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www.csub.edu/kej/

KERN ECONOMIC JOURNAL is a quarterly publication by the Center for Economic Education and Research at California State University, Bakersfield. Its main purpose is to track local trends and analyze regional, national, and global issues that affect the economic well-being of Kern County. The journal provides useful information and data that can help the community make informed economic decisions.

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Local Economy in Perspective:

Business Outlook Survey: Businesses are much less optimistic about local economic conditions. The Business Outlook Index plunged by 11 points from 126 to 105 between the second and third quarters of 2001. Factors contributing to reduced business optimism are:

- Economic effects of the terrorist attacks on September 11th
- Personal security and safety considerations
- Reduced consumer spending and anticipations of a nation-wide recession
- Seasonality of production in agriculture
- Merger of two major oil companies

(Full story on page 4)

Consumer Sentiment Survey: Households are turned pessimistic about local economic conditions. The Consumer Sentiment Index plunged by 25 from 119 to 94 between the second and third quarters of 2001. Compared to one year ago, 26 percent of the respondents said their families are doing financially *better*, 40 percent *the same*, and 34 percent *worse*. Anticipating one year from now, 33 percent of the respondents perceived their financial conditions to be *better*, 35 percent *the same*, and 32 percent *worse*.

(Full story on page 5)

Kern County's unemployment rate continued to fall. It declined from 9.9 to 9.4 percent between the second and third quarters of 2001. Total employment rose by 7,200, whereas total unemployment fell by 1,300 persons. In the non-farm sector, jobs were added in construction, communications, transportation, wholesale trade, and retail trade added new jobs, whereas state and local education reduced employment.

(Full story on page 7)

Kern County must create high paying jobs. By focusing on the recommendations of the Natelson study and spending \$35 to 40 million over five years, we can lower the county's unemployment rate to the statewide rate and increase the county's nonfarm payroll toward California's average.

(Full story on page 9)

Kern County's demography is somewhat different from that of the state and nation. In particular, the county has a younger population, a larger family size, and more married-couple families with children under 18.

(Full story on page 15)

Economic impact of prisons on the local economy are rather significant. All together, the three local prisons add more than 8,300 jobs in the local economy. Construction of a fourth prison can help ease the stress on the existing overcrowded facilities. However, prison construction consumes a large amount of natural resources and poses social and environmental strains on the hosting community.

(Full story on page 18)

The CSUB is a multi-million dollar enterprise, serving residents of Kern County and beyond. Its expenditures on wages and salaries, supplies and services, and construction and equipment add income to the local economy. Using the Regional Input-Output Model for Kern County, we estimate that the \$115.2 expenditures of the university have generated an additional \$158.5 million of income in the community.

(Full story on page 21)

EDITORIAL: ALREADY WEAK ECONOMY IN THE AFTER-MATH OF TERRORIST ATTACKS

ABBAS P. GRAMMY, PUBLISHER AND MANAGING EDITOR



The tragic events of September 11th, 2001 have had a profound effect on the United States economy. Undoubtedly, the major cost of the terrorist attack is the loss of innocent life and valuable human capital including the brave passengers boarding the hijacked airplanes, highly educated individuals working in the Pentagon and World Trade Center, and dedicated New York City firefighters and police officers. In addition, the destruction of the Pentagon, World Trade Center, and American and United Airlines jetliners imposes a significant loss of capital investment. Furthermore, the resulting loss of employment and income for millions of people would add to the pain and suffering that many of us have already experienced. Of course, we must add the cost of combating terrorism across the globe.

Although the full economic impact of these tragic events will not be known for some time, preliminary estimates indicate that in New York City, the cost of rebuilding, loss of jobs, and loss of business revenues could reach to more than \$100 million over the next two years. The

impact of these losses is magnified since each dollar of income lost would reduce earnings by an extra \$2, hence raising the cost to nearly \$300 million. This impact would exert a ripple effect on the national economy as New York City alone contributes more than 4 percent of the United States personal income and accounts for almost 3 percent of the United States non-farm employment. Nationally, an estimated \$3 billion have flown out of equity funds since the attack. Wall Street firms expect to lose \$1 billion in profit this year.

Hundreds of companies including banks, airlines, plane manufacturers, insurance and finance companies, hotels and restaurants, entertainment companies, travel and leisure firms have cut their work force or announced massive layoffs. Nearly 300,000 layoffs have been announced in September, the worst month for layoffs in decades, which included more than 120,500 airline jobs.¹ The lion's share of job cuts was announced following September 11th hijackings and mass destructions. Boeing led the downsizing

with 30,000 layoffs followed by the American and United Airlines with 20,000 each. As a result of the terrorist attacks, fear of air traveling, and a wave of cancellations around the globe, several major foreign airlines led by British Airways and Air Canada had to cut back nearly 17,000 jobs from their labor force.

Prior to September 11th, the United States economy was extremely sluggish. The Gross Domestic Product in constant dollars (GDP) grew at an annualized rate of only 1.2 percent in the first quarter and by a mere 0.08 percent in the second quarter of this year. In spite of the falling investment spending, consumers were taking advantage of lower interest rates and tax rebates to keep the economy out of a recession. However, it has no longer be the case as the number of layoffs continues to rise and business and financial conditions continue to deteriorate. Indeed, the GDP plunged at an annual rate of 0.4 percent in the third quarter of this year, the biggest drop since the last recession in 1991. Ex-

(Continued on page 3)

Airline Related Job Losses Attributed to September 11 th Attacks			
Company	Lost Jobs	Company	Lost Jobs
Boeing	30,000	British Airways	5,200
American Airlines	20,000	Air Canada	5,000
United Airlines	20,000	Swissair	3,000
Delta Airlines	13,000	Alitalia	2,500
Continental Airlines	12,000	Virgin Atlantic Airways	1,200
US Airways	11,000		
Northwest Airlines	10,000		
America West Airlines	2,000		
Midway Airlines	1,700		
Frontier Airlines	440		
Hawaiian Airlines	430		
Total	120,570	Total	16,900

Editorial (Continued from page 4)

expectations are that the economy would continue to slide in the fourth quarter, heading toward a full-blown downturn.²

The growing volatility of the Stock Market is an indication of worsening economic conditions. For instance, the Standard and Poor’s 500 (S&P 500) Price Index has fallen in four consecutive quarters. Between September 2000 and September 2001, the Index plunged by 396 points or 27.6 percent. In September 2001 alone, the S&P 500 plummeted by 93 points or 8.2 percent.³ Since the S&P 500 is one of the components of the Index of Leading Economic Indicators, its declining trend alarms recessionary conditions. The Index of Leading Economic Indicators fell by 0.5 points to 109.2 in September, following a revised 0.1-point drop in August. The decrease in the September index is the largest one-month decline since January 1996. The two-month decline in the Index suggests that the already ailing economy is likely to remain weak in the next three to six months.⁴

Consumer spending accounts for about two-thirds of the real GDP, making consumer confidence a key economic indicator. The University of Michigan’s Index of Consumer Expectations is an accurate indicator of the future course of the national economy. It focuses on three areas: (1) how consumers view prospects

for their own financial situations; (2) how consumers view prospects for the general economy over the near term; and (3) how consumers view prospects for the economy over the long term. An index value greater than 100 indicates optimistic expectations and less than 100 suggests pessimism.

Consumers have turned rather pessimistic in their expectations of future economic conditions. The Index of Consumer Expectations has had a declining trend. Between September 2000 and September 2001, the Index of Consumer Expectations plummeted by nearly 30 points or 29 percent. Between August and September 2001, the Index value plunged from 85.2 to 73.5. This amounted to 11.7 points or 13.7 percent slide, the largest monthly drop in 13 months.⁵

Clearly, we cannot foresee what the ultimate duration of this crisis would be or what events might ensue to help the economy gain momentum or to make it further deteriorate. However, consumers fell that job insecurities and financial losses breed pessimism and create an incentive to postpone expenditures and rebuild financial reserves. Consumers, worried about keeping their jobs and preserving their investments, are cautious about big-ticket item expenditures in spite of low interest rates, tax rebates, and talk of further tax cuts. Reduced consumer spending exerts a magnifying effect on the

growth of the aggregate economy.

