Report on the State of Colorado Employment:
A 115,000 to 203,000 Jobs Deficit and Slower Job Growth than in the 1990s

by Bob Powell, 9/03/05[1]

Introduction:

Phillip McCready[2] and I visited Brian Vogt, Director of Colorado OED, on 7/25/05 and talked with him about employment in Colorado. We exchanged views of the Colorado employment situation. I understood Mr. Vogt's perspective to be that we're OK because current data shows we are improving and jobs are being created in new areas. He perceives that the news media overemphasize the negative and the actual job situation is much more positive than it appears.

My impression is that there's primarily an overemphasis on minimal positives and cheerleading on the part of

- the press
- official government sources, and
- economists who might be expected to be neutral.

So unfortunately, the real extent of the employment problem in CO (and the nation) goes largely unrecognized.

Prompted by this discussion and recent articles in the Denver Post[3], curiosity got the better of me (again) and I decided to look at the data. Given differing views, what does the data show?

I found that the Colorado economy is significantly lagging when it comes to employment. While I've not done an exhaustive search, I don't believe one would know from the sources above that there's a 140,000 to 228,000 job deficit in Colorado: 25,000 jobs to get back to the early 2001 peak and 115,000 to 203,000 jobs (depending on how the estimate is done) to create the jobs needed for those entering the workforce over the past 4½ years.

A realistic picture of the jobs situation is important because, lacking that, there's a lessened perception of the need for action to change public policy and to increase our ability to actually *profit from innovation*.

Example articles in the press

6/30/05, Business section page one banner headline: **"Front Range jobless rate at '01 low"**[4] with the subhead, **"15,100 nonfarm jobs added across the state."** It's only on page 10C that the headline is, "Information-industry jobs lag," and in the last paragraphs that "... in the Denver-Boulder area, every sector is adding jobs so far this year except one -- information, ... Information jobs consist of telecommunications, about half the total, as well as software development and publishing."

7/21/05, Front Page banner headline: **"Colo. paychecks fatten."**[5] The only negative comment is from one person saying that "Law firms are still laying off."

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[1] This revision 6 primarily expands some material into a section on "The Effect of Growth on Jobs" and removes referenced articles and backup graphs to the companion document noted in the footnote below. Also made minor edits and added a major points summary. Revision 7 corrects errors in the calculation of the number of jobs needed for those entering the workforce over the past 4½ years.

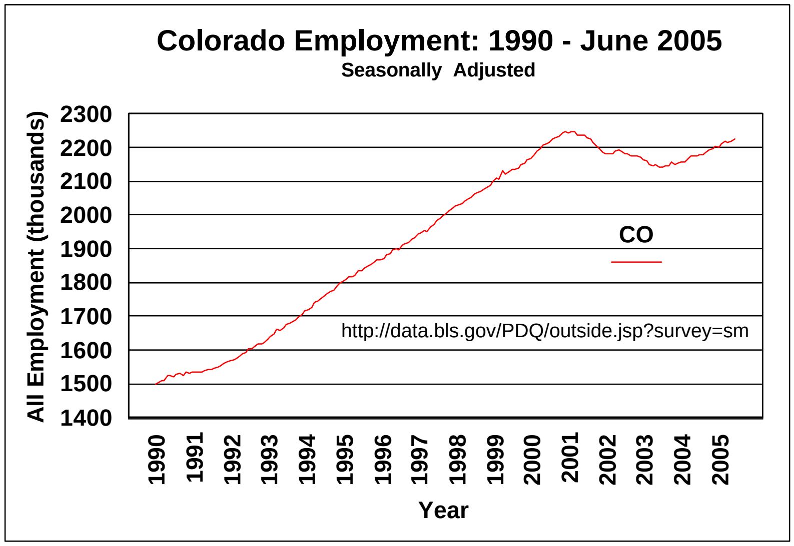
[2] Dr Philip McCready, Principal, Innovation Economics LLC, Phone: 303-984-6165, http://www.innovationeconomics.com

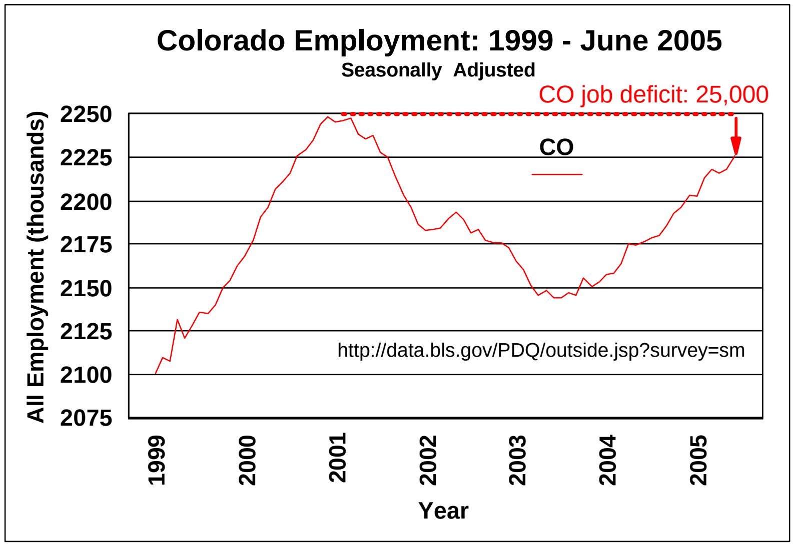
[3] The full last two articles are included in a Colorado Employment Details companion document that can be accessed on the same web page as this article at http://www.exponentialimprovement.com/cms/coemploy.shtml.

[4] "Front Range jobless rate at '01 low," 6/30/05, Denver Post, could not find at denverpost.com.

