of this manufacturing was concentrated in wood products and these labor earnings quickly fell to almost $200 mil. by 1982. This coincided with a nation-wide recession at that time that also included very high interest rates. This combination of conditions hit the housing industry hard and curtailed a lot of construction involving the use of wood materials.

Manufacturing recovered a bit but stood at $213 mil. in 1993 before falling to much lower levels in 1994. Manufacturing continued its decline and had labor earnings of about $150 mil. by 2001. The sector stabilized for a few years before declining sharply again, this time because of the gradual shutdown of the paper plant. With paper manufacturing then gone, labor earnings fell to $106 mil. by 2010 and $90 mil. by 2012.

Labor Earnings in Manufacturing, Transport & Utilities, and Wholesale Trade in Missoula Co., 1969 - 2012



Source: BEA, U.S. Commerce Dept.

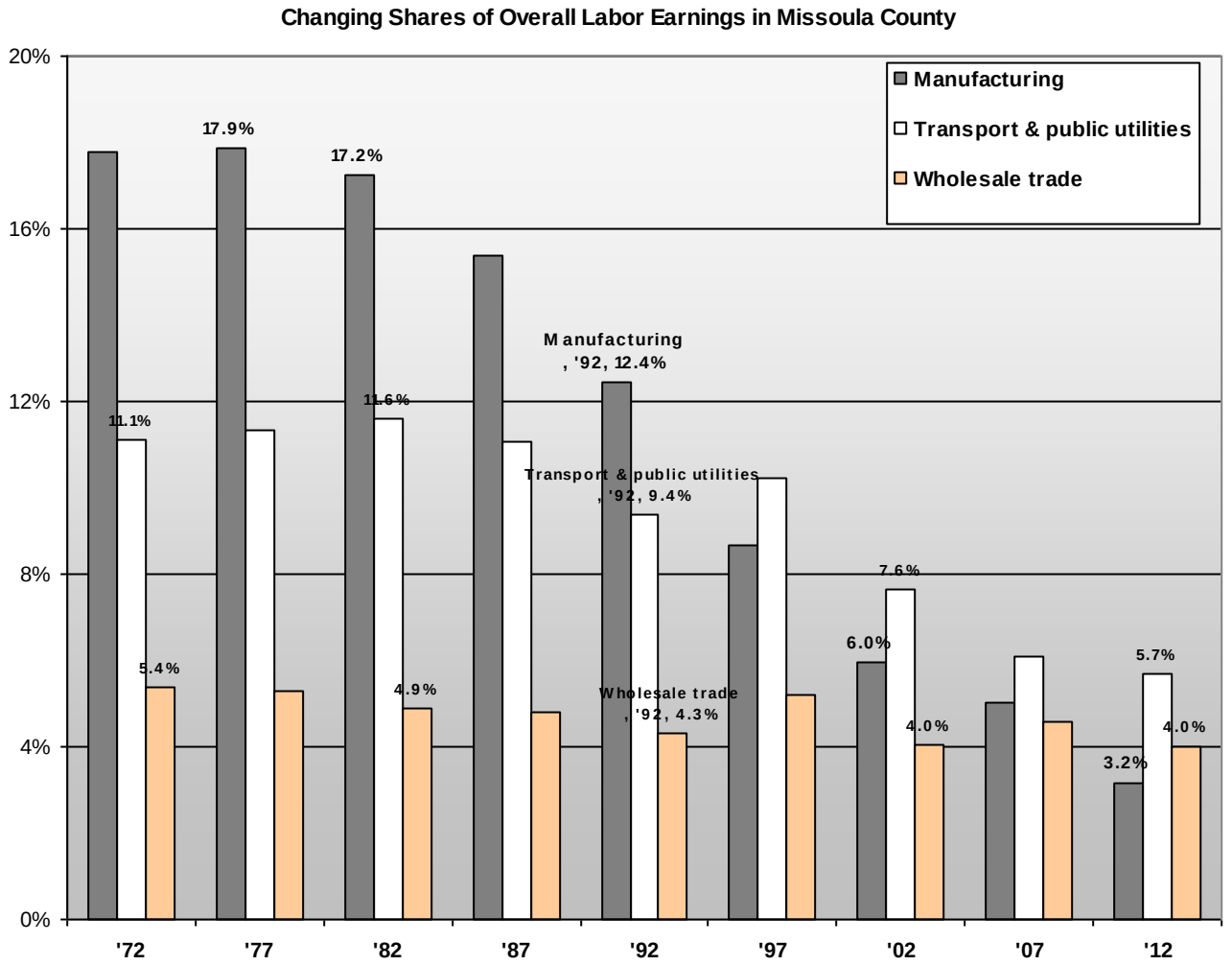
So, manufacturing today in Missoula County generates about one-third the labor earnings it once generated at its peak in 1979. The transportation and public utilities sector generated about $218 mil. in labor earnings at its peak in 2000, but today this is closer to $160 mil., with this decline largely accounted for by declines in truck transportation (see table on page 51). Wholesale trade has gradually grown in Missoula County, reaching a high in labor earnings of $133 mil. in 2007. Its recent decline can be attributed to the general economic slowdown during the recession. It will likely continue to grow. The future of manufacturing is much less sure in Missoula Co., but it is more stable at current levels.

D. Area Income Dependence on Manufacturing, Transportation and Utilities, and Wholesale Trade Over Time

This chart shows the share of total area labor earnings each of these major sectors have accounted for over time. While labor earnings in these sectors have declined or grown only slowly, the larger economy of Missoula County has continued to grow, resulting in a steady fall in area economic dependencies on these industrial sectors.

Manufacturing's share of total labor earnings in the county has shrunk from almost 18% in 1977 to nearly 3% in 2012. For each year five-years apart shown in the chart since 1977 manufacturing's share of the Missoula economy has shrank. So the county has a relatively small dependency on manufacturing today for area labor earnings.

The share of labor earnings accounted for by transportation and utilities also has shrunk, but not to the same degree as with manufacturing, falling from almost 12% in 1982 to less than 6% in 2012. Wholesale trade's share of income has stayed fairly stable with only a minor decline.



These declines in Missoula's manufacturing sector can be seen in changes in how the county's industrial lands are now used. The Champion mill site in down-town Missoula now contains no wood products manufacturing. Widespread contamination of the site from its past use in manufacturing has been and is being cleaned up and the site is now the home of a minor league baseball park and other parts of the site are being redeveloped for mixed residential and commercial use. The Bonner mill site also is being redeveloped but largely around other potential manufacturing uses. Most of Missoula's continuing wood products manufacturing is by Roseburg (particleboard, laminate board, glue, etc.). The company is headquartered in Oregon and has particleboard plants in Missoula, Mississippi, and Louisiana. (*Missoulian*, Nov. 9, 2013)

D. Recent Labor Earnings Trends among Key Industrial Sub-sectors in Missoula Co.

The table shows labor earnings change within manufacturing in Missoula County, focusing on levels in 2001, 2004, 2007, 2010, and 2012. This permits examination of where overall manufacturing labor earnings declines in the county are occurring and allows change to be examined for the pre-recession (2001-07), recession (2007-10), and post-recession recovery (2010-12) periods. Labor earnings in these years for the utilities, wholesale trade, and construction sectors are also shown, along with key sub-sectors within these. Labor earnings levels for professional and technical services are shown for comparison purposes.

Even in a period of economic growth leading into the recession, manufacturing labor earnings fell by $5.7 mil. A $15 mil. decline in wood products manufacturing accounted for most of the decline. The $42 mil. decline in manufacturing labor earnings between 2007 and 2010 was mainly from further declines in wood products (down $17.6 mil.) and in paper products (a nondurable) which can't be shown because the data are suppressed for proprietary reasons. Further declines by paper account for most of the 2010-12 decline in manufacturing.

Missoula County Industry Profile: Sector Labor Earnings in 2010 Dollars (Mil.)

Missoula	2001	2004	2007	2010	2012	2001-07	2007-2010	2010-2012
All Manufacturing	**$153.5**	**$156.2**	**$147.8**	**$105.9**	**$90.5**	***-$5.7***	***-$41.9***	***-$15.4***
Durables Mfg.	**$84.5**	**$78.0**	**$72.0**	**$53.1**	**$53.0**	***-$12.5***	***-$18.9***	***-$0.1***
Wood products	$49.9	$47.1	$34.8	$17.2	$14.8	*-$15.2*	*-$17.6*	*-$2.4*
Fabric. metal prod.	$5.1	$2.7	$4.6	$3.6	$6.6	*-$0.5*	*-$1.1*	*$3.0*
Furniture mfg.	$7.4	$6.3	$5.9	$4.5	$2.8	*-$1.5*	*-$1.4*	*-$1.7*
Machinery mfg.	$3.0	$3.1	$2.4	$1.6	$1.9	*-$0.6*	*-$0.8*	*$0.3*
Computers & electron.	$0.2	(D)	(D)	$0.7	$1.7	(D)	(D)	*$1.0*
Miscel. mfg.	$16.5	$14.8	$19.6	$21.8	$21.8	*$3.1*	*$2.2*	*$0.0*
Nondurable Mfg.	**$69.0**	**$78.2**	**$75.8**	**$52.8**	**$37.5**	***$6.8***	***-$23.0***	***-$15.3***
Food products	$11.5	$14.5	$10.5	$8.6	$9.9	*-$1.0*	*-$1.9*	*$1.2*
Beverage prod.	$6.1	$8.7	$6.3	$7.3	$9.0	*$0.2*	*$1.0*	*$1.7*
Chemical products	$0.8	$3.0	$8.4	$10.2	$11.7	*$7.6*	*$1.7*	*$1.5*
Plastics & rubber	$0.5	$0.7	$3.1	(D)	$4.0	*$2.6*	(D)	(D)
Printing & related	$4.3	$4.1	$3.4	$2.5	$2.3	*-$0.9*	*-$1.0*	*-$0.2*
Utilities	**$14.4**	**$14.7**	**$17.3**	**$18.5**	**$18.3**	***$2.8***	***$1.2***	***-$0.1***
Transpt. & warehsg	**$189.9**	**$185.2**	**$170.7**	**$116.0**	**$129.4**	***-$19.2***	***-$54.7***	***$13.4***
Truck transpt.	$127.6	$117.7	$100.3	$48.8	$58.1	*-$27.2*	*-$51.6*	*$9.4*
Rail transpt.	$30.2	$32.8	$34.5	$34.7	$36.5	*$4.3*	*$0.2*	*$1.8*
Transpt. support activ.	$9.7	$10.6	$10.1	$8.7	$10.7	*$0.4*	*-$1.5*	*$2.0*
Couriers & messengrs	$10.3	$10.9	$10.4	$10.6	$10.7	*$0.2*	*$0.2*	*$0.1*
Transit & ground supt	$4.8	$6.5	$6.4	$5.5	$5.9	*$1.5*	*-$0.9*	*$0.5*
Air transpt.	$5.2	$4.9	$6.5	$4.6	$4.4	*$1.3*	*-$1.9*	*-$0.2*
Wholesale trade	**$104.0**	**$114.8**	**$134.0**	**$113.2**	**$115.3**	***$29.9***	***-$20.8***	***$2.1***
Construction	**$197.7**	**$217.4**	**$230.1**	**$180.3**	**$173.4**	***$32.4***	***-$49.8***	***-$6.9***
Heavy & civil eng.	$33.4	$44.6	$45.9	$48.8	$43.8	*$12.5*	*$2.9*	*-$4.9*
Prof. & technical serv	**$153.6**	**$175.6**	**$203.9**	**$202.9**	**$205.8**	***$50.3***	***-$1.0***	***$2.9***

Source: BEA, U.S. Commerce Dept. (REIS labor earnings data for NAICS sectors adjusted for inflation)

One area of growth in manufacturing in Missoula Co. is in "miscellaneous manufacturing". This is manufacturing that can't be easily classified under the other sub-sector categories and include manufacturers of medical instruments, sporting goods, office supplies, and other items. Labor earnings losses in the transportation sector are mainly in truck transportation.

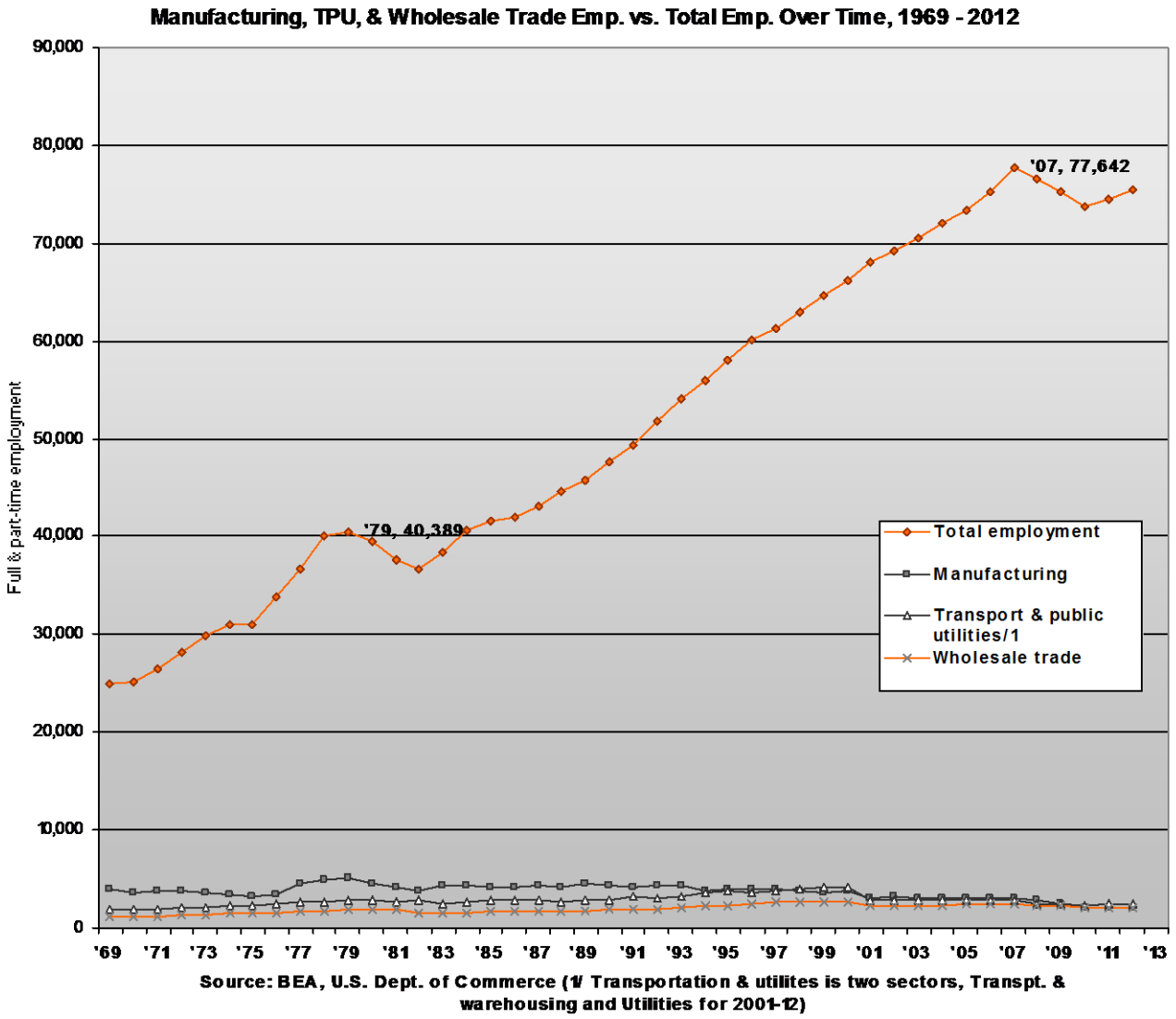
D. Long-term Trends in Industrial Employment Growth in Missoula County

The chart shows Missoula County total employment (all full- and part-time jobs) over an extended period of time (1969 through 2012). Over this more than four decade period, Missoula's employment in all areas of the economy has steadily grown, except in two periods – the early '80s when the national economy was faced with recession and "stagflation" and, more recently, during the national recession which extended from late in 2007 in 2009.

The economy grew from one with about 25,000 full and part-time jobs to one approaching 80,000 jobs.

The chart also shows levels of employment in several key sectors of the economy with businesses that are mostly likely to require industrial-type locations. These include manufacturing, transportation and utilities, and wholesale trade (where warehouses or large distribution centers may be involved).

As can be seen with the eye, Missoula County's economy has been adding employment for many years and most years, other than the two major recessions, with little or no gain in employment among these three industrial sectors. This reflects fundamental changes in the area economy whereby overall economic growth is less and less dependent on growth in any of these three sectors of the economy.



