

## APPENDIX 4 – EMPLOYMENT TRENDS

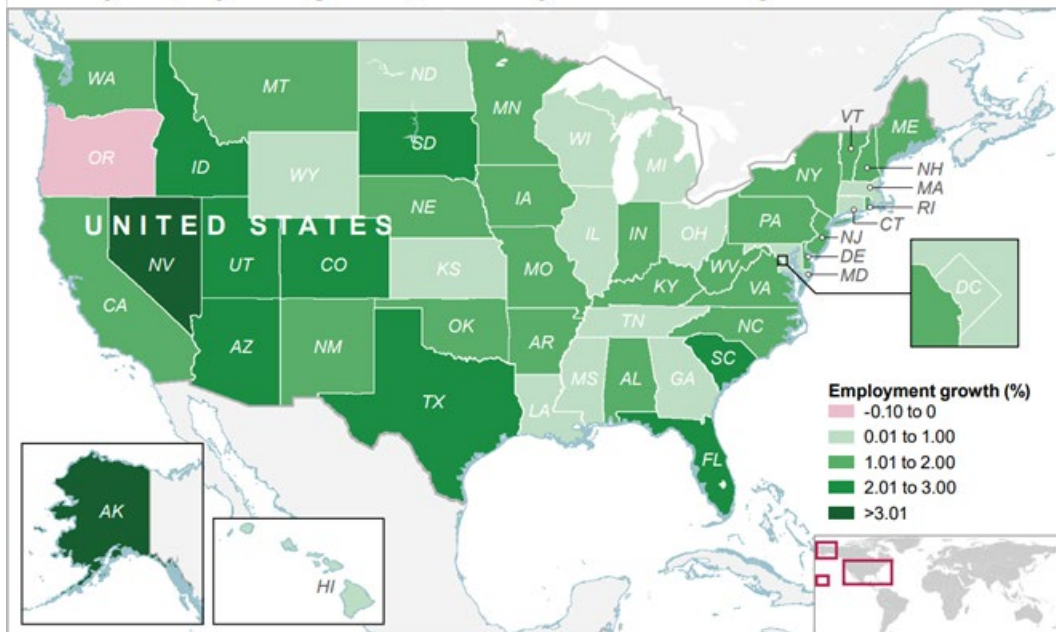
### Background

The material presented in this appendix offers additional insight into recent employment trends and a comparison of forecast details for the MSA. The MSA region includes the counties of Clackamas, Columbia, Multnomah, Washington and Yamhill in Oregon plus the counties of Clark and Skamania in Washington. Additional forecast details for the current UGR job forecast can also be found in another appendix. This appendix offers a narrative of regional job trends torqued by the Great Recession and the more recent pandemic-induced downturn and the impact each had on the subsequent job recovery and adaptation of this information on previous forecast vintages. The information herein includes headline employment trends and unemployment information, sector details, and other work force data for the MSA.

### Recent employment trends in the MSA

The trend in MSA-level employment began cycling into negative growth beginning this year. The first three months of 2024 saw the rates of year-over-year (y/y) payroll employment growth for the MSA region fall to -1.9% in January, -1.76% in February and settle to -1.75% decrease in March. The number of unemployed workers went up to 60,000-65,000 in the region during this quarter, a number that is roughly 10,000 more unemployed compared to the annual average number of unemployed workers in 2023. During these last 3 months, the seasonally adjusted unemployment rate for the MSA inched up to 4.2%, up from 3.7% at the end of last year – a sure sign that the regional economy is slowing and the labor market in the region is beginning to loosen.

### Monthly employment growth, February 2023–February 2024



Data compiled April 1, 2024.

Source: S&P Global Market Intelligence: 2012743.

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Figure 1: Map of year ago payroll employment growth in each state

The labor market in Oregon and specifically the region has been easing more rapidly than compared to national labor trends. Nowhere else in the US has employment growth been worse than here in Oregon. Consequently, the Oregon economy is dead last in y/y job growth as a nearby map of the annual growth in state-level employment indicates. This information is based on Bureau of Labor Statistics (BLS) payroll employment data and compiled by S&P Global.