The United States economy is going to experience very tough times in the months ahead and a longer time-frame recovery. Many economists believe the terrorist attacks have pushed the country into a recession with the economy showing a decline in the third quarter and the expectations of continued slide in the current fourth quarter. They are looking for the Fed’s sizable interest rate reduction by to stimulate consumer spending and capital investment, and increased fiscal stimulus in the form of higher government spending and additional tax cuts in order to launch a rebound next year. Of course, recessionary conditions in the United States, the largest economy in the world, shall create a profound ripple effect on its trading partners around the globe. In fact, the key economic indicators of France, Germany, Japan, Korea, Mexico, and United Kingdom have already shown signs of weakness.⁶ Hence, the global economy shall slow down.

¹ M. Corey Goldman, “The Ripple Effect,” and Betsy Stark, “Economic Ripple Effect,” abcNew.com

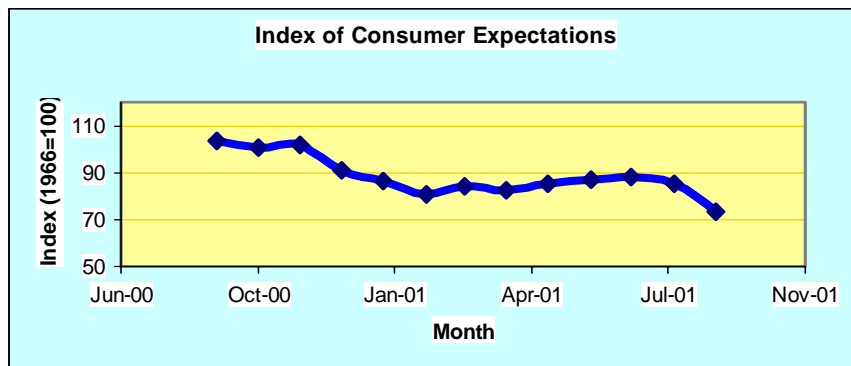
² “Consumer Spending Plunges,” MSNBC, November 1, 2001, www.msnbc.com/news

³ See www.Economagic.com

⁴ Key Economic Gauge Slides, October 24, 2001, www-msnbc.com/news

⁵ University of Michigan, Surveys of Consumers, September 2001.

⁶ Ibid.



KERN BUSINESS OUTLOOK SURVEY

ABBAS P. GRAMMY, PROFESSOR AND CHAIR OF ECONOMICS

This article presents opinions of business managers regarding current and expected economic conditions of Kern County in the third quarter of 2001. Over the first three weeks of October, we telephoned a random sample of 250 members of the Greater Bakersfield of Commerce, of whom 102 replied. Responses were enumerated to construct a Business Outlook Index (BOI). The BOI value of 100 indicates *neutrality* about local business conditions, greater than 100 expresses *optimism*, and less than 100 *pessimism*.

Between the second and third quarters of 2001, the BOI plunged by 11.1 points from 126.3 to 105.2. This sizable decline indicates that business managers are much less optimistic about local business conditions. Compared with one year ago, the BOI plunged by 14 point, indicating considerable erosion in business optimism. Relative to the pre-

vious quarter, a smaller number of business managers gave positive, but a greater number of them provided negative responses to the survey questions we asked.

The majority of survey respondents reported that the number of jobs in their companies stayed the same as the previous quarter. They expected the number of jobs available in their companies to remain unchanged next quarter.

Only one-third of the business managers perceived that financial conditions (sales or profits) of their companies improved this quarter and less than half of the respondents projected improvements next quarter.

The majority of business managers perceived that current employment and financial conditions of their industries were the same this quarter and are likely to remain constant next quarter.

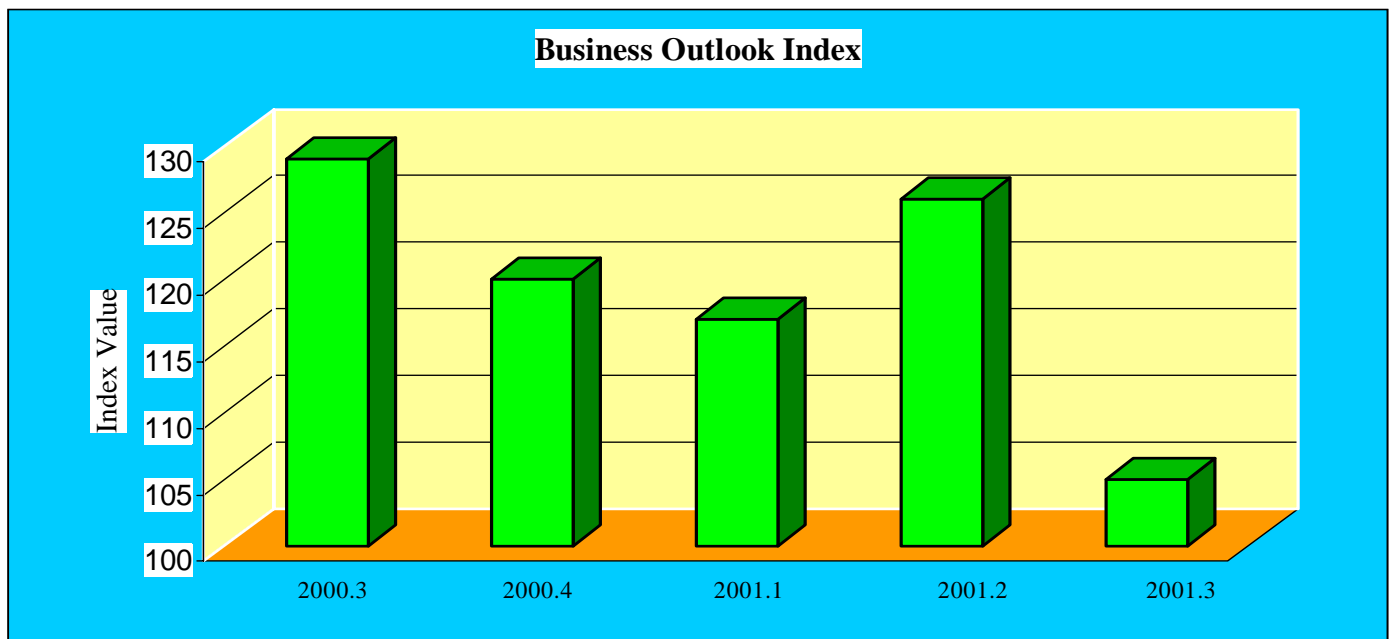
Fifty-one percent of business managers felt that employment and general business conditions in Kern County were the same as the previous quarter. But, only forty-one percent of the respondents expected employment and general business conditions to stay constant next quarter.

Survey participants were asked to comment on local, regional, national, or international factors that have affected employment and financial conditions of their companies.

Major factors perceived to hinder business outlook are:

- Economic effects of the terrorist attacks on September 11th
- Personal security and safety considerations

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BAKERSFIELD CONSUMER SENTIMENT SURVEY

MARK EVANS, INTERIM DEAN, EXTENDED UNIVERSITY DIVISION

The Bakersfield Consumer Sentiment Index plunged to 94 in the third quarter from a robust 119 in the second quarter of 2001. The index is compiled from telephone surveys administered to a random sample of households listed in the Bakersfield section of the phone book. Approximately one-fourth of the sample was surveyed after the September 11 attack on the World Trade Center. The index is disaggregated into sub-indexes relating to recent trends and future expectations. Both sub-indexes declined sharply. The Index of Recent Buying and Financial Trends decreased from 115 to 93, while the Index of Future Expectations decreased from 122 to 95. Index values over 100 are indicative

of consumer optimism. Values below 100 are rare and suggest pessimism. CSUB's Center for Economic Education and Research began compiling the Bakersfield Consumer Sentiment Index in 1999. This is the lowest attained value in the short history of the index, the previous low being 110 in third quarter, 1999.