[5] "Colo. paychecks fatten"' 7/21/05, Denver Post, http://www.denverpost.com/business/ci_2878108

Colorado data from:
http://data.bls.gov/PDQ/outside.jsp?survey=sm
Series Id: SMS08000000000000001
Seasonally Adjusted
State: Colorado
Area: Statewide
Supersector: Total Nonfarm
Industry: Total Nonfarm
Data Type: All Employees, In Thousands





7/26/05, **Denver tagged with "over-priced" label**,[6] using 2004 data notes that Denver is 93rd in job growth among the 150 largest cities. But the semi-official source, Metro Denver Economic Development Corp., said it plans to counter the Forbes.com "Most Overpriced Places" study with information from 2005 that shows stronger job growth.

7/27/05, **"Colo. school woes hurt economy, panel told."**[7] But, countering with good news, economist Tucker Hart Adams ... told the committee ... Job growth is on the rise, unemployment is down ... . "We're not outperforming the nation to the extent we did in the 1990s, but at least we're not underperforming."

Data for Colorado[8]

From the two graphs on this page, one can see that, while Colorado employment has again begun to rise since mid-2003, it's still ~25,000 jobs short of the number of jobs in Jan 2001. Perhaps I've missed it, but I've not seen this mentioned in the press.

Another factor is that jobs must be added to keep up with the growth of the labor force. Approximately 137,000 jobs/month are needed in the U.S. to keep up with those entering the workforce.[9] Prorating this using the ratio of CO/US population in 2003[10], 2,144 jobs/month are needed in Colorado to keep up with those entering the workforce. For the 4.5 years (54 months) since the early 2001 peak, this is 115,776 jobs. I've also not seen this mentioned in the press.

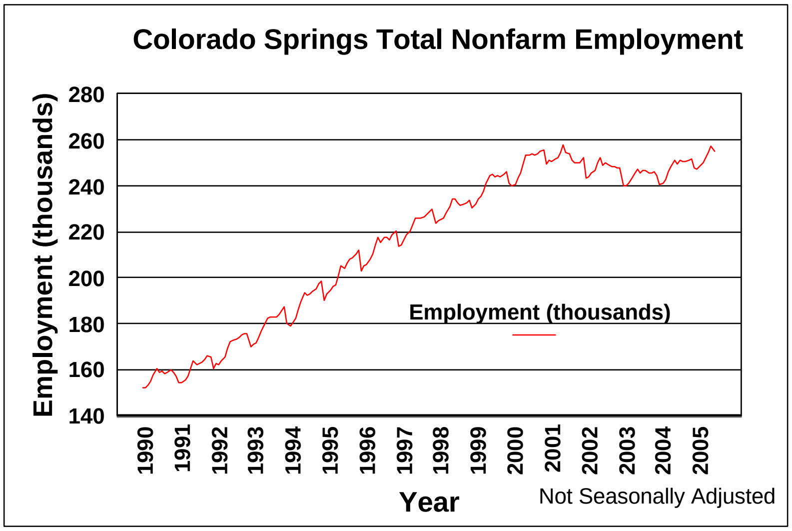
Therefore, the total job backlog is 25,000 + 115,776 = 140,776 jobs since January 2001.

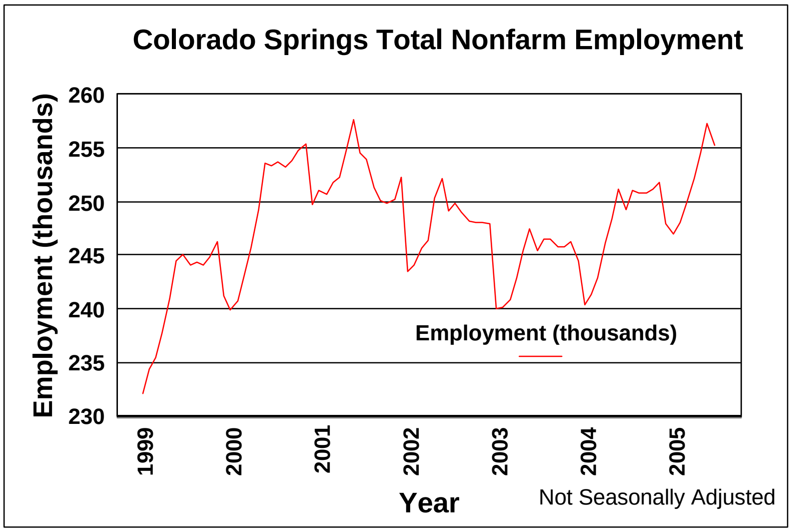
Even this is an underestimate, because population growth in Colorado from 4/1/00 to 7/1/03

6 "Denver tagged with 'overpriced' label," 7/26/05, Denver Post, http://www.denverpost.com/business/ci_2890451
7 "Colo. school woes hurt economy, panel told," 7/27/05, Denver Post http://www.denverpost.com/business/ci_2881255/ci_2892607
8 The numbers in this section are significantly higher than cited in the last version, which estimated "the Colorado job backlog as somewhere between 35,000 and 42,000 jobs." My mistake was to multiply the 2144 jobs/month needed in Colorado by 4.5 years instead of 54 months.
9 I've also seen 150,000 jobs/month quoted.
10 CO/US ratio = 4,550,688 / 290,809,777 = 0.015648 from http://quickfacts.census.gov/qfd/states/08000.html. 0.015648 x 137,000 = 2144

was 5.8% vs. U.S. growth of 3.3%; so population growth in Colorado was 76% greater than the U.S. Consequently, Colorado job growth should be greater to accommodate the greater influx of population. To be proportional to population growth, the jobs needed to keep up would be ~203,500 jobs. And the backlog would be ~228,500 jobs.[11]

So the Colorado job backlog is somewhere between 140,000 and 228,000 jobs.[12]





Data for Colorado Springs

Graphs[13] for Colorado Springs show that the area has approximately recovered the number of jobs lost.

However, as noted above, jobs must be added to keep up with the growth of the labor force. Prorating the approximately 137,000 jobs/month needed in the US according to the population ratio of Colorado Springs to the U.S., we get 170 jobs/month. For the 4.5 years (54 months) since the early 2001 peak, that's 9181 jobs needed.

