

TECHNOLOGY FORECAST FOR SAN LUIS OBISPO, CALIFORNIA

**Prepared by the
Technology Advocacy Committee
of the
San Luis Obispo Chamber of Commerce**

SUMMARY

The San Luis Obispo Chamber of Commerce's Technology Advocacy Committee sees technology companies as an increasingly important part of the region's economic make-up. To enhance and support that component, TAC conducted a survey and analysis to determine whether any actions, by the Chamber or otherwise, are advisable.

At the least, TAC members hope that the information contained in this report can be used as an economic development tool, especially as the Chamber revises its five-year Economic Vision document. Technology companies, too, may benefit from the information.

TAC members also see opportunity for specific actions taking advantage of the proximity of Cal Poly and its plans for a research park, putting out the welcome mat to new tech companies and monitoring distance workforce trends.

WHY A TECHNOLOGY FORECAST

Technology-related businesses are a desirable element of San Luis Obispo's economy. They are generally clean and non-polluting. They provide well-paying jobs for educated workers and entrepreneurs. They represent diversification of an economy that is largely dependent on agriculture and tourism – both of which are seasonal, cyclical and mostly low-paying – as well as on government (including Cal Poly and Cuesta College), which is more stable but still subject to state budget ebbs and flows. Tech companies also seem a natural fit for the area, considering the proximity of Cal Poly, which has a large and highly regarded College of Engineering.

TAC was established to develop recommendations supporting and enhancing technology-based businesses in and around San Luis Obispo. Early on, however, it became clear that TAC had little information about such

businesses in the area. Census and Department of Commerce data was too aggregated to be useful, and what information we had was largely anecdotal, from personal and professional contacts or news items.

In 2005, TAC members conducted a survey to gather information about the types of technology-related businesses in the area, whether they were doing well and what advantages and disadvantages they perceive about doing businesses in San Luis Obispo. That survey, plus a "SWOT" analysis, became the basis for the first Technology Forecast.

In spring 2008, the committee conducted a follow-up survey to gauge how the situation has changed and formulate an updated forecast. (Note: The survey was conducted before the economic events following September 2008. It is impossible to guess whether or how the current economy would affect responses, so we make no attempt to do so.)

THE SURVEY AND RESULTS

Like in 2005, a web-based survey system was used to gather information about the respondents as well as their opinions¹. The survey featured both traditional, multiple-choice questions and an online idea exchange, or internet dialog, that incorporated respondents' comments and reactions to the questions. The questions were seeded with potential answers, to which participants could respond. Their responses also were added to the list of statements that later respondents could respond to, either in agreement or disagreement. Those statements that did not generate much interest or response eventually dropped off the list, while more popular responses bubbled to the top.

In all, there were 91 completed surveys, though many of the dialog queries had fewer responses. There is no way of determining how representative the results are, though there is no indication the results are not representative.

Perhaps the most significant finding of the survey is that nearly half of the respondents believe that the overall environment for high-tech businesses in SLO has gotten better or much better compared to five years ago, and more than twice as many respondents believe it has remained the same as those who believe it has gotten worse.²

Like in 2005, cost of living and housing were cited numerous times as

¹ The static survey was done with www.zoomarang.com and the on-line idea exchange was done with www.dialogr.com

² Full results for the question: Getting much better: 6%; Getting better: 43%; Neutral: 35%, Getting worse: 17%, Getting much worse, 0%.

the largest barrier to developing a tech industry in San Luis Obispo, with lack of qualified employees and government regulations garnering somewhat fewer responses. A total of 86 percent of respondents named the cost of real estate as a “very significant” or “meaningful” obstacle; other options garnering high response rates included: availability of skilled employees, California taxes, size of the local market for products and services of high-tech firms and lack of technology leadership from elected officials.³

The most cited advantages of SLO for a tech firm were quality of life (32 responses) and Cal Poly (30). More than half of participants responded that the engineering, science and business programs at Cal Poly are “vitally important” to the development of high-tech ventures in the SLO area, with another 28 percent calling them important. The responses were mixed on the active support from those programs, with 19 percent saying excellent, 33 percent saying good, 15 percent saying neutral, 11 saying poor and five terrible.

SWOT ANALYSIS

Strengths

San Luis Obispo has an extremely high quality of life. The small-town atmosphere, enhanced by a wide variety of cultural opportunities, along with the mild climate and proximity to the coast all contribute to making San Luis Obispo a location where many people would love to live.

The high average level of educational attainment, partly a function of the presence of Cal Poly, provides a pool of talent unexpected in a typical small town. This is a potential attractor for companies who need a large proportion of “knowledge workers.” It also affects the demand for, and supply of, cultural opportunities, such as the Festival Mozaic (formerly the Mozart Festival), the San Luis Obispo Symphony and other community-based performing arts organizations.

City and county governments have a positive attitude toward technology-based businesses, in particular those that provide high-paying jobs for highly skilled employees. Government regulation does not appear to be a significant impediment for technology-based businesses in San Luis Obispo.

Although San Luis Obispo has a high cost of living, due mostly to the high cost of housing, the overall cost of doing business here is somewhat lower than in Silicon Valley, Los Angeles, Orange County and Santa

³ Availability of skilled employees: 68%; California taxes: 66%; Size of the local market for products and services of high-tech firms: 52%; and Lack of technology leadership from elected officials: 59%.

Barbara. It is still possible for someone to work in San Luis Obispo and live in a relatively affordable home close enough to commute.