The Index of Recent Buying and Financial Trends is constructed from responses to questions relating to expenditures on discretionary items, financial status of the household compared to one year ago, and perceived financial condition of acquaintances in Kern County. Spending on discretionary items was greater than normal in one-of-three

households, compared to one-in-four during the previous quarter. However, discretionary spending was less than normal in almost one-half of the households, compared to only one-in-five households in the previous quarter. Heads of households were asked how their families were doing compared to one year ago. Fewer households reported they were better off (26 percent versus 37 percent in the previous quarter). The percentage of households indicating they were worse off increased sharply from 13 percent in the second quarter to 34 percent in the third quarter.

(Continued on page 6)

	Most Recent Quarter	Previous Quarter	One Year Ago
Bakersfield Consumer Sentiment Index	94	119	125
Subindex: Recent Buying & Financial Trends	93	115	123
Subindex: Expectations	95	122	127

	More than usual	Same as usual	Less than usual
Your recent spending on discretionary items (dining out, weekend outings, entertainment)	32%	23 %	45 %
	Better off	Same	Worse off
How your family is doing financially compared to one year ago.	26 %	40 %	34 %
How your acquaintances in Kern County are doing financially compared to one year ago.	32 %	36 %	32 %

Business Outlook (Continued from page 4)

- Reduced consumer spending and anticipations of a nation-wide recession
- Seasonality of production in agriculture
- Merger of two major oil companies

Major factors perceived to improve business outlook are:

- ✓ Lower interest rates
- ✓ Technological advancement helping small business
- ✓ Local economic development efforts
- ✓ High price of crude oil and natural gas

Overall, business managers were much less optimistic about local business outlook this quarter. A wide range of positive and negative factors has contributed to forming business perceptions.

Question	Response		
	Better	Same	Worse
	(Percentage of Total Responses)		
Employment in your company this quarter was	20.8	60.4	18.8
Employment in your company next quarter will be	13.7	63.7	20.6
Financial condition (sales or profits) of your company this quarter was	34.0	48.0	18.0
Financial condition (sales or profits) of your company next quarter will be	44.4	44.4	11.2
Employment and general business conditions in your industry this quarter were	16.4	57.1	26.5
Employment and general business conditions in your industry next quarter will be	27.0	51.0	22.0
Employment and general business conditions in Kern County this quarter were	19.1	51.1	29.8
Employment and general business conditions in Kern County next quarter will be	34.4	41.4	24.2

Consumer Sentiment (Continued from page 5)

To assess consumer expectations, households were asked how they thought the financial situation of their families would change over the coming year. Responses were equally split. One-third thought their

financial situation would improve, one-third expected their situation to worsen, and one-third expected no change. In the previous quarter, fifty percent of the respondents expected their financial situation to improve, and only 12 percent expected it to worsen or become more risky. One-

half of the respondents indicated their friends and acquaintances in Kern County seemed pessimistic about the coming year, compared to only 13 percent in the previous quarter.

**TABLE 3
FUTURE EXPECTATIONS**

	Better or more stable	About the same	Worse or more risky
The most likely financial situation of your family one year from now	33 %	35 %	32 %
	Optimistic	Neutral	Fearful
How your acquaintances in Kern County view the coming year.	31 %	21 %	48 %
	Safe time to buy	Neutral response	Risky time to buy
Is now a safe or risky time for most people to use savings or incur debt to buy expensive goods?	43 %	17 %	40 %

EMPLOYMENT AND UNEMPLOYMENT IN KERN COUNTY

ABBAS P. GRAMMY, PROFESSOR AND CHAIR OF ECONOMICS

Seasonally adjusted¹ data indicate that Kern County's unemployment rate declined from 9.9 to 9.4 percent from the second to third quarter of 2001. Total employment rose by 7,200, whereas total unemployment fell by 1,300. The increase in total employment consisted of 8,700 additional job in the farm sector and 500 new jobs in the non-farm sector, less 2,000 jobs in the "residual" sector that accounts for self-employed labor and workers who live outside their place of residence.

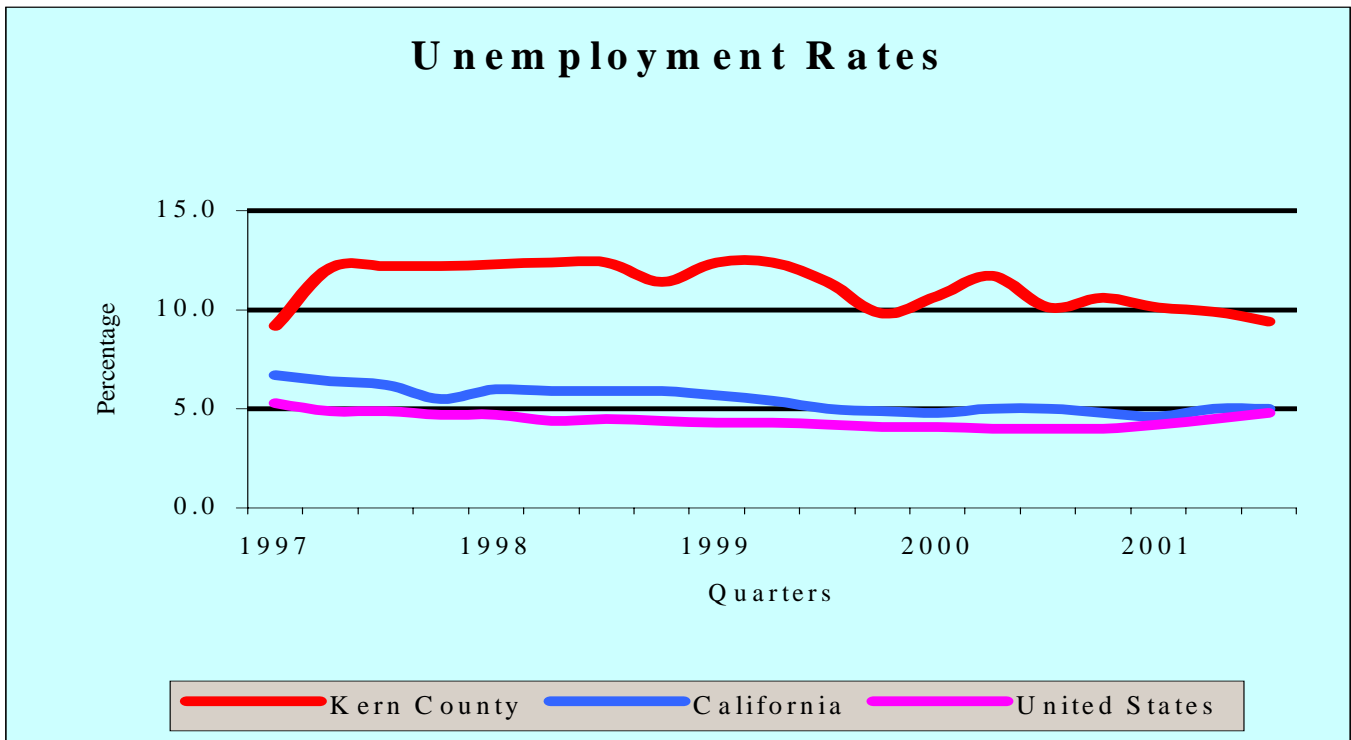
In the non-farm sector, construction, communications, transportation, wholesale trade, and retail trade added new jobs, whereas state and local education reduced employ-

ment. In the third quarter of 2001, non-farm employment increased at an annualized rate of 4.0 percent in Kern County, 0.0 percent in California, and -0.4 percent in the United States. Over the previous four quarters, non-farm employment growth averaged 3.5 percent in Kern County, 2.4 percent in California, and 0.5 percent in the United States.

