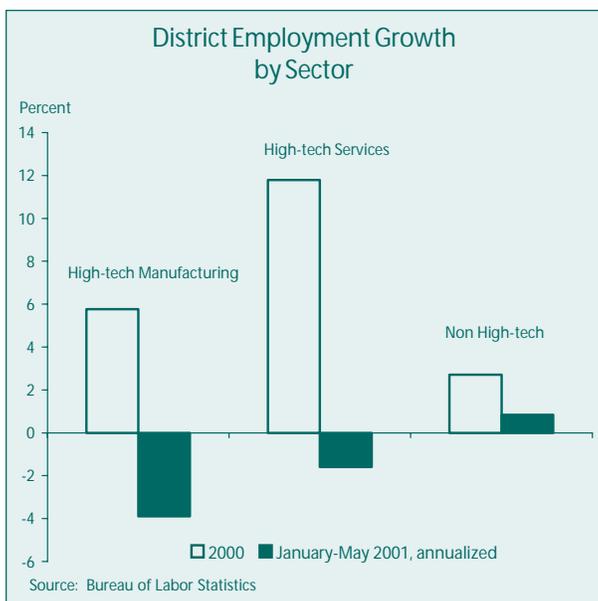


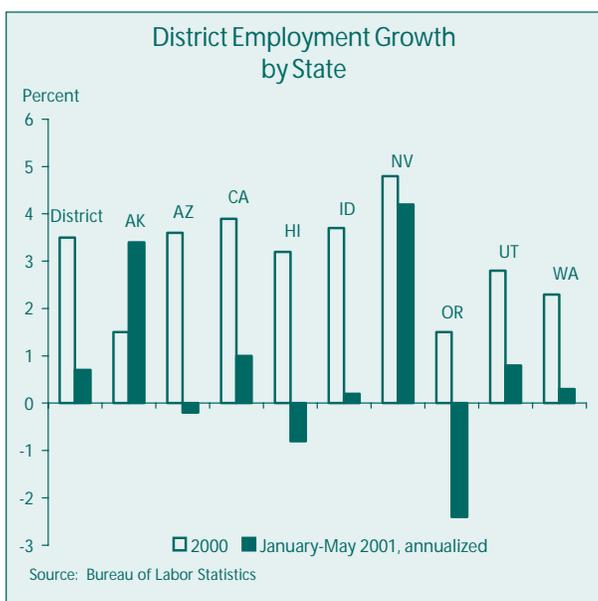
# Western Economic Developments

## Technology downturn slows district economy



The Twelfth District economy slowed significantly in recent months, as businesses scaled back in response to slower growth in the national economy, softening demand for high-tech products, and waning consumer confidence. Total non-agricultural job growth slowed to 0.7 percent at an annual rate during the five months ending in May, well off the 2.3 percent pace recorded in 2000. The District added an average of 14,500 jobs per month during the first five months of the year, compared to an average increase of 69,900 jobs per month in 2000.

Much of the recent slowdown is attributable to weakness in the technology sector. Between January and May, payroll employment among high-tech manufacturers fell by about 3.9 percent at an annual rate, as makers of electronic products including semiconductors, computers and related products, and communications gear shed jobs or slowed hiring. On the services side, the dot-com crash and a drop in demand for contract workers with information technology skills curbed growth in the area's business services sector. Business services employment fell by 1.6 percent at an annual rate between January and May following an expansion of more than 11 percent in 2000.



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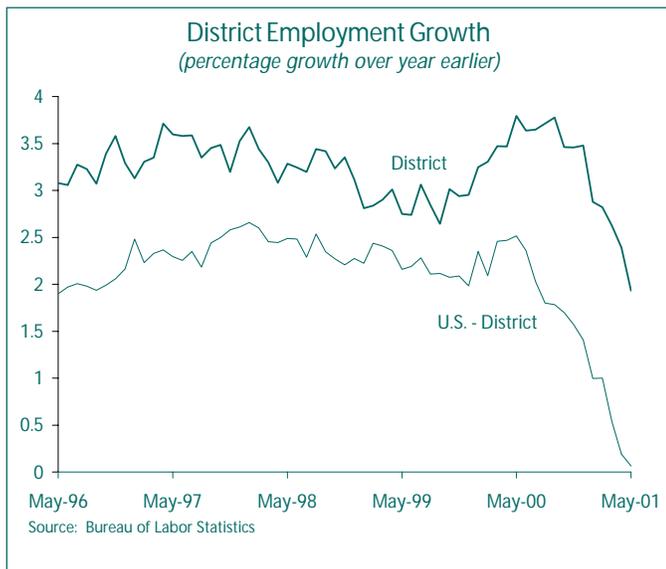
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The effects of the technology slowdown are particularly evident in states with large numbers of high-tech firms. In California, total non-agricultural payroll employment expanded by about one percent during the five months ending in May, compared to growth of 3.9 percent in 2000. In Oregon, payroll employment fell by 2.4 percent at an annual rate during the five months ending in May, for a net reduction of 16,200 jobs. Employment growth in Washington has been essentially flat over the period, expanding by 0.3 percent at an annual rate.

Decelerating employment growth and increased layoffs eased labor market pressures in the District. The District unemployment rate has risen 0.3 percentage point since December, to 4.9 percent in May. Looser labor markets reportedly have made it much easier to fill vacancies with qualified workers. In contrast to earlier this year, District contacts also reported some easing in wage pressures in recent weeks.

Despite the recent deceleration in the District, the gap in employment growth between the District and the rest of the U.S. has not narrowed. The District economy expanded by about 1.9 percent during the 12 months ending in May, about 1.3 percentage points above the pace in the rest of the U.S. On a state by state basis, only Oregon has expanded less quickly than the rest of the U.S. over the past 12 months and four of the 10 fastest growing states in the nation are in the District.



### Vacancies rise, but remain close to natural rate

Commercial real estate markets in the District showed signs of softening in the first quarter of 2001. Virtually all of the major industrial and office markets in the Twelfth District

reported higher vacancy rates and lower net absorption (new construction minus vacant space).

