San Diego County Manufacturing Industry Report
"Weak Recovery Continues"
December 2009
By Michele Nash-Hoff

While national economists have declared an end to this recession, California's manufacturing industry would be hard pressed to agree. However, San Diego's manufacturing industry continues to fare better than rest of state. While some companies continued slow during the third quarter, some saw a gradual upturn in business, some saw a steady level of business, and some have been busy.

According to Tatum's December Survey of Business Conditions, "Looking back 30 days, our respondents reported a continuation of slow, gradual recovery, with most indicators about flat or slightly better than the prior month. However, the outlook for the next 60 days is more cautious than the recent recovery trend." In August, the Tatum Index of Business Conditions reached its highest level at 4.2 since September 2007, just before the Recession began. It dropped to 4.0 in September before rising up to 4.1 in October, dropping back to 3.0 as of December 1st. Tatum's Index of Business Conditions had reached an all-time low of 0.4 in November and December 2008. In November, order backlogs, employment, and capital expenditure commitments were flat, while capital expenditure commitments and pricing were significantly down. Employment was slightly down. "Businesses with international markets are experiencing relatively better conditions than in domestic markets. Manufacturing is weak except in technology and exports." Tatum regularly surveys nearly 1,000 financial and technology executives nationwide, but only 25 percent are manufacturing executives.

The Manufacturing Institute for Supply Management's Report on Business was slightly more optimistic because "The manufacturing sector grew for the fourth consecutive month in November. While the rate of growth slowed when compared to October, the signs are still encouraging for continuing growth as both new orders and production are still at positive levels, and the Prices Index fell 10 points, signaling less inflationary pressure on manufacturers' costs. Overall, the recovery in manufacturing is continuing, but many are still struggling based on their comments," said Norbert J. Ore, C.P.M., chair of the Manufacturing Business Survey Committee. Previously, the manufacturing sector had contracted for 18 consecutive months, while the overall economy had contracted for seven consecutive months. The PMI registered 53.6 percent in November, down from 55.7 percent in October, but up from the low of 32.9 percent in December 2008. A reading of 50 percent indicates that the manufacturing economy is generally expanding and below 50 percent indicates that is generally contracting In November, 13 of the 18 manufacturing industries reported growth in new orders, 11 in production, but only six of the 18 reported growth in employment. The backlog of orders rose to 60.3 percent from the low of 29.5 percent in January. New export orders expanded for the 5th consecutive month On the downside, supplier deliveries were slower for the 6th consecutive month.

The results of the "Future of Manufacturing 2009" survey, conducted by *Industry Week* and Crow Horwatch, a public accounting and consulting firm were less optimistic, showing that "they identified a wide range of issues that are keeping them up at night, as well as strategies they are employing to grow their businesses in the face of intense global competition and the uncertainties presented by proposed changes in health care, environmental regulation and other policy issues. Manufacturing leaders identified competition from low-cost countries, cost of health care and cost of raw materials as their top concerns …" (48%, 47% and 46% respectively). Attracting/keeping skilled labor and credit markets/working capital were tied at 26%.

Survey respondents reported that on average 18% of their products are manufactured or directly sourced from outside the United States and expect their international sourcing to increase to 24% in three years. On average, manufacturers said international sales represent 16% of their business, but for very large firms with revenues of $1 billion or more, international sales represents 21% of revenues.

According to the PricewaterhouseCoopers Manufacturing Barometer, 48% of manufacturers surveyed are optimistic about the U. S. economy's prospects over the next 12 months. This time last year, 66% of respondents were pessimistic. Three-fourths of respondents expect to have recovered b the second half of 2010. In the next 12 months, 68% plan to increase operational spending, up 15 points. However, only 25% of respondents plan to add workers, and 28% plan to reduce the number of full-time employees. " Two concerns rose sharply in the latest report: legislative/regulatory pressures (58%, up 16 points) and taxation policies (53%, up 10 points." by the second half of 2010.

For much of the United States, the recovery is proving to be "jobless" as the unemployment rate rose nationwide to 10.2% and 12.5% in California as of November 1st. Surprisingly, only 11,000 jobs were lost in November. That's much better than the 130,000 job losses that Wall Street economists expected and than the revised loss of 111,000 job losses for October. San Diego's unemployment rate matched the national rate of 10.2% in October, but the November rates haven't been released yet. Our immediate neighbors of Orange, Riverside, and Imperial counties have rates of 9.4%, 14.7%, and 30.1% respectively. Imperial County's rate is one of the highest in the country.