Again, this is an underestimate because Colorado Springs has grown even faster than Colorado. Between 4/1/00 and 7/1/03 Colorado Springs has grown by 6.50%[14] vs. 3.3% for the U.S. Therefore the Colorado Springs vs. U.S. growth ratio is 6.5% / 3.3% = 1.97 and the number of needed jobs should be more like 9191 * 1.97 = 18,083 jobs.[15]

So the job backlog in Colorado Springs is somewhere between 9,000 and 18,000 jobs.

What about unemployment? Isn't that low?

"Official" unemployment in Colorado is 4.9%. That sounds good, but it's only part of the story.[16] A 5% "official" unemployment is over 9% "effective" unemployment as shown in the chart from the New York Times at right[17] ("effective" unemployment includes "discouraged" & "involuntary part-time" workers). Also, a story on a Federal Reserve study, **"U.S. jobless rate understated, study says**", makes a similar point on different grounds.[18]

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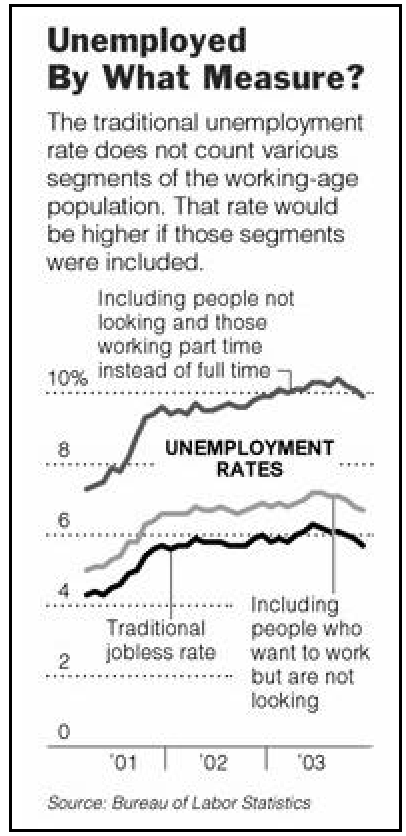
[11] 5.8% / 3.3% = 1.76 ... 1.76 x 115,776 jobs = 203,468 jobs ... 25000 + 203,468 = 228,468 jobs ... ~228,500 jobs.
[12] None of this takes into account that more and more people have more than one job.
[13] Seasonally adjusted data isn't available, so there are clear seasonal oscillations in the data.
[14] El Paso County growth; Colorado Springs growth is not given for this period at http://quickfacts.census.gov/qfd/states/08000.html.
[15] (Colorado Springs pop / U.S. pop) x 137,000 jobs/month = (360,890 / 290,809,777) x 137,000 jobs/month =170 jobs/month; 54 months x 170 jobs/month = 9181 jobs.
[16] See "There's no 'free market' for Labor" at http://www.exponentialimprovement.com/cms/labor.shtml
[17] "To Understand U.S. Jobs Picture, Connect the Dots, and Find the Dots," LOUIS UCHITELLE, *New York Times*, 1/12/04, http://www.nytimes.com/2004/01/12/business/12jobs.html
[18] Full article included in a Colorado Employment Details companion document that can be accessed on the same web page

And here's another example from an article on "Employment and Unemployment Reporting"[19]:

> The popularly followed unemployment rate was 5.5% in July 2004, seasonally adjusted. That is known as U-3, one of six unemployment rates published by the BLS. The broadest U-6 measure was 9.5%, including discouraged and marginally attached workers.
>
> Up until the Clinton administration, a discouraged worker was one who was willing, able and ready to work but had given up looking because there were no jobs to be had. The Clinton administration dismissed to the non-reporting netherworld about five million discouraged workers who had been so categorized for more than a year. As of July 2004, the less-than-a-year discouraged workers total 504,000. Adding in the netherworld takes the unemployment rate up to about 12.5%.



But wait, there's more.

Including other categories one can see that there are many more people looking for more work and work that's a better fit for their skills. Here's a summary by Lester Thurow in a 1996 article, "The Crusade That's Killing Prosperity" in *The American Prospect*.[20] following the publication of his book, *The Future of Capitalism.* The chart summarizes.

> In the fall of 1995, America's official unemployment rate was hovering around 5.7 percent. But like an iceberg that is mostly invisible below the waterline, officially unemployed workers are just a small part of the total number of workers looking for more work.
>
> If we combine the 7.5 to 8 million officially unemployed workers, the 5 to 6 million people who are not working but who do not meet any of the tests for being active in the workforce and are therefore not considered unemployed, and the 4.5 million part-time workers who would like full-time work[21], there are 17 to 18.5 million Americans looking for more work. This brings the real unemployment rate to almost 14 percent.
>
> Slow growth has also generated an enormous contingent workforce of underemployed people. There are 8.1 million American workers in temporary jobs, 2 million who work "on call," and 8.3 million self-employed "independent contractors" (many of whom are downsized professionals who have very few clients but call themselves self-employed consultants because they are too proud to admit that they are unemployed). Most of these more than 18 million people are also looking for more work and better jobs. Together these contingent workers account for another 14 percent of the workforce. In the words of Fortune magazine, "Upward pressure on wages is nil because so many of the employed are these `contingent' workers who have no bargaining power with employers, and payroll workers

Category	Millions of People	Percent of Workforce	Cum
• officially counted	8.0	6.1%	6.1%
• don't meet test	6.0	4.5%	10.6%
• part-time	4.5	3.4%	14.0%
• temporary	8.1	6.1%	20.2%
• on-call	2.0	1.5%	21.7%
• self-employed	8.3	6.3%	28.0%
• disappeared	5.8	4.4%	**32.3%**
Category Total	42.7	**32.3%**	
Total Workforce	132	100%	
The last 4 categories above total 24.2 million people. Assuming only ½ of them want more or better work, that's 12.1 million, 9.2%. Adding them to 14% gives:			**23.2%**

as this article at http://www.exponentialimprovement.com/cms/coemploy.shtml.