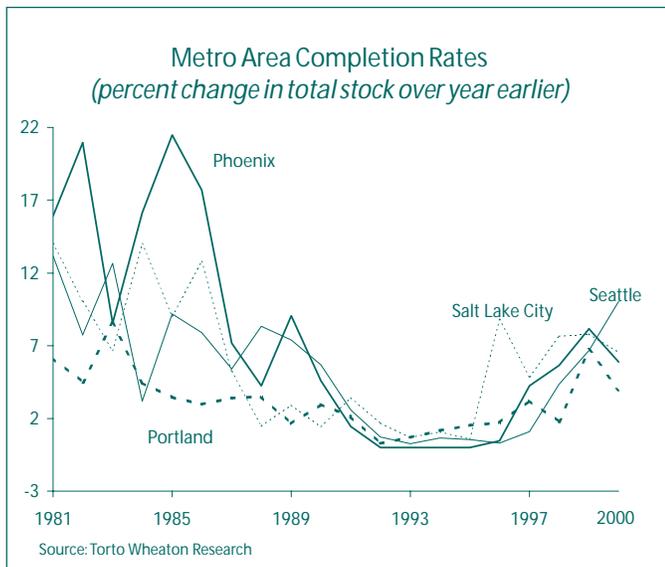
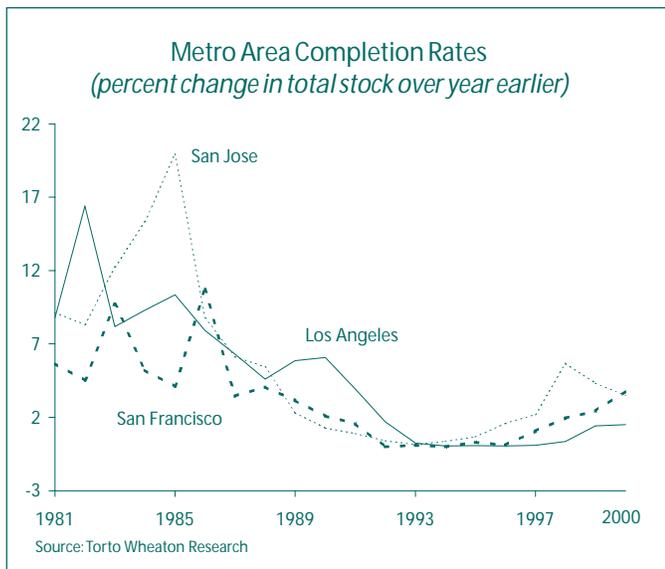
For industrial markets, availability rates have increased somewhat in the first quarter of 2001 (see charts on pages 7, 9 and 11). In percentage terms, the San Francisco market suffered the largest quarterly increase in availability (54 percent). As availability in the District has increased, net absorption and lease rates have declined somewhat. As a result, new construction reportedly is slowing in most markets.

Office markets in the District have softened even more than the industrial market. Vacancy rates for major office markets in the Twelfth District have increased over the past year. Once again, the San Francisco office market stands out; the vacancy rate has risen from 1.6 percent in 2000:Q1 to 7.6 percent in 2001:Q1. San Jose and Seattle also have experienced large increases in vacancy over the year.

The increase in vacancies in these three metropolitan areas is not surprising in light of the difficulties that have befallen the high-tech sector. Indeed, CB Richard Ellis estimates that more than one-half of the 2.5 million square feet net increase in San Francisco vacancies in 2001:Q1 could be attributed to sublease space vacated by high-tech firms. High-tech woes seem to be at the heart of developments in San Jose and Seattle as well, with many firms failing and other firms postponing plans for expansion until conditions improve.

For markets in California showing the largest increases in vacancy—San Francisco and San Jose—projected new supply appears to be under control (see figure). San Francisco has increased its stock of rentable space by an average of 2.3 percent over the past four years. This compares to an average of 3.2 percent over the past twenty years. In San Jose, the stock has increased by an average 3.9 percent over the past four years, compared to an average of 5.4 percent over the past twenty years. CB Richard Ellis reports that these two cities will add 1.2 million square feet (1 percent of current stock), and 1.8 million square feet (4 percent of current stock), respectively, over the next six months.

In Seattle, the outlook is more uncertain. New construction in the Seattle area has been running at high levels relative to its recent past (see figure). CB Richard Ellis reports that Seattle has another 5.4 million square feet due for delivery in the next six months (7.5 percent of current stock). Admittedly, much of the recent new construction has been absorbed; Seattle is one of the few markets in the Twelfth Dis-



	Estimated natural vacancy rate	Average vacancy (1980-2000)	Vacancy 2001.Q1	Vacancy 2000.Q1
Los Angeles	10.9	15.6	13.7	13.7
Phoenix	12.9	17.2	15.2	14
Portland	9.3	12.3	8.5	7.7
Salt Lake City	11.6	14.5	11.7	11.7
San Francisco	5.1	9.6	7.6	1.6
Seattle	8.8	11.6	7.7	3.3

Source: Torto Wheaton Research and author's calculations

recession or expansion) as well as local shocks (e.g., changes in employment growth in an important local industry).

Estimates of a natural rate for cities in the Twelfth District, point to extremely tight conditions in 2000 in markets such as San Francisco and Seattle (data are insufficient to provide an estimate for San Jose). However, with the rise in vacancy rates in the first quarter of this year, conditions have eased noticeably (see table). In the case of San Francisco, the current vacancy rate now exceeds the estimated natural rate. In Seattle, by contrast, the current rate of 7.7 percent is still below the estimated natural rate of 8.8 percent. Elsewhere in the District, vacancy rates are hovering close to or a little above the estimated natural rates.

### California electricity update

Wholesale electricity prices in the West fell in recent weeks, returning to levels not seen since early last summer. On June 18, spot prices at the California Oregon Border (COB) were \$61 per mwh on-peak and \$45 off-peak, substantially below the \$275 on-peak and \$147 off-peak averages recorded in May. Prices in the futures markets also fell, though not to the levels of current spot prices. Recent declines in wholesale electricity prices reflect changes in both the supply of and demand for electric power in California.

On the supply side, imports from the Northwest increased, natural gas-fueled generators fired up as input prices fell, and a number of power plants down for maintenance came back on line to start the summer season. Overall, online generation capacity increased in June by 16 percent or about 5,400 mw compared to the average for May. Imports of electric power rose by 6 percent.

On the demand side, cooler temperatures, voluntary con-

tract to show positive (and increasing) net absorption over the past quarter. Relatively strong economic growth in the Seattle-Puget Sound area and an almost complete lack of office construction during the mid-1990's reportedly has created substantial pent-up demand for space.

While the increase in vacancies in some Twelfth District office markets has been large, it also is true that these increases come after a period of unusually low vacancy rates. This observation has led many commentators to argue that the change in vacancy rates actually represents a movement towards a more sustainable equilibrium.

This claim can be examined more closely by estimating what is called the natural vacancy rate for a city. A city's vacancy rate is assumed to depend on shocks to the national economy (e.g., interest rate shocks, or whether the economy is in

conservation efforts, and responses to anticipated electricity rate hikes helped reduce electric consumption in California in April, May, and early June. Compared to last year, the average California Independent System Operator (ISO) system load fell by 5.4 percent in April, 1.8 percent in May, and 12 percent through mid-June. Declines in the average peak-load were even greater, falling by 6.4 percent, 2.9 percent, and 14.9 percent in April, May, and June, respectively.