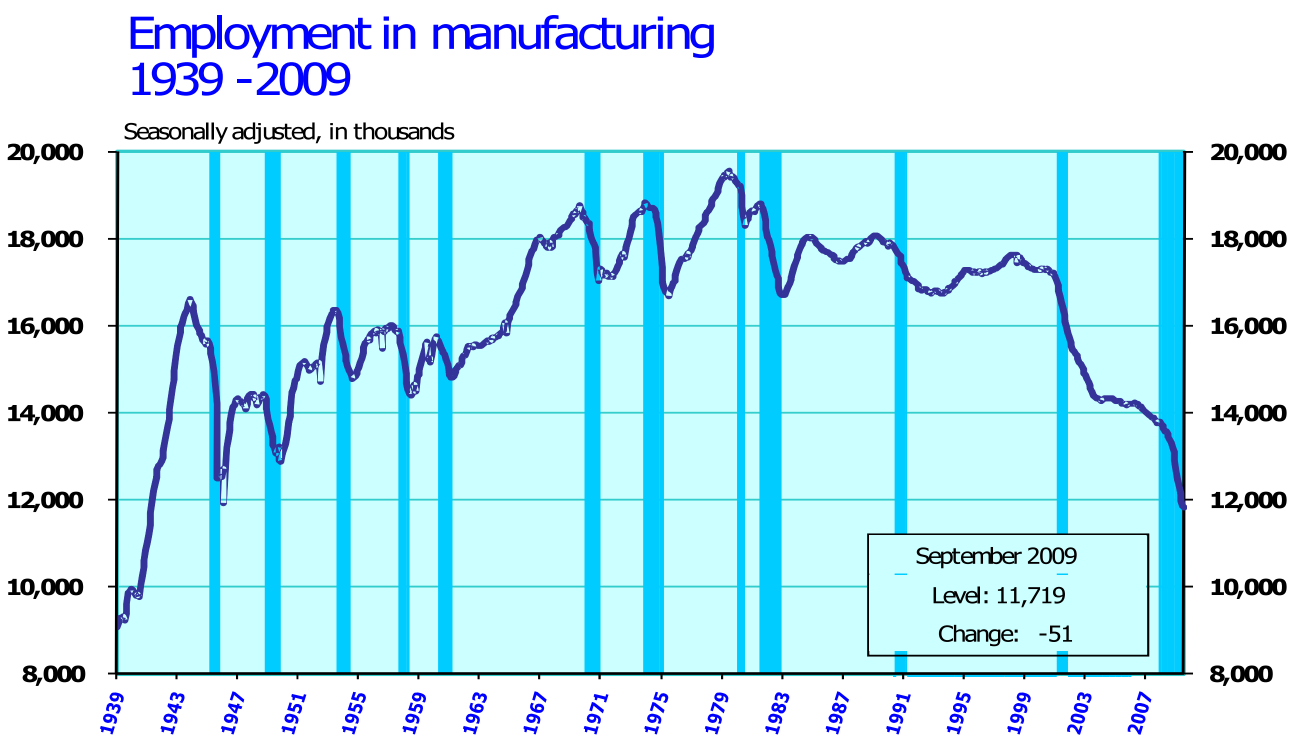
Some economists and policy makers believe that many jobs lost during this recession may be gone forever and a weak employment market could linger for years. This could add up to a "new normal" of higher joblessness and lower standards of living for many Americans Mark Zandi, chief economist and co-founder of Moody's Economy.com, said, "This Great Recession is an inflection point for the economy in many respects. I think the unemployment rate will be permanently higher, or at least higher for the foreseeable future."

According to the National Association of Business Economics, California is not expected to get relief from double-digit unemployment like the broader U. S. jobs market. Analysis expect California's jobless rate to climb well into next year. "Manufacturers are reluctant to hire without definitive signs the recession is letting up, said Raymond Sfeir of Chapman University's Anderson Center for Economic Research. "They're trying to survive with as few workers as possible," Sfeir said. "They're not going to commit until they're more certain."

The auto and construction industries led the nation out of past recessions. But the carnage among American automakers and the surplus of new and foreclosed homes and empty commercial properties make it unlikely that these two industries will be engines of growth anytime soon.

Even before the recession, many jobs had vanished or were shipped overseas by the manufacturing industry. The California Employment Development Department reported that California lost 121,300 manufacturing jobs in between August 2008 and September 2009. A total of 557,300 jobs have been lost in this sector since the decline started in December 2000, a 28 percent decline. No wonder California's unemployment rate increased from 5.7 percent in 2006 to 12.2 percent in October 2009. San Diego County's unemployment rate rose to 6.8 percent, up from 4.8 percent in October 2007. This rate is the highest point since summer 1995, when military contractors were closing their doors after the end of the Cold War.