A year of restrictive monetary policy has led to the region’s slower growth in employment. Factors that contributed to this recent slowdown include: 1) ongoing effects of past FED tightening, 2) tightening bank lending standards on loans to businesses and consumers, 3) diminishing economic tailwinds that had boosted growth rates in 2023, 4) strengthening dollar which weighs down exports. The downshift in regional economic activity is shown in both aggregate payroll employment and the gradual rise in MSA unemployment rates. A nearby chart illustrates this step down in MSA payroll employment and the edge up of MSA unemployment rates, with both indicators indicating the onset of a deterioration in the regionwide labor market.

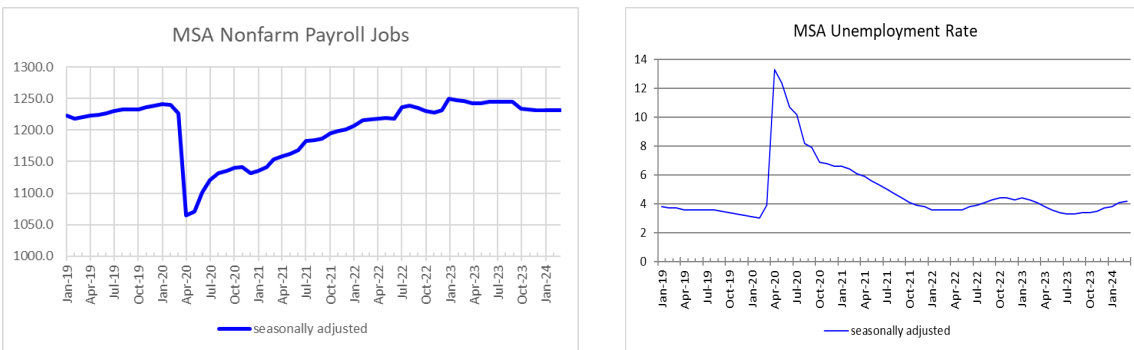


Figure 2: MSA payroll jobs (in thousands) and unemployment rate (in percent) point to a loosening labor market

The nation’s central bank engineered an increase to interest rates to slow employment/ economic growth to stem elevated inflation rates. With some lag, signs of labor market weakness in the MSA appeared at the end of 2023, primarily in job sectors most vulnerable to elevated interest rates. Higher rates have made capital expenditure and investments much costlier and riskier to finance. Industries in the region susceptible to the higher cost of obtaining investment funding, such as the information services industry has led the decline in regionwide job growth with jobs in the information sector decreasing -10% (y/y), while the construction industry fell -5.7%, followed closely by the financial services sector declining -5.5%. The manufacturing sector dropped -3.5% from a year ago, led primarily by durable goods producers, which include high-tech and advanced manufacturing industries in this mix.

Interest-sensitive sectors have been leading the dip in regional job growth, but that strain has now carried over into the hiring and employment decisions made in the retail and service sectors. Consumer spending, which centers around service and retail industries, began the year more subdued compared to the second half of 2023. Real consumer purchases in the second half were well over 3% annualized growth. The first quarter of 2024 saw real US consumer spending drift lower to 2.5%, an indication that both high interest rates and elevated inflation rates. The slowdown in US growth has begun to weigh against retailers and service providers and will likely lead to additional erosion in the regional consumer consumption cycle. Hiring and job growth are thus affected by the slower rate of consumer expenditures in the region.

Several counter-cyclical elements of the region’s economy remain upbeat, such as in private education, health care, and nonfederal government jobs. However, even these industries are starting to show easing of year-over-year sector growth. There are fewer bright spots that can be pointed to in the region nowadays compared to regional conditions from a year ago.