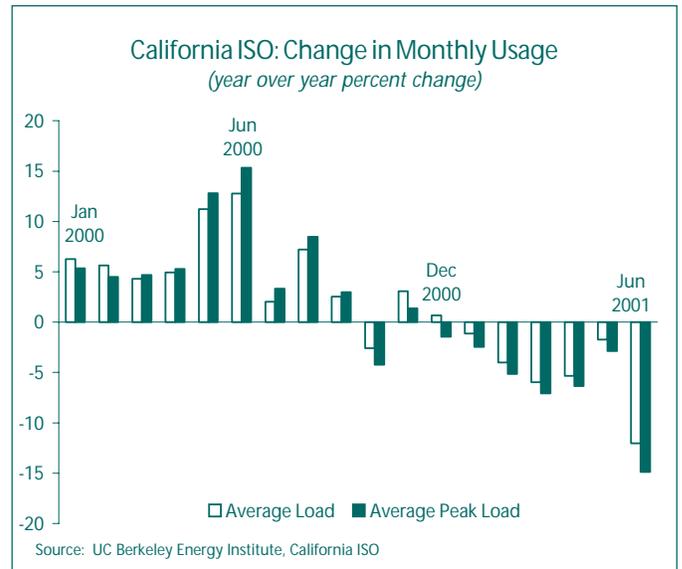
Despite the recent easing of market conditions, California's energy situation remains a concern. Many of the same difficulties that disrupted electricity markets last summer such as poor hydro-conditions in the Northwest, less than adequate in-state generation capacity, and no real-time pricing of electricity for most users remain true this year. However, over the past several months a number of regulatory and market changes have occurred that may lessen the impact of these factors.

For one, the California Energy Commission estimates that about 3,143 mw of new generation will come on line during the summer. Among approved generation projects, about 1,284 mw will come on line in July, followed by 1,040 mw in August, and an additional 414 mw in September. Other projects, under review but not yet approved, could add another 405 mw over the next three months. Increases in potential imports from the Northwest also could help ease capacity constraints during peak periods this summer. Although the hydro-conditions remain poor, load curtailment and reduction programs by Bonneville Power may put it in a better position than last year to meet California's summer import needs.

Another factor potentially easing the pressure in California's electricity markets is demand reductions. Public campaigns for electricity conservation, particularly during periods of peak demand, are well underway. And the state has initiated a number of funded conservation and curtailment programs to encourage businesses to reduce consumption during peak periods.

Recent electricity rate increases also should help reduce consumption this summer. Although about one-half of households are exempt from the recent increase, others are being hit with marginal increases of 30 percent or more this year (with the January and June increases combined). The rate increases will affect just about all businesses and are closer to 50 percent this year.

Finally, California has reduced its reliance on the potentially volatile wholesale spot market for electricity this sum-



mer. Since taking responsibility for procuring the so-called net short electricity requirements for the grid run by the state's ISO, the California Department of Water Resources (DWR) had been buying electricity almost exclusively in the spot market. However, this summer DWR will buy a considerable amount of electricity through long-term contracts with energy companies. The agency reports that it expects the contracts to cover 45 percent of the net short requirements during periods of peak usage. Over the next few years, the contracts will cover a growing share of DWR's purchases, leaving relatively little if any power purchases to the spot market. The greater reliance on power contracts will reduce the state's exposure to spikes in wholesale electricity prices.

Wholesale electricity prices in California and the rest of the West also will be subject to a new price mitigation plan announced on June 18 by the Federal Energy Regulatory Commission (FERC). The heart of the plan is the imposition of a maximum market-clearing price that is based on the marginal cost of the least efficient gas-fired electricity generator in California. As with long-term contracts, the price mitigation plan likely will reduce extreme spikes in the cost of electricity, though the impact on the amount of electricity supplied remains to be seen. On June 21, prices in wholesale spot markets for electricity in the West were somewhat below the \$91.87 maximum rate allowed by FERC.

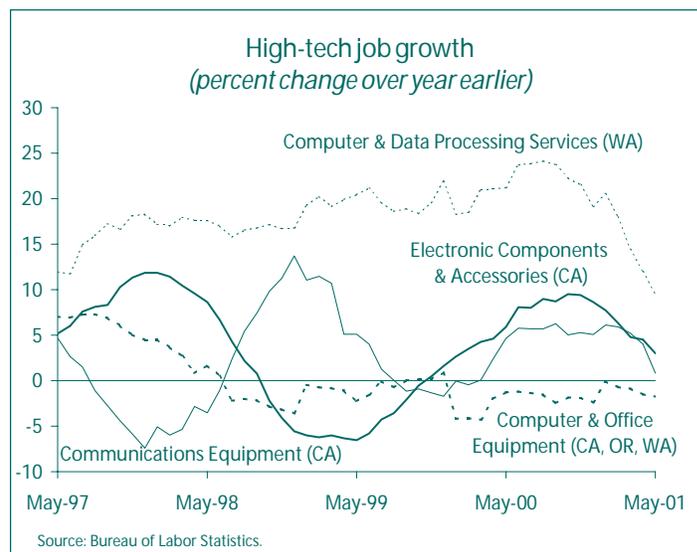
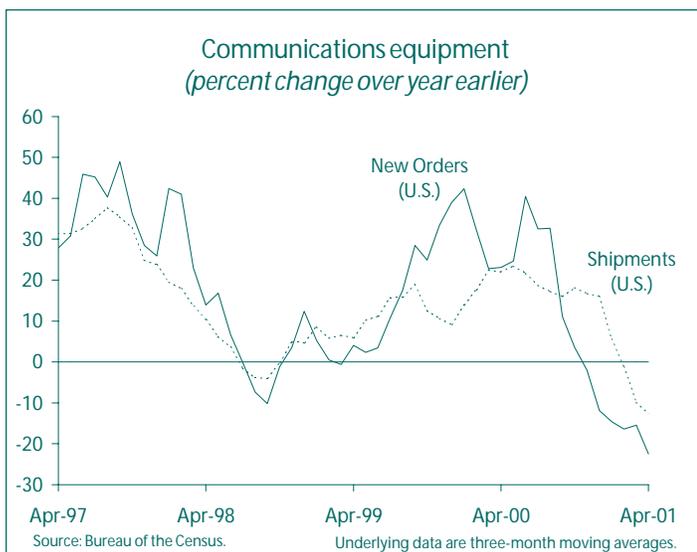
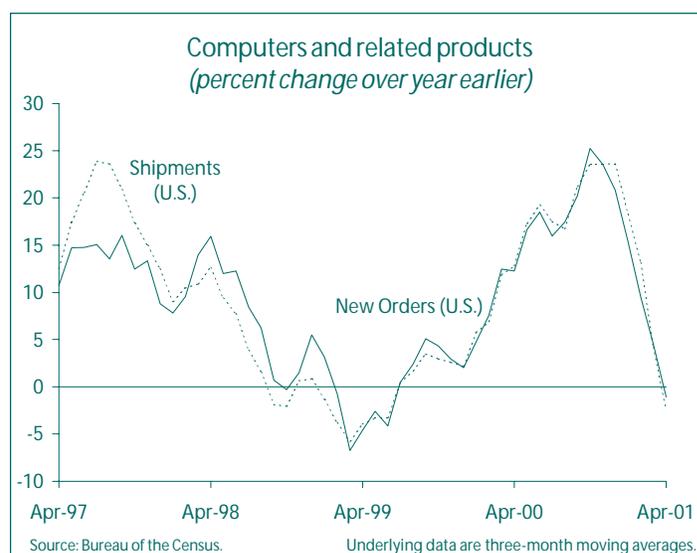
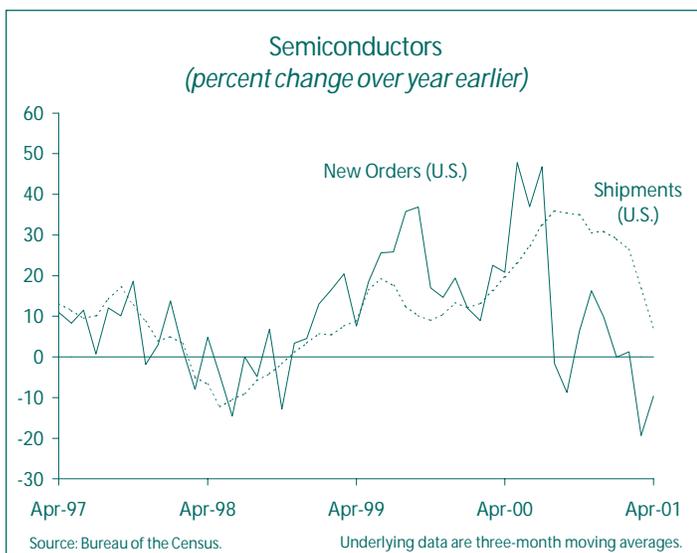
Contributions by Mary Daly, Fred Furlong, and John Krainer  
 Financial and Regional Studies Section  
 Economic Research Department, FRBSF