The chart below illustrates unemployment trends in the local, state, and national economies. Historically, the rate of unemployment in Kern County had been in double digits. However, Kern's unemployment has fallen into single digits in two consecutive quarters and for the fourth time in four years-- the first quarter of 1997, fourth quarter of

1999, and second and third quarters of 2001. Between the second and third quarters of 2001, the unemployment rate fell from 9.9 to 9.4 percent in Kern County, stayed at 5.0 percent in California, and rose 4.5 to 4.8 percent in the United States. Compared with four quarters ago, the unemployment rate declined by 1.2 percent in Kern County, but rose by 0.2 percent in California and 0.8 percent in the United States.

¹Quarterly data are adjusted for seasonality by the X-11 procedure of the ARIMA model using the SPSS statistical software package.



ULTIMATELY, THE GOAL IS TO INCREASE INCOME AND SKILLS

SHERYL BARBICH, PRESIDENT, INTEGRATED KNOWLEDGE GROUP, INC. AND GREATER BAKERSFIELD 2020, INC.

We have a two-pronged challenge in our communities. One challenge is to create jobs for the unemployed and the other is to attract and grow those businesses that will generate higher income levels over time.

We know that we must provide jobs and training for a population with low education and skill levels; and we know that our population is increasing rapidly. Relative to the rest of the state, some tangible results include: high unemployment rates, low median incomes, and greater dependence on public assistance. In the short run, this could be an attractive situation for businesses seeking to obtain low costs of production. However, this benefit is only a short term gain. Eventually, as the world continues to lose its economic borders, Bangladesh, or some other locale in the world, will underbid our low cost production, leaving our community without an economic platform other than as a bedroom community to our neighbor to the south.

The other challenge is that our economy has traditionally been heavily dependent on agriculture and energy production and has not diversified to any significant extent. The higher paying work available in the *new economy* has virtually passed us by as our communications infrastructure and educational attainment levels have not proven attractive in the technology-based world in which we now live. Without higher income levels, we are unable to afford some

of the quality of life aesthetics and activities that residents in other parts of California enjoy. We chance losing some of our best and brightest students and community members, who can choose and afford to live elsewhere. In other words, we face a brain drain phenomenon that could hold us in a low income, stable situation for the foreseeable future.

The interdependence of all of these elements has been recognized for some time, but the issue really came into focus through the Vision 2020 process. Over 13,000 residents of Greater Bakersfield participated in identifying the strengths and challenges of the community, and then developed a Vision of what we want our community to be. The community's economic future was envisioned as:

A community with a well balanced economic base that provides diverse and stable employment opportunities...that provides entry level and vocational opportunities while developing our workforce to meet the changing needs of a dynamic economy...and encourages a broad range of high quality employment and entrepreneurial opportunities.

As the Action Plan to accomplish the Vision was being developed, it became clear that we needed to understand what the new and future economic structure would look like in order to attract those businesses and bring higher paying work to our community.

The *new economy* businesses are location-independent. Through the development of communications technology, the *new economy* work can be done anywhere, anytime. Businesses could choose to locate and grow on the basis of a whole new set of parameters, and so far; they had not been choosing us. Recently Joel Kotkin, author of [The New Geography: How the Digital Revolution is Reshaping the American Landscape](#), helped us better understand what we needed to do to accomplish our Vision. His research indicates that the *new economy* knowledge workers are predominantly young, unmarried and/or childless. Therefore, in selecting where to locate a business and attract or grow these knowledge workers, a whole new set of parameters becomes important. Knowledge workers are more concerned with quality of life issues and being somewhere that has a "sense of place" with lots of interesting activities. We breathed a small sigh of relief as we turned to the community's Vision for Quality of Life:

Our community attracts and supports businesses and organizations because of our clean, healthy air and many diverse offerings of arts and culture...takes pride in our museums, theaters, and live musical entertainment...maximizes the use of trees, greenbelts, and water throughout the community, through the extensive use of walking and bike paths, neighborhood parks, and landscaped transportation corri-

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JOB AND INCOME CREATION IN KERN COUNTY

JEFFREY B. JOHNSON, DIRECTOR, WEILL SMALL BUSINESS DEVELOPMENT CENTER



Historically, Kern County has suffered from chronic double-digit unemployment. The county’s “natural” rate of unemployment is measured at about 10 percent, which is 4 to 5 percent higher than that of the state economy. With our rapid population growth, it is imperative for the economic and social health of the county to create high paying jobs and reduce the unemployment rate to single digits. Here, we depict a five-year job creation plan that aims at (1) lowering the county’s unemployment rate to the statewide rate and (2) increasing the county’s non-farm payroll toward California’s average.

Planning for More Jobs and Higher Pays

To reduce Kern’s unemployment

toward the statewide rate, we need to create 19,200 new jobs in the non-farm sector. Using the statewide average payroll of about \$30,000, these new jobs would result in \$576 million increase in gross income. To increase the county’s average payroll toward the statewide average, we would need an extra \$5,600 per nonfarm job. This increase in wages and salaries for 135,000 nonfarm workers would amount to \$756 million. All together, the job creation plan would add approximately \$1.3 billion to the county’s gross income.

By focusing on the recommendations of the Natelson study and spending \$35 to 40 million, we can achieve our employment goals within the next five years. Table 1 illustrates employment and payroll

projections for Kern County. We can create 19,185 new jobs over five years. Of the industry clusters considered, tourism and entertainment is projected to lead employment projections with 4,000 new jobs. It is followed by the high tech industry with 3,000 new jobs, and financial services, aerospace, and chemicals and plastics industries each with 2,000 new jobs.

In raising the county’s average earnings to that of the statewide level, the high tech industry will benefit considerably with an increase of over \$21,000. Employees of the aerospace, financial services, and tourism and entertainment industries shall also gain additional income with the adjustment of Kern

(Continued on page 10)

Table 1: Job Creation and Payroll Adjustment in Kern County

Industry Cluster	Employment (no. of jobs)			Wage & Salary (\$000)		
	Current	Projection	Difference	Kern	California	Difference
Financial Services	18,336	20,336	2,000	28,443	34,871	6,428
Aerospace	167	2,167	2,000	40,125	46,875	6,750
High Tech	1,170	4,170	3,000	28,070	49,170	21,100
Value Added Agriculture	6,623	7,623	1,000	27,224	26,121	-1,103
Apparel	162	662	500	17,600	16,689	-911
Chemicals & Plastics	1,763	3,763	2,000	35,971	36,440	469
Tourism/Entertainment	39,388	43,388	4,000	19,545	23,128	3,583
Others	66,935	71,620	4,685	25,496	31,405	5,909
Total	134,544	153,729	19,185	1,706,600	2,249,205	54,2605
Average				24,409	30,025	5,616

Job Creation (Continued from page 9)

County’s wages and salaries toward that of California.

Financing the Plan

As shown in Table 2, Kern County spent \$515 million to support its low-income residents in the 1998-99 Fiscal Year. If our employment goals are achieved, it is estimated that Kern County could save 50 percent or about \$250 million a year in providing human and social services. This saving over a five-year period would amount to nearly 1.3 billion dollars to account for the job creation expenditure and payroll adjustment. In addition, greater employment opportunities for the adult and the youth shall generate significant social benefits in such forms as a decline in the crime rate and a fall in the school drop out rate.

Job creation, however, requires start up expenditures. We estimate that a modest expenditure of \$2,000 is required to create a new job. Hence, 19,200 new jobs would require about \$35 to 40 million in five years or \$7 to 8 million per year. Presently, the County of Kern and City of Bakersfield provide “perks” to new businesses relocating in the county.

These perks can be as high as \$8,400 per job. Furthermore, the County and City receive annually \$9 million in HUD CDBG funds that can be used for economic development, which neither of them choose to do so. We also have access to \$1 million of CalWORKS funds ear marked for economic development. Properly allocated, the funds can support the \$7 to 8 million required for job creation and payroll adjustment.

Implementing the Plan

The following strategies can be employed to implement the job creation plan.