Up until 2007, California was one of the largest manufacturing states, employing the most number of people nationwide. In 2006, we still had more than 14 million manufacturing employees nationwide. Now, it's down to 11.7 million. Nationwide, 1.5 million manufacturing jobs have been lost from January 2008 to September 2009, according to the Federal Bureau of Labor Statistics.

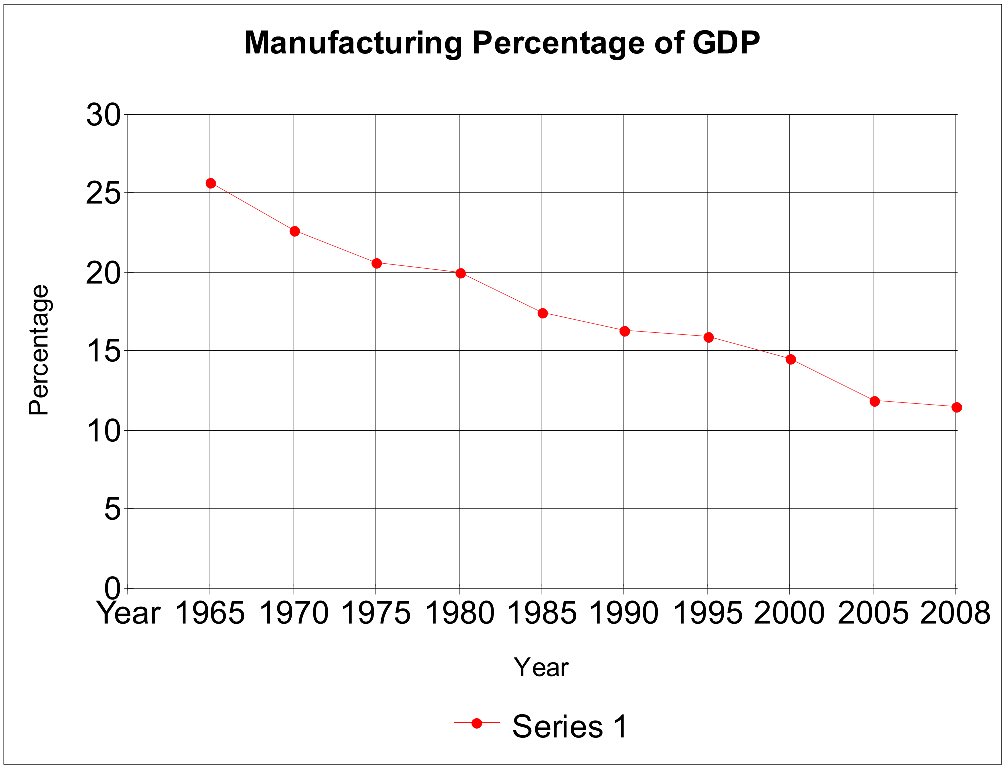


Source: Bureau of Labor Statistics, Current Employment Statistics survey, October 2, 2009.

Notes: Shaded areas represent recessions as determined by the National Bureau of Economic Research (NBER). NBER has not yet determined an endpoint for the recession that began in Dec. 2007. Most recent 2 months of data are preliminary.

Notice that we have lost about 5.5 million manufacturing jobs since the year 2000. The American economy cannot completely recover until such time as jobs are found for the millions of Americans who are out of work. I don't mean service jobs at Wal-Mart of McDonalds. I mean jobs that provide adequate income needs for the middle class – jobs that provide money to pay mortgages, pay for health care, college tuitions, vacations, maybe a new car, and contribute to church and charities.

Manufacturing jobs are the foundation of the middle class because they pay wages that are double or more than wages for service jobs. In 1965, manufacturing accounted for about 25% of the U. S. Gross Domestic Product. It has dropped to 11.5% by mid 2009.



Employers in California are expected to keep cutting jobs in 2010 even as the wider U. S. jobs market recovers. This is largely because of the continued housing and home building crisis. In the 12 months from September 2008 to September 2009, California's construction industry lost 144,000 jobs or 19% of its workforce, the largest decline on a percentage basis of industry groups.