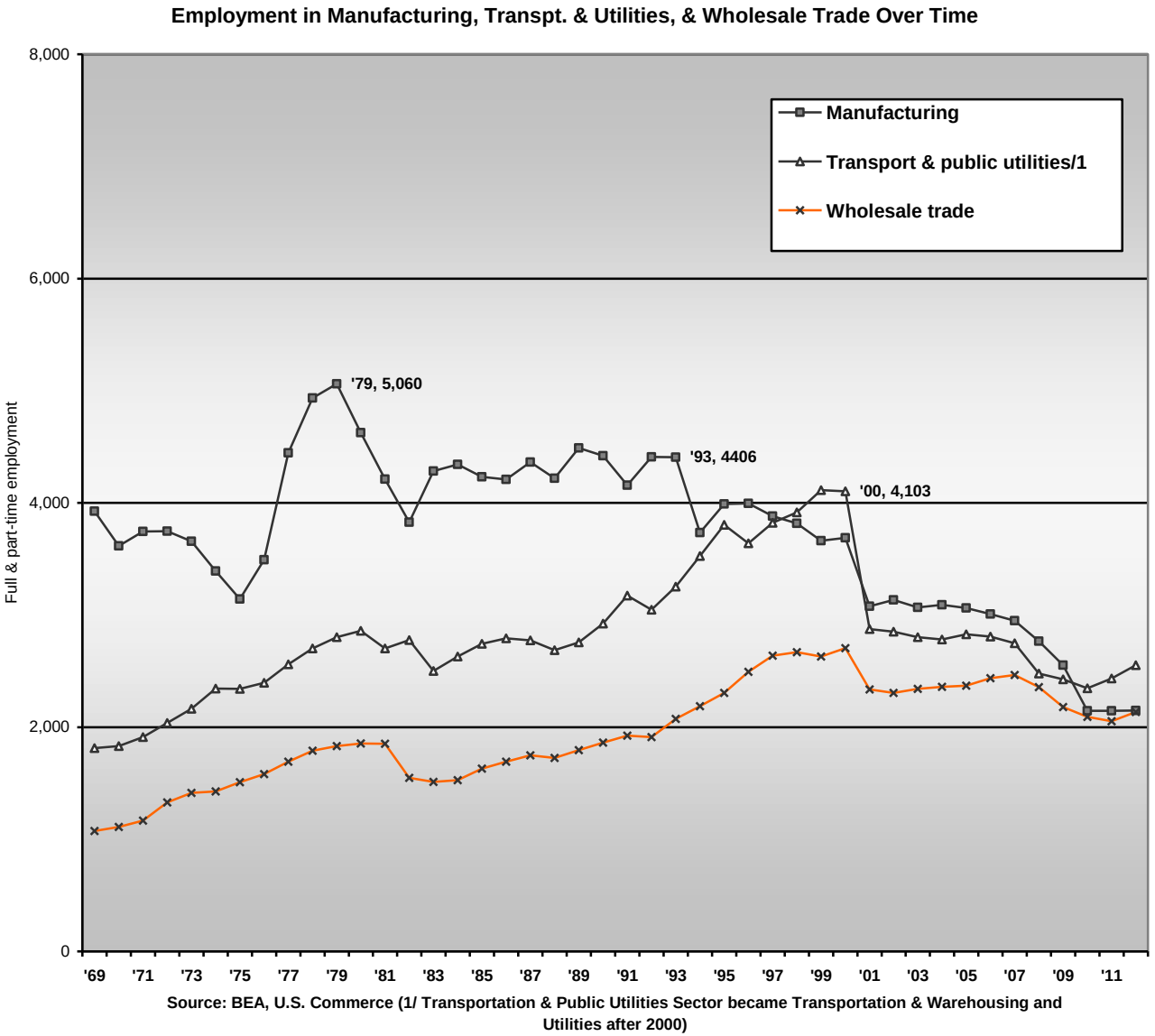
A closer picture of how employment in these sectors has changed can be gained by dropping total employment from the chart and reducing the scale, as in the next chart.

D. Employment Levels in Manufacturing, Transportation and Utilities, and Wholesale Trade in Missoula Co. Over Time

This chart then focuses only on the three key sectors – manufacturing, transportation and utilities, and wholesale trade -- and their levels of total employment in Missoula County over the extended period from 1969 to 2012.

Industry classification codes changed in 2001 when national data-gathering agencies went to the North American Industry Classification System (NAICS). And this resulted in some shifting of certain types of businesses from one general classification to another. Transportation and utilities was split into two general sectors under the new classification: Transportation and warehousing and Utilities.

Manufacturing employment in Missoula County peaked in 1979 at 5,060. By the early '90s this employment had fallen to about 4,400. In 2000 manufacturing employment was about 4,100. Marked declines in county manufacturing continued and, today, it has a little over 2,000 jobs. The slide in recent years largely resulted from the gradual reduction and closing of the area's paper plant.



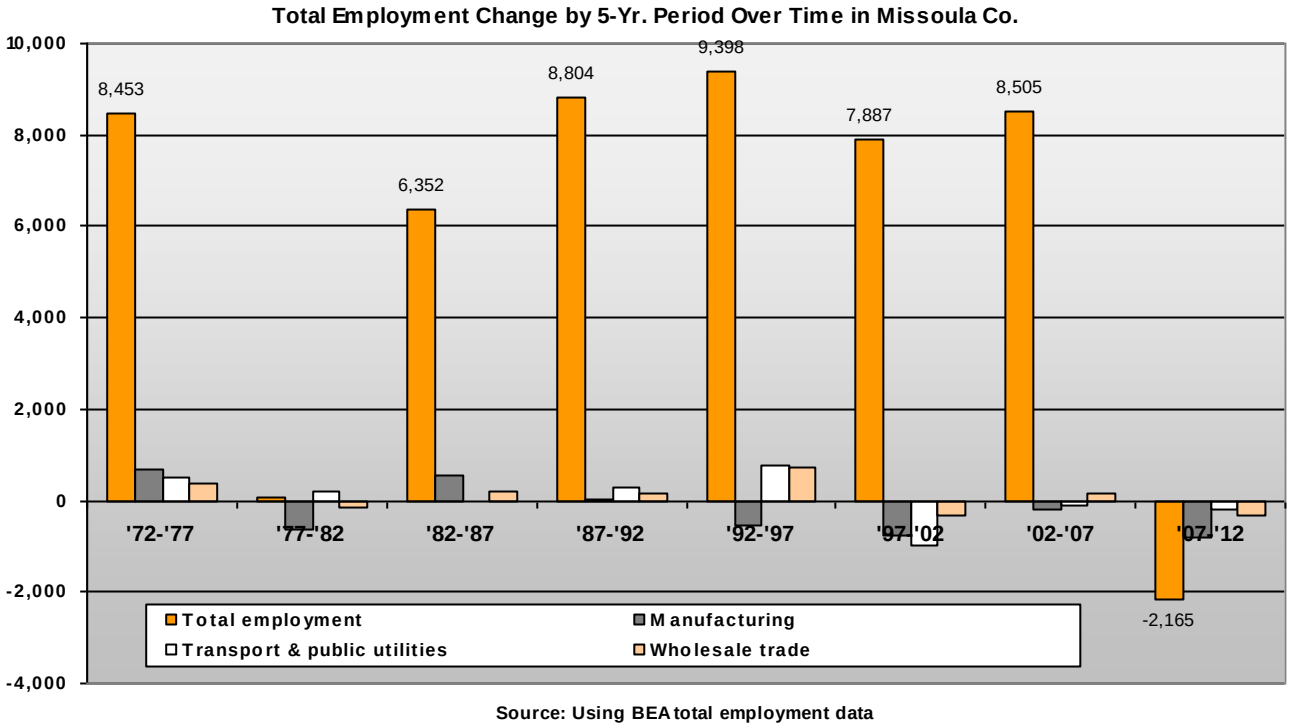
County employment in transportation, warehousing, and utilities steadily rose from less than 2,000 in the early '70s to more than 4,000 by 2000. Since then, this employment has fallen dramatically to around 2,550 jobs. Wholesale trade jobs in Missoula County gradually increased to around 2,700 jobs in the late '90s. After which they gradually declined to around 2,100 jobs in 2012.

D. Patterns of Employment Change for 5-year Periods through time and more recently

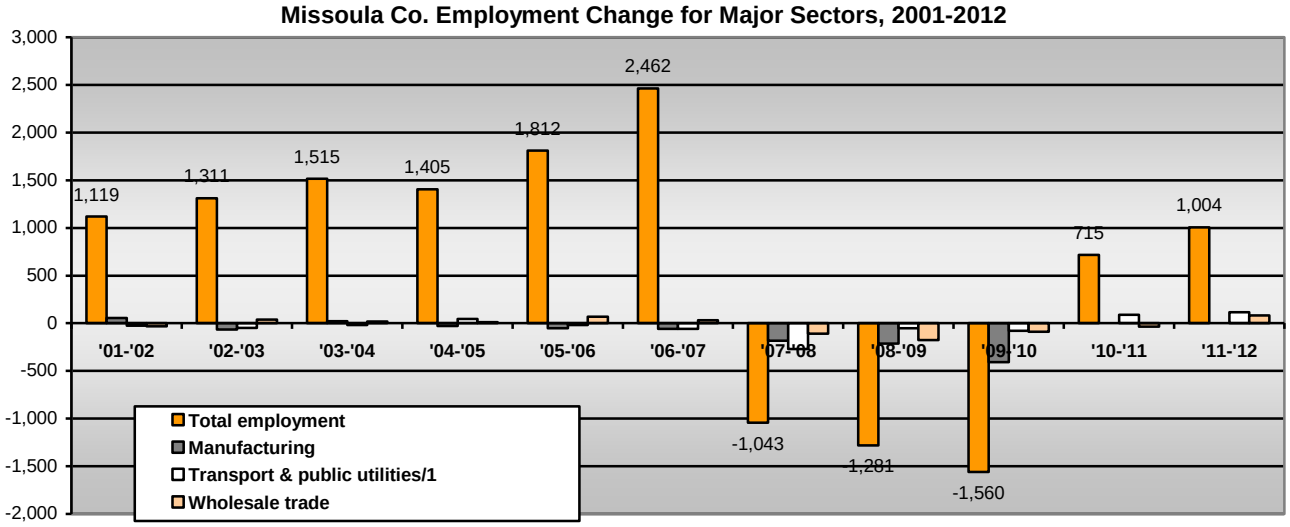
The top chart shows employment change in Missoula County overall and for manufacturing (gray bars), transportation and utilities (white bars), and wholesale trade (light orange) for 5-year periods beginning in the early '70s up to the present. The bottom chart shows changes in these for recent years.

There was general conformance in employment growth in these primary sectors in the mid-70s and some in the mid-80s and early '90s. But overall employment has grown in periods even when manufacturing fell ('92-'97, '97-'02, and '02-'07). Employment in transportation and utilities and wholesale trade tends to grow when overall employment grows, but not always.

Further evidence of this can be seen in annual change from 2001 to 2007 and from 2010 to 2012. Manufacturing and transportation and utilities employment often decrease even as overall employment in Missoula County grows. So these do not appear to "drive" employment growth in the county, particularly in more recent years.



Source: Using BEA total employment data



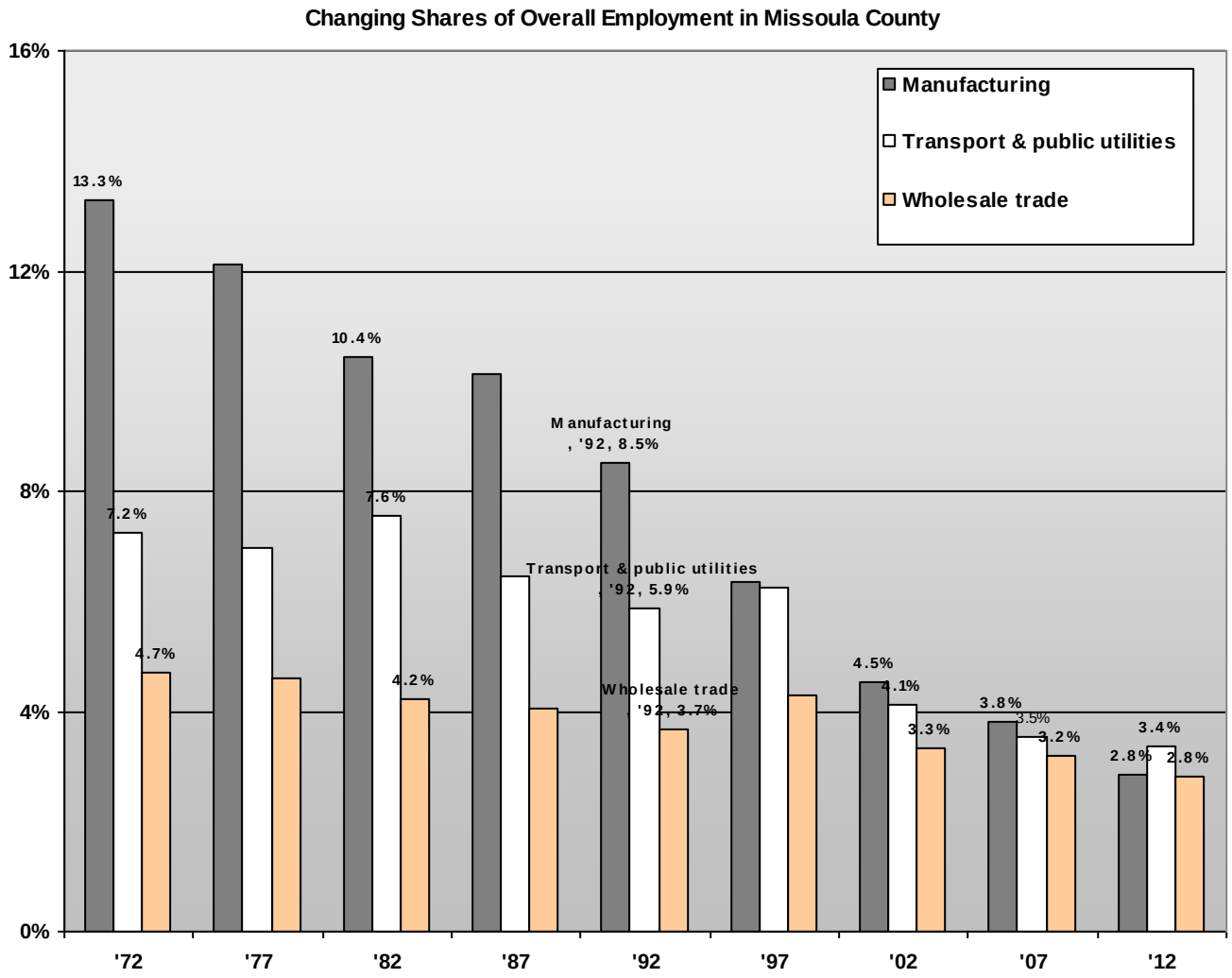
D. Decreasing Area Dependency on Industrial Sectors in Missoula County in Employment

This chart shows the shares of total employment accounted for by these three sectors of the economy over time. Shares of area employment are examined for selected years five years apart beginning with 1972 and ending with 2012.

Manufacturing's share of total employment in the county has shrunk from a high of 13.3% in 1972 to less than 3% in 2012. While manufacturing employment fell dramatically in the county in the last decade, this decline has been part of a pattern for a much longer period of time, as can be seen.

The share of total employment in the county in transportation and utilities once stood as high as 7.6% in the early '80s. Today it is less than half of this at 3.4%.

Wholesale trade employment accounted for 4.7% of all employment in the early '70s and even with its gradual growth, now accounts for only 2.8%. These represent shifts and restructuring in the Missoula area economy and are likely to continue, although at a slower pace than in the past.



Classic "economic base" models of the economy that divide the economy into "basic" and "non-basic" or "derivative" sectors would say that declines in manufacturing and even in areas of transportation, like railroads and trucking, would lead to further declines in non-basic areas of employment. However, the Missoula economy has continued to grow, even with these declines, indicating that other areas of the economy are driving its growth and change.

D. Labor Income Trends in Montana among Industrial Sectors

The table shows annual levels of labor earnings for sub-sectors within manufacturing in Montana since 2001, and then shows change occurring in the pre-recession period (2001-07), recession (2007-10), and post-recession recovery (2010-12). Figures for utilities and transportation and warehousing also are shown.

Manufacturing labor earnings grew in the 2001-07 period ($44.4 mil.), fell by $177 mil. during the recession and then recovered by $52 mil. in the post-recession recovery. Durables manufacturing (mainly wood products and fabricated metals, but also nonmetals and machinery) has been largely in decline. Nondurables manufacturing (mainly petroleum refining and food, but also chemicals) has been more stable.