# High-tech Watch

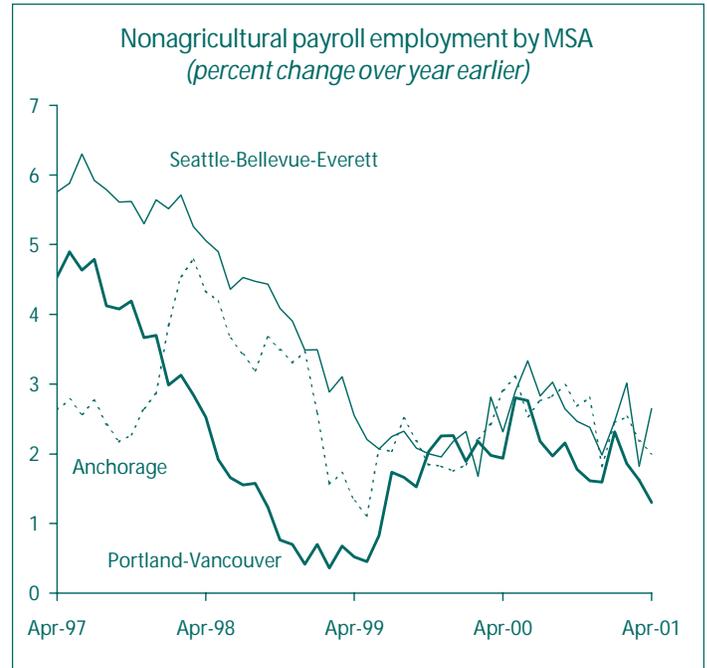
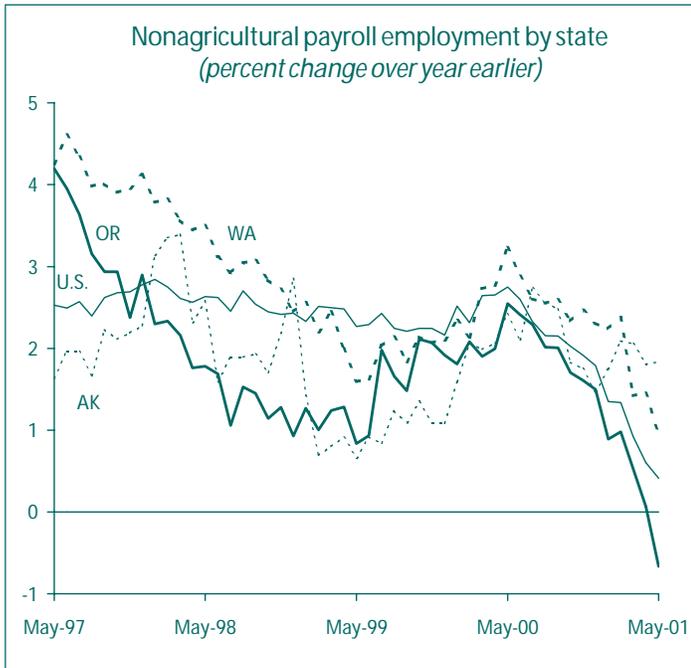
Slower growth in the national economy and significant inventory overhang of information processing goods continued to temper business investment in recent months. As a result, the District's high-tech sector slowed noticeably, as firms scaled back production in response to accumulating inventories and declining sales and orders. Makers of communications fared the worst, as the dot-com crash and development delays in wireless content tempered demand for their products. Nationally, the value of new orders and shipments of communications products were down 22% and 13%, respectively, in April compared to year earlier levels. Data for California show that weaker demand for communications products has translated into job cuts in the sector;

during the five months ending in May the sector has reduced employment at a 3.3% annual pace.

While cyclical declines in high-tech manufacturing occur regularly, the downturn in the high-tech services sector has been more of a surprise. For the past five or six years, growth in computer and information processing jobs and contract workers with IT skills was a major driver in the District's expansion. Recently, however, growth in these sectors has slowed noticeably. In Washington for instance, employment in the computer and data processing sector has remained flat this year, following growth of nearly 20 percent in 2000. Similar patterns can be found for California, Oregon, and Utah.