The temporary staffing industry is often a bell weather of a recession or recovery so a sustained increase in staffing employment is a signal a recession is over. "During the week of Oct. 19-Oct. 25, 2009, temporary and contract work increased by 0.65%, maintaining the ASA Staffing Index at a value of 83. This index has maintained an overall trend of steady growth since the beginning of July, indicating that the staffing industry has continue to add temporary workers to their payrolls over the past 15 weeks." The baseline value for the American Staffing Association ASA Staffing Index was set at 100 in June 2006

Global staffing companies have been in a better position than smaller, regional companies to manage the crisis. Several San Diego staffing firms have closed their doors this year, and the survivors have reduced their own staff. The challenge has been dealing with the growing number of job applicants for fewer positions. For the first time since the recession of 1991-92, I personally know several highly qualified professionals that haven't been able to find jobs for several months now.

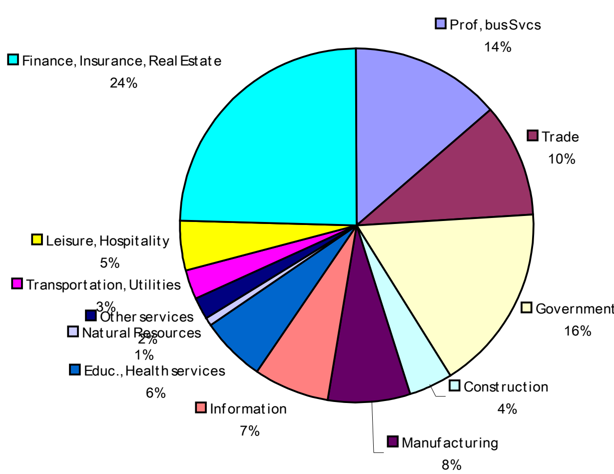
San Diego's Manufacturing Industry Continues Recovery

San Diego's primarily small to medium-sized companies in its manufacturing industry have fared better than other parts of the state and nation during this recession and have shown signs of gradual recovery since January 2009.

According to reports recently released by the U. S. Department of Commerce's Bureau of Economic Analysis (BEA), the San Diego metropolitan area generated $169.3 billion in Gross Domestic Product (GDP) in 2008. Economic production by the county or metropolitan area of San Diego alone is greater than 25 U. S. states, and if San Diego were a country, it would rank between Chile and Pakistan in the world ranking of GDP. As California's economy slumped to a real gain of only 0.4% and the U.S. slowed to 0.7%, San Diego GDP accelerated by 2.6%.

The increase in GDP in 2008 was largely driven by growth among sectors closely associated to government expenditures. The role of government is significantly more prominent in San Diego's economy than other neighboring areas, accounting for 17% of GDP compared to only 8.7% for Los Angeles-Long Beach-Santa Ana's GDP. "It is not too much of a reach to say that but for the grace of Department of Defense spending, San Diego would look a lot more like other economically devastated regions in the southwest, including Phoenix, Las Vegas, and Riverside-San Bernardino." (San Diego Economic Ledger, November 2009 by National University System Institute for Policy Research)

San Diego 2008 GDP by Industry



San Diego's diverse technology-based manufacturing industry has been the foundation of this recovery, but two new growth sectors of "CleanTech" and the "action and sports" industry are helping to spur the recovery. In 2007 TechAmerica (formerly AeA) added “clean technology” as one of the categories of their High Tech Awards, and CONNECT added “clean technology” as one of their categories for their Most Innovative Product Awards. This year, CONNECT added the category of Action and Sports Technology for their Most Innovative Product Awards and kicked off networking groups specializing in Clean Technology and Action and Sports Technologies.

Of course, not all technology-based companies received the awards form TechAmerica or CONNECT are manufacturers. For example, in 2008, there were 41companies that were finalists for the AeA (formerly American Electronics Association) High Tech Awards, but only 23 companies produce a product. This year, there were 38 companies that were finalists for the TechAmerica (formerly AeA) awards, but only 24 produce a product.

For purposes of this report, the definition of a manufacturer is a company that makes, creates, or produces a product, whether it is hardware, software, biotechnology, pharmaceutical, foodstuffs, etc. in contrast to a company that provides a service.

The marine technology industry is thriving in San Diego. Brad Fisher, western regional sales manager for Sea Con Brantner & Associates, said, “San Diego is a phenomenal place to do maritime business.” Sean Newsome, sales manager for SeaBotix Inc., said his company’s location on San Diego Bay allows staff to train customers on-site, deploying their miniature underwater vehicle into the water off the company’s pier. SeaBotix was one of the winners of TechAmerica’s High Tech Awards on October 30th. Marine technologies are best made near the water where developers can test products, and San Diego’s location on the West Coast is often called the gateway to the Pacific Rim. Some of the other successful maritime companies in San Diego are SonTek/YSI, BMT Scientific Marine, and SIDUS Solutions.