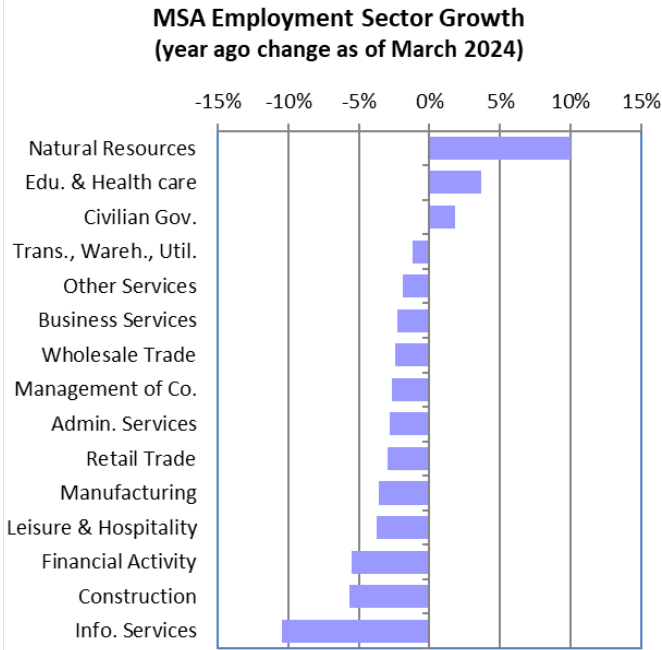


Figure 3: MSA job growth is slowing due to the twin specter of elevated interest and inflation rates of the past year

**Pandemic employment recovery**

Despite the recent dip in regional employment, the recovery in the MSA since the pandemic’s end remains intact. The dip so far is unlikely to be deep nor long lasting if the US can skirt a recession. Most pundits still believe a “soft-landing” is still achievable, one in which the inflation rate declines to about 2% and the labor market loosens without undue hardship, holding unemployment rates below 5%. The macroeconomic advisor (S&P Global | IHS Markit) for the 2024 UGR presents a near-term outlook of slower expansion of real GDP and consumer spending, with macro-economic growth slowing and avoiding an outright recession. Interest rates for the US will remain elevated until later this year to squeeze and force inflation rates to step down to the central bank’s preferred target. A period of slower job growth is expected to achieve the price stability sought by the US Federal Reserve (FED). The regional forecast assumes the region will share a similarly muted growth path and an economic outcome consistent with widely held views which incorporate assumptions by the FED and our macro-economic advisor.

The MSA forecast incorporates the assumption of moderate easing in national growth estimates and this is reflected in the downstream economics and demographics assumed of the MSA economy. Slowing growth is not predicated on a recession, anticipating the FED will successfully skirt a downturn while successfully lowering inflation to its long-run expectation of 2% annual growth. Assuming the national economy can ease into a soft-landing, the MSA economy is expected to also settle into a period of easing or slight declines in regional growth.

To date, aggregate employment in the region crested above pre-pandemic employment levels in mid-2022 and has remained above this mark until recently. The leisure and hospitality service industry led all sectors in job growth since the economy was re-opened, but of course this makes sense, since it was the industry that had the sharpest decline overall during the pandemic-induced recession. Medical services buoyed job growth in the health care sector during and after the pandemic. Construction employment also remained highly resilient during and after the pandemic, and only seeing its recent downturn as cost of construction rose sharply with the FED engineering higher interest rates to stem the rise in US inflation. The financial activity sector had largely recovered its modest losses during the pandemic, but recent interest rate hikes have decimated previous recovery gains.

Manufacturing and information services, which depend on capital investments to drive growth, has also slipped in their growth trajectory ever since capital costs rose due to higher interest rates. The cost of building a new home (or apartment building) and the cost of consumer mortgages also rose sharply in the last year, impacting housing affordability (and rents). The steep rise in inflation has lowered consumer purchasing power and made normal household expenditure that much more costly and eating into consumer spending. Higher interest rates have made consumer purchase of “big-ticket” consumer items costlier too. Business investments have been more subdued given higher interest rates. Overall, the economic headwinds have finally begun to drag down demand for payroll employment in the MSA. The recovery in MSA employment peaked about a year ago, and then the FED’s shift to a more restrictive monetary stance has had the expected result in easing employment demand.