It is difficult to conclude from these patterns of change that increases in manufacturing labor earnings in Montana are probable or even likely. But even if they grow, their share of overall labor earnings in Montana will likely continue to shrink. Utilities labor earnings have grown from $297 mil. in 2001 to $368 mil. in 2012. Labor earnings in transportation and warehousing are rising also. Truck and rail are the largest transportation sub-sectors.

Sector Labor Earnings in 2010 Dollars (Mil.)

Montana State-wide	2001	2004	2007	2010	2012	2001-07	2007-2010	2010-2012
All Manufacturing	**$1,092**	**$1,034**	**$1,136**	**$959**	**$1,011**	***$44.4***	***-$176.7***	***$51.5***
Share of all lab. Inc.	5.9%	5.0%	4.9%	4.2%	4.1%	1.0%		2.9%
Durables Mfg.	**$691**	**$611**	**$676**	**$494**	**$566**	***-$15.1***	***-$181.6***	***$71.5***
Wood products mfg.	$270	$252	$230	$128	$131	*-$40.6*	*-$101.4*	*$3.2*
Fabric. metal prod.	$58	$59	$80	$76	$109	*$21.7*	*-$4.2*	*$32.8*
Nonmetal. minerals	$50	$51	$54	$40	$74	*$4.5*	*-$14.5*	*$34.1*
Machinery mfg.	$87	$67	$80	$71	$71	*-$6.6*	*-$9.7*	*-$0.1*
Furniture mfg.	$39	$38	$38	$26	$28	*-$0.7*	*-$11.8*	*$2.1*
Computers & electron.	$32	$23	$30	$21	$24	*-$2.7*	*-$8.6*	*$2.9*
Other transpt. equp mfg	$9.0	(D)	$8.7	$9.9	$13.1	*-$0.3*	*$1.1*	*$3.2*
Motor veh.& parts mfg.	$16.7	(D)	$20.7	$15.9	$12.9	*$4.0*	*-$4.8*	*-$3.0*
Electr. equp. & appl.	$7.2	$9.7	$11.7	$12.4	$10.4	*$4.5*	*$0.7*	*-$2.0*
Primary metals mfg.	$49.0	$16.9	$29.0	$4.7	$6.5	*-$20.1*	*-$24.3*	*$1.8*
Miscel. mfg.	$72	$68	$94	$89	$86	*$21.2*	*-$4.0*	*-$3.5*
Nondurable Mfg.	**$401**	**$423**	**$460**	**$465**	**$445**	***$59.5***	***$4.9***	***-$20.0***
Petro. & coal refining	$120	$113	$138	$162	$174	*$17.8*	*$24.2*	*$11.4*
Food products	$95	$103	$108	$110	$107	*$13.8*	*$1.6*	*-$3.0*
Chemical prod. mfg.	$42	$53	$62	$71	$52	*$20.0*	*$8.8*	*-$18.9*
Printing & related	$38	$39	$47	$37	$40	*$9.0*	*-$10.0*	*$3.4*
Beverages & tobac.	$32.5	$33.9	$30.2	$33.5	$38.3	*-$2.3*	*$3.3*	*$4.8*
Textile prod. mfg.	$6.3	$5.4	$6.0	$6.1	$5.5	*-$0.3*	*$0.0*	*-$0.5*
Leather prod. mfg.	$4.0	$5.4	$2.6	$2.7	$2.9	*-$1.4*	*$0.2*	*$0.2*
Textile mills prod.	(D)	(D)	$0.7	(D)	$0.6	(D)	(D)	(D)
Paper prod. mfg.	(D)	(D)	(D)	$22	(D)	(D)	(D)	(D)
Apparel mfg.	$4.2	$9.6	(D)	(D)	(D)	(D)	(D)	(D)
Utilities	**$297**	**$288**	**$326**	**$360**	**$368**	***$29.3***	***$33.9***	***$8.2***
Share of all lab. Inc.	1.6%	1.4%	1.4%	1.6%	1.5%	0.7%		0.5%
Transpt. & warehsg	**$860**	**$911**	**$958**	**$903**	**$1,061**	***$98.3***	***-$55.1***	***$158.0***
Share of all lab. Inc.	4.6%	4.4%	4.2%	3.9%	4.3%	2.2%		8.9%
Truck transport.	$395	$412	$408	$355	$466	*$12.5*	*-$52.6*	*$110.5*
Rail transport.	$232	$247	$259	$254	$283	*$27.1*	*-$5.9*	*$29.4*
Couriers & messeng.	$64	$80	$86	$89	$93	*$22.6*	*$2.9*	*$4.1*
Transpt. support activ	$53	$57	$76	$76	$86	*$22.8*	*$0.0*	*$9.9*
Pipeline transport.	$32	$29	$36	$55	$51	*$4.0*	*$18.8*	*-$4.4*
Transit & passeng. ground	$39	$43	$42	$39	$43	*$3.3*	*-$2.9*	*$4.2*
Air transport.	$35	$35	$41	$24	$25	*$6.0*	*-$16.5*	*$0.8*
Warehsg. & storage	$7.6	$4.6	$8.5	$9.5	$10.8	*$0.9*	*$1.0*	*$1.3*

D. Employment Trends in Montana among Industrial Sectors

Manufacturing employment peaked in Montana in 1979 with 29,000 jobs, 19,500 in durables including 12,000 in wood products. They fell to 22,000 in 1982 and gradually rose back to 29.000 again in 1997 (SIC codes). These jobs fell from 2001-07, even as labor earnings grew by $44 mil. Jobs fell by 4.160 during the recession, recovering by 1,566 between 2010 and 2012.

Job losses in durables were pronounced during the recession (minus 3,500), but these were declining in Montana in the pre-recession years (minus 1,100). Most losses were in wood products, but also in machinery, furniture, and primary metals. Jobs in nondurables (mainly food, printing, petroleum, beverages, and chemicals) have been more stable. There has been very little change in utility industry jobs. Transportation jobs have grown, spread throughout the sector.

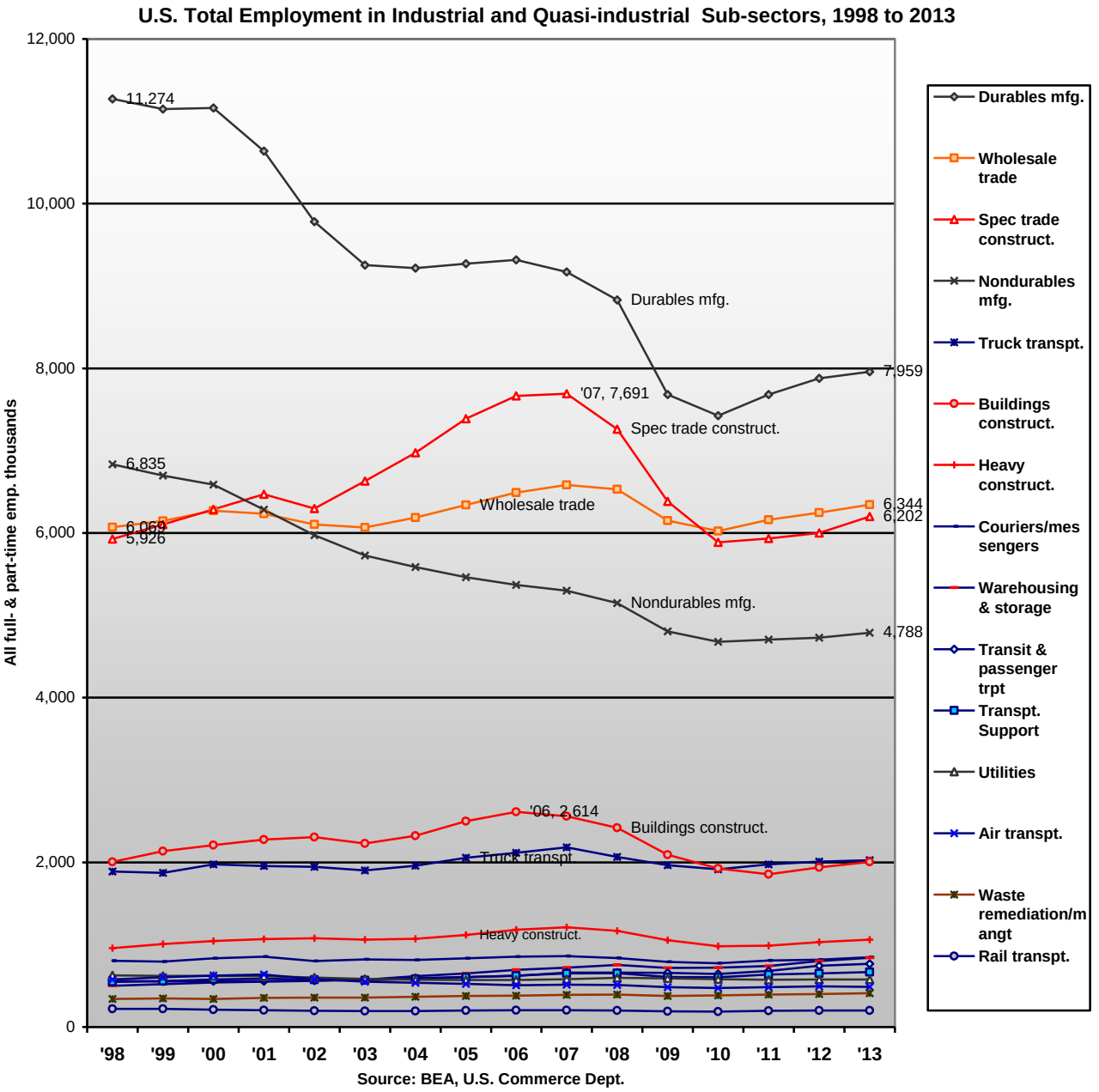
Most of these industries are shrinking in terms of their share of all jobs in Montana, even in this more recent and short period of time. Prior to the recession (2001-07) total jobs statewide increased by 75,400 while manufacturing jobs shrunk by 488, utility jobs fell by 96, and transport jobs grew by 1,200.

Montana State-wide	2001	2004	2007	2010	2012	2001-07	2007-2010	2010-2012
All Manufacturing	**24,450**	**22,273**	**23,962**	**19,802**	**21,368**	***-488***	***-4,160***	***1,566***
Share of total emp.	*4.4%*	*3.8%*	*3.8%*	*3.2%*	*3.4%*			*8.7%*
Durables Mfg.	**16,406**	**14,084**	**15,311**	**11,792**	**13,131**	***-1,095***	***-3,519***	***1,339***
Wood products mfg.	5,913	5,292	4,956	3,065	3,057	*-957*	*-1,891*	*-8*
Fabric. metal prod.	1,626	1,549	1,986	1,890	2,582	*360*	*-96*	*692*
Nonmetal. minerals	1,095	1,109	1,169	938	1,436	*74*	*-231*	*498*
Machinery mfg.	1,919	1,288	1,608	1,168	1,334	*-311*	*-440*	*166*
Furniture mfg.	1,400	1,348	1,233	971	947	*-167*	*-262*	*-24*
Computers & electron.	709	479	583	435	573	*-126*	*-148*	*138*
Motor veh.& parts mfg.	359	(D)	409	286	246	*50*	*-123*	*-40*
Other transpt. equp mfg	227	320	208	281	241	*-19*	*73*	*-40*
Electr. equp. & appl.	140	194	228	206	184	*88*	*-22*	*-22*
Primary metals mfg.	923	332	487	173	188	*-436*	*-314*	*15*
Miscel. mfg.	2,095	1,952	2,444	2,379	2,343	*349*	*-65*	*-36*
Nondurable Mfg.	**8,044**	**8,189**	**8,651**	**8,010**	**8,237**	***607***	***-641***	***227***
Food products	2,579	2,740	2,962	2,779	2,859	*383*	*-183*	*80*
Printing & related	1,195	1,205	1,338	1,099	1,137	*143*	*-239*	*38*
Petro. & coal refining	938	903	988	1,088	1,085	*50*	*100*	*-3*
Beverages & tobac.	788	826	769	766	935	*-19*	*-3*	*169*
Chemical prod. mfg.	687	800	885	997	895	*198*	*112*	*-102*
Leather prod. mfg.	173	201	176	203	370	*3*	*27*	*167*
Textile prod. mfg.	235	223	238	226	216	*3*	*-12*	*-10*
Textile mills prod.	(D)	(D)	47	(D)	64	(D)	(D)	(D)
Paper prod. mfg.	(D)	(D)	(D)	180	(D)	(D)	(D)	(D)
Apparel mfg.	318	298	(D)	(D)	(D)	(D)	(D)	(D)
Utilities	**3,240**	**2,971**	**3,144**	**3,168**	**3,285**	***-96***	***24***	***117***
Share of total emp.	*0.6%*	*0.5%*	*0.5%*	*0.5%*	*0.5%*			*0.6%*
Transpt. & warehsg	**17,412**	**17,064**	**18,626**	**17,411**	**19,200**	***1,214***	***-1,215***	***1,789***
Share of total emp.	*3.1%*	*2.9%*	*2.9%*	*2.8%*	*3.0%*	*1.6%*		*9.9%*
Truck transport.	7,914	7,465	7,765	7,125	8,045	*-149*	*-640*	*920*
Rail transport.	2,665	2,587	2,804	2,632	2,900	*139*	*-172*	*268*
Couriers & messeng.	(D)	(D)	2,612	2,464	2,680	(D)	*-148*	*216*
Transpt. support activ	1,455	1,549	1,864	1,763	1,943	*409*	*-101*	*180*
Transit & passeng. grd	1,696	1,620	1,736	1,600	1,625	*40*	*-136*	*25*
Air transport.	877	867	959	689	754	*82*	*-270*	*65*
Warehsg. & storage	308	(D)	(D)	(D)	656	(D)	(D)	(D)
Pipeline transport.	269	291	357	486	474	*88*	*129*	*-12*
Total employment	**558,884**	**583,900**	**634,292**	**613,163**	**631,196**	***75,408***	***-21,129***	***18,033***

D. Employment Trends for Industrial Sectors of the Economy in the U.S.

The chart at the right tracks total employment counts for key sectors and sub-sectors of the U.S. economy that may be most associated with industrial locations. Fifteen separate sectors or sub-sectors are included which include durables and nondurables manufacturing, seven different sub-sectors within transportation and warehousing (blue lines), and three different sub-sectors within construction (red). Employment in waste remediation and management (that is within the larger administrative and waste management services) is shown (brown), as is wholesale trade.

The largest employer among these is durables manufacturing, but its employment has fallen from 11.3 mil. in 1998 to less than 8 mil. Wholesale trade is the next largest employer and it has had relative stability in employment over time. Next is special trade contractor employment within the large construction sector and jobs here peaked in 2007. Nondurables manufacturing is next, but these jobs have fallen from 6.8 mil. to 4.8 mil. over the period. There is little or no employment growth in the remaining smaller sectors, as can be seen. There is no trend for even modest increases in employment in any of these areas.



D. Employment Trends in the U.S. among Industrial Sectors

Manufacturing employment in the U.S. peaked in 1979 at 21.5 million full- and part-time workers, which at that time represented 19% of all jobs in the U.S. In 2001 manufacturing jobs in the U.S. totaled 16.9 million and accounted for 10% of all jobs. And in 2012 these jobs totaled 12.6 million, 7% of all U.S. jobs.