The good news is that San Diego’s off road vehicle industry has finally seen a modest upturn in orders starting in the third quarter despite the continuing crisis in the mortgage industry. As first mentioned in my report of November 2007, the reasons behind this slow down are complicated. Inquiries revealed that a majority of people who purchase off road vehicles (dune buggies, quad wheelers, and dirt bikes) work in the building industry or related industries. With the housing market in a big slump, fewer homes, condos, and apartments are being built so people working in this industry experienced a tight money situation and didn’t have the money to purchase off road vehicles or even keep the vehicles they had already purchased.

Outsourcing Offshore Expands

According to the fifth annual report on offshoring trends, published by Duke University in collaboration with the Conference Board, 53% of the companies surveyed had a corporate offshoring strategy in place, up from 22% in 2005. “Sixty percent of companies that had already offshore say they have aggressive plans to expand existing activities, and very few plan to relocate activities back to the United States,” it said … “Speed to market and the domestic shortage of science and engineering talent are two key drivers for offshoring projects,” the board said. Previously, offshoring strategies were largely focused on information technology and help desk support and aimed at reducing costs. There is a growing interest in offshoring engineering, software development, marketing, and sales and procurement.

However, companies that have sourced manufacturing in China or that are importing parts and assemblies for their products should be aware of the new risk in offshoring – longer lead times for deliveries. The worldwide recession is taking its toll on the shipping industry for goods exported from the Far East, particularly China. "The impact on the import/export balance of container traffic is dramatic," said Mike Garratt of MDS Transmodal." Chinese exports drive the overall demand for global shipping capacity, notes Garratt. "Here the picture is bleak." China's global shipping capacity declined 24% from Q2 2008 to Q2 2009. Growing consumer demand within China, coupled with the declining demand for Chinese goods in the West could affect container traffic.

The shipping industry grew rapidly from year to year, ever since China became the "world's factory." The cargo capacity of the world's combined container fleet increased from 4 million TEUs in 2000 to 12.5 million today. The northern German port city of Hamburg became the world's leading center for the financing and operation of new ships. Germans own 35% of the container ships in operation worldwide, and close to 60 shipping banks and financiers are headquartered in Hamburg.

The global economic recession and the change in the trade patterns have wreaked havoc on shipping. Demand and prices have collapsed, and ports are filling up with fleets of empty freighters. The shipping industry is fighting for survival. Ocean container lines have responded with various cost-cutting measures, including cutting routes and ships per route. The giant ships are now much too big for the cargos they transport and often sail half-empty.

This is causing a domino effect in the shipping industry. Large shipping companies are getting rid of the ships they lease from charter companies. Charter companies are now faced with the return of ships they had been leasing to other companies and can't make their payments to banks. Some shipping companies are on the verge of bankruptcy, as are shipping banks and charter shipping companies.

Another problem is the 1,550 new ships that were on order in mid-2008 that are scheduled to be delivered in the new few years, and the major Asian shipyards are unwilling to accept cancellations. Some shipyards haven't received an order for a new ship for over a year, and they are having difficulty getting progress payments from the customers for which they are currently building ships.

None of the world's major companies is currently turning a profit, and the crisis has fueled cut-throat competition, with shipping companies only being able to charter about $500 to ship one container from Asia to Europe – about $300 less than they need to cover their costs. A year ago, shipping companies were still collecting more than $1,500 per container.

Already, the governments of Germany, France, Denmark, Israel, China, and Japan have had to prop up their shipping industries with government guaranteed loans and other financial support. It is highly unlikely that all of the major shipping companies will be able to survive a long-term recession. (Shipping Industry Fights for Survival)

Harder to Compete for California Companies

"The total cost of regulation to the State of California is $492.994 billion which is almost five times the State's general fund budget, and almost a third of the State's gross product," according to the "Cost of State Regulations on California Small Businesses Study" by Sanjay Varshney, Ph.d., CFA, and Dennis Tootelian, Ph.D. of The College of Business Administration, California State University, Sacramento. "The cost of regulation results in an employment loss of 3.8 million jobs which is a tenth of the State's population. Since small business constitute 99.2% of all employer businesses in California, and all of non-employer business, the regulatory cost is borne almost completely by small business. The total cost of regulation was $134,122.l48 per small business in California in 2007, labor income not created or lost was $4,359.55 per small business, indirect business taxes not generated or lost were $57,260.15 per small business, and finally roughly one job lost per small business… Small business drives the economic engine and the gross state product. An adverse impact on small business is bound to adversely impact the production of goods and services, the risk tolerance of the American enterprise, the productivity of labor, the quality of life, and the overall well being of the State and its citizens." The Executive Summary concludes: …efforts to make the regulatory environment more attractive will make California a more attractive state for doing business. This in turn will improve the state's output, employment, labor income, indirect business taxes, economic climate, quality of life, living standards, and growth prospects."