# Alaska • Oregon • Washington



## Employment by Industry

	Total Employed (thousands)	Percent Change			
		May-01	1-mo. <sup>a</sup>	3-mo. <sup>a</sup>	YTD <sup>a</sup>
<b>Alaska</b>					
Total	288.7	5.1	1.0	3.4	1.8
Mining	11.5	23.4	7.3	6.5	18.6
Construction	14.8	-14.9	-7.7	6.8	3.5
Manufacturing	13.0	20.4	-29.8	0.0	-5.8
T.C.P.U.	27.4	14.1	3.0	3.6	0.0
Trade	58.4	2.1	4.2	0.4	1.4
F.I.R.E.	12.7	0.0	-3.1	0.0	0.0
Services	75.7	11.8	5.5	6.6	4.0
Government	75.2	-1.6	1.6	2.6	0.0

	Total Employed (thousands)	Percent Change			
		May-01	1-mo. <sup>a</sup>	3-mo. <sup>a</sup>	YTD <sup>a</sup>
<b>Washington</b>					
Total	2,745.0	0.4	0.0	0.3	1.0
Mining	3.7	38.9	0.0	14.3	2.8
Construction	165.3	-2.2	-1.4	1.5	2.9
Manufacturing	339.3	-2.8	-7.0	-4.7	-3.9
T.C.P.U.	148.9	-1.6	-1.9	-1.9	2.5
Trade	657.2	-2.9	-1.5	-0.7	0.6
F.I.R.E.	139.7	4.4	2.6	2.8	2.0
Services	802.0	4.0	2.7	1.7	3.5
Government	488.9	1.2	2.8	2.5	-0.6

<b>Oregon</b>						
	Total Employed (thousands)	May-01	Apr-01	Mar-01	Feb-01	May-00
Total	1,596.4	-3.0	-3.2	-2.4	-0.7	
Mining	1.8	98.6	-19.4	-12.2	-5.3	
Construction	85.6	4.3	-13.7	-6.4	1.8	
Manufacturing	236.9	-8.7	-6.3	-7.9	-2.8	
T.C.P.U.	79.2	-4.4	-9.0	-4.7	-0.6	
Trade	390.3	-3.0	-2.7	-2.2	-1.1	
F.I.R.E.	95.4	2.6	1.7	2.0	1.9	
Services	441.0	-5.5	-2.3	-1.7	0.7	
Government	266.2	2.3	1.2	2.0	-2.0	

	Unemployment Rates (%)				
	May-01	Apr-01	Mar-01	Feb-01	May-00
Alaska	5.6	5.8	5.8	5.8	6.8
Oregon	5.6	5.2	4.7	4.9	5.1
Washington	5.5	5.8	5.8	5.6	5.2
U.S.	4.4	4.5	4.3	4.2	4.1

Unemployment rates are from the household employment survey; all other data are for nonagricultural payroll employment. All data are seasonally adjusted.

<sup>a</sup> Annualized.

Source: Bureau of Labor Statistics.

### Residential permits—April 2001

	3-mo. average number	Moving average percent change	
		3-mo. <sup>a</sup>	12-mo. <sup>a</sup>
Alaska	249.2	12.7	21.4
Oregon	1,731.9	-11.0	-1.2
Washington	3,353.9	-18.5	-0.2

Source: Bureau of the Census.

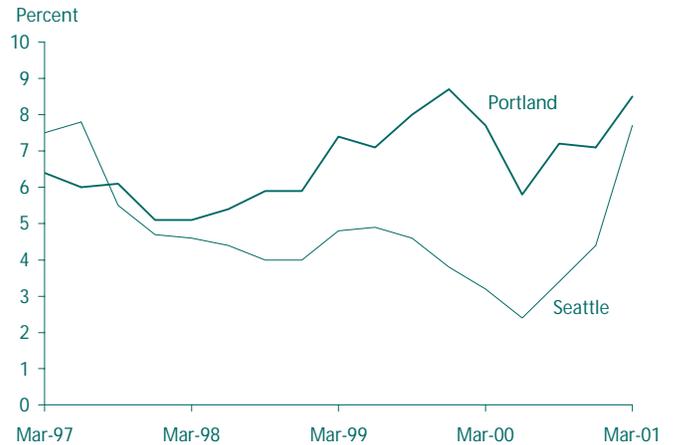
### Non-residential construction awards—April 2001

	3-mo. average \$ millions	Moving average percent change	
		3-mo. <sup>a</sup>	12-mo. <sup>a</sup>
Alaska	37.7	-19.9	4.9
Oregon	230.6	34.8	11.3
Washington	370.2	-18.6	1.0

<sup>a</sup> Underlying data are seasonally adjusted moving averages.

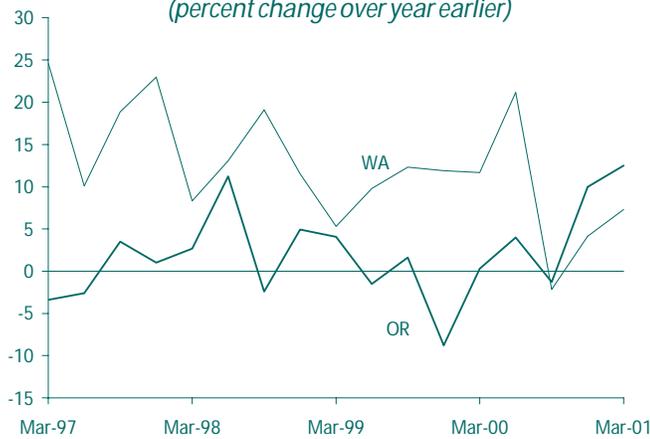
Source: F.W. Dodge.

### Metro area office vacancy rates



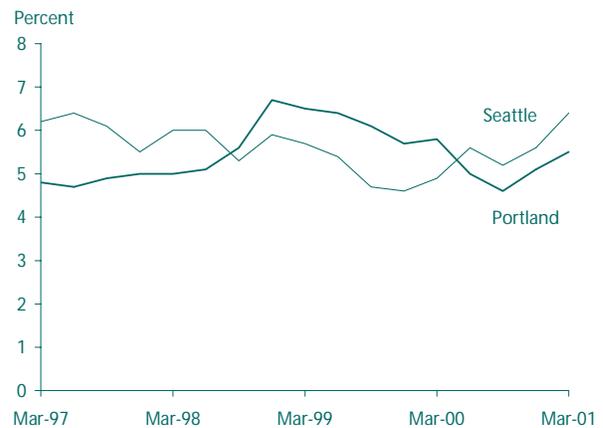
Source: Torto Wheaton Research.

### Sales of existing homes (percent change over year earlier)



Source: National Association of Realtors.

### Metro area industrial availability rates



Source: Torto Wheaton Research.

### Median home price appreciation (percent change over year earlier)



Source: National Association of Realtors.