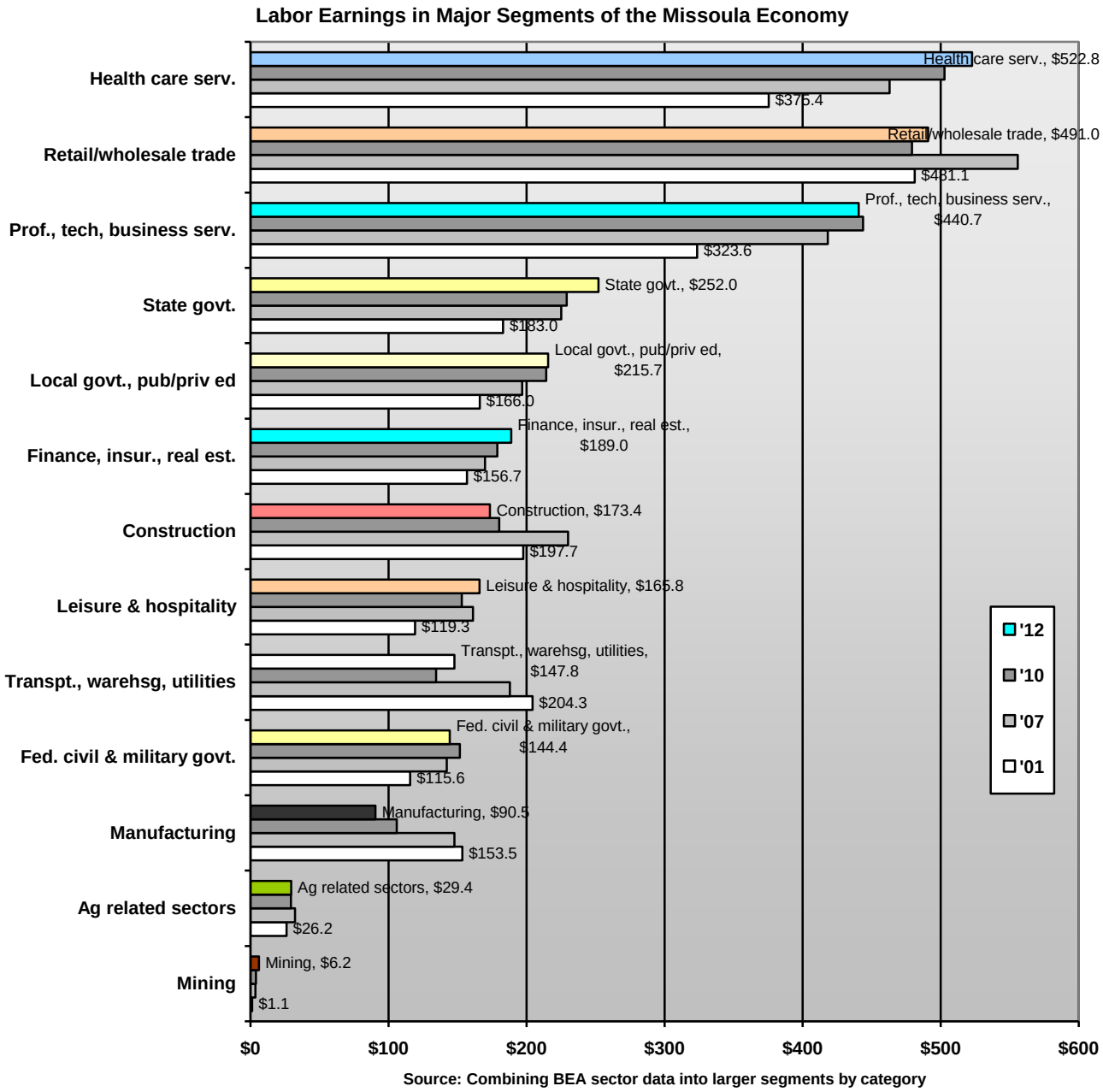
The table shows total employment nationally in manufacturing and its two major sub-components – durables and nondurables – as well as for major sub-sectors. Jobs in utilities and transportation and warehousing also are shown. Annual data for 2001, 2004, 2007, 2010, and 2012 are included, allowing changes in employment to be isolated for the pre-recession period (2001-07), recession period (2007-10), and post-recession recovery (2010-12). Periods where there were employment losses for the various sectors and sub-sectors are shown in "red". Every major sector and sub-sector of U.S. manufacturing lost employment in the pre-recession period of U.S. economic growth leading into the recession (2001-07) and they all lost employment during the recession. Most have seen some recovery more recently. Utilities lost employment in the pre-recession period and in the post-recession recovery.

United States (nation)	2001	2004	2007	2010	2012	2001-07	2007-2010	2010-2012
All Manufacturing	**16,921,600**	**14,800,900**	**14,471,800**	**12,102,900**	**12,596,500**	***-2,449,800***	***-2,368,900***	***493,600***
Share of total emp.	*10.2%*	*8.8%*	*8.0%*	*7.0%*	*7.0%*			
Durables Mfg.	**10,637,900**	**9,216,000**	**9,171,500**	**7,424,800**	**7,883,400**	***-1,466,400***	***-1,746,700***	***458,600***
Fabric. metal prod.	1,733,600	1,536,200	1,611,800	1,330,100	1,473,000	*-121,800*	*-281,700*	*142,900*
Machinery mfg.	1,401,900	1,179,600	1,230,600	1,037,700	1,154,200	*-171,300*	*-192,900*	*116,500*
Computers & electron.	1,768,800	1,330,100	1,289,300	1,118,900	1,113,800	*-479,500*	*-170,400*	*-5,100*
Motor veh.& parts mfg.	1,215,800	1,120,400	999,100	684,700	788,000	*-216,700*	*-314,400*	*103,300*
Other transpt. equp mfg	736,400	663,600	729,300	666,200	692,500	*-7,100*	*-63,100*	*26,300*
Primary metals mfg.	575,300	474,300	462,300	372,100	412,600	*-113,000*	*-90,200*	*40,500*
Nonmetal. minerals	554,000	514,600	517,300	391,500	402,000	*-36,700*	*-125,800*	*10,500*
Furniture mfg.	683,400	606,700	562,300	391,500	392,400	*-121,100*	*-170,800*	*900*
Electr. equp. & appl.	566,200	456,800	442,100	369,600	387,900	*-124,100*	*-72,500*	*18,300*
Wood products mfg.	625,900	611,200	569,800	389,500	387,800	*-56,100*	*-180,300*	*-1,700*
Miscel. mfg.	776,600	722,500	757,600	673,000	679,200	*-19,000*	*-84,600*	*6,200*
Nondurable Mfg.	**6,283,700**	**5,584,900**	**5,300,300**	**4,678,100**	**4,713,100**	***-983,400***	***-622,200***	***35,000***
Food products	1,593,700	1,538,000	1,539,200	1,491,300	1,530,200	*-54,500*	*-47,900*	*38,900*
Chemical prod. mfg.	971,700	907,300	880,400	807,100	828,500	*-91,300*	*-73,300*	*21,400*
Printing & related	816,800	712,900	679,200	553,000	520,700	*-137,600*	*-126,200*	*-32,300*
Paper prod. mfg.	578,400	496,800	458,900	396,500	381,800	*-119,500*	*-62,400*	*-14,700*
Beverages & tobac.	214,400	201,600	208,700	195,800	206,600	*-5,700*	*-12,900*	*10,800*
Apparel mfg.	458,700	316,100	255,400	198,000	176,000	*-203,300*	*-57,400*	*-22,000*
Textile prod. mfg.	206,600	184,400	167,100	129,500	130,100	*-39,500*	*-37,600*	*600*
Textile mills prod.	334,200	240,100	174,000	125,600	125,900	*-160,200*	*-48,400*	*300*
Petro. & coal refining	121,900	113,600	117,000	112,900	113,000	*-4,900*	*-4,100*	*100*
Leather prod. mfg.	63,300	47,500	39,500	34,300	44,700	*-23,800*	*-5,200*	*10,400*
Utilities	**615,800**	**575,400**	**580,600**	**582,200**	**575,200**	***-35,200***	***1,600***	***-7,000***
Share of total emp.	*0.4%*	*0.3%*	*0.3%*	*0.3%*	*0.3%*			
Transpt. & warehsg	**5,479,000**	**5,427,800**	**5,948,900**	**5,474,200**	**5,838,400**	***469,900***	***-474,700***	***364,200***
Share of total emp.	*3.3%*	*3.2%*	*3.3%*	*3.2%*	*3.3%*			
Truck transport.	1,954,300	1,958,300	2,182,600	1,916,600	2,014,100	*228,300*	*-266,000*	*97,500*
Couriers & messeng.	852,800	814,400	861,700	774,500	834,600	*8,900*	*-87,200*	*60,100*
Warehsg. & storage	549,400	616,800	719,700	719,500	774,000	*170,300*	*-200*	*54,500*
Transit & passeng. ground	557,300	593,900	659,200	645,300	700,000	*101,900*	*-13,900*	*54,700*
Transpt. support activ	587,300	583,300	650,100	605,400	656,000	*62,800*	*-44,700*	*50,600*
Air transport.	636,800	536,100	513,300	474,600	492,400	*-123,500*	*-38,700*	*17,800*
Rail transport.	202,900	194,000	204,000	187,200	202,200	*1,100*	*-16,800*	*15,000*
Pipeline transport.	44,100	38,200	40,900	42,400	44,500	*-3,200*	*1,500*	*2,100*
Total employment	**165,519,200**	**169,036,700**	**179,874,700**	**173,043,700**	**179,613,300**	***14,355,500***	***-6,831,000***	***6,569,600***

D. Sectors Combined into Major Segments of the Area Economy

Data for several sectors are combined in the chart at the right, reducing the economic profile of the economy from 24 sectors to 13 "segments". In this, health care remains alone, as does state government, construction, manufacturing, and mining. Professional and technical services is combined with administrative, information, and management services; retail and wholesale trade are combined along with other services (largely consumer services); educational services are combined with local government that also includes public education; finance and insurance is combined with real estate; accommodations is combined with arts and entertainment services to form leisure and hospitality; transportation and warehousing is combined with utilities; the federal civilian government and U.S. military are combined; and farm and ranch net income is combined with ag services.

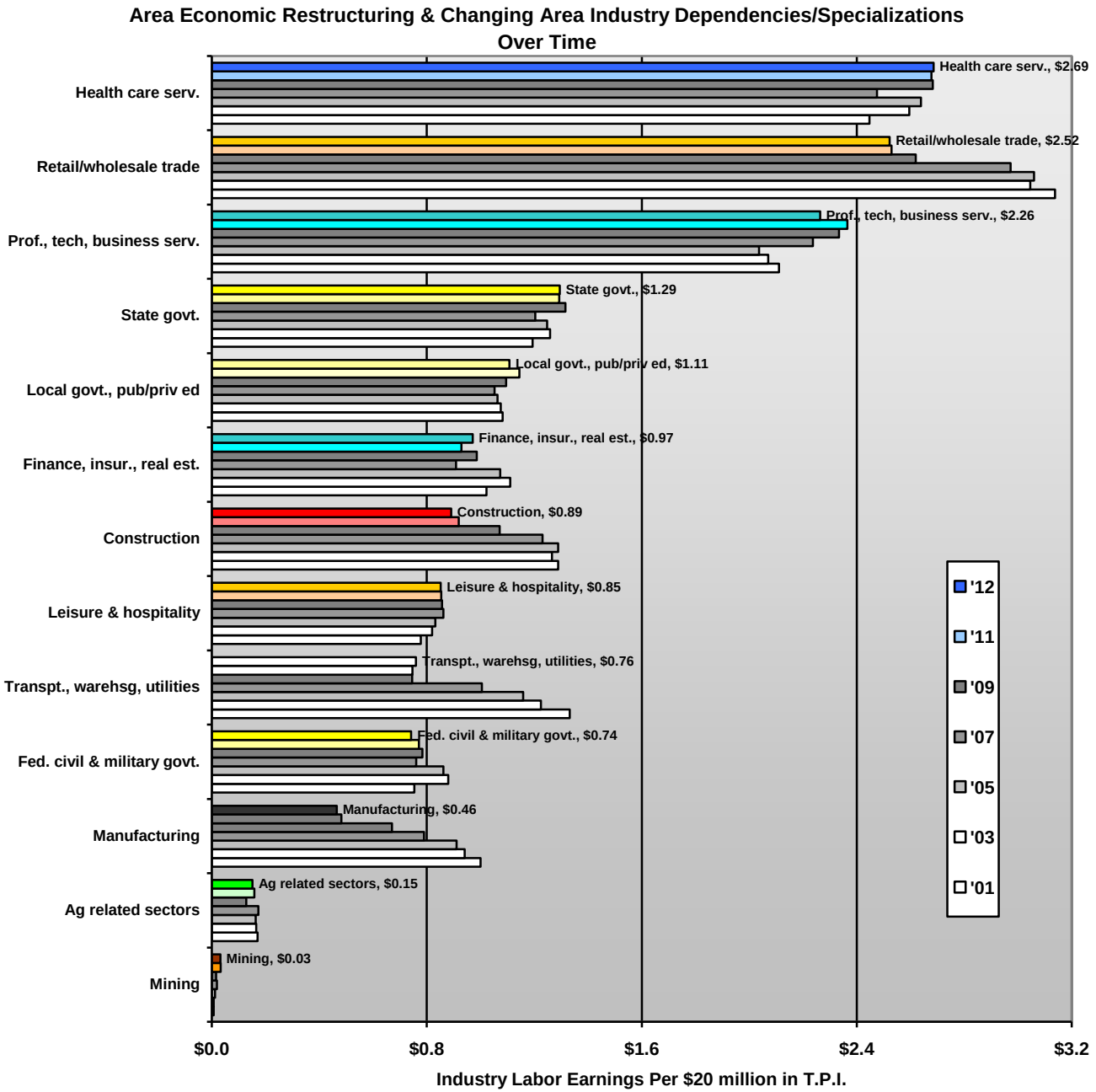
These are the major segments of the Missoula economy by size in terms of labor earnings. Health care ($523 mil.) is largest followed by retail/wholesale trade ($491 mil.) and then professional, technical, and business services ($441 mil.). State govt. including UM is next ($252 m.).



D. Recent Shifts and Changes in Areas of Sector Specialization in the Missoula Economy

As the Missoula economy changes with some sectors and segments growing while others decline, areas of specialization within the economy shift and change. And dependencies on the various segments for local area income change as well. This chart examines area industry dependencies or specializations for Missoula County since 2001. For each major sector, the amounts of area labor earnings generated for every $20 mil. in total personal income are calculated for each year.

Health care has become the area of greatest specialization within the Missoula economy. It generates $2.7 mil. in labor earnings for every $20 mil. in area total personal income. Retail and wholesale trade is the 2nd greatest area of specialization with this segment generating $2.5 mil. in labor earnings per $20 mil. in personal income and professional, technical, and business services is 3rd at $2.3 mil. These are the "big three" areas of economic specialization in Missoula County, with state government including the University of Montana, 4th at $1.3 mil. Dependency on manufacturing and transportation, warehousing, and utilities has declined considerably.

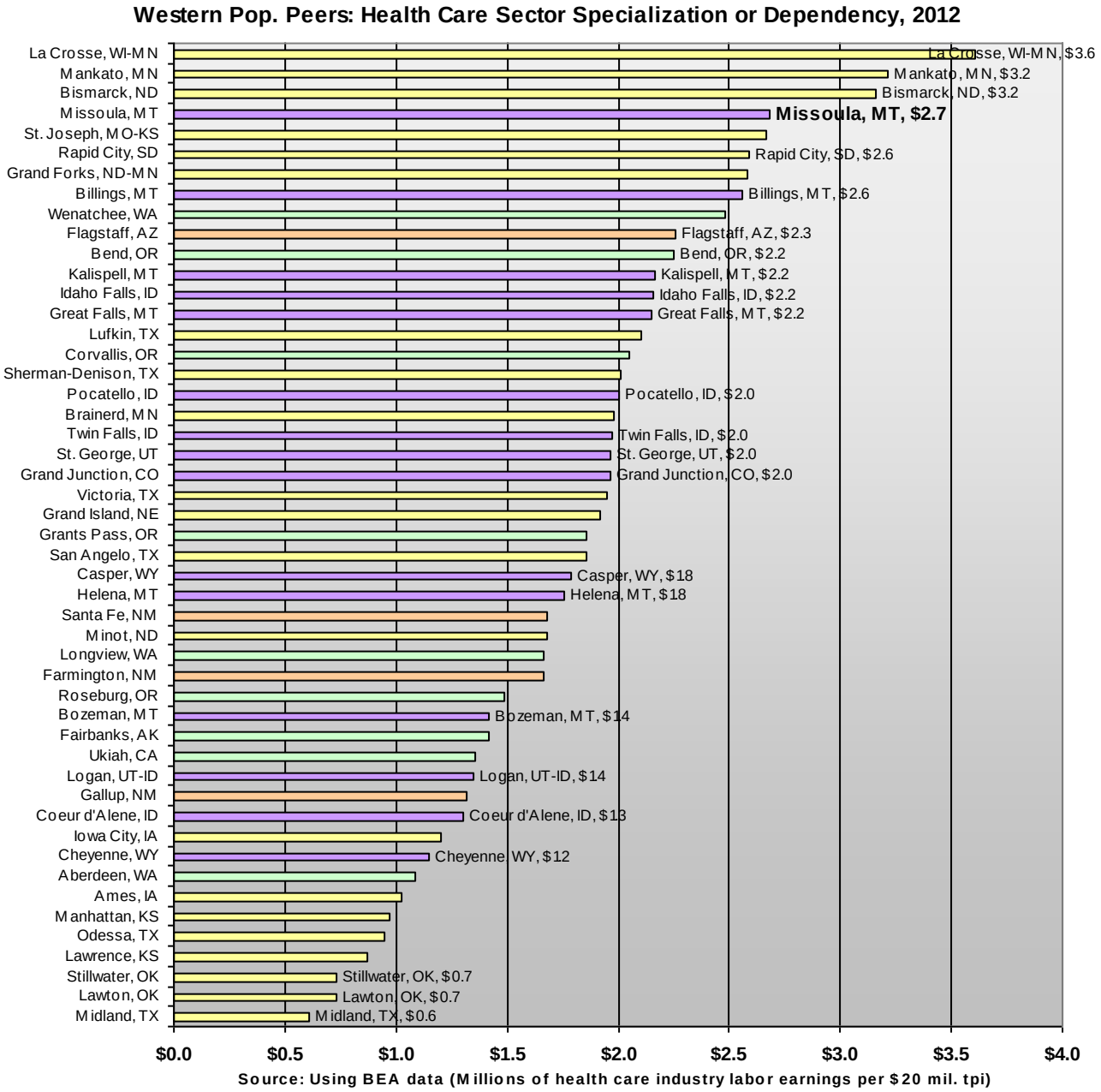


D. Specialization in Health Care Services among Missoula's Western Peers

One of Missoula County's primary areas of specialization is in health care services. This segment of the economy generated about $2.7 mil. in labor earnings for every $20 mil. in area personal income. To see how specialized Missoula may be in this area, this measure is compared for all of the 50 peer places in the West.