California's manufacturers find it harder to compete because the business environment grows increasingly unfriendly. In 2005, California dropped to 50th in ranking in the Small Business Survival Index by the Small Business & Entrepreneurship Council (SBE Council), and its rank did not change in the 2006 and 2007 reports. California rose to 49th in the 2008 survival index by switching places with New Jersey. This low overall ranking was based on California's anti-business environment in the following areas:

- Highest personal income tax rates
- Highest state gas taxes
- Highest capital gains tax
- 5th highest cost of worker's compensation premiums
- 6th highest electric utility costs
- 6th highest Workers' Compensation rates
- 8th highest corporate capital gains tax rates
- 9th highest corporate income tax rates

Since taking office in late 2003, Governor Schwarzenegger vetoed 10 out of 10 of the California Chamber's identified "job killer" bills in 2004, seven of eight in 2005, and nine of the eleven in 2006. In 2007, the California Chamber of Commerce reported that Governor Schwarzenegger vetoed all twelve "job killer" bills sent to his desk for action by the legislature. In 2008, the California Chamber reported that the Governor vetoed nine of the ten "job killer" bills.

Despite California's government being near bankruptcy, the legislature introduced a plethora of new "job killer" bills in 2009. Fortunately, many of them failed to get out of committee, were amended to remove the egregious clauses, or failed passage in the Assembly or Senate. Of the ten "job killer" bills passed by the legislature, the Governor vetoed nine. The complete list can be viewed at California Chamber website www.calchamber.org. Fortunately, nearly all of the most egregious “job killer” bills I selected for my June report didn’t make it out of committee, and the following bill that did was vetoed:

AB 1404 (De León; D-Los Angeles) Discourages Emission Reductions — Significantly increases business costs and threatens state jobs and businesses by severely limiting the amount of offsets California industries can use to meet their greenhouse gas emission goals.

Job Creator Bills

“California is already feeling the weight of overly burdensome regulations, unique to California, passed by legislators when times were good, ” said Cal Chamber President Allan Zaremberg. “Governor Schwarzenegger knows that given California’s current economic situation, allowing these ‘job killer’ bills to become law would have further negatively impacted our state’s competitiveness and job climate. The private sector will bring this economy back, which is why the Governor signed both of the ‘job creator’ bills.” Eighteen other “job creator” bills didn’t make it out of committee.

SB 827 (Wright; D-Inglewood, formerly SB 696) – Supports Construction of Vital Projects – Prevents the loss of thousands of jobs and keeps businesses in California by re-establishing the South Coast Air Quality Management District credit bank.

AB 333 (Fuentes; D-Sylmar) New Home Construction – Facilitates the smooth recovery of the housing market by extending the life of active tentative subdivision maps and parcel maps for a period of two years.

Tax Reform

In December 2008, Governor Schwarzenegger appointed a 14-member bi-partisan Commission on the 21st Century Economy to make recommendations on ways to update and improve California’s out-dated revenue system and make it more reflective of our state’s economy.

California's state budget has relied too heavily on capital gains taxes, and the capital gains tax rates is the highest in the country at 10.3 percent. Capital gains tax filled the coffers of California government during the boom years of the late 1990s when stock options from high-tech ventures reached their peak, creating a huge spike in temporary millionaires and multimillionaires. It is estimated that revenues from stock options and capital gains generated a $5 to $10 billion one-time revenue windfall in the late 1990s. The state legislature did not put aside money in a rainy day fund. They just started spending it on new programs. Thus, politicians who did not understand the source of the revenue squandered it.

When the bubble burst, the state’s capital gains revenue plummeted, and when the revenue dried up, the state legislature didn’t have the money to fund the programs they had initiated during the boom years. Of the some 25,000 families making seven-figure incomes in 2006, more than 5,000 of them left in 2007. The loss of their tax payments accounted for half of the state budget hole in 2008, according to 2009 report “Rich States, Poor States,” by Arthur Laffer, Stephen Moore, and Jonathan Williams. the above-mentioned report.