Entrepreneurship: Annually, about 4,000 new business enterprises start in Kern County. Many of these businesses are reluctant to hire new employees due to regulatory risk factors such as workers compensation, unemployment insurance, and employment liabilities. It is estimated these new businesses employ about 7,500. However, the failure rate for new business ventures is high. With proper incentives, entrepreneurship training, micro-loan funding, incubator development and employment risk abatement, entrepreneurship employment can generate about 2200 new jobs.

Retention and Expansion: There are presently 30,000 businesses in Kern County - 15,000 with employees and 15,000 without employees (i.e., mostly home-based). About two-thirds of these businesses have less than 10 employees. They employ about 65,000 people. With on-site employer management training and employment risk abatement, retention and expansion can generate 4,000 new jobs.

Recruitment: In the past 10 years Kern Economic Development Corporation (KEDC) has recruited or assisted in expansion of 169 businesses resulting in over 11,500 new jobs. If the KEDC’s average annual budget is doubled and if it concentrates its efforts on job creation in the industries identified by the Natelson study, we should be able to create over 10,000 new jobs.

By driving the unemployment rate down toward the statewide rate, we should see an increase in overall pay rates in the area as supply and demand come into balance. By increasing the pay toward that of the statewide average, we will add to the county’s gross income and improve the standard of living of our workers.

Table 2: Spending by the County of Kern

Facet of the Budget	Amount of the Budget (Millions of Dollars)
Kern Medical Center (KMC)	16
Human Services	227
Employers Training Resource	11
Probation	26
Public Employment Grants	27
KMC Enterprise Funds	175
Community Connection Child Care	33
Total	515

SBA 540 LOANS HELPING SMALL BUSINESSES AND COMMUNITY BANKS

KEITH BRICE, PRESIDENT, MID STATE DEVELOPMENT CORPORATION

Despite the Mid State role in financing over \$50 million in projects and the creation of over 4,000 jobs over the years, the Small Business Administration (SBA) 504 loan program remains a less well-known financing vehicle. This loan program combines elements of economic development with the fundamentals of sound credit underwriting. As such, the SBA 504 benefits both community banks and small businesses. Benefits to community banks include mitigation of credit risk, liquidity management, managing overall lending limits, and strengthening core earnings through a highly marketable commercial lending product. Benefits to small businesses include the low down payment requirements and the attractive long-term fixed rate.

The focus of the SBA 504 program is economic development through the purchase or construction of capital assets while requiring minimal equity from borrowers. Its financing structure derives from a broadly defined project cost, which can include an array of soft costs (such as architect/engineering fees, interim interest, and appraisal/feasibility studies). It cannot include working capital and is limited to the financing of short-lived assets.

Financing Requirements

The borrower is required to contribute 10-20% of the cost into the project. This can be accomplished through actual cash injections of the contribution of acceptable assets, such as land for construction-related projects. Equity requirements begin at 10% of the defined project cost and increase by 5% increments, de-

pending on whether the (1) project involves special or single-purpose construction and (2) borrower is a start-up venture. During construction or the delivery and installation of equipment, the bank funds the "net" balance of the project cost. Within 30 to 60 days of completion, the SBA 504 will provide take-out financing, thus reducing the bank's exposure to approximately 50% of the project cost, with an upper dollar limit to the takeout of \$1 to 1.3 million.

The bank's financing is a first security position with the SBA supported financing junior to the bank in security interest. At no time in the process does the bank enjoy a guarantee from the SBA the program simply commits to an end takeout, reducing the final exposure to a very low loan-to-cost ratio. Collateral is project-specific, leaving working assets available to support other credit extensions.

There are virtually no restrictions on the bank's senior debt, in terms of either structure or pricing, other than it must be for a term of at least seven to 10 years, depending on the term of the SBA-supported junior debt. The bank remits to the SBA a one-time participation fee of 0.5% of the first-position permanent loan's balance. While this cannot be explicitly passed to the borrower, it obviously factors into the pricing of the bank's first position permanent loan. The SBA-sponsor financing is by definition a term loan, fully amortizing for either 10 or 20 years, at a fixed rate of interest. The rate is fixed for the full term of the loan. Historically, these rates have averaged at or be-

low the Wall Street Journal Prime prime rate.

The vehicle used by the SBA to deliver this program is the Certified Development Company (CDC) of which Mid State Development is considered. There are approximately 250 CDCs around the country, the majority of which are not-for-profit, locally organized corporations charged with a range of economic development tasks but licensed specifically for the delivery of the 504 loan program by the SBA. Mid State gathers the requisite information for a standardized credit application. Subsequent to approval by a lender, the application is approved by the CDC's local board of directors and then submitted to the SBA district office in Fresno for approval. The SBA approval process and requisite paperwork is handled entirely by Mid State, making the process less burdensome, if somewhat more redundant, than the better-known SBA 7 (a) program. If approved by the SBA, the bank receives a commitment, subject to specified conditions, to provide the takeout loan described above.

Eligibility for borrower participation in the program is dramatically more straightforward than in other SBA programs. Eligibility essentially comes down to being a for-profit corporation with a tangible net worth of less than \$6 million and average annual net income for the preceding two years of less than \$2 million. Concurrent with this is a job creation requirement. While fundamental to the program, this requirement is of less importance in an individual

(Continued on page 12)

Loans (Continued from page 11)

situation owing to the specifics of the calculation.

Advantage to Small Business

Compared with other SBA programs, the SBA 504 program is readily marketable to a range of borrowers because of the relatively limited list of eligibility considerations. The product provides several significant advantages to the small business clients of community banks, which immediately makes it more attractive.

The primary advantage of the program is the low down payment requirements and the attractive long-term fixed rate. As mentioned above, the required level of borrower equity in a transaction can range 10-20%. To most borrowers, the ability to retain cash in a busi-

ness operation as working capital is extremely appealing. However, if needed, a quick set of pencil calculations on the nearest envelope should demonstrate that the return on funds kept in the business operation should exceed that of most real estate investments. By allowing most borrowers to remain at equity levels below the 20-25% demanded by conventional lending, the 504 have a definite edge.

Fixed rates for 20 years are not particularly common in the financial market. The ability to control key cost component is of particular benefit and interest to many small businesses and is well worth the issue of prepayment penalties. Should prepayment penalties be a significant issue on the second-position loan, a significant counterpoint is the ability to prepay up to 20% of the first-position loan, even when structured

with penalties that render it more saleable in the secondary market.

Rate structure is also a potentially strong selling point of the product as it is possible to combine fixed and floating-rate products. This inherently creates a hedge against rate movement, which is not often, a product afforded by all banks to their smaller borrowers. These same factors can help overcome borrower objections to program fees that, on the second-position loan, these are not out-of-pocket expense, again preserving working capital in the business. Furthermore, the overall rate structure can produce an all-in cost of financing below that of the conventional market.

We will present the benefits of SBA 540 program to community banks in the next issue of the journal.

Goal (Continued from page 8)

dors... maximized the river through the use of water elements that serve as cultural and recreational resources...

Looking further, our community's Vision for Downtown: the Heart of the City is:

An inspiring magnet for those who live, work or play there and is truly the "heart of the city"... architecturally pleasing, with an emphasis on the use of water that provides an attractive backdrop for public art and sculptures, concerts, and other cultural activities...

Supposing we are successful in building the "sense of place" that will please knowledge workers, does that mean that *new economy* businesses

will move here, or more importantly, that we will be able to grow those higher paying jobs from within? The answer depends on the implementation of another of the Vision elements, Education and Life-long Learning which envisions a community that

Recognizes the vital link between education and the prosperity of the community... recognizes the importance of higher education...offers a broad range of opportunities that meet the needs of a new economy...

For our community to grow beyond our current low wage based economy, we need to focus in both of these areas. There must be a continuing source of an educated workforce prepared for this higher level of knowledge work, and we must build a community that is culturally exciting and

aesthetically pleasing to keep them here. Implementation of the Vision 2020 Action Plan is not an option.