Among the 50 peers, Missoula ranks very high (4th) in the relative importance of health care services in the structure of the area economy and in area economic specialization. The peer with the greatest specialization and dependency in this is La Crosse, WI, at $3.6. Mankato, MN, and Bismarck, ND, are 2nd and 3rd at $3.2 mil. Midland, TX, and Lawton, OK, are the least specialized in this area; each with less than $0.7 mil. in health care labor earnings per $20 mil. in income.

Among Montana peers, Missoula ranks highest, followed by Billings at $2.6, Kalispell and Great Falls at $2.2, Helena at $1.8, and Bozeman at $1.4 mil. For whatever reason, the health care sector of Bozeman and Gallatin County is quite small, perhaps due to the proximity of Billings.

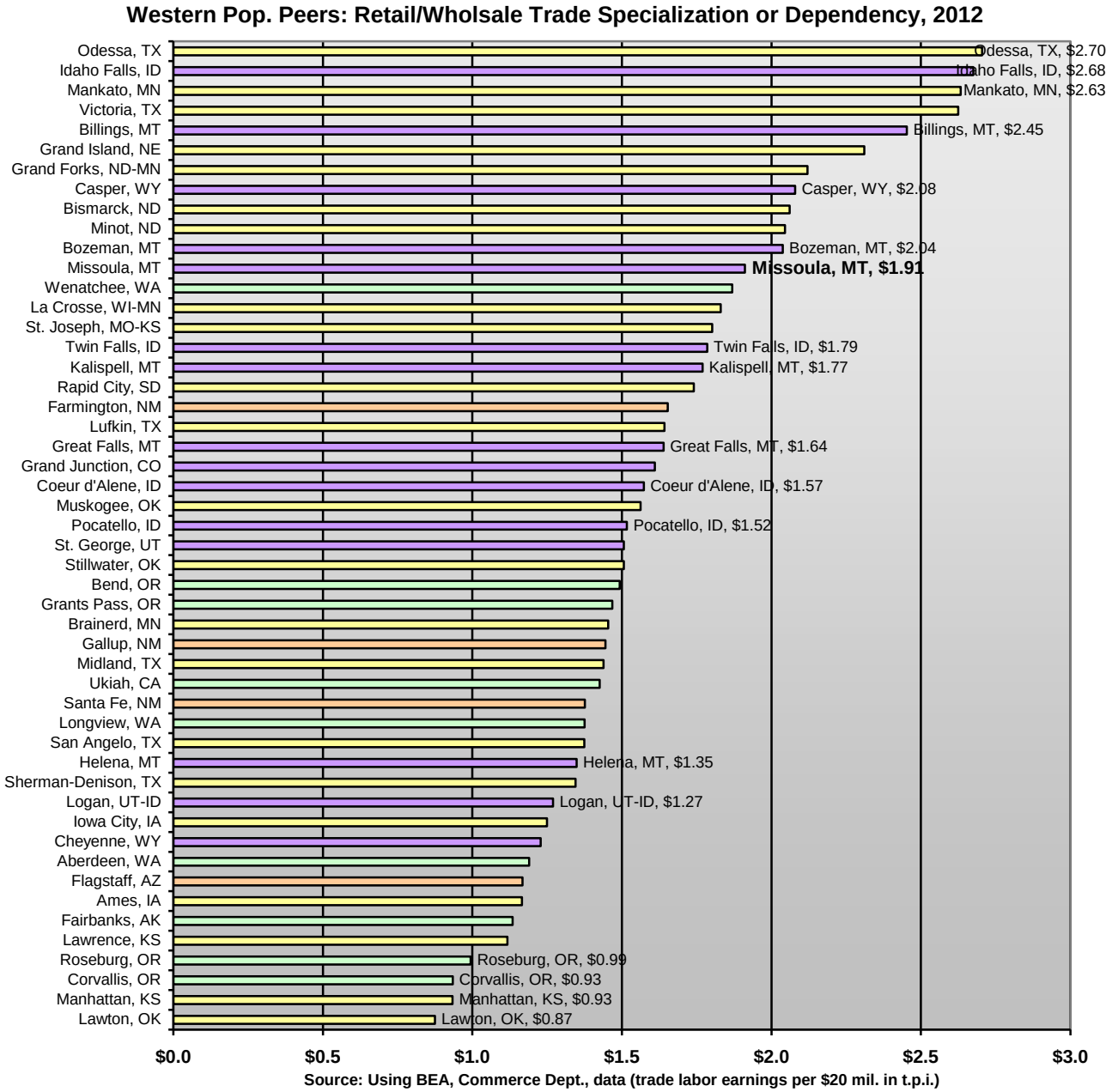


D. Area Specialization in Retail & Wholesale Trade among Western Peers

Missoula County's 2nd largest area of economic specialization is retail and wholesale trade. When labor earnings generated by those employed in retail trade, wholesale trade, and other services (which are largely consumer retail-type services) are added together, they represent about $2.5 mil. in labor earnings per $20 mil. in area personal income. If just retail trade and wholesale trade are added together, these represent $1.9 mil. in labor earnings per $20 mil. in personal income.

This latter measure is compared to similar measures for the 50 peer places in the West which are then rank-ordered in terms of their dependent this segment of the economy. Missoula ranks 12th among these peers in this area of specialization. Ranking highest are Odessa, TX, and Idaho Falls at $2.7 mil. Ranking lowest in trade center specialization are Lawton, OK, at $0.87 and Manhattan, KS, and Corvallis, OR, at $0.93 mil.

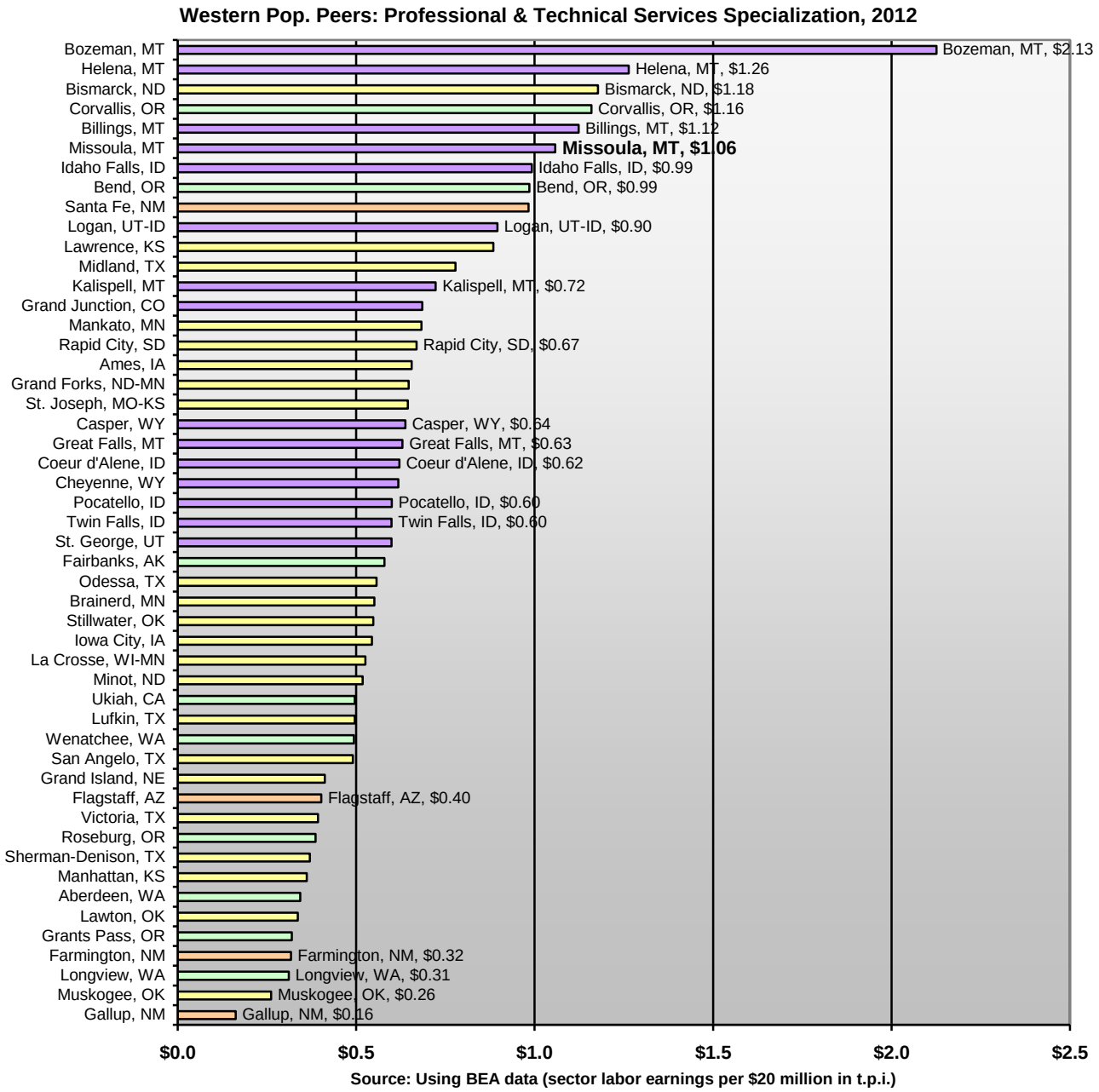
Among Montana peers, Billings ranks highest at $2.45 mil. Bozeman ranks just above Missoula at $2.04 mil. Kalispell ($1.77), Great Falls ($1.64), and Helena ($1.35) rank significantly below Missoula.



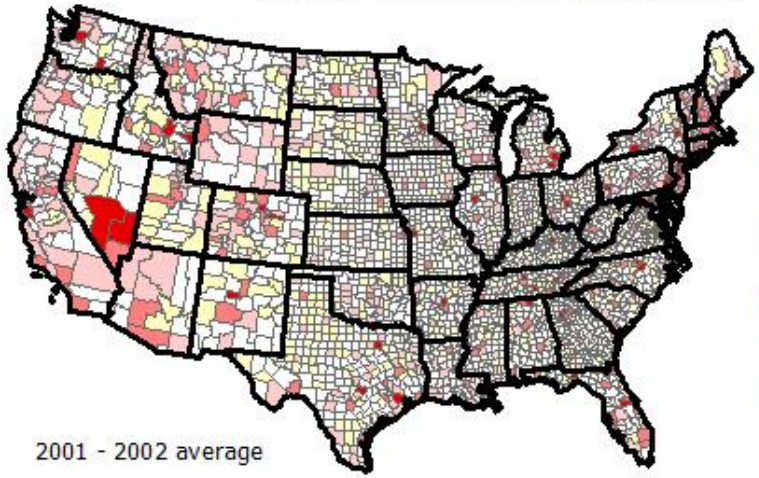
D. Area Specialization in Professional, Scientific, and Technical Services among Western Peers

Missoula County's 3rd largest area of economic specialization is in professional, technical, and business services which includes not only professional, scientific, and technical services, but also administrative, information, and management services. Together these sectors generated $2.3 mil. in area labor earnings for every $20 mil. in total personal income. If we consider the largest of these by itself – professional, scientific, and technical services – this sector generated $1.06 mil. in labor earnings for every $20 mil. in income.

At this level, Missoula County ranks 6th highest among the 50 peers in this area of economic specialization. Ranking first is Bozeman at $2.13 mil. Ranking 2nd highest is Helena, but at a considerably lower level than Bozeman at $1.26 mil. This is an impressive showing by Bozeman given the fact that this is one area of fairly rapid growth in the U.S. economy as a whole. It also helps makeup for the much lower level of area specialization in health care. Billings ranks slightly above Missoula at $1.12 mil. Kalispell ($0.72) and Great Falls ($0.63) rank lower. Gallup is lowest among the 50 peers.



Area Economic Dependency on Professional & Technical Services in the U.S.



2001 - 2002 average

The professional, scientific, and technical services sector (many times simply referred to as professional and technical services) is the 2nd largest generator of labor earnings nationally among major NAICS sectors. It is the 6th largest employer. The maps capture aspects of the geographic distribution of this sector in years prior to the 2007-09 recession. The scale and measure used also indicates how specialized an area may be in this sector of the economy, as well as how dependent an area may be on it as a source of income. Nation-wide in the 2004-2005 period professional and technical services generated $1.47 mil. in labor earnings for every $20 mil. in total personal income.

Professional and Technical Services
Labor Earnings Per $20 million
in Total Personal Income

- $2.0 and greater - "very high"
- $1.0 to $2.0 - "high"
- $0.5 to $1.0 - "moderately high"
- Less than $0.5 - "average or low"
- Data not available

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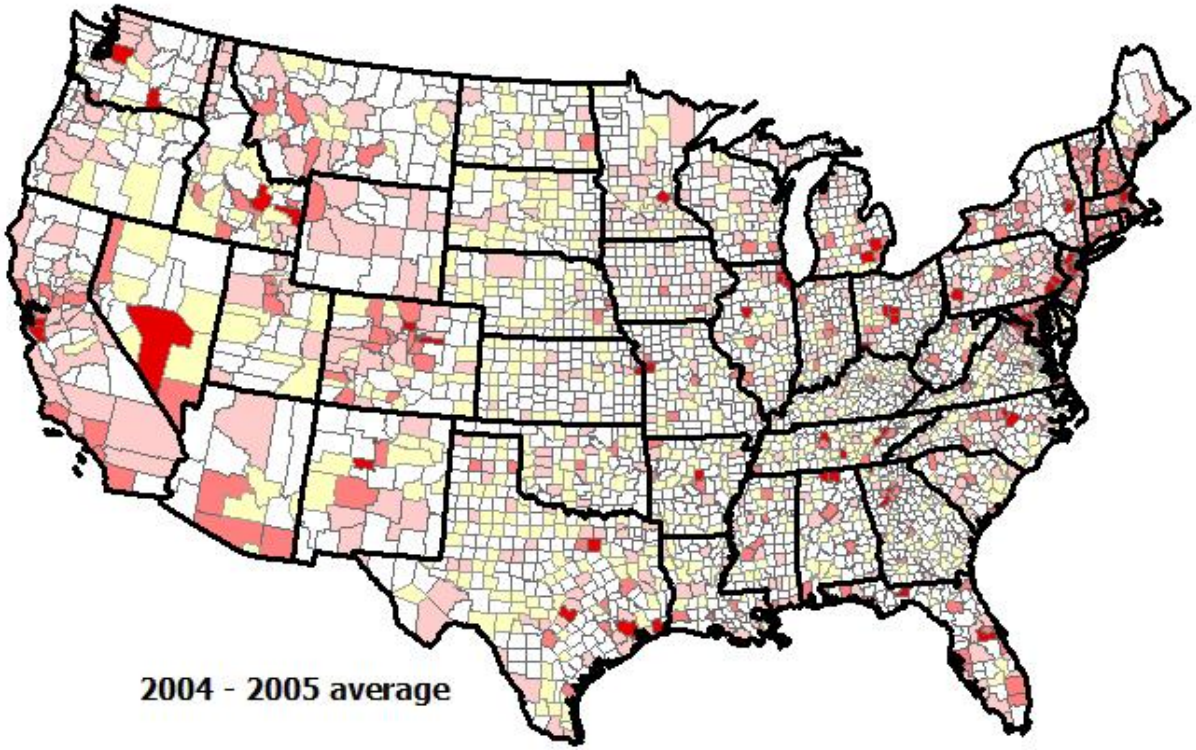