After ten public hearings held through the state, hundreds of hours of expert and public testimony, and rigorous analysis and debate by the members of the Commission, a final report was released on September 29, 2009. The report contains recommendations that would dramatically overhaul the state's tax structure. The expansive recommendations include a significant reduction in personal income tax rates for all income groups, elimination of the state sales tax, changes to taxes on commerce, and a strengthened rainy day fund.

- Section One's recommendations re of a statutory nature, which means they may be made effective upon passage by a majority of the State Legislature and signature by the Governor.
- Reducer Personal Income Tax (PIT) for every taxpayer – reduce the number of tax brackets from six to two. The new tax rate would be 2.75% for taxable income up to $56,000 for joint filers ($28,000 for single) and 6.5% for taxable income above that amount.
- Eliminate the corporation tax and minimum tax – eliminate the corporate tax, which is currently at 8.85%, and eliminate the $800 minimum franchise tax.
- Eliminate the state general-purpose sales tax – eliminate the current 5% state sales tax, with the exception of the sales on gas and diesel fuels, which would continue to be dedicated to transportation. Elimination of the sales tax would phase in over five years.
- Establish a business net receipts tax (BNRT) – establish a new tax, not to exceed 4 %, applied to the net receipts of businesses. Small businesses with less than $500,000 in gross annual receipts would be exempt from this tax. This tax would have a much broader base than the sales tax since it would apply not only to good but also to services and to sales into the state from businesses located outside the state and, unlike the sales tax, be deductible against federal taxes.

Section Two would require a change in the State Constitution on a state ballot initiative in order to be effective.

- Strengthen the state's Rainy Day Reserve Fund – increase the target for the reserve from 5% of revenues to 12.5% and restrict the government's ability to use reserve assets so that the reserve is available to help fund services during recessionary periods.

The full report may be viewed at the following website: http://www.cotce.ca.gov./

Many Democrat leaders, including Senators Feinstein and Boxer, former Governor Gray Davis, former Speaker of the California State Assembly, Robert Hertzberg, Former Mayor Willie Brown, and Former President pro tempore of the California State Senate, Don Perata, have praised the commission's report. However, five of the commission's own members (four Democrat appointees and a business lobbyist named by the governor, Bill Hauck,) refused to endorse the recommendations.

Because of the Democrat majority in both houses of the state legislature, it will be difficult to get any of these recommendations enacted into law without stronger Democrat support. There is a much better chance of getting support from voters for a ballot initiative to strengthen the state's Rainy Day Reserve Fund.

For several years, I have been writing about my own prescription for what needed to be done to improve California's business climate. Here are my top four suggestions:

- Lower taxes - reduce the corporate and personal income tax rates by about two percent, to be competitive with other states. On average, we're about two to four percent higher than other states.
- Restore the capital equipment investment tax credit - the legislature repealed the capital equipment investment tax credit in 2003, which penalized companies for investing in the future. That needs to be changed.
- Reform workers' compensation to address the issues of fraudulent claims and frivolous lawsuits and reduce workman's compensation rates. Even after the reforms in 2004, California still has the 6th highest rate nationwide.
- Eliminate burdensome regulations on small businesses

San Diego Regional Chamber of Commerce Chairman Ben Haddad appointed a State Budget Task Group to develop recommendations on behalf of the San Diego business community. Key recommendations include:

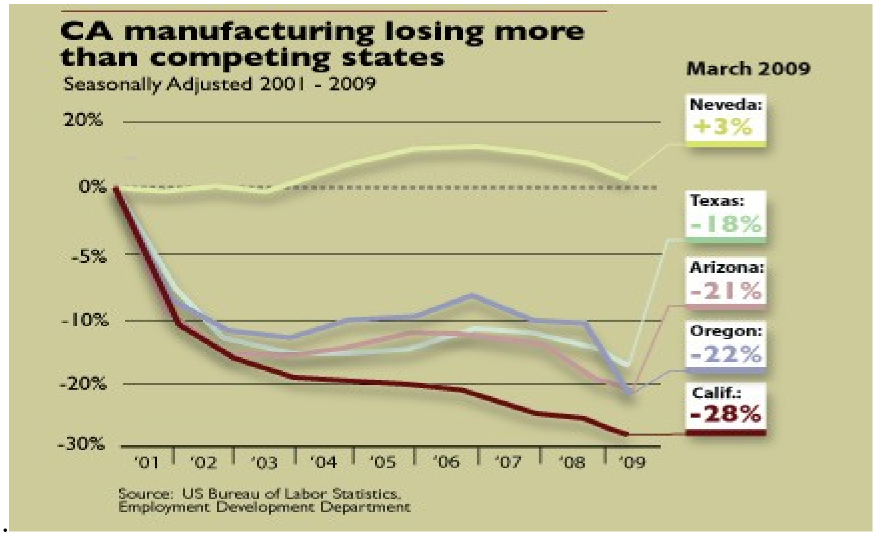
- Significant budgetary reform, including spending caps, two-year budget periods, and penalties for failing to meet budget declines;
- Tax reform, moving toward fairer, broader-based (as opposed to higher) taxes;
- Consolidation of duplicative government agencies to promote greater efficiency and lower costs;
- Referendum reform to increase financial stability and decrease ill-advised, unfunded public mandates. (Chamber Business Online June 09 Feature)