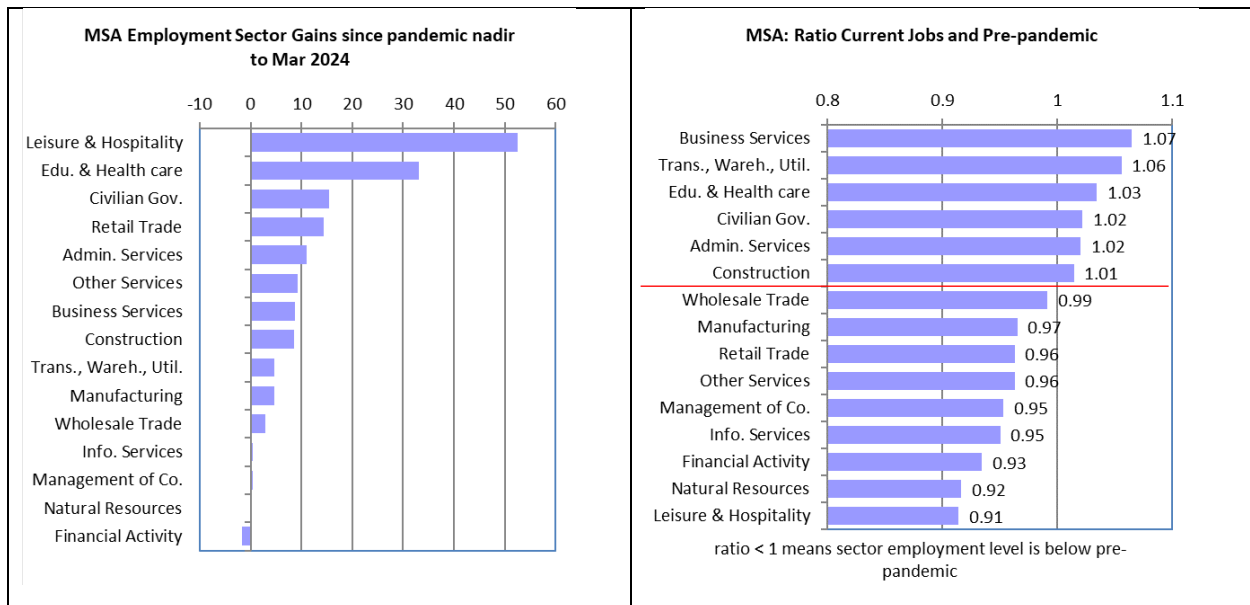


Figure 4

Regional employment growth has slowed and indeed tilted into negative growth. In a nearby chart, industry sectors above the “redline” have current employment levels above what they were before the pandemic, while those below have sagged below employment levels that existed before the onset of the pandemic. Roughly a year ago, all regional sectors had achieved full recovery (i.e., employment above pre-pandemic levels), but that hasn’t been the case since the FED shifted its outlook to tightening of monetary policies. There is perhaps greater concern in Oregon for the slowing employment growth because the state ranks dead last in y/y job growth and is either seen as lagging in the recovery or

leading the nation into a soft landing that might just be a bit “harder-landing” here in this state compared to elsewhere in the country.

Regional employment declined roughly to the same degree as the US during the depth of the pandemic. The region carried a slight advantage heading into the pandemic recession, experiencing relatively greater job growth before the pandemic. That advantage disappeared with the ensuing recession. Since reopening of the economy to business, the MSA region has lagged the US. More recently, that lag has grown wider (see nearby chart).

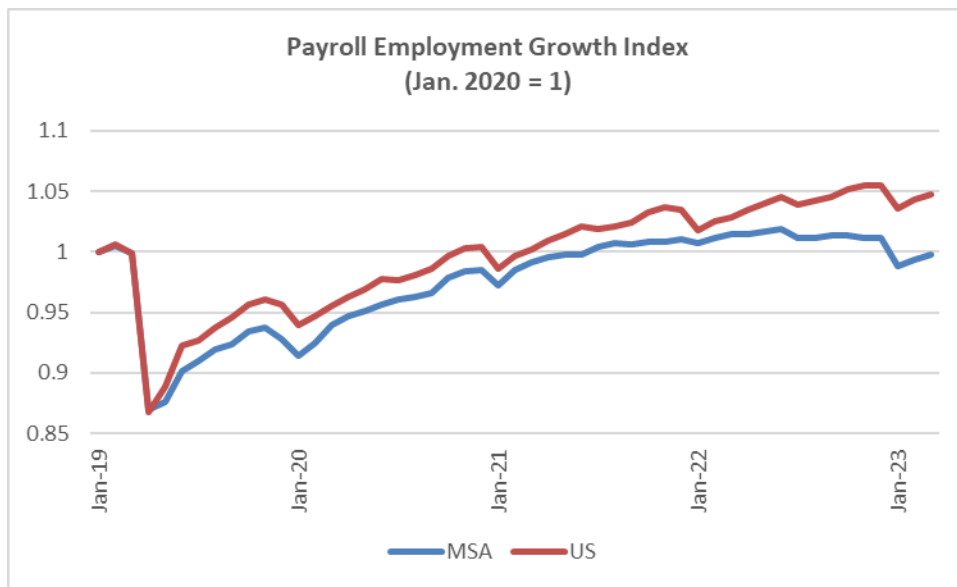


Figure 5: MSA vs. US payroll employment trends since the onset of the COVID pandemic