[19] http://www.gillespieresearch.com/cgi-bin/bgn/article/id=341. Accessed via: "Shadow Government Statistics, Analysis Behind and Beyond Government Economic Reporting" at http://www.gillespieresearch.com/cgi-bin/bgn.

[20] Lester C. Thurow, "The Crusade That's Killing Prosperity," *The American Prospect* vol. 7 no. 25, March 1, 1996 - April 1, 1996. http://www.prospect.org/print/V7/25/thurow-l.html.

[21] There are 4.369 million classified in July 2005 as "Part time for economic reasons" due to either "Slack work or business conditions" or "Could only find part-time work". Link: http://www.bls.gov/news.release/empsit.t05.htm.

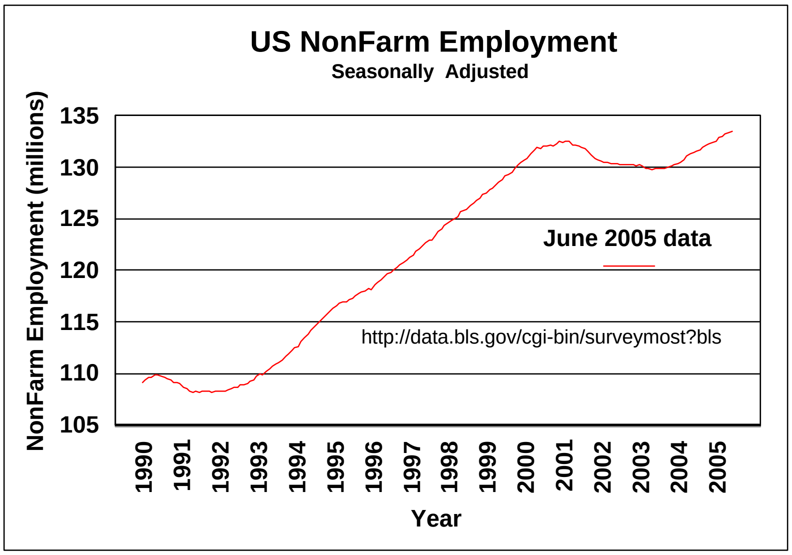
realize they must swim in the same Darwinian ocean." Like the unemployed, these contingent workers generate downward wage pressures.

In addition there are 5.8 million missing males (another 4 percent of the workforce) 25 to 60 years of age. They exist in our census statistics but not in our labor statistics. They have no obvious means of economic support. They are the right age to be in the workforce, were once in the workforce, are not in school, and are not old enough to have retired. They show up in neither employment nor unemployment statistics. They have either been dropped from, or have dropped out of, the normal working economy. Some we know as the homeless; others have disappeared into the underground illegal economy.

Put these three groups together and in the aggregate about one-third of the American workforce is potentially looking for more work than they now have. Add in another 11 million immigrants (legal and illegal) who entered the United States from 1980 to 1993 to search for more work and higher wages, and one has a sea of unemployed workers, underemployed workers, and newcomers looking for work.

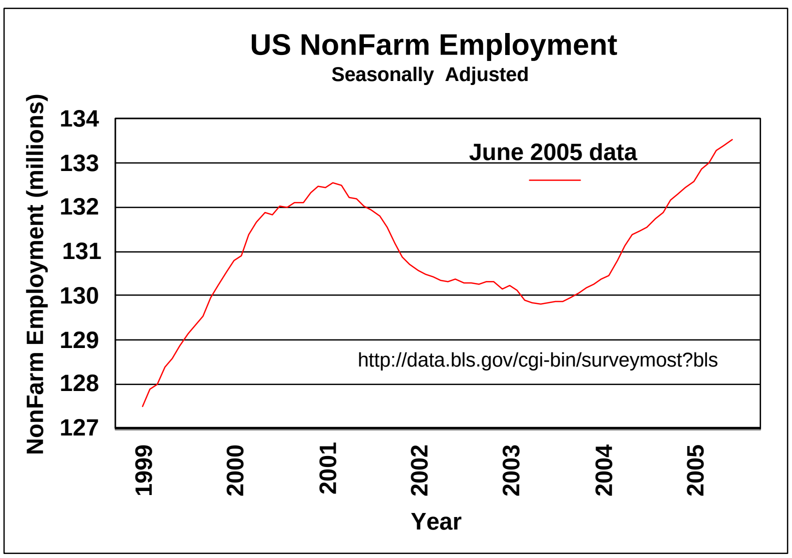
Counting only one-half of the last 4 categories as wanting work, more work, or work better fitted to their skills, the slack in the labor force is over 20%. Whether 1 in 10 or 2 in 10, that's a lot of slack.[22] This is why, as Thurow explains:

> If one believes even marginally in the power of supply and demand, surplus labor of these magnitudes has to lead to falling real wages. Wages rise roughly with productivity growth only if there are labor shortages. Since slow growth throws the bottom 60 percent of the workforce into unemployment far more than it does the top 20 percent, the earnings of the bottom 60 percent should be expected to fall sharply relative to the top 20 percent in a period of high unemployment--as they have.



What about U.S. employment?

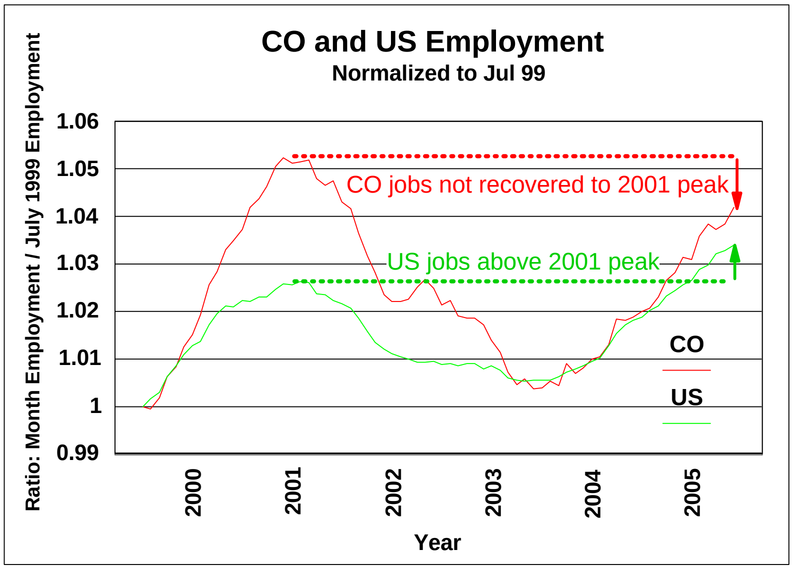
As the graphs on the next page show, U.S. non-farm employment has surpassed the peak in 2001, whereas the graphs above for Colorado show employment remains 25,000 below the 2001 peak.