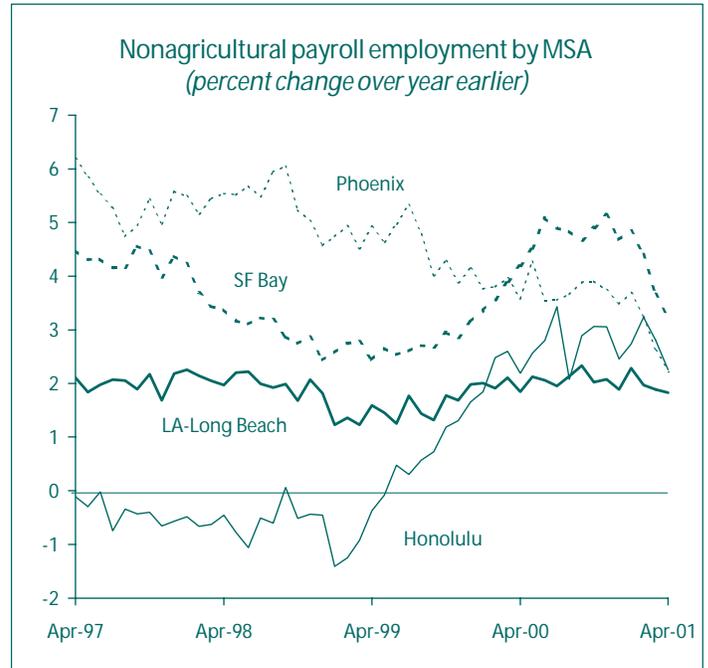
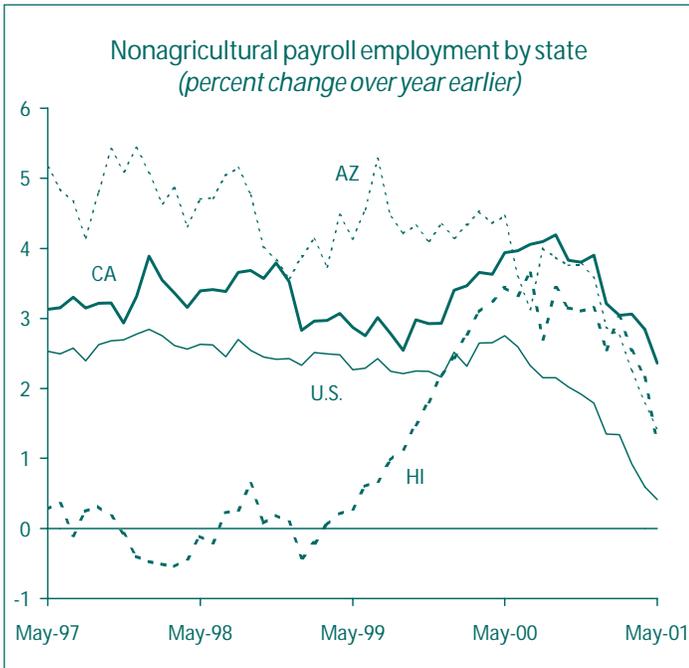
### Export update—March 2001

	\$ billions		Percent Change		
	2000	YTD	1999	2000	YTD <sup>a</sup>
Alaska	2.4	0.5	32.7	-5.6	-14.9
Oregon	10.5	2.2	15.3	6.6	-19.9
Washington	31.2	9.0	-4.1	-13.1	34.3

<sup>a</sup> Percent change from same period a year earlier.

Source: Census FT900 Supplement, Origin of Movement Series.

# Arizona • California • Hawaii



## Employment by Industry

	Total Employed (thousands)	Percent Change			
		May-01	1-mo. <sup>a</sup>	3-mo. <sup>a</sup>	YTD <sup>a</sup>
<b>Arizona</b>					
Total	2,278.6	1.2	0.0	-0.2	1.4
Mining	9.6	-11.7	-4.1	-2.5	0.0
Construction	166.8	-8.2	0.5	2.3	3.7
Manufacturing	214.4	-2.2	-4.2	-2.6	0.4
T.C.P.U.	1100	2.2	-1.1	-1.5	1.8
Trade	533.4	6.0	1.6	0.9	2.0
F.I.R.E.	146.4	6.8	5.4	1.3	2.7
Services	723.0	-2.3	-2.7	-2.4	1.0
Government	375.0	5.6	3.6	3.0	0.4
<b>Hawaii</b>					
Total	557.5	-5.2	-2.0	-0.8	1.2
Mining	.	.	.	.	.
Construction	23.4	-18.4	-6.6	-5.9	-0.8
Manufacturing	17.6	14.7	9.6	4.2	2.3
T.C.P.U.	42.9	5.8	-0.9	-2.2	2.1
Trade	140.1	1.7	2.0	1.4	2.7
F.I.R.E.	34.0	3.6	2.4	4.4	2.1
Services	187.4	-6.2	0.2	0.1	2.9
Government	112.1	-17.4	-12.2	-5.6	-3.5

	Total Employed (thousands)	Percent Change			
		May-01	1-mo. <sup>a</sup>	3-mo. <sup>a</sup>	YTD <sup>a</sup>
<b>California</b>					
Total	14,821.5	0.3	2.2	1.0	2.4
Mining	233	-5.0	-5.0	-1.0	-0.9
Construction	766.5	-1.6	2.5	1.6	5.8
Manufacturing	1,934.7	-0.9	-2.1	-2.3	-0.3
T.C.P.U.	766.0	1.6	2.6	2.0	3.0
Trade	3,365.4	0.2	2.5	2.1	2.5
F.I.R.E.	843.3	3.0	2.9	3.6	3.1
Services	4,747.8	-1.6	2.4	-0.2	3.4
Government	2,374.5	4.3	4.6	3.3	0.8

### Unemployment Rates (%)

	May-01	Apr-01	Mar-01	Feb-01	May-00
Arizona	4.2	4.3	4.4	4.1	3.9
Hawaii	4.3	4.8	4.3	4.4	4.3
U.S.	4.4	4.5	4.3	4.2	4.1
California	4.9	4.9	4.7	4.5	5.0

Unemployment rates are from the household employment survey; all other data are for nonagricultural payroll employment. All data are seasonally adjusted.

<sup>a</sup> Annualized.

Source: Bureau of Labor Statistics.

### Residential permits—April 2001

	3-mo. average number	Moving average percent change	
		3-mo. <sup>a</sup>	12-mo. <sup>a</sup>
Arizona	5,245.2	17.4	-7.3
California	12,151.9	-14.9	7.9
Hawaii	427.9	2.4	11.1

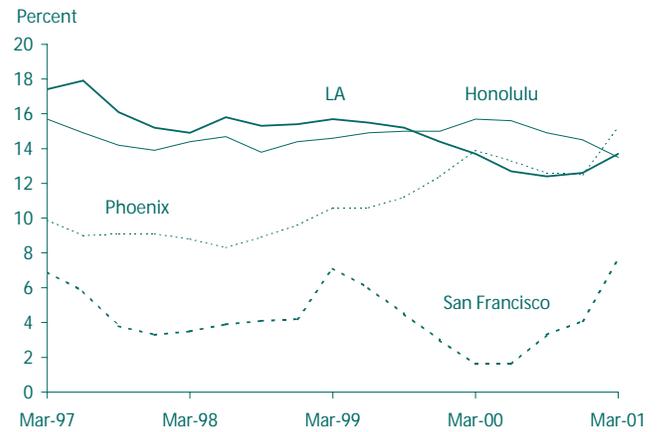
Source: Bureau of the Census.

### Non-residential construction awards—April 2001

	3-mo. average \$ millions	Moving average percent change	
		3-mo. <sup>a</sup>	12-mo. <sup>a</sup>
Arizona	319.0	-21.5	-1.2
California	1,561.2	-13.9	19.7
Hawaii	31.6	22.3	-33.7

<sup>a</sup> Underlying data are seasonally adjusted moving averages.  
Source: F.W. Dodge.