### A brief post-mortem Metro’s MSA employment forecasts since the Great Recession

Payroll employment briefly declined more in the region (see nearby chart) than the nation during the Great Recession (2007-09). The regional economy fell sharply after the housing bubble broke. Financial sectors were in turmoil, discombobulated by mountains of bad debt. Major financial institutions went bankrupt while others were forced into merging with more stable and financially stronger firms. While the downturn was less than two years, the initial recovery took 2 to 3 times longer. The recovery was muted by a finance sector unable to respond normally to financial incentives and monetary policies usually capable of elevating a troubled economy. The housing bubble had short circuited many of the financial tools that normally helped heal an ailing economy. As it was, there were moments during the extended recovery period in which the region didn’t seem much like one that was rebounding because the pace of growth had been so incrementally slow in materializing. It took almost 5 years for this region to rebound to pre-loss aggregate conditions.

Metro had just completed a regional forecast for the 2010 UGR. It had been near the nadir of the business cycle and was optimistic that regional growth would rebound sharply. However, the reality was that regional growth would be much slower between 2010 and 2015. The 2010 UGR regional employment forecast was in hindsight too optimistic compared to what had actually come to pass.

In 2015, the next UGR cycle, the regional employment forecast partly self-corrected and downshifted future growth in the short-run to reflect the milder growth trend that existed between 2010 and 2015.

Generally, the long-run half of the job forecasted remained moderately optimistic, but the growth trend had been marked down to reflect updated US macro assumptions that pointed to more subdued growth going forward. The reality for the short-run portion for the 2015 UGR forecast was those adjustments over corrected and became too low for the remainder of the decade, compared to the uptick that actually occurred between 2015 and 2019. Regional growth between 2015 and 2019 trended up more quickly than expected (see nearby chart). The long-run portion of the 2015 UGR forecast had been shifted down in part due to the perception that growth in the outyears would be even slower than expected. This less optimistic outlook in the 2015 forecast owed partly to a population forecast that anticipated growth in the future wasn't going to be as fast as what it had been in the prior decade.

In the 2018 mid-cycle periodic UGR, the short-run forecast edged up to compensate for what was by then seen as more robust growth in the latter half of the 2010's, but this adjustment to the new information was itself still shading itself to the lower end of prospective job growth for reasons similar to prior regional forecasts. The 2018 UGR incorporated an even less sanguine national macroeconomic baseline view of economic growth rates in the future. A principal driver was a continuation of demographic factors that began suggesting a lower population trajectory – more baby boomers leaving the work force, fertility rates that were significantly lower than before, and increased recognition of additional economic headwinds. These factors meant more economic turbulence and slower growth, although no pundits back then would have imagined the pandemic-induced shutdown of the global economy. The 2018 UGR employment forecast included near term adjustments that partly lifted the job outlook in the near-term but not to the detriment of drastically lower employment projections in the long run. Consideration of what was then an emerging change in the trend of key demographic components had yet to be fully apparent back then as they are now. Still, the expectation that the labor force supply (i.e., population growth) would be more muted began to influence and tamp down prospects of larger job projections in the outyears of the forecast.

It could be described that each subsequent forecast from the 2010 UGR to the 2018 UGR adapted reasonably well with the data on hand at that juncture in history to help narrow the discrepancy between prior forecasts and actual history. Uncertainty was rising and a directional change in the business cycle was being hinted at by economic data at that time. Growth at the end of the last decade seemed more turbulent as more economic headwinds were perceived which would knock down the longest uninterrupted peace-time expansion in real GDP growth. Economic momentum was already flagging even before the pandemic.

The Great Recession had set in motion a period of that represented significant growth opportunities in the region, but also a greater degree of uncertainty going forward. This is reflected in the gyrations in past employment projections that were at first too high and then subsequent ones in which growth projections in the region were lowered. At these midpoints, the first forecast adjustment was too low and that adjustment was revised up in the last regional forecast before this 2024 UGR employment forecast.