That employment in the U.S has surpassed the peak in 2001 doesn't mean that all's OK in the USA. In the 52 months since the recession began in March 2001, from April 2001 through July 2005, there has been a

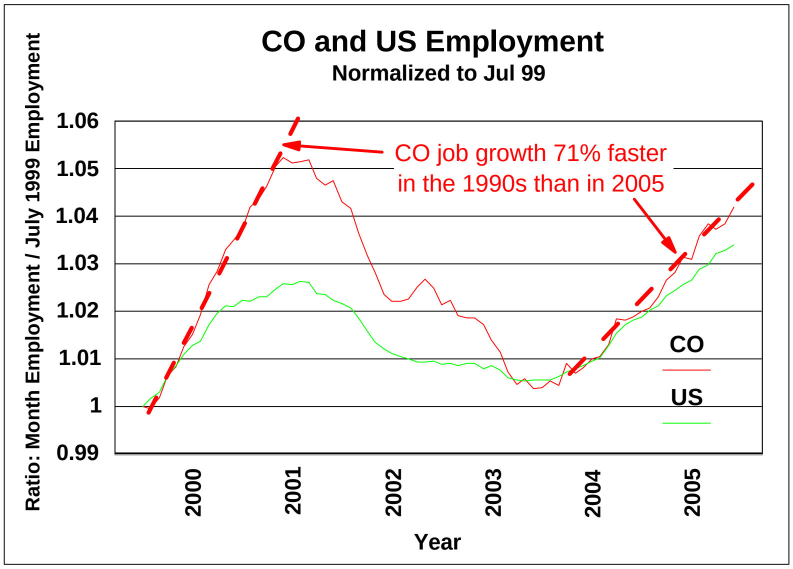
[22] This enormous slack explains why wages increased very little in the 90s even though "official" unemployment dropped to around 4%.

net increase of 1,275,000 jobs. But just to keep up with population growth over this period, 137,000 jobs must be added every month. Over 52 months that's 7,124,000 jobs that are needed just to stay even. ***That means that over this period there's a job backlog of 5,849,000 jobs, almost 6 million jobs***.[23] This gets little, if any, media attention.



Comparing Colorado & U.S. employment

The graphs on the bottom of this page and the top of the next show comparisons of Colorado and US employment, with the values for both normalized to their values in July 1999.



The bottom graph shows Colorado jobs have not recovered to the 2001 peak, whereas U.S. jobs have recovered (though neither has made up for the backlog needed to keep up with population growth).

The graph on the top of the next page shows (also see table next page[24]) the Colorado job growth rate in the 1990s was 71% greater than the current job growth rate (or current is ~59% that in the 1990s).

	Employment Growth Rates			Employ-ment Drop
	1992 - 2000 timeframe	2005 timeframe	1990s/2005 ratio	
CO	3.45% / year	2.02% / year	1.71	~4.4%
US	2.23% / year	1.58% / year	1.41	~2.0%
CO/US ratio	1.55	1.28		2.2

Though the job growth rate is 28% greater for Colorado than for the nation, its had further to go because the employment drop in Colorado was ~4.4% vs. a 2.2% drop for the nation. The drop in Colorado is likely largely due to the greater Colorado dependence on dotcom and IT employment, the loss of those jobs in the dotcom bust, and the continuing loss of those jobs through offshoring.

The role of U.S. economic policy

Federal Reserve policy

This section describes why Colorado's problem is really a national problem and why, on its

[23] Data from the Bureau of Labor Statistics, CES0000000001 at http://data.bls.gov/cgi-bin/surveymost?bls.

[24] Rates derived from Excel plots of Jan1992-Jun2000 and Aug2003-Jun2005 and slopes from linear regression fits over the relevant time frames. See the graphs included in a Colorado Employment Details companion document that can be accessed on the same web page as this article at http://www.exponentialimprovement.com/cms/coemploy.shtml.

own, Colorado cannot solve the employment problem without quite negative "side effects."[25]

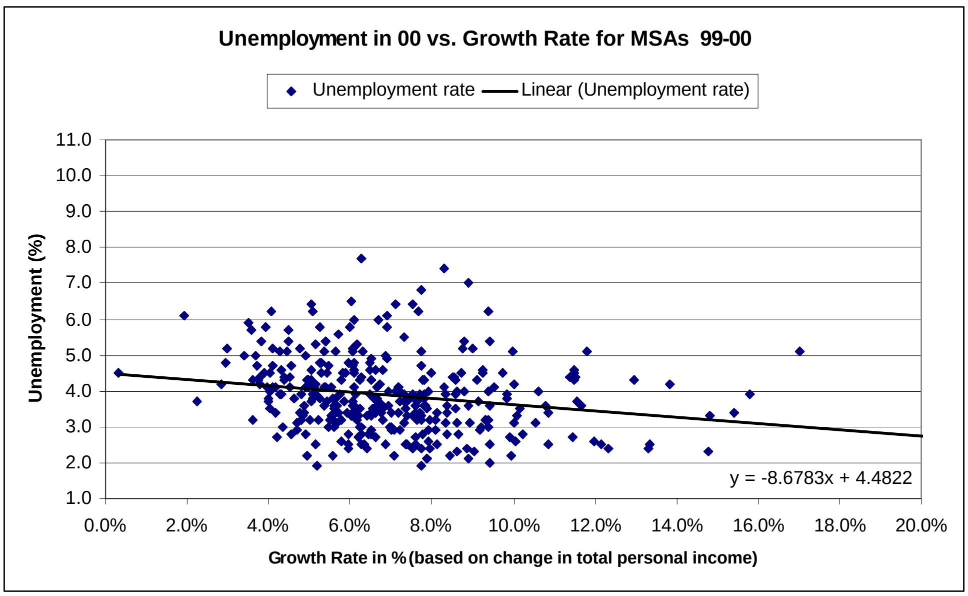
The U.S. Federal Reserve raises interest rates when it fears an inflationary wage-price spiral might develop for whatever reason -- be it from the Greenspan-described "irrational exuberance" of the recent dotcom stock market bubble[26], from increasing oil prices, or from its perception that excessive economic growth might lead to what it sees as excessive labor demand that would drive up wages.