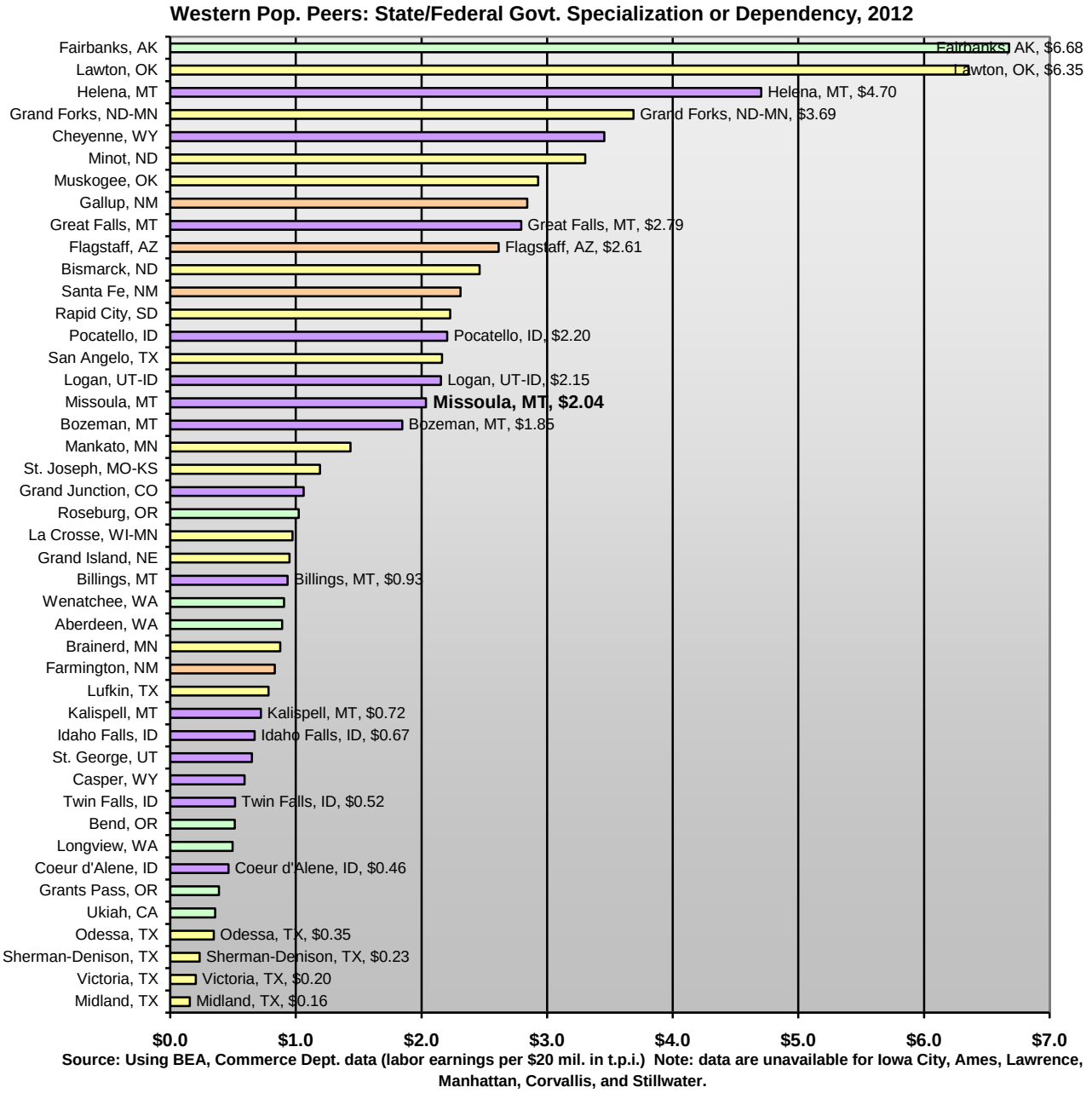
2004 - 2005 average

D. Specialization in Federal and State Government among Missoula's Western Peers

State government activity in Missoula County includes all persons employed in the county by state entities, including the University of Montana. By itself this is the 4th most important area of economic specialization in Missoula County after health care, trade center activity, and professional and business services. State government generates $1.3 mil. in local labor earnings for every $20 mil. in personal income. When you add to this labor earnings generated by federal civilian government activities, like those of the U.S. Forest Service, and U.S. military activities this rises to $2.04 mil. The chart shows how this compares with Missoula peers.

Fairbanks, AK, and Lawton, OK, rank highest in this area of dependency at $6.68 mil. and $6.35 mil., respectively. Helena ranks 3rd among the 50 peers at $4.70 mil. Great Falls ranks 9th at $2.79 mil., while Missoula County at $2.04 mil. ranks 17th just ahead of Bozeman, ranked 18th, with $1.85 mil.

Four places in Texas (Midland, Victoria, Sherman-Denison, and Odessa) rank lowest in this area.

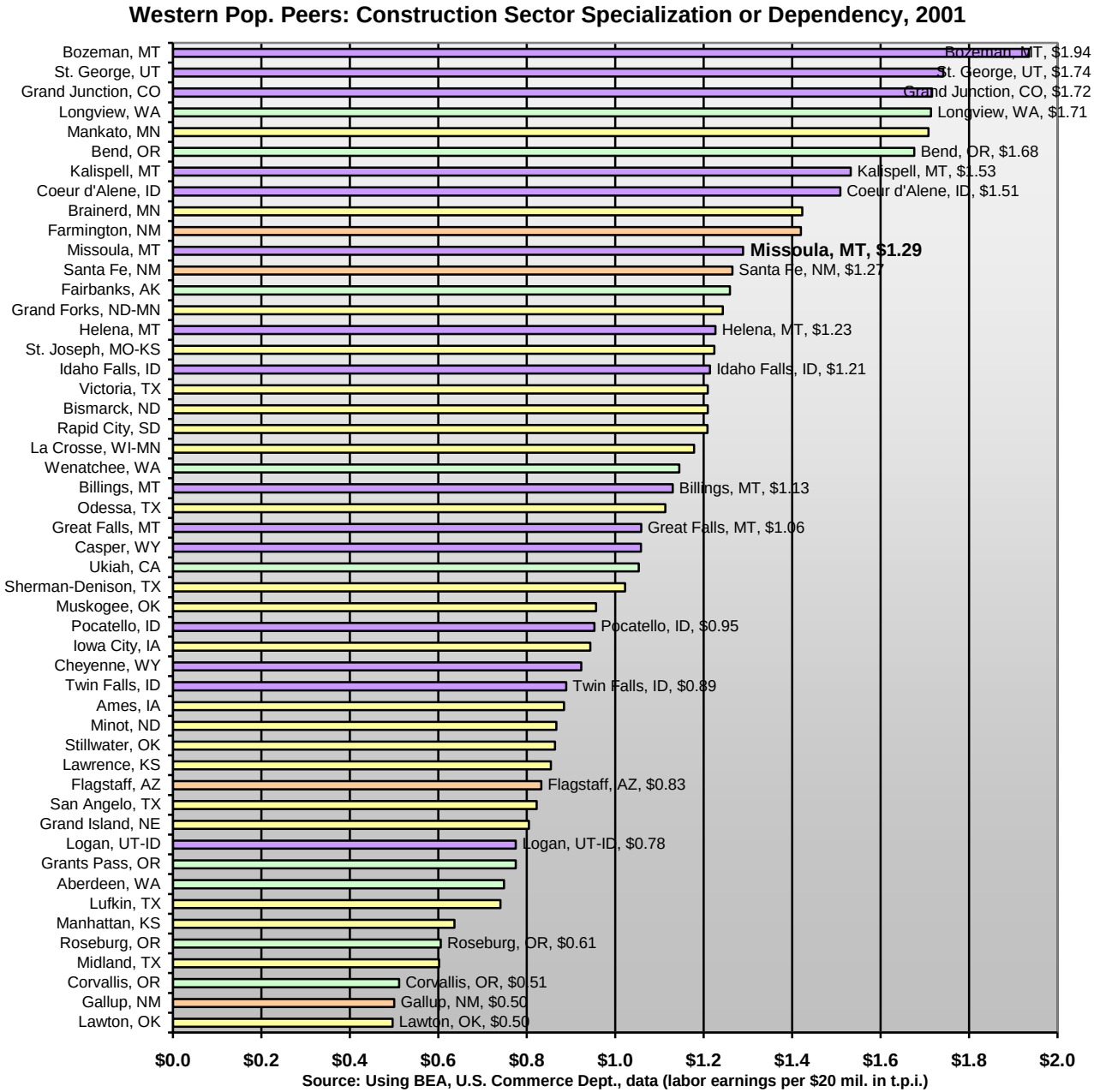


Source: Using BEA, Commerce Dept. data (labor earnings per $20 mil. in t.p.i.) Note: data are unavailable for Iowa City, Ames, Lawrence, Manhattan, Corvallis, and Stillwater.

D. Area Specialization in or Dependency upon the Construction Sector among Western Peers

Construction includes all those employed in the area for special trade contractors (electricians, plumbers, carpenters, etc.), for builders of buildings (home builders and commercial building constructors), and for construction companies doing heavy construction projects like highways and large engineering projects, along with their contractors. The chart shows area specialization or dependency of peers using 2001 data for construction labor earnings and total income. The 2001 data provide a picture of the relative importance the construction sector had in the area economy well prior to 2006 and 2007 when construction activity rapidly declined in the recent recession.

The peer area with the highest dependence and economic specialization in construction is Bozeman (Gallatin) with $1.94 mil. in construction labor earnings for every $20 mil. in personal income. St. George, UT, and Grand Junction, CO, are 2nd and 3rd highest, reflecting their ties to area construction. Missoula ranks 11th among the 50 peers at $1.29 mil. Five of the top 8 are in the Rocky Mountain West where construction has been high.



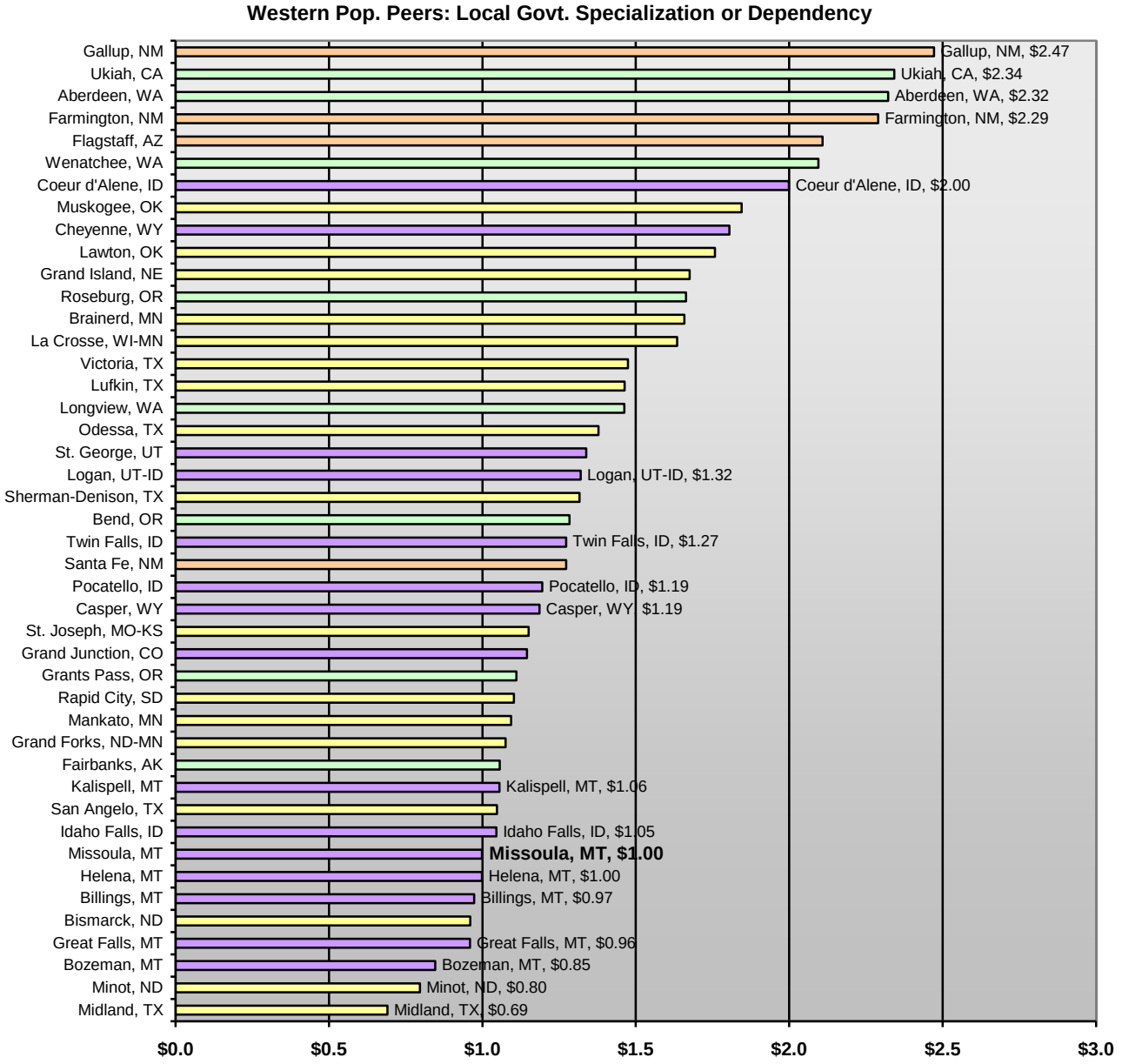
D. Area Specialization in Local Government among Missoula's Western Peers

Local government includes all entities of city and county government and also includes local public education. In 2012 local government accounted for $1 mil. in area labor earnings for every $20 mil. in personal income. It is important to compare this with other similar places to consider whether this is a high dependence on local government or low dependence.

The chart shows similar measures for 44 of the 50 western population peers (these data were unavailable for the others). At $1 mil. Missoula ranks 37th among the 44 peers. This indicates that persons employed in the area in local government account for a relatively small share of total personal income in relation to what this represents in other peers.

All six of the Montana peers rank low in this regard with Bozeman 42nd out of 44 at $0.85 mil. in local government labor earnings per $20 mil. in personal income. Great Falls ranks 41st at $0.96 mil. while Billings ranks 39th at $0.97 and Helena 38th at $1.00 mil., tied with Missoula.

All of the Montana counties are similar in how they are organized and funded for local government and local public education and all rank low in this area of economic dependency.



Source: Using BEA, U.S. Commerce Dept. data (labor earnings per $20 mil. in t.p.i.) Note: data are unavailable for Ames, Iowa City, Lawrence, Manhattan, Corvallis, and Stillwater.