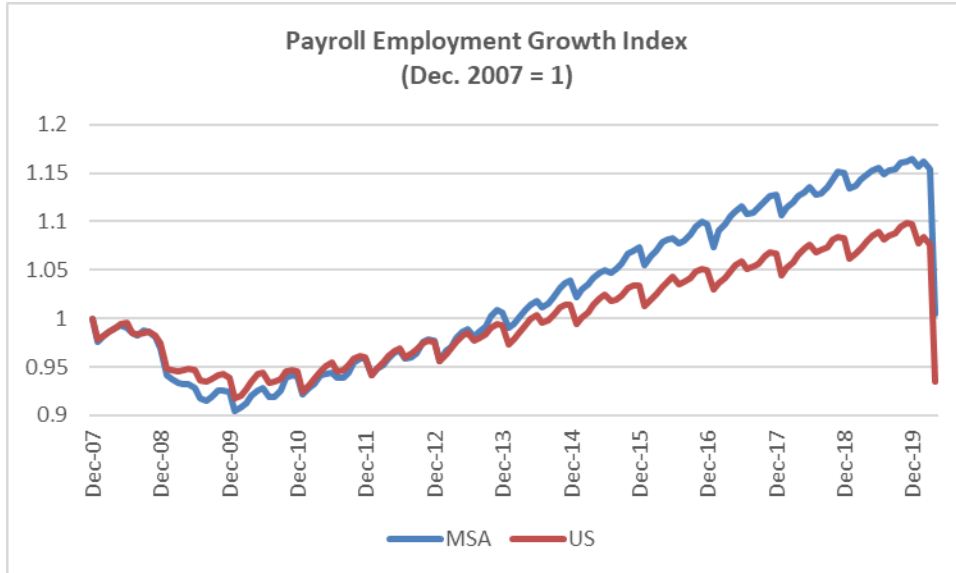


Figure 6: MSA vs. US payroll employment trends since the start of the Great Recession

In now, the current 2024 UGR regional forecast, the projections have the benefit of over a decade of hindsight and incorporates the latest base year course corrections to the regional forecast. However, even so, there is potentially more uncertainty that now exists in the aftermath of the pandemic-induced recession. A great many more post-pandemic questions about what might be the “new normal” and the economic trends that have either accelerated or emerged in the latest aftermath.

Some of the new trends which are visible today include:

- Accelerated and elevated shares of employees working from home or in a hybrid work setting;
- Elevated rates of office vacancy, with some office leases still needing to be renegotiated in the next year or so as longer-term leases continue to expire;
- Artificial intelligence and its implications on future work and industry;
- Rise of mercantilism (and protectionism) in industrial policies.