This policy assures what's described above: there are more people who want jobs than jobs.

Therefore, because only so much economic growth is allowed for the nation as a whole, people and regions compete for the jobs and growth that are possible. Regions attract companies by offering ever more what they call "business friendly" policies of lower taxes, less regulation (including environmental) and weaker worker protections. Also, because worker supply exceeds demand, workers work for less pay than would otherwise be the case.

And competition escalates. The regional and individual situations parallel each other in that the escalation drives both peoples' wages (that support family quality life) and regional taxes (that might be called "regional wages" that support regional quality of life) toward somewhere between zero and subsistence level. This happens because this "musical chairs" effect[27] causes the "added value" of any one person or region to be zero.[28] This leads to regions not being able to maintain infrastructure and services and to wages that aren't a "living wage" that affords basics like housing and health care.

And there's another reinforcing feedback: As regional infrastructure backlog grows and services decline, regions are led to promote more development in order to gain tax revenue. This provides some immediate relief, but years later the increased load on the infrastructure creates an even larger backlog. This prompts regions to promote *even more growth* for more immediate relief. This is called "addiction." It's the same structure as addiction to drugs: feel good in the short-term even though long-term health suffers. Because there's a long delay before the



[25] We learn from systems thinking that there are no "side effects," but effects we ignore or don't foresee due to flawed mental models.

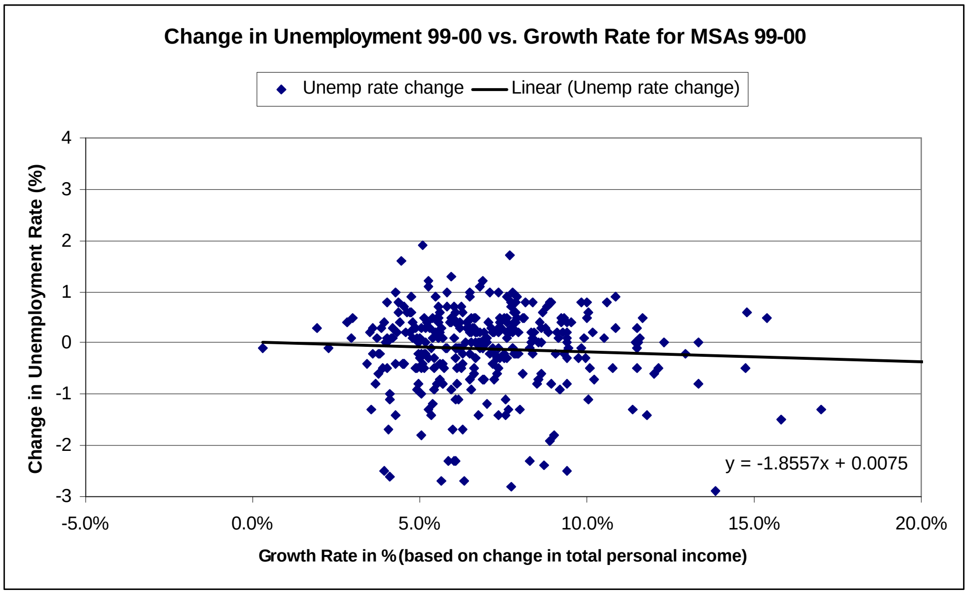
[26] The Federal Reserve, rather than steadily raising interest rates throughout 2000, should have instead increased margin requirements. When speculators look for on the order of 20 - 30% returns in 6 months, they are not deterred by a few percentage points increase in interest rates; only a lessened ability to borrow to fuel their speculation will be effective. In addition, when the speculative bubble did finally burst, the higher interest rates made the collapse even worse. The Fed did abruptly reverse course, but to little effect in the face of great production overcapacity. With supply greatly exceeding demand, reducing interest rates to promote investment is like pushing on a rope, which works poorly, if at all. However, the much lower interest rates did result in a refinancing boom that has reduced mortgage expenses for many Americans, that has buoyed consumer spending and that, many believe, has creating a housing price bubble.

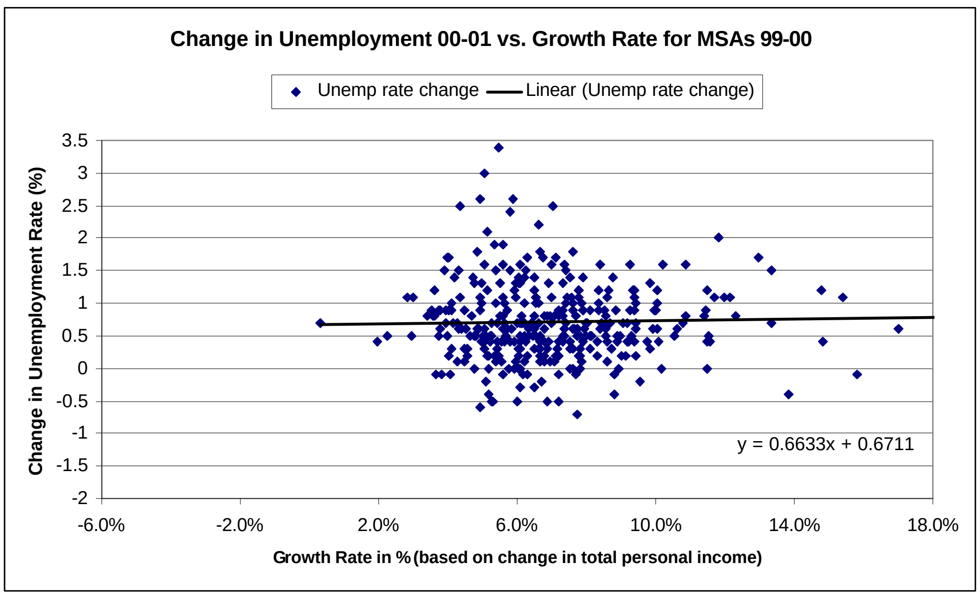
[27] For an explanation of this effect based on game theory, see the book by Brandenburger & Nalebuff, *Co-opetition*, 1996, pp. 41-47.