For more information visit www.bakersfieldvision2020.com

URBANIZATION IN KERN COUNTY

SRIRAM KHÉ, DIRECTOR, ENVIRONMENTAL RESOURCE MANAGEMENT PROGRAM, CSUB



Note: The author and Abbas Grammy recently completed a study on the cost of residential development in Bakersfield. In the previous issue of this journal, we investigated the extent of urbanization in Bakersfield. In this issue, we will identify the infrastructure “centers of gravity” for Bakersfield metropolitan area and select three sites for residential development. In future issues, we will measure and compare the cost of residential development and discuss the lessons learnt from this study.

The complete study can be accessed at <http://www.csub.edu/~skhe/study.htm>

This study is a test of an intuitive understanding about urban development; that the true cost of development may depend on the distance from existing infrastructure and services. Identification of sites where this intuitive understanding can be tested was done in two steps:

1. A “center of gravity” analysis of infrastructure identified in the academic literature as important cost components, and
2. Identification of residential development sites, real or hypothetical, that were not only far from each other, but were also either near to, or far from, the centers of gravity identified in the previous step.

Centers of Gravity

The academic literature identifies response time for emergency care, roads, and trans-

portation to and from schools as major determinants of true cost of development. Therefore, as a first step, the locations of the following infrastructure facilities were geocoded and analyzed in ArcView: emergency care, public parks, public libraries, public high schools, and major roads.

When this study was initiated, there were five 24-hour emergency care facilities in metropolitan Bakersfield: San Joaquin Hospital, Bakersfield Memorial Hospital, Mercy Hospital, Bakersfield Heart Hospital, and Kern Medical Center. Since then, Catholic Healthcare West has decided to close down Mercy Hospital. A center of gravity for emergency beds was computed using ArcView, after weighting these locations by the number of beds.

Roads classified as major arterials or higher in metropolitan Bakersfield were included in this center of gravity analysis. Roads were weighted by the number of lanes, and the center of gravity for roads was determined. There are five branch libraries in metropolitan Bakersfield in addition to the main library, Beale Library.

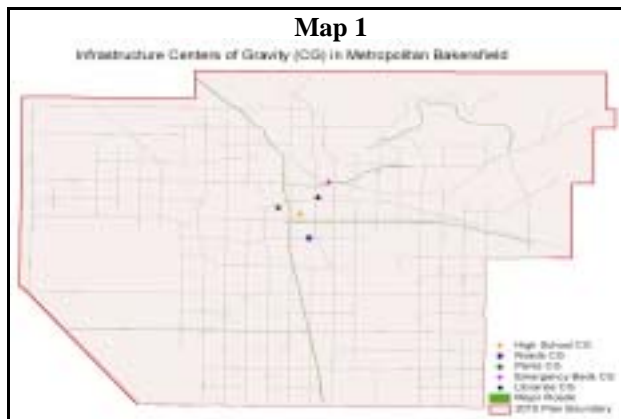
They are the Baker Street Branch, Northeast Branch, Rathbun Branch, Southwest Branch, and Wilson Road Branch. These facilities were also geocoded and analyzed to determine the library-center-of-gravity, after appropriately weighting the locations by the number of holdings.

Public high schools and parks are usually neighborhood facilities--they primarily serve the population around the location. While there is only a very low level of school attendance across school boundaries, an analysis of the locations and center of gravity will indicate how schools are distributed over the area. Also, in a relatively small urban area such as Bakersfield, it is not uncommon for people to drive to parks that are far away. We geocoded the locations of public high schools and parks in metropolitan Bakersfield and determined their respective centers of gravity.

Map 1 illustrates the centers of gravity of all the facilities. It is interesting to note that all the centers of gravity are clustered near the center of the 2010 General Plan area. This clustering identifies the infrastructure centers of the gravity and can be referred to as a Central Service District to denote the gravitational locus of the service facilities.

In this model of urban residential land use, the city grows outward, in concentric circles. The model predicts the development of suburbs from where residents commute either to

(Continued on page 14)



Urbanization (Continued from page 13) central or suburban locations. When concentric circles were laid over the centers of gravity, as shown in Map 2, it becomes easy to conceptualize a possible relationship, in terms of the cost of providing services, between the development pattern and the Central Service District, where the centers of gravity are located.

Site Selection

In order to understand the costs of development, specific sites need to be indentified and studied. The discussions on urban land use models often employed in economic geography, the urbanization pattern in Bakersfield, and the location of centers of gravity of infrastructure facilities, provide the framework for selecting sites whose development costs can be compared. Two criteria were used to select sites for cost comparisons, and they are:

1. At least one site would be near the centers of gravity, and
2. At least one site would be a “real” development area, where

housing is being built or is planned to be built.

Three sites satisfied these criteria, and these, shown in Map 3, are:

1. The City in the Hills project, which is a “real” development that has been proposed,
2. The Buena Vista project, which is a “real” development, and
3. The Casa Loma neighborhood, which is a “proposed” development project and near the centers of gravity.

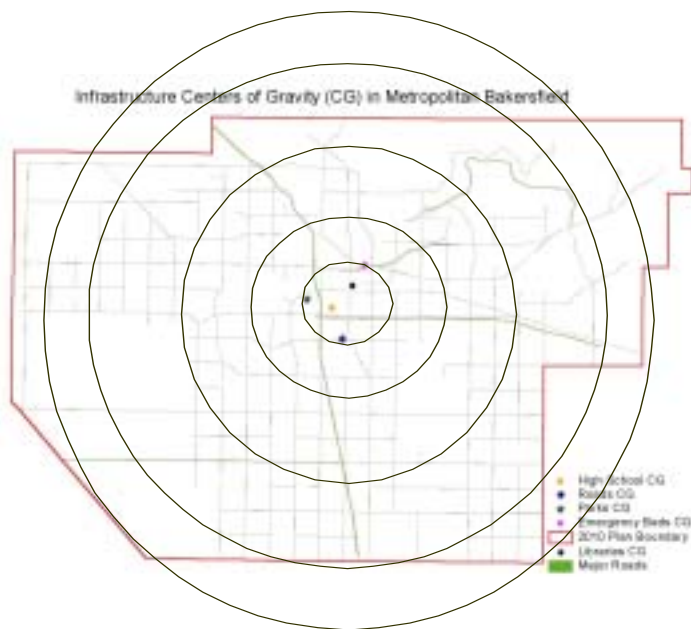
City in the Hills is located in the northeastern portion of Bakersfield, this project consists of approximately 694 acres. The proposed project is a mixed-use development, which includes 2,750 single family lots, 1,300 multiple family lots, and more than a million square feet of commercial floor area. The project includes a residential population of approximately 11,500 and approximately 2,060 jobs. The Buena Vista project is located in southwest Bakersfield. A total of

3,897 dwelling units and 394,000 square feet of commercial use units will be constructed in this site of about 691 acres.

Casa Loma is a hypothetical project area and was selected because of its proximity to the centers of gravity--unlike the other projects, which are relatively farther from these centers. The area was also selected because an architect firm had developed a conceptual plan for mixed-use development in the Casa Loma site. This proposal won the top award in the contest held by the Great Valley Center in 1998. The entry submitted by Blackbird Architects of Santa Barbara was one of the five that received the highest prize in the competition—the Honor Award. The development plan called for the construction of 4,225 housing units in the site. Fifty-one acres of the 640 acre project site were set aside for commercial development.

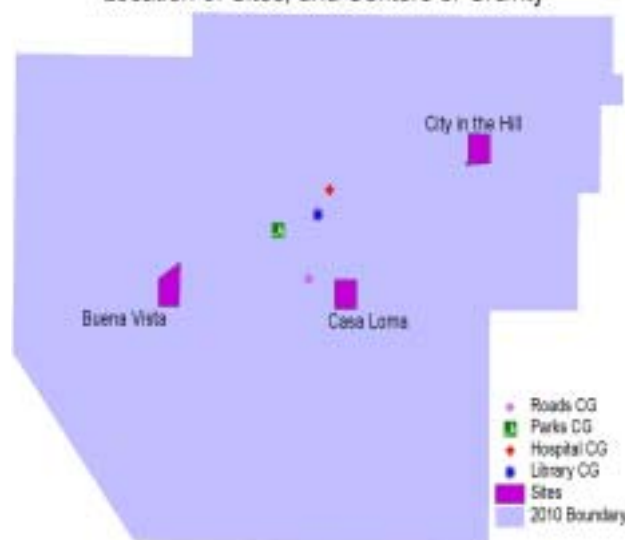
The cost of development at these sites will be discussed in the next installment of this series.