## Forecast table of prior vintages: 2010 UGR, 2015 UGR, 2018 UGR and 2024 UGR

MSA Employment Forecast	<i>previous regional forecast assumptions</i>						<i>current forecast</i>		year 2019 forecast			comparison of 2040 forecast year		
	circa 2009 US macro		circa 2014 US macro		circa 2017 US macro		circa 2023 US macro		difference from 2019 actual			vs. current 2040 forecast		
	<u>2010 UGR</u>		<u>2015 UGR</u>		<u>2018 UGR</u>		<u>2024 UGR</u>		<u>2010 UGR</u>	<u>2015 UGR</u>	<u>2018 UGR</u>	<u>2010 UGR</u>	<u>2015 UGR</u>	<u>2018 UGR</u>
(Employment figures in thousands)	<u>2019</u>	<u>2040</u>	<u>2019</u>	<u>2040</u>	<u>2019</u>	<u>2040</u>	<u>2019 (actual)</u>	<u>2040</u>						
<b>Nonfarm Wage &amp; Salary Jobs, TOTAL</b>	1,244.2	1,707.4	1,206.4	1,571.3	1,214.3	1,432.3	1,228.0	1,365.4	1.3%	-1.8%	-1.1%	25%	15%	5%
<b>Manufacturing, TOTAL</b>	127.0	133.8	122.5	127.2	127.6	117.7	129.3	126.3	-1.8%	-5.3%	-1.3%	6%	1%	-7%
<b>Durables, total</b>	96.1	102.5	92.9	100.0	94.9	88.7	95.3	93.9	0.8%	-2.5%	-0.4%	9%	6%	-6%
Wood Products	4.9	4.4	4.6	3.8	4.1	4.2	4.0	3.4	22.2%	14.8%	1.4%	30%	11%	24%
Primary Metals	5.7	4.3	5.2	4.4	6.1	4.9	6.2	4.2	-7.1%	-15.4%	-0.9%	2%	3%	16%
Fab. Metals	12.5	11.9	13.3	12.3	13.2	11.1	13.4	13.6	-6.8%	-0.8%	-1.8%	-13%	-9%	-19%
Machinery Mfg.	7.9	7.3	8.7	7.9	9.8	8.6	10.1	9.1	-21.9%	-13.9%	-2.7%	-20%	-14%	-7%
Computer & Electronics	36.6	44.2	39.4	51.1	37.8	40.8	37.5	41.1	-2.3%	5.1%	0.8%	8%	24%	-1%
Transp. Equipment	9.9	10.9	6.5	4.8	6.8	6.2	7.4	4.7	33.3%	-12.0%	-7.6%	133%	4%	32%
Other Durable Goods	18.6	19.5	15.1	15.8	17.1	13.0	16.7	17.8	11.1%	-9.4%	2.2%	9%	-11%	-27%
<b>Nondurables, total</b>	30.9	31.3	29.6	27.2	32.7	28.9	34.0	32.4	-9.1%	-13.1%	-3.8%	-3%	-16%	-11%
Food Processing	9.6	9.4	9.9	9.5	13.9	13.1	13.6	14.0	-29.4%	-27.2%	2.1%	-33%	-32%	-7%
Paper	4.9	4.8	3.1	1.8	2.7	1.9	2.5	2.0	100.2%	26.6%	8.2%	142%	-9%	-2%
Other Nondurables	16.4	17.2	16.6	15.9	16.2	13.9	18.0	16.4	-8.8%	-7.9%	-9.8%	5%	-3%	-15%
<b>Nonmanufacturing (private), TOTAL</b>	959.5	1,362.9	919.6	1,229.7	927.0	1,118.4	946.1	1,075.9	1.4%	-2.8%	-2.0%	27%	14%	4%
Natural Resources & Mining	1.5	1.2	1.8	1.3	1.4	0.9	1.3	1.5	16.9%	35.4%	6.1%	-20%	-18%	-42%
Construction	68.5	93.0	70.8	110.9	74.2	94.0	76.0	103.6	-9.9%	-6.8%	-2.4%	-10%	7%	-9%
Trade, Transport & Utilities	269.9	345.1	254.5	317.7	245.0	262.8	221.8	231.7	21.7%	14.8%	10.5%	49%	37%	13%
Wholesale Trade	69.7	92.0	65.5	82.7	56.7	60.2	57.3	60.8	21.6%	14.3%	-1.1%	51%	36%	-1%
Retail Trade	121.8	144.6	121.9	150.7	118.8	127.4	118.1	130.0	3.1%	3.2%	0.6%	11%	16%	-2%
TWU	49.5	65.4	41.1	46.1	43.2	41.1	46.3	40.9	6.7%	-11.4%	-6.7%	60%	13%	0%
Information Services	29.0	43.1	26.1	38.3	26.3	34.0	26.4	29.9	9.8%	-1.2%	-0.3%	44%	28%	14%
Financial Activities	87.2	119.8	67.8	78.7	73.4	81.6	73.5	77.2	18.6%	-7.8%	-0.2%	55%	2%	6%
Pro. Business Services	178.5	265.0	190.5	270.5	189.9	253.7	190.0	233.0	-6.0%	0.3%	0.0%	14%	16%	9%
Education + Health	185.0	301.2	173.0	240.8	175.9	237.7	188.0	218.6	-1.6%	-8.0%	-6.4%	38%	10%	9%
Leisure + Hospitality	119.6	164.2	120.0	151.0	125.7	140.5	126.4	130.2	-5.4%	-5.1%	-0.6%	26%	16%	8%
Other Services	49.3	73.4	41.4	58.9	41.6	47.2	42.8	50.2	15.4%	-3.3%	-2.8%	46%	17%	-6%
<b>Government, Civilian TOTAL</b>	157.7	210.7	164.3	214.4	159.6	196.3	152.6	163.2	3.3%	7.7%	4.6%	29%	31%	20%
Federal, Civilian	18.1	18.1	16.8	18.6	17.8	19.3	18.4	18.7	-1.6%	-8.6%	-3.5%	-3%	-1%	3%
State & Local	139.5	192.5	147.5	195.8	141.8	177.0	134.2	144.4	4.0%	9.9%	5.7%	33%	36%	23%