Now is not the time to raise taxes or fees. This is not the time to implement regulations that kill jobs. We need to make some drastic changes in California's business climate so that we can maintain as much as possible of our manufacturing base in California.

San Diego has always been a "start-up business" area where companies grew to a certain size and were acquired by mostly out-of-the area companies. The new owners usually kept the division or subsidiary in San Diego because they were afraid of losing key people if they moved have taken a look at their bottom line for their San Diego-based acquisition and decided they couldn't afford to stay in California.

This line of thinking has changed as the costs of doing business in California have escalated over the past several years and the overall business climate became more unfavorable. San Diego companies have been moved to such former business unfriendly states as Ohio, Minnesota, Maryland, and New York.

Most western states have endured large job losses in their manufacturing sector, but California's situation is worse, as the following chart shows:



The initial list of 40 companies that had gone out of business or moved out of California that accompanied my first report of March 2003 more than doubled to 85 by the end of 2003. The mass exodus of companies moving out of San Diego County slowed down after the Schwarzenegger reforms in early 2004. Even so, another 65 companies have either gone out of business or moved out of state since 2004 for a total of about 160 companies no longer in business or located in San Diego County. Based on employment data for companies listed in the 2000 Technology Directory for San Diego County and estimating 20 employees for companies not listed in the directory, the current list of companies represents a loss of nearly 8,000 jobs.

The economic data indicates that each manufacturing job creates three to four other jobs while service jobs only create one to two other jobs. Therefore, the loss of over 500,000 manufacturing jobs may have caused 1.5 to two million other jobs to vanish. Nationwide, a staggering 5.5 million manufacturing jobs have disappeared since the year 2000. In 2006, the U. S. Department of Labor predicted that another 1.5 million manufacturing jobs would be lost between 2006 and 2016. Because of the recession, we have already lost more than that amount. If this trend is not reversed, it is only a matter of time before California's economy and America's economy becomes primarily a service and retail one. It will difficult, if not impossible, for the United States to remain the world's super power if this trend becomes a reality. It will take the cooperative effort of government, industry and individuals to restore California and our country to the "land of opportunity" they once were.

Background: As background for how this series of reports came to pass, ElectroFab Sales is a manufacturers' sales representative agency for "job shop" companies that perform custom fabrication services. Our primary market is OEM's (Original Equipment Manufacturers) in San Diego County that utilize sub-contract manufacturing services.

We began losing customers and prospective customers in early 2001 because of the adverse business climate in Caifornia and the effects of the recession. We started keeping a record of the companies that moved out of state or had gone out of business since January 2001. This list evolved into an analytical report that I have been e publishing periodically since then in an effort to make key policy makers aware of the seriousness of the situation. This16th report provides an update on the state of various San Diego industry sectors, along with a focus on the effects of outsourcing offshore and California's competitiveness in the challenging global economy.

About the Author: Michele Nash-Hoff is President of ElectroFab Sales, an independent manufacturer's representative agency, which she founded in 1985. She is past president of the San Diego Electronics Network, the San Diego Chapter of the Electronics Representative Association, and The High Technology Foundation, as well as several other community and non-profit organizations. She was a candidate for San Diego City Council in 1996 and the California State Assembly in 2000. She has a B.A. from San Diego State University and later earned a certificate in Total Quality Management. Prior reports are accessible at Michele's website of www.electrofab.com. Michele is also the author of the newly published book, *"Can American Manufacturing be Saved? Why we should and how we can."* You may read/download the free chapter, "Why should we save American manufacturing?" and /or order her book at: http://www.savingusmanufacturing.com