### Metro area office vacancy rates



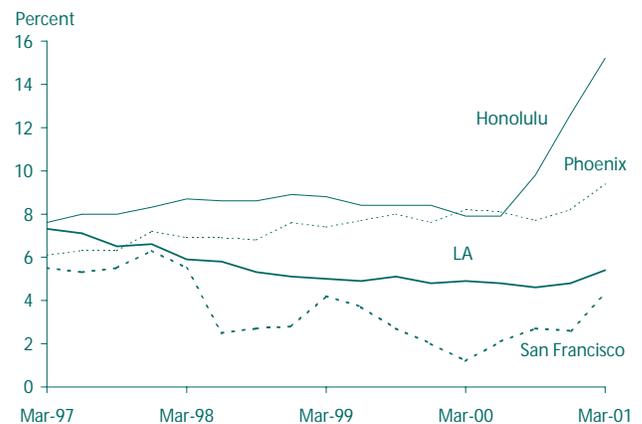
Source: Torto Wheaton Research.

### Sales of existing homes (percent change over year earlier)



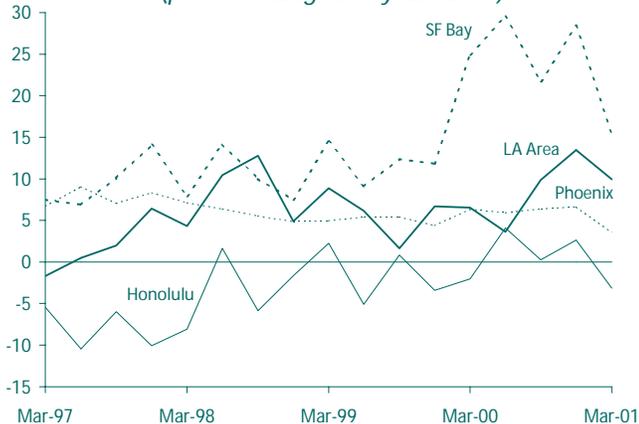
Source: National Association of Realtors.

### Metro area industrial availability rates



Source: Torto Wheaton Research.

### Median home price appreciation (percent change over year earlier)



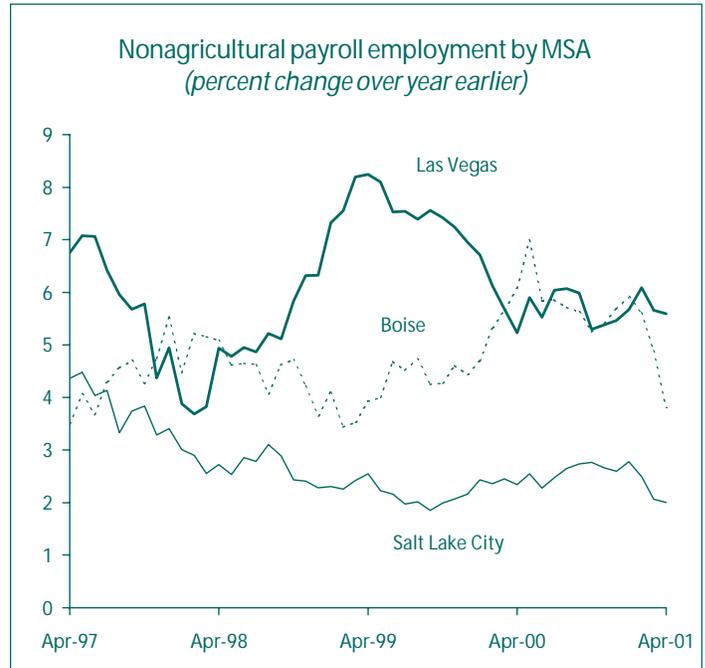
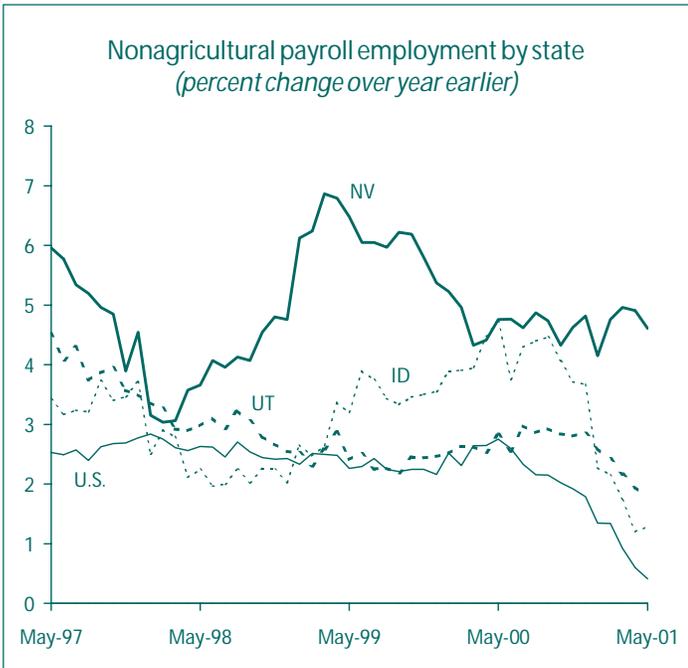
Source: National Association of Realtors.

### Export update—March 2001

	\$ billions		Percent Change		
	2000	YTD	1999	2000	YTD <sup>a</sup>
Arizona	13.2	3.3	3.8	19.0	1.6
California	100.9	25.8	0.1	19.5	15.5
Hawaii	0.3	0.1	0.0	33.4	49.1

<sup>a</sup> Percent change from same period a year earlier.  
Source: Census FT900 Supplement, Origin of Movement Series.

# Idaho • Nevada • Utah



## Employment by Industry

	Total Employed (thousands)		Percent Change			
	May-01	1-mo. <sup>a</sup>	3-mo. <sup>a</sup>	YTD <sup>a</sup>	12-mo.	
<b>Idaho</b>						
Total	568.5	8.2	3.8	0.2	1.3	
Mining	2.4	-38.7	-15.1	-9.3	-4.0	
Construction	35.6	10.7	8.3	-7.6	-0.8	
Manufacturing	75.7	1.6	-2.6	-2.5	-2.4	
T.C.P.U.	28.4	18.6	8.9	2.6	1.8	
Trade	144.1	7.8	3.1	-1.6	2.8	
F.I.R.E.	23.6	0.0	-1.7	-2.0	0.0	
Services	148.9	12.9	9.4	3.8	4.9	
Government	109.8	6.8	1.1	2.4	-1.7	
<b>Nevada</b>						
Total	1,071.2	3.0	4.6	4.2	4.6	
Mining	10.6	0.0	-7.2	-6.5	-1.9	
Construction	91.1	0.0	7.3	5.8	3.6	
Manufacturing	46.3	2.6	2.6	3.7	5.2	
T.C.P.U.	59.6	10.6	5.6	6.3	7.4	
Trade	229.0	7.1	5.4	6.2	8.3	
F.I.R.E.	49.6	2.5	4.1	5.5	6.7	
Services	459.5	3.7	4.7	2.9	3.6	
Government	125.5	-7.3	2.9	3.7	0.8	