Map 2
Centers of Gravity and the Urban Model



Map 3

Location of Sites, and Centers of Gravity



DEMOGRAPHIC STRUCTURE OF KERN COUNTY: A CENSUS 2000 REPORT

ABBAS P. GRAMMY, PROFESSOR AND CHAIR OF ECONOMICS

The demographic structure of Kern County is somewhat different from that of the state and nation. In Kern County, the gender distribution of population favors males. Over fifty-one percent of the population is male and nearly forty-nine percent is female. In contrast, the percentage of female is over fifty in California and the United States.

Kern County also has a younger population. As illustrated in Figure 1, the median age is 31 years in Kern County. Its median age is nearly 3 years younger than that of California and 5 years less than that of the United States.

Data shown in Table 1 would enable us to further examine demographic structure of Kern County. Here, we define *children* as persons 15 years of age and younger, *adults* as indi-

viduals between 15 and 64, and *seniors* as citizens 65 years and older. As a percentage of population, Kern County has more *children* than the state and nation. In contrast, it has a substantially smaller percentage of *seniors*. We also note that the percentage of the *adults* is smaller in Kern County than in California and the United States.

To examine the demographic data presented in Table 2, we note the following census definitions:

- *Household* consists all of the people who occupy a housing unit.
- *Householder* refers to a person in each household in whose name a housing unit is owned or rented.
- *Family Household* includes a householder and one or more other people living in the same

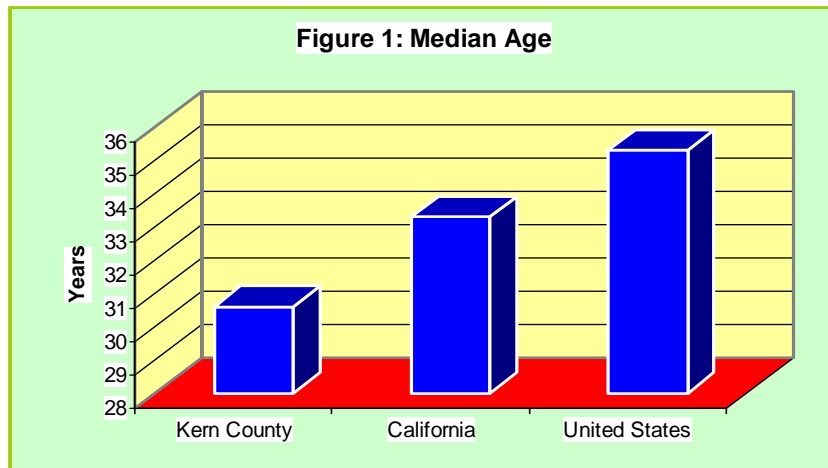
household who are related to the householder by birth, marriage, or adoption.

- *Average Family Size* is a measure obtained by dividing the number of people in families by the total number of families.

In Kern County, 75 percent of all *households* are classified as *family households* compared with 69 percent in California and 68 percent in the United States. In Kern County, 73 percent of all *family households* consists of *married-couple families*, which is 1 and 2 percentage points less than that of California and the United States, respectfully.

Local *married-couple families* have proportionally more children. The percentage of *married-couple fami-*

(Continued on page 16)



	Population	Female	Male	Children	Adults	Seniors
Kern County	661,645	48.7	51.3	26.7	63.9	9.4
California	16,874,892	50.2	49.8	22.9	66.4	10.7
United States	281,421,906	50.9	49.1	21.4	66.2	12.4

Demographic Structure (Continued from page 15)

lies with own children under 18 is over 53 percent in the county, which is 2 and 7 percent higher than that of the state and nation, respectively.

Female householders with no husbands present, manage 71 percent of the non-married families in Kern County. This percentage is equal to that of the state, but 4 percent greater than the national average. The majority of these females have children younger than 18 years of age. In Kern County, 67 percent of all female householders with no husbands present take care of their own children as compared with 58 percent in California and 59 percent in

the United States.

Non-family households consist of householders living alone or with non-relatives. In Kern County, 81 percent of these households live alone and 19 percent live with non-relatives. The corresponding percentages are 76 and 24 for California and 81 and 19 for the United States.

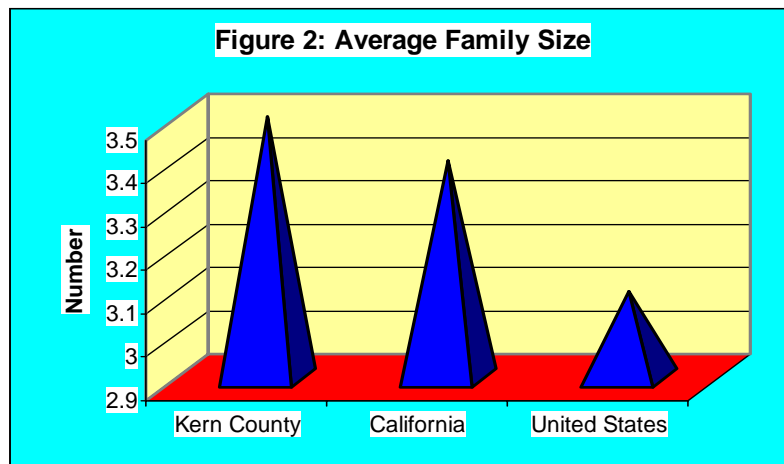
Average Family Size is greater in Kern County as well. As illustrated in Figure 2, the number of family members averages 3.5 in Kern County compared with 3.4 in California and 3.1 in the United States.

The demographic structure of Kern County varies from that of the state

and nation with respect to the following characteristics:

- Greater percentage of male population
- Lower median age
- Greater percentage of children, but smaller percentage of senior citizens
- Greater percentage of family households
- Greater percentage of married-couple families with children under 18 years old
- Greater percentage of female householders, no husbands present, with children under 18 years old
- Higher average family size

	Kern		California		United States	
	Number	Percent	Number	Percent	Number	Percent
Total Households	208,652	100	11,502,870	100	105,480,101	100
Family households	156,401	75	7,920,049	69	71,787,347	68
Married-couple families	114,025	73	5,877,084	74	54,493,232	76
With own children under 18	60,737	53	2,989,974	51	24,835,505	46
Unmarried-couple families	42,376	27	2,042,965	26	17,294,115	24
Female householder, no husband present	30,262	71	1,448,510	71	12,900,103	75
With own children under 18		67	834,716	58	7,561,874	59
Nonfamily households	52,251		3,582,821		33,692,754	
Living alone	42,379	81	2,708,308	76	27,230,075	81
Living with non-relatives	9,872	19	874,513	24	6,462,679	19
Average family size	3.5		3.4		3.1	



MONEY GROWS ON TREES—IF ONLY WE LET TREES GROW

DANA ADAMS AND ERIKA STOCKTON, THE TREE FOUNDATION OF KERN



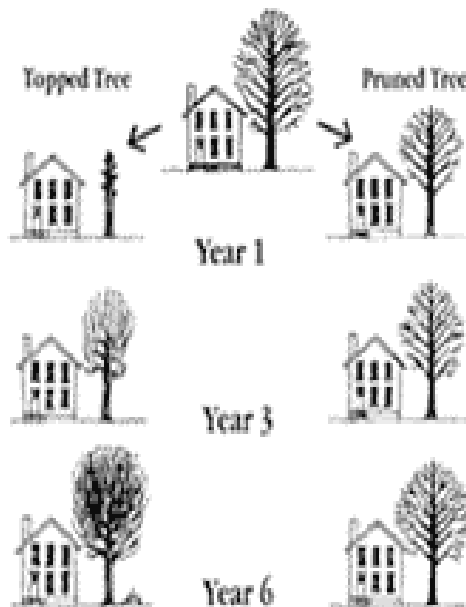
The Tree Foundation of Kern has begun to tackle the destructive practice of tree topping. This article is a summary of a recently completed study, "Improving Tree Care In Bakersfield: The Root Causes of Destructive Pruning Practices". The entire report can be accessed at <http://www.urbanforest.org/treeeconomics.html>.