[28] A minimum wage was established because wages are driven toward zero.

infrastructure demands arise, it's easy to ignore, and/or obfuscate, the connection. Of course, addiction of any kind is not a solution. No one can sell a product (Colorado) at a long-term loss and make it up in volume.

The Effect of Growth on Jobs





Increased regional growth is heavily promoted as needed to "create jobs" and reduce regional unemployment. It's taken for granted as a given; almost everyone believes more local growth reduces local unemployment. But it does not. Growth is so often promoted on this basis that this is a shocking statement.

As with many beliefs, there's a grain of truth. The scatter plot on the previous page for Metropolitan Statistical Areas (MSAs) shows area Unemployment vs. area growth rate (as measured by the change in area total personal income).[29]

In this example, the trend is that areas growing faster from 1999 to 2000 tend to have lower unemployment in the year 2000. In this case, by increasing the growth rate by 10%, unemployment falls by ~1%. Similar plots for the years 1998 to 2003 show that when the growth rate increases by 10% unemployment falls by between 0.25% to 2.5%.[30]

That's nice, but points to the first problem with seeing regional growth as the solution to unemployment: U.S. economic growth is ~ 3.5%. An additional 10% growth rate in an economy that's growing in the range of 3.5% to 5% is simply unsustainable.

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[29] "Personal income and population summary estimates (CA1-3)" from http://www.bea.doc.gov/bea/regional/reis/ and Unemployment data from the Bureau of Labor Statistics from http://data.bls.gov/PDQ/outside.jsp?survey=la. Twelve outlying MSAs with official unemployment over 12.5% are omitted; for example, the areas of El Centro, CA, and Yuma, AZ, had average official unemployment from 1997 to 1993 of 21.3% and 23.7%, respectively, ... getting up to 26% to 30% in the years from 1997 through 1999 ... simply incredible.

[30] See a full set of plots in a Colorado Employment Details companion document that can be accessed on the same web page as this article at http://www.exponentialimprovement.com/cms/coemploy.shtml.

The second plot on the previous page shows the "Change in Unemployment Rate" from 1999 - 2000 as a function of area "Growth Rate" over that period. One would expect that, if growth does reduce unemployment, the general trend would be that greater economic growth would result in a drop in unemployment. It does not. One might also think that after a year delay there might be an unemployment drop. This graph above shows that is also not the case.[31]

The reality is that, because Federal Reserve policy only allows so many jobs to be created, greater regional growth doesn't create jobs; it only redistributes jobs. Lower unemployment in high growth areas is because it takes time for people to move to take the jobs. High growth in some areas is at the expense of other areas that are left with lower growth.

Engaging in "tax wars" between regions, is no more effective than prolonged price wars between gasoline stations. Gas station price wars continue until one goes out of business so the other can raise prices in the presence of less competition. Regions war until infrastructure backlogs and a lack of funds for necessary government services become so great that taxes are raised again. A current example is drive to pass Colorado Initiatives C and D to increase taxes that can be retained to make up for prolonged, too-low taxes on business.[32] Unfortunately these taxes will be obtained from the public at large, instead of from business.[33]

Federal tax policy

Our economy is in the trough of the "long wave"[34] when capacity to produce products and services provides a supply that greatly exceeds demand. This has become progressively more the case since the long wave peak in 1973, hence the ever slower job recovery since that time. Domestic tax policy should be geared to increasing demand, not promoting investment, because of where the economy is in the long wave cycle. In the trough of the long wave, there's overcapacity and supply that exceeds demand for almost everything (steel, autos, semiconductors, laid optical fiber, etc. …). The approach of the trough of the long wave is what has led to ever slower job recovery as shown in the graph[35] above.

[31] In most years the trend is virtually flat. Unemployment from 1999 to 2000 went up in areas that had greater 1998 to 1999 growth rates. See the graphs in a Colorado Employment Details companion document that can be accessed on the same web page as this article at http://www.exponentialimprovement.com/cms/coemploy.shtml.

[32] For more on growth see "The Trouble with TABOR" and links at http://www.exponentialimprovement.com/cms/tabor.shtml.

[33] Many argue that corporations shouldn't pay taxes at all because that expense is passed on to consumers and it's ultimately individuals who pay the taxes. However, corporations selling products and services require the support of infrastructure and government services. The market can only efficiently allocate resources when the costs of supporting the creation of those products and services is built into all the products people purchase. Individuals in turn pay sales tax to pay for the services that support their own economic activity.

[34] A description of the "long wave" and its effects based on work at M.I.T. are included in "A Systems Thinking Perspective on Manufacturing & Trade Policy" at http://www.exponentialimprovement.com/cms/fostermfg.shtml.

[35] "A strange recovery: Jobs continue to disappear," *The Economist*, 8/7/03, http://www.economist.com/displaystory.cfm?story_id=S%27%29HH%2BRA%3F%20%20P%22%24%0A

Current administration policies, designed to increase investment and further increase capacity, will not work. In the long wave trough, when supply exceeds demand, there will be little investment without accompanying demand, no matter how much taxes are cut for corporations and the wealthy. Current policy prolongs economic stagnation in the trough of the long wave.