	Total Employed (thousands)		Percent Change			
	May-01	1-mo. <sup>a</sup>	3-mo. <sup>a</sup>	YTD <sup>a</sup>	12-mo.	
<b>Utah</b>						
Total	1,094.4	2.1	1.2	0.8	1.8	
Mining	8.3	15.7	5.0	6.0	2.5	
Construction	70.5	0.0	-14.4	-10.1	-2.8	
Manufacturing	130.5	0.9	-1.5	-2.2	-0.2	
T.C.P.U.	61.0	10.4	5.4	-0.8	0.7	
Trade	254.9	1.4	0.9	0.6	1.6	
F.I.R.E.	58.7	-2.0	2.8	3.8	3.2	
Services	322.2	4.6	5.8	3.7	4.3	
Government	188.3	-1.3	0.2	2.3	1.0	

### Unemployment Rates (%)

	May-01	Apr-01	Mar-01	Feb-01	May-00
Idaho	4.8	4.9	4.5	4.5	4.8
Nevada	4.4	4.9	4.6	4.4	3.8
Utah	4.0	3.9	3.7	3.4	3.2
U.S.	4.4	4.5	4.3	4.2	4.1

Unemployment rates are from the household employment survey; all other data are for nonagricultural payroll employment. All data are seasonally adjusted.

<sup>a</sup> Annualized.

Source: Bureau of Labor Statistics.

### Residential permits—April 2001

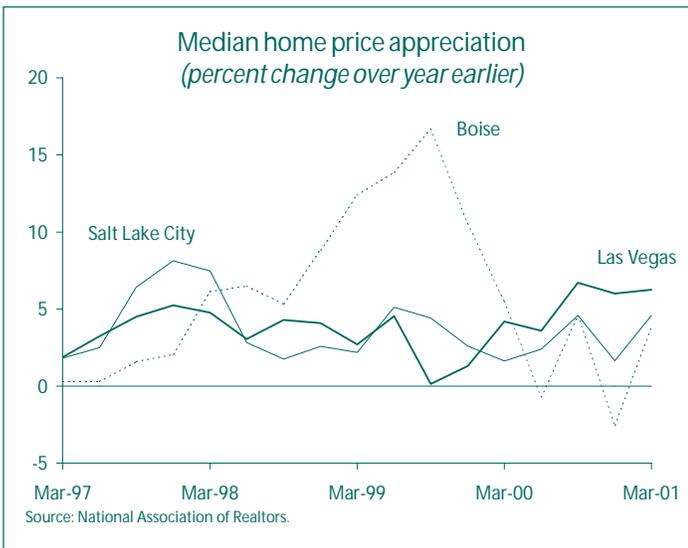
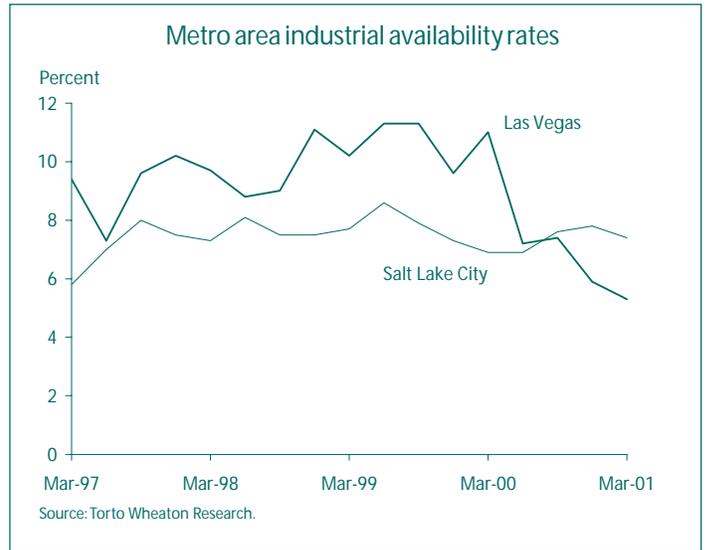
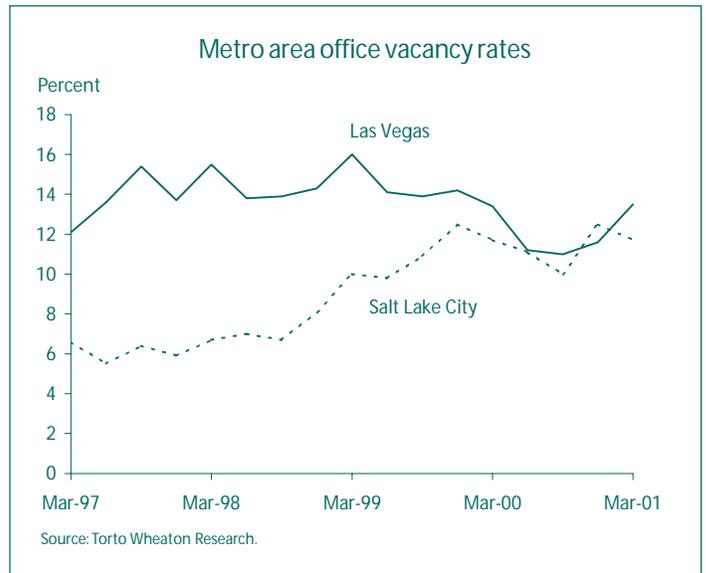
	3-mo. average number	Moving average percent change	
		3-mo. <sup>a</sup>	12-mo. <sup>a</sup>
Idaho	1,054.2	11.3	3.2
Nevada	3,342.2	11.0	14.4
Utah	1,587.1	19.7	-3.8

Source: Bureau of the Census.

### Non-residential construction awards—April 2001

	3-mo. average \$ millions	Moving average percent change	
		3-mo. <sup>a</sup>	12-mo. <sup>a</sup>
Idaho	51.8	-17.2	-14.2
Nevada	139.6	-23.7	-6.8
Utah	140.2	10.3	0.4

<sup>a</sup> Underlying data are seasonally adjusted moving averages.  
Source: F.W. Dodge.



### Export update—March 2001

	\$ billions		Percent Change		
	2000	YTD	1999	2000	YTD <sup>a</sup>
Idaho	3.2	0.7	42.6	53.6	5.9
Nevada	1.0	0.2	41.5	21.8	30.5
Utah	3.1	0.8	5.1	1.7	8.1

<sup>a</sup> Percent change from same period a year earlier.  
Source: Census FT900 Supplement, Origin of Movement Series.

## 2001 Issues

## Mailing Dates

March	March 30
June	July 3
October	October 9
December	December 18

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