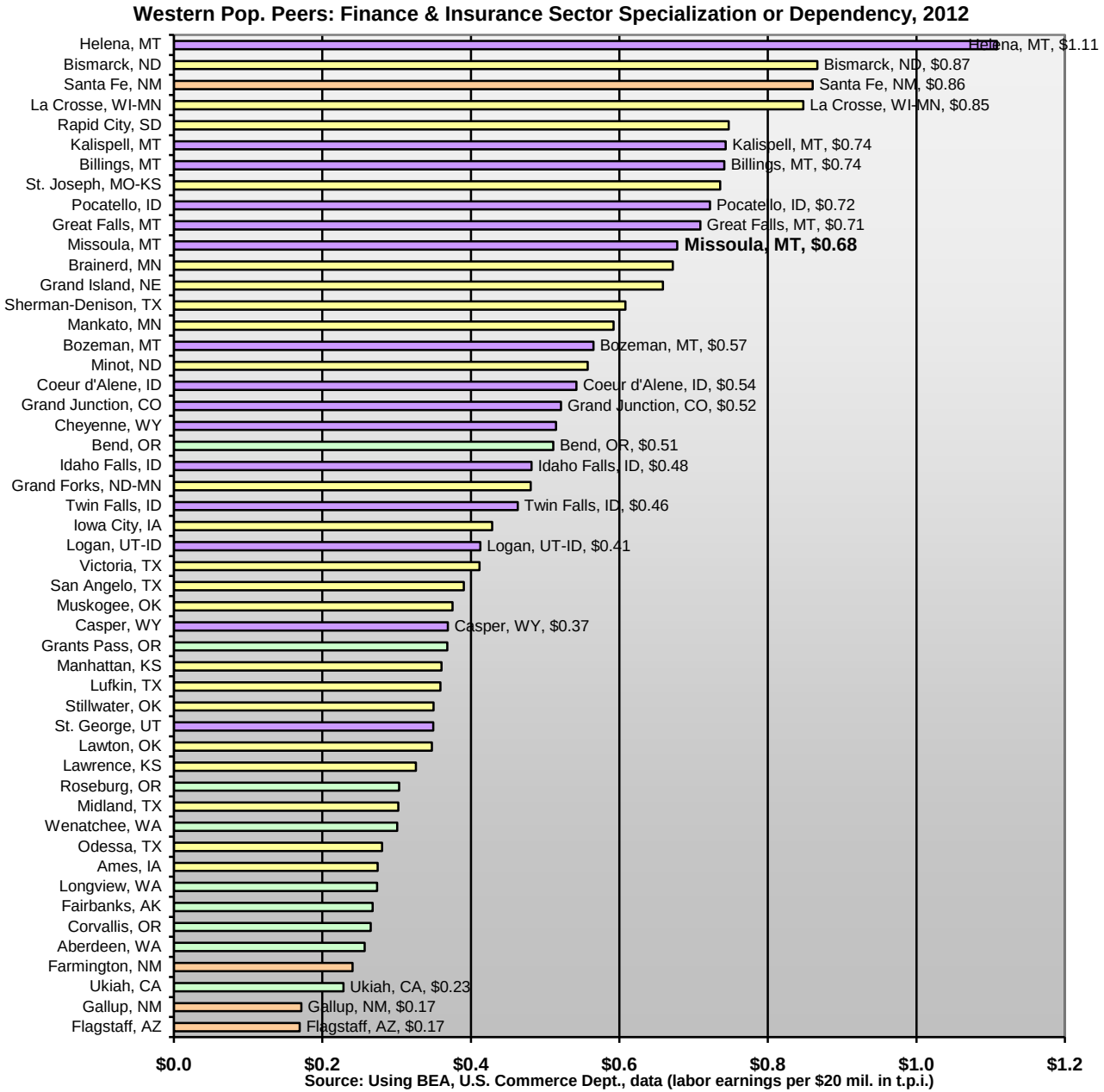
D. Area Specialization in Finance and Insurance among Western Peers

In 2012 the finance and insurance sector generated $0.68 mil. in labor earnings for every $20 mil. in personal income. The chart shows how this ranks among western peers.

Missoula ranked 11th in this area of economic specialization and dependency among the 50 peers. Helena ranks 1st at $1.11 mil., probably due to the presence of a regional branch of the federal reserve banking system along with Helena's relatively small population.

Kalispell ($0.74 mil.), Billings (also $0.74 mil.), and Great Falls ($0.71 mil.) all rank higher than Missoula and along with Missoula all rank in the top 11, suggesting fairly large relative presences of banking and insurance activity in each of the Montana areas. Bozeman ranks the lowest at 16th ($0.57 mil.).

Among all 50 peers the areas with the lowest area specializations and dependencies on the finance and insurance sector are Flagstaff and Gallup in New Mexico, both at $0.17 mil.



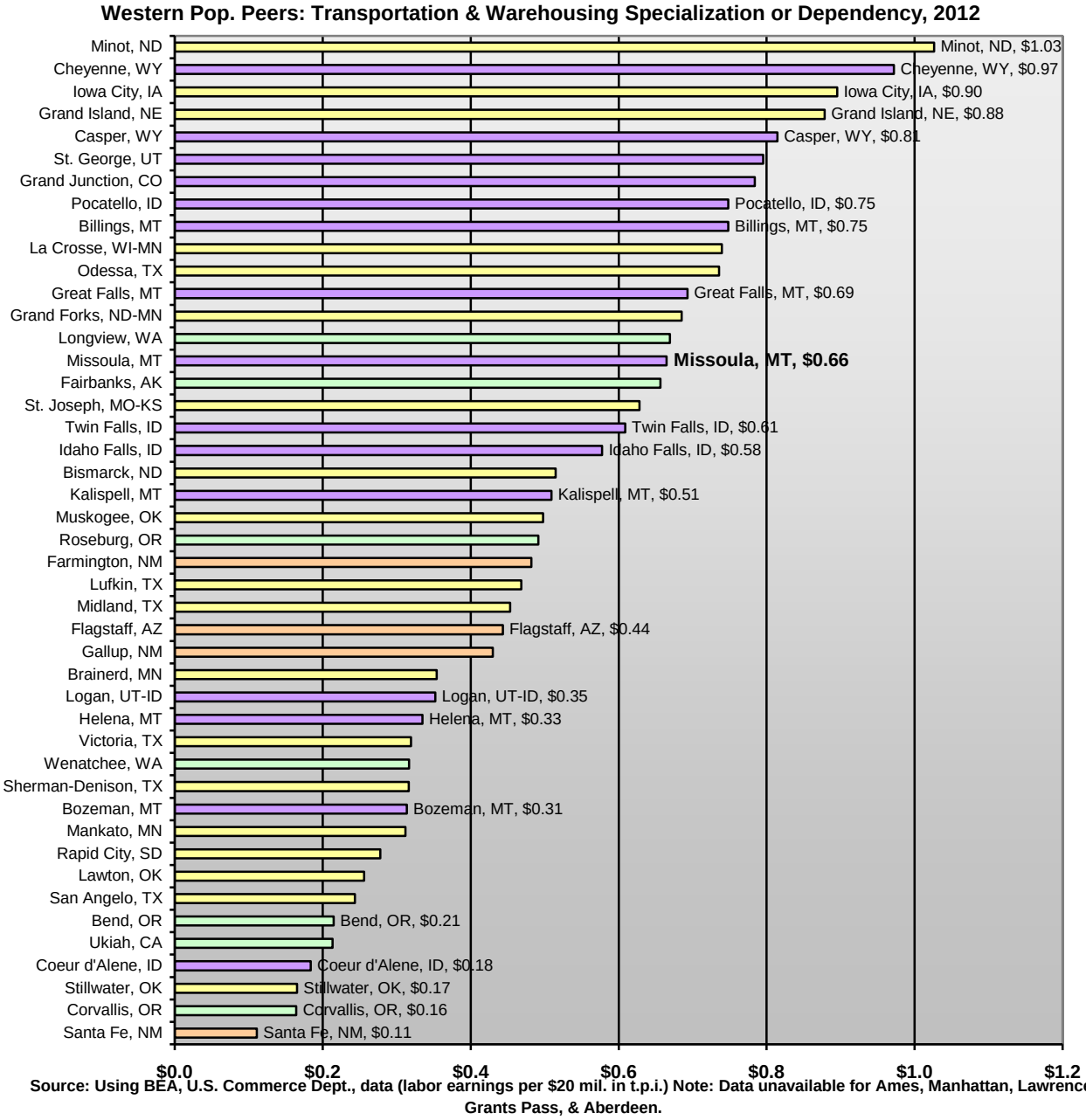
D. Area Specialization in Transportation and Warehousing among Western Peers

In 2012 the transportation and warehousing sector generated $129 million in area labor earnings in Missoula County, which was about $0.66 mil. for every $20 mil. in area personal income. The transportation and warehousing sector includes railroads and trucking firms and their employment and local area labor earnings. It also includes air transportation, pipelines, warehousing, and transportation support. The chart shows how this compares with western peers.

Missoula ranked 15th among the 50 in this area of economic specialization and dependency. Minot, ND, ranked highest with $1.03 mil. in labor earnings and Cheyenne, WY, ranked 2nd highest at $0.97 mil.

Ranking highest among peers in Montana is Billings at $0.75 mil., 9th highest among peers. Great Falls ranked 12th at $0.69 mil. Ranking lowest among Montana peers in this area of specialization is Bozeman at $0.31 mil, 35th among the 50 peers.

Santa Fe, NM, ranked lowest in this area of specialization with only $0.11 mil. in labor earnings for every $20 mil. in personal income.



Source: Using BEA, U.S. Commerce Dept., data (labor earnings per $20 mil. in t.p.i.) Note: Data unavailable for Ames, Manhattan, Lawrence, Grants Pass, & Aberdeen.

D. Recent Trends in Transportation & Warehousing Employment among Montana Peers

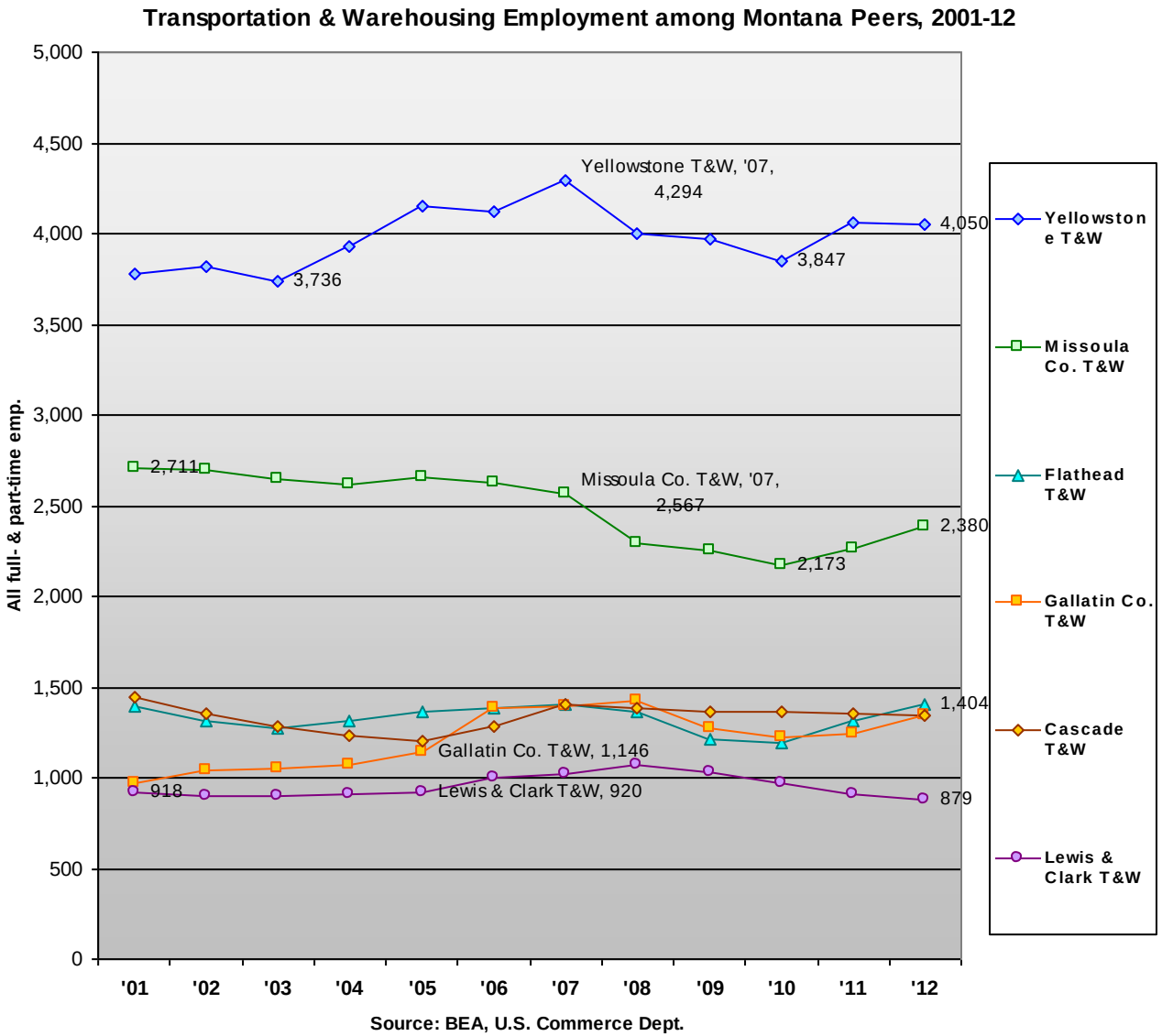
Total employment counts for the six Montana peers for the transportation and warehousing sector as a whole are shown in the chart at the right covering recent patterns for the 2001-12 period. Included in this is employment in all facets of transportation (rail, truck, air, local, pipelines, etc.) and well as warehousing and storage.

Yellowstone Co. has the highest employment in this sector among the six with 4,050 full and part-time jobs in 2012. This is down from a high over the period of 4,294 in 2007, but up from 2010.

Missoula Co. is 2nd among the six in this area of employment with 2,380 jobs in 2012. This is down considerably from the 2,711 jobs in the county in 2001.

Flathead, Gallatin, and Cascade all have very similar levels of employment in this sector at around 1,400 each. This is up a bit for Gallatin Co. over its employment in 2001, but at similar levels for the other two counties.

Lewis & Clark has the lowest level of employment in this sector at 879 in 2012, down some from earlier in the period (over 1,000 jobs in 2008.



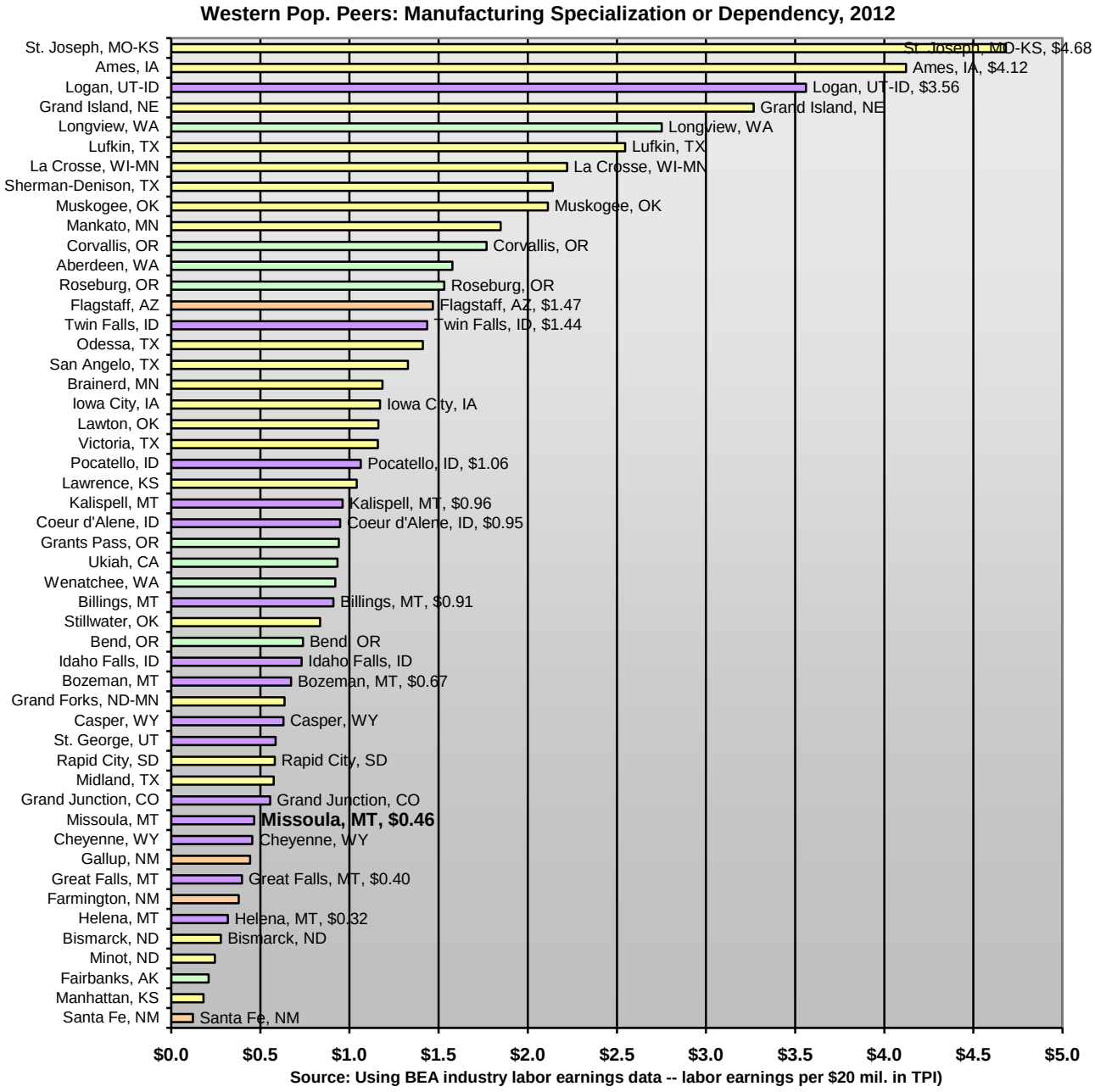
Source: BEA, U.S. Commerce Dept.