The needed policy is to return taxes on corporations and higher income individuals to previous levels and cut income and payroll taxes (at least temporarily) for lower income individuals to increase demand.[36] Do this and everyone will do better, investors included.[37]

Summary:

Tucker Hart Adams' statement, "We're not outperforming the nation to the extent we did in the 1990s, but at least we're not under performing," is partially correct: current job growth is 28% greater in Colorado.

However, it's mostly incorrect. There's a lot further to go to even reach the 2001 peak, whereas nationally the 2001 peak has been exceeded. Colorado has yet to make up for 25,000 lost jobs or create another 115,000 to 203,000 jobs for those who have come into the workforce since the 2001 peak. That's a shortfall of between 140,000 to 228,000 jobs. Nationally, there's a backlog of 6 million jobs. The Colorado job loss was 2.2 times more severe than for the nation.

The problem is even greater than these numbers would suggest, because many of the lost jobs have been high-level and high-paying, high-skill IT and dotcom jobs ... and Colorado is still losing them. So the solution isn't simply for people to get more training; there are lots of highly-skilled people. A *Colorado Springs Business Journal* article quotes a local recruiter ("Quantum lays off engineers," 8/19/05).

> Kathleen Connor, an executive recruiter based in the Springs, said the layoffs reflect a tough market for mid- to senior-level professionals and new college graduates. High-tech positions and mid to upper level management positions are not open, she said.
>
> "No matter how good the economy is getting, it's a difficult professional job market," Connor said. "I still have a lot of Ph.Ds in my database who don't have jobs." ...
>
> What's real in today's job market is that large corporations are not in the "hiring mode," she said. "And we are not creating top-level jobs in this community."

Economic development is vital if Colorado is to recover from the economic downturn. But "economic development" should not take the form of tax wars between regions. It must be economic development based on increased innovation and the ability to actually *profit from innovation*, which is no easy task.[38]

One initiative is that of the Manufacturing Task Force in Colorado Springs[39], which has been exploring for over 2 years what can be done to restore and grow the Colorado Springs manufacturing base by increased manufacturing excellence, innovation, knowledge distribution, and area marketing. Another example is the work of the Magellan Center[40] in Longmont that is focused on promoting innovation and entrepreneurial activity.

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[36] Even some Republicans know this: "... a growing number of business and political leaders, including at least one influential industry group, want to funnel more money to lower- and middle-income taxpayers in an effort to generate more demand for goods and services." From "Split in Ranks of Business and G.O.P. on Tax Cuts" by EDMUND L. ANDREWS, 11/29/02, http://www.nytimes.com/2002/11/29/business/29TAX.html.

[37] See comparisons of 90s vs. current in *There's no "free market" for Labor*, at http://www.exponentialimprovement.com/cms/labor.shtml.

[38] Developing the ability to not just innovate, but to actually profit from innovation, is challenging. See why in "A Systems Thinking Perspective on a Manufacturing Base Restoration Initiative" at http://www.exponentialimprovement.com/cms/STMfgBaseRestorInit.shtml.

[39] In this report, I speak only for myself, not for the Task Force. For info see the mid-2005 Report on Manufacturing Task

The U.S. must also address its trade policy that is creating an exponentially-increasing trade deficit and undermining the purchasing power of economy, as well as our economic and military security. We must develop a sane, balanced trade policy to bring the trade deficit under control. As a first step, it's not protectionist to put an end to "reverse protectionist" policies that actually subsidize the offshoring of jobs.[41]

The story from government, EDCs and the press is more positive than warranted for the true state of the job market to be conveyed to companies considering relocation. Excessive cheerleading is unhelpful.

Key point summary:

- Colorado is 25,000 jobs short of the 2001 peak.
- Considering those who would have come into the workforce since the 2001 peak, the Colorado job backlog is between 140,000 and 228,000 jobs.
- Colorado Springs jobs have approximately recovered to the level of the 2001 peak.
- Considering those who have come into the workforce since the 2001 peak, the Colorado Springs job backlog is between 9,000 and 18,000 jobs.
- Economic development activity should highlight, rather than underplay, the job backlog in Colorado as a factor to attract companies to Colorado.
- Nationally, the job backlog is ~6 million jobs.
- The Colorado job growth rate in the 1990s was 71% greater than the current job growth rate.
- The employment drop from early 2001 to mid-2003 in Colorado was ~4.4% vs. a 2.2% drop for the nation.
- The Colorado job growth rate is 28% greater than for the nation.
- "Official" unemployment is a vast understatement of real unemployment. "Effective" unemployment is of order 9 - 12%. Counting others, the slack in the labor force is over 20%. Whether 1 in 10 or 2 in 10, that's a lot of slack.
- Unemployment and underemployment are national problems that cannot be solved at a regional level because over the long run they are determined by Federal Reserve policies.
- "Reverse-protectionist" trade policies and offshoring are undermining economic and military security. A shift to "balanced trade" is required to bring the U.S. exponentially-increasing trade deficit under control.
- "Economic development" based on "business-friendly" tax competition between regions leads to infrastructure backlogs over the long run.
- Economic development must be based on increased innovation and the ability to profit from innovation (e.g., by keeping manufacturing in the U.S.).
- Because of where the economy is in the "long wave" with a global glut of supply, tax policy should be geared to increasing demand, not increasing investment.

Force activity at http://diy.rippleffx.com/index.cfm?fuseaction=landing.landing&c=57 or contact "Dave Anderson" <dcanderson51@adelphia.net>.

[40] The Magellan Center is a nonprofit, nonpartisan think tank and resource center, the Magellan Center provides practical information on all aspects of entrepreneurship through studies, demonstration projects and conferences. They foster collaboration among large corporations, small businesses, nonprofit organizations and communities to enhance economic growth by facilitating partnerships and creating new approaches to benefit enterprise. http://www.magellancenter.org/

[41] This is a complex topic beyond the scope of this paper. See "The Fallacy of Composition" and other links on this page http://www.exponentialimprovement.com/cms/fallacy.shtml.