Each summer when temperatures soar into the triple digits in metropolitan Bakersfield and the asphalt sizzles, residents retreat to the costly sanctuary of air conditioning. Before the advent of air conditioning, residents relied on trees for relief from the heat. They planted shade trees next to their homes and along sidewalks, creating stately canopies that dropped temperatures up to 20 degrees and added charm and elegance to their neighborhoods.

Today, however, a bizarre and disturbing practice known as tree topping is devaluing Bakersfield trees and neighborhoods at an alarming rate. An estimated 200,000 trees in the metropolitan area have been topped, blunt cut and aggressively pruned, leaving unsightly hat racks that litter the city landscape.

Trees are nature's air conditioners producing a valuable annual crop of leaves. They offer an economical, long-term solution to soaring energy and cooling costs and a pollution solution to combat the primary negative perception of Bakersfield — poor air quality. A landscape rich in shade trees also provides the added benefit of improving the perception of Bakersfield as a beautiful, invit-

ing and appealing locale. Topping practices, which were developed to produce firewood and fruit, eliminate the shade benefits of trees by reducing overall leaf area resulting in warmer temperatures, degraded air quality and shortened lifespan. The following graphic shows the effects of tree topping over time.



In order to understand the practice of tree-topping, the Tree Foundation surveyed more than 200 homeowners, renters, property managers and tree services. According to the survey results, the practice of tree-topping rages on because:

- There is a lack of leadership and poor public awareness of the benefits of trees and proper pruning techniques.
- There is a lack of educated professionals and performance standards for tree services and workers

- Tree care providers are not organized; there are no continuing education requirements and, at present, no licensing or certification is required.
- The problem of unskilled tree workers not only damages the perception and value of legitimate tree services but also compounds the problem of poor consumer education and awareness of the benefits of trees and basic tree care.

In the study, an attempt was also made to estimate the annual economic impact topping or aggressive pruning has on the value of metropolitan Bakersfield's urban forest. As a first step, the following assumptions were made:

1. Metropolitan Bakersfield has a million trees.
2. Twenty percent of trees are uniformly topped.
3. For every ten small trees, there are two medium trees and one large tree. (Bakersfield is growing rapidly so small trees are prevalent in new development areas while large trees exist in the older areas of town.)
4. Benefits of trees include energy savings, ozone and particulate matter absorption, carbon dioxide removal from atmosphere, property value increase, and reduction of expenditure for water quality management and

(Continued on page 18)

(Continued from page 17)

flood control as a result of rainfall interception.

- 5. Bakersfield is similar in climate to Modesto, another San Joaquin Valley city. Modesto's urban forest was the subject of Dr. Greg McPherson's study of the Costs and Benefits of Urban Forests from which we obtained the tree values for this impact page.¹ McPherson's study showed that the net annual benefits for shade trees in the San Joaquin valley on average are \$25 for small trees, \$100 for medium trees, and \$175 for large trees.

Based on these assumptions, the total annual net benefits of trees in Bakersfield were estimated at about 48 million dollars. The economic impact of

topping was calculated to be \$9.6 million.

Having understood the reasons for tree-topping, and its economic impact as well, the Tree Foundation is moving forward to combat the problem. Recent actions include a series of "Proper Pruning Pays" workshops for the public and local tree services, the formation of an ad hoc tree advisory committee to city council, review of tree ordinances, revised landscape standards for new commercial developments and the hiring of an urban forester by the City of Bakersfield. Further, creating and sustaining a healthy urban forest is expected to create 500 new and better paying jobs in a \$100 million industry for the area by the year 2020.

Since 1994, the Tree Foundation of Kern has actively promoted the awareness of the urban forest and its

benefits to Bakersfield. Tree Foundation of Kern is committed to inspiring people to plant two million trees in Bakersfield's urban forest by 2020 and take better care of them, thereby increasing the average shade canopy to 30 percent by 2050, and adding to the monetary benefits that we can reap from them.

As consumers begin to appreciate the value of their trees more and understand proper pruning techniques, they will no longer tolerate the unsightly work of "Bakersfield's tree butchers. As public awareness improves and trees in Bakersfield are recognized as a valuable asset, the bleak landscape and scorching heat of the concrete jungle will give way to the cool, soothing green of an urban forest.

¹ His study can be found in the *Kern Economic Journal*, Volume 3 Issue 1, or online at <http://wcufre.ucdavis.edu>.

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ECONOMIC IMPACT OF CSUB ON KERN COUNTY

ABBAS P. GRAMMY, PROFESSOR AND CHAIR OF ECONOMICS

The university provides direct benefits to the regional economy in three areas: wages and salaries, supplies and services, and construction and equipment. In the fiscal year 2000, the university's total current expenditures and transfers totaled \$77.6 million. The supplies and services spending is estimated at \$25.7 million which consists of expenditures by students who come to CSUB from outside Kern County, students enrolled in regional programs, and students who would have left the county to complete their education elsewhere. The construction and equipment budget for major and minor capital outlays averaged \$11.9 million. Hence, the university provided nearly \$115.2 million of direct spending in Kern County.

Using the Regional Input-Output Model for Kern County, the Center for Economic Education and Research (CEER) estimates that the \$115.2 expenditures of the university

generated an additional \$158.5 million of income in the community. Table 1 illustrates a multiplier effect of 1.4 for the university spending. This expenditure multiplier indicates that any \$1 dollar the university spent in the local economy created an additional \$1.40 of income.

Furthermore, the CEER estimates that the university's expenditures and transfers raised employment by 3,475 jobs and created \$78.5 million in wages and salaries in Kern County.

Table 2 illustrates the economic impact of the CSUB by industry. Of the additional jobs created by its expenditures, the services (e.g., health, business, engineering) industry benefited the most with 2,401 new employment positions, over \$51 million in wages and salaries, and about \$93 million in additional income. The university presence helped create 574 new jobs, \$9.6 million in wages

and salaries, and \$21.7 million in income in the retail and wholesale trade industries. In the Finance, Insurance, and Real Estates industry, 165 new jobs were added with payrolls in excess of \$2.7 million and total income of over \$21 million. Likewise, 176 new jobs were created in the construction industry with \$5.4 million in wages and salaries and about \$7 million in total income.

The CSUB is a multi-million dollar enterprise, serving residents of Kern County and beyond. Its expenditures on wages and salaries, supplies and services, and construction and equipment add income to the local economy with a reasonably high multiplier effect. Growth in student enrollments, continued faculty and staff hiring, and increased capital outlays would enable the university to make greater contributions to Kern's economy.

Table 1: CSUB Spending and Economic Impact

	Current educational expenditures and transfers	Major and minor capital outlays	Community expenditures and transfers	Total
CSUB Spending	\$77,612,000	\$11,899,000	\$25,714,000	\$115,225,000
CSUB Economic Impact	\$129,783,000	\$13,971,000	\$14,754,000	\$158,508,000
Spending Multiplier Effect				1.4

Table 2: CSUB Economic Impact by Industry

Industry	Employment	Wages & Salaries (\$)	Output (\$)
Agriculture & Agricultural Services	13	363,000	670,000
Mining	3	17,000	51,000
Construction	176	5,496,000	6,983,000
Manufacturing	42	1,689,000	7,102,000
Transportation & Public Utilities	49	6,134,000	6,475,000
Trade, Wholesale & Retail	574	9,607,000	21,726,000
Finance, Insurance, and Real Estates	165	2,737,000	21,023,000
Services	2,401	51,124,000	92,703,000
Government	52	1,307,000	1,775,000
Total	3,475	78,474,000	158,508,000