The Montana Department of Labor & Industry in its latest jobs projections estimates job growth in transportation and warehousing of 2,800 jobs over the 2012-22 ten-year period.

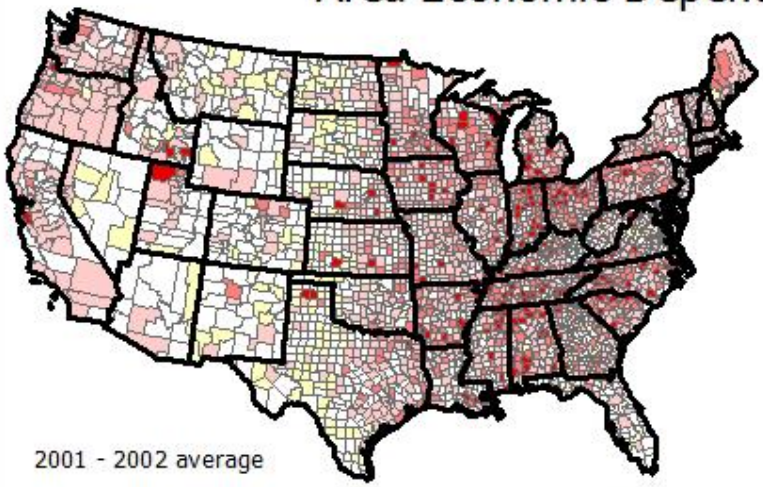
D. Manufacturing Specialization or Dependency among Western Peers

While ranking relatively high in area specialization in health care services, trade, and professional, scientific, and technical services, Missoula ranks low among peers in its specialization in manufacturing. In 2012 manufacturing generated $0.46 mil. in labor earnings in Missoula County for every $20 mil. in total personal income. This is the 11th highest among the 13 segments of the economy ranking this area of specialization low for Missoula and low when compared to similar measures for the 50 peers.

Missoula ranks 40th among peers in area manufacturing specialization and dependency. Ranking highest is St. Joseph, MO, at $4.68 mil., Ames, IA, ranks 2nd at $4.12 mil., and Logan, UT, ranks 3rd at $3.56 mil. Peers in the larger Plains region (yellow) tend to rank higher in this than places in the Mountain region (which can be seen in the map on the next page).. Among the six Montana peers, Kalispell ranks highest at $0.96 mil., ranking it 24th among the 50 peers. Billings is 2nd highest in manufacturing specialization at $0.91 mil., which ranks it 29th among the 50. Bozeman is next at $0.67 mil., ranking it 33rd. Great Falls and Helena are both below Missoula at $0.40 mil., and $0.32 mil.



Area Economic Dependency on Manufacturing in the U.S.



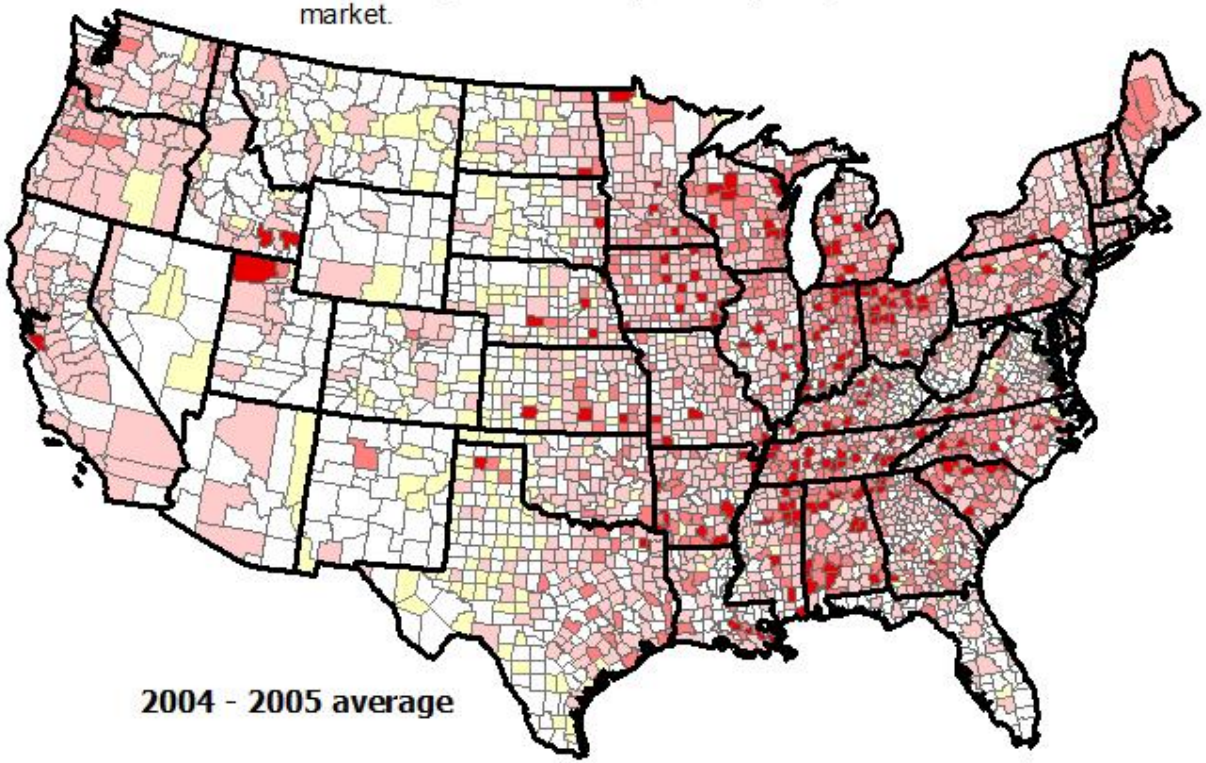
2001 - 2002 average

In 2013 manufacturing was the 3rd largest generator of labor earnings among major sectors of the economy in the U.S. Prior to the 2007-09 recession, manufacturing was first among major sectors in labor earnings and 3rd in employment. Nation-wide there were $1.91 mil. in manufacturing labor earnings for every $20 mil. in total personal income in the 2004-05 period. Dark red areas – very highly dependent on manufacturing – have $5 mil. and more in these manufacturing labor earnings for every $20 mil. in personal income. Most of these are in the eastern U.S. Areas in medium red also have high dependencies on manufacturing and they also are mainly in the east. The Interior West region of the U.S. has the lowest dependencies on manufacturing of any region of the nation. This is largely because of the region's relative geographic isolation and the length and difficulty of transporting manufactured items to market.

Mining Labor
Earning Per $20 million
in Total Personal Income

- $5.0 and greater - "very high"
- $3.0 to $5.0 - "high"
- $1.0 to $3.0 - "moderately high"
- Less than $1.0 - "average or low"
- Data not available

Carroll and Nancy Fields O'Connor Center for the Rocky Mountain West



2004 - 2005 average

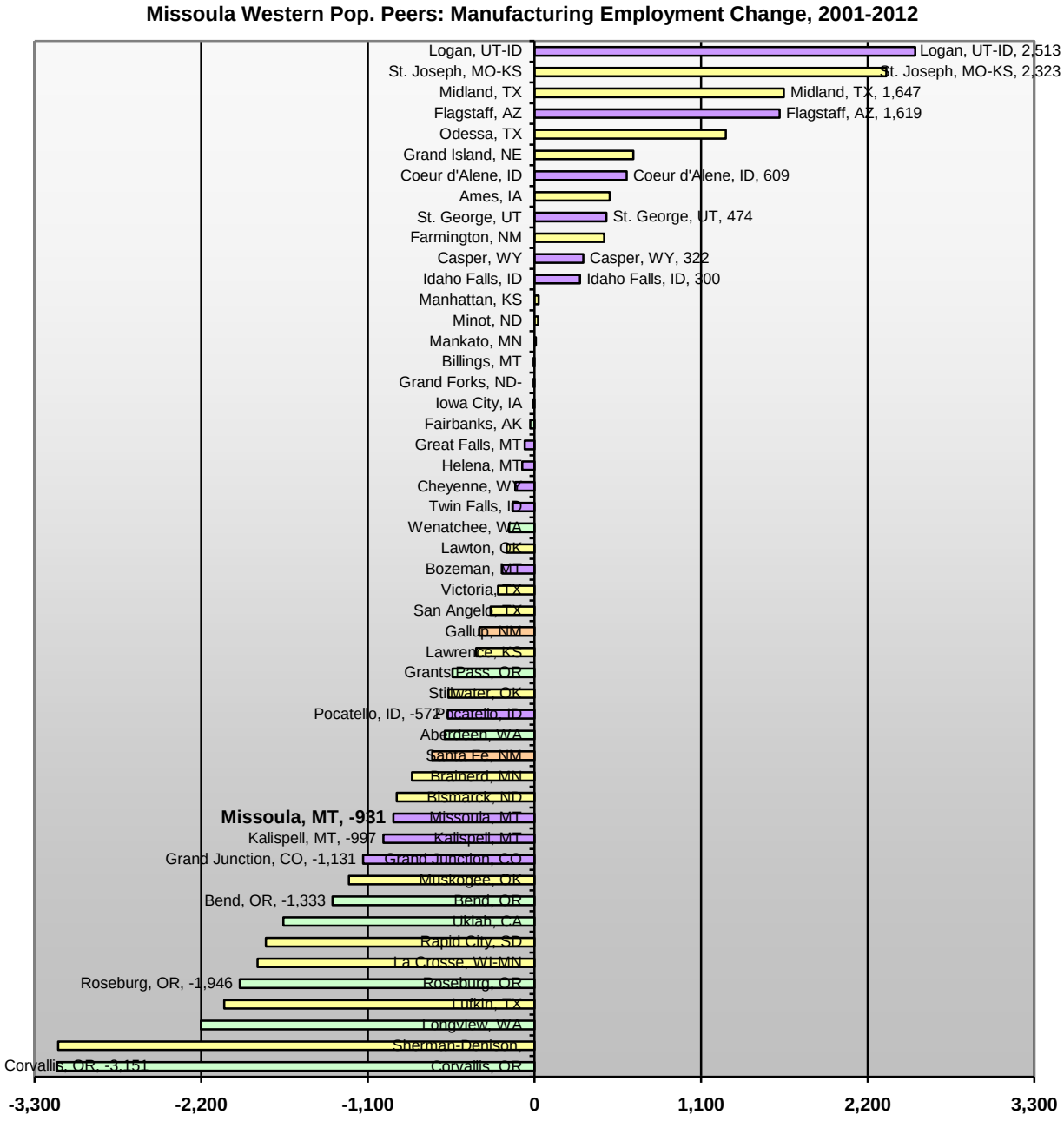
D. Manufacturing Employment Change among Missoula's Western Peers

This chart shows manufacturing employment change for all 50 Missoula western population peers for the period from 2001 to 2012.

Thirty-five of these 50 peer counties (70%) lost manufacturing employment over this period that includes the pre-recession and post-recession periods. Only 12 of these had sizeable gains of more than 100 jobs.

Peers with the largest manufacturing employment gains were: Logan, UT, with a gain of over 2,500 jobs; St. Joseph, MO, with a gain of over 2,300; Midland, TX, with a gain of 1,647; and Flagstaff, AZ, with a gain of 1,619. Coeur d'Alene, ID, had a gain of 609 manufacturing jobs. St. George, UT; Casper, WY; and Idaho Falls, ID; all in the larger Rocky Mountain West region, also had sizeable gains of 300 jobs or more.

Missoula County's loss of 931 manufacturing jobs over this period ranked it 13th in terms of job losses. Twelve other peers had larger job losses than Missoula Co. In Montana, Billings, Great Falls, Helena, and Bozeman all had relatively small job losses in manufacturing.



D. Recent Trends in Manufacturing Employment among Montana Peers

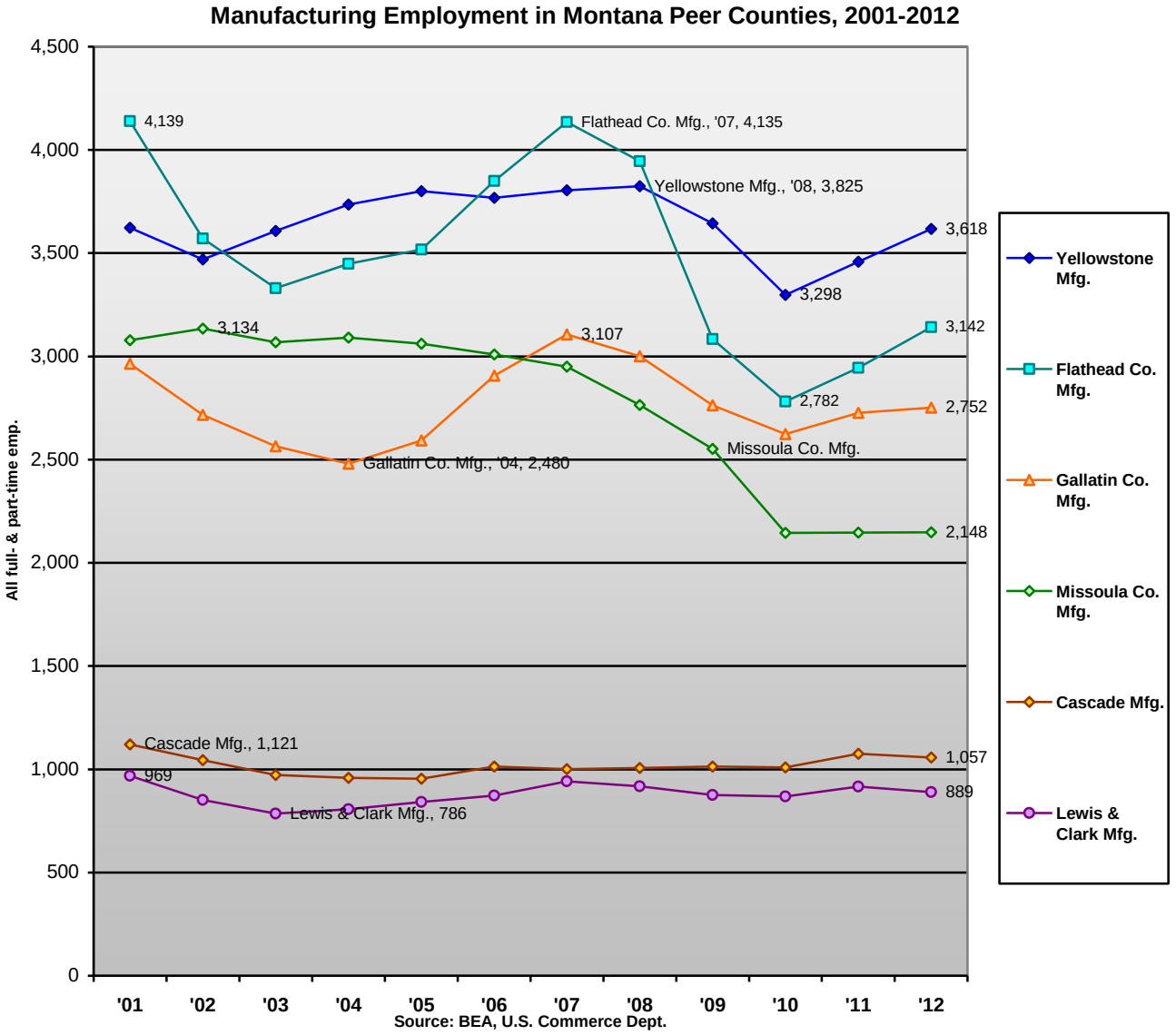
Total employment counts for the six Montana peers for manufacturing are shown in the chart at the right covering recent patterns for the 2001-12 period. Yellowstone Co. has the highest employment in manufacturing among the six with 3,618 full and part-time jobs in 2012. This is down a bit from a high over the period of 3,825 in 2008, but up from 2010.

Flathead Co. had the highest level of manufacturing employment at the beginning of the period (4,139 in 2001) and also prior to the recession (4,135 in 2007), but this fell to as low as 2,782 in 2010 before increasing.

Gallatin Co. is 3rd among the six peers in 2012 manufacturing employment at 2,752. This is down from 3,107 in 2007.

Missoula Co. is now 4th in manufacturing employment at 2,148 in 2012. It was 3rd among these six peers in 2002 when manufacturing employment stood at 3,134.

Manufacturing employment in both Cascade and Lewis & Clark Counties is considerably lower than the other four peers, but this has fallen by only a small amount in each of these over the period.



The cumulative picture for all six of these Montana counties is for fairly flat growth, if any, in manufacturing employment and the current projection for manufacturing employment state-wide in Montana is for growth of only about 2,600 jobs over the 2012 to 2022 period.