San Luis Obispo has a robust communications infrastructure. Major telecom and data carriers have an established presence here, and data center facilities are available.

The city of San Luis Obispo appears to be preferred to outlying communities as a place for technology-related companies to do business.

Weaknesses

The distance from major technology centers (Silicon Valley, Los Angeles) means that there is less opportunity for networking among entrepreneurs and employees.

The fluid employment market that Silicon Valley is famous for, making it easy for firms to find specific talent they need on short notice, does not really exist in San Luis Obispo. Recruiting is slower and more expensive, and many people are reluctant to move to an area where there may be only one employer who needs their specific skill.

Even though San Luis Obispo is a less expensive place to live and do business than Silicon Valley, housing is still expensive, which means that only highly paid individuals are likely to consider moving here to work.

There is a definite preference at all levels of government for clean, green enterprises, which makes manufacturing a difficult sell.

The pool of technology-trained labor is limited.

Opportunities

Cal Poly, with its top-ranked engineering school and large science and business programs, tops the list of undeveloped resources in San Luis Obispo. There is a great deal of talent among the faculty at Cal Poly, and a continuing stream of students who might be able to provide research, testing or design support to local businesses. Programs or activities providing mutual benefit for participants are an area ripe with opportunity. (See more below).

Threats

As firms grow, they may move out of the region to major industry or venture capital centers or be bought by larger, out-of-area companies.

Companies based in the larger centers (LA, Silicon Valley) have a

competitive advantage in labor pools, networking opportunities and so forth, which make them preferable for many firms looking to set up shop or relocate from elsewhere.

In each of the sectors where San Luis Obispo has some strength (software, communications, biotechnology), companies face the threat that their business could be rendered obsolete by some new technology or large competitor. Probably the best protected sub-sector in San Luis Obispo is the firms that supply technology services to local firms. As long as these firms stay current in the technology they provide, there is likely to be a need for their support services.

CAL POLY – THE UNTAPPED RESOURCE

Cal Poly is highly acclaimed in the areas of engineering, science and business, and yet the interaction with the local tech community has been limited. Past efforts to increase this interaction have floundered, in large part because of a lack of identified mutual benefit. TAC believes strengthening this interaction is a key component to growing the local tech industry.

The proposed tech park, for one, has the potential to be a boon for local tech companies, though the extent depends greatly on how it is executed.

Cal Poly has been successful, for example, at procuring large, sponsored research projects. Those projects, however, don't relate to local business, and a tech center populated with such projects could have little impact on the local tech community.

What would be mutually beneficial to the university and local business is an established tech transfer program, in which faculty and students provide the actual technology and the business partners facilitate money and business expertise to commercialize it. The Boulder Innovation Center in Colorado has seen significant economic development success in working with the University of Colorado's tech transfer program along these lines.

"Every successful technology incubator or region (Silicon Valley, Massachusetts Route 128, Research Triangle Park, etc.) came to be through the combination of federal, state and academic stakeholders collaborating with private sector companies and venture capitalists to address specific challenges and capitalize on the opportunities created by them," wrote one internet dialog respondent, with 80 percent of other respondents agreeing or strongly agreeing.

A tech park also could provide a physical location where fledgling businesses could find managerial, secretarial and logistical support, which could make San Luis Obispo a more desirable location for tech start-ups.

The university also could become a nexus of networking among students, faculty, alumni and local tech employers and employees. Such networking could lead to internships, job opportunities, new business or project collaborations. A successful model is the UC-San Diego Connect program, which facilitates a number of networking activities, including mixers, focus groups, mentoring and more. It has become a sort of “who’s who” of the San Diego tech scene.

“We have a great resource in Cal Poly,” another survey respondent commented, “but far too many grads move out of the area.”

THE GLOBAL VILLAGE – AN UNCERTAIN EFFECT

Technology itself, combined with other modern realities, is changing the way we do business, allowing companies to be headquartered in one area and employ people elsewhere or do business across the globe without ever leaving the home or office.

This course could have profound effects on San Luis Obispo’s economy and work force, yet multiple potential scenarios make those effects far from clear.

In one scenario, firms small and large could make their headquarters in San Luis Obispo but employ at least part of their workforce elsewhere. For example, the corporate leadership and sales team could be located in San Luis Obispo while manufacturing and distribution took place elsewhere. Or an entrepreneur who enjoys the San Luis Obispo lifestyle could live here but hire staff in an area with a lower cost of living, perhaps even overseas.

This approach has found success in Silicon Valley and in some cases locally.

In another scenario, the employees could live here and work for companies located elsewhere. San Luis Obispo seems to appeal to the creative class and type of “knowledge workers” who would be in demand – with enough of such workers and some public-private initiatives, the city may even develop a reputation as a place for tech companies to find their distance workers.

“The ability to work anywhere has created a significant population of telecommuters in the SLO area,” one respondent wrote in the dialog portion. “I see this trend continuing and possibly exploding into SLO as host to many

technology workers from many diverse companies all telecommuting to various places. Smart companies may come to recruit workers to stay here and work for them.” Seventy-three percent of respondents agreed or strongly agreed with the statement. Another respondent wrote: “The ‘everywhere and always’ nature of the internet tends to drive internet knowledge workers to ‘satisfaction of living’ places like the Central Coast.”

A more likely scenario is a mixture of the above, though a preponderance of one or the other could lead to trends with specific consequences that the business community and local government will need to anticipate.

INCENTIVES: A VIABLE TOOL?

Getting existing technology companies to move here is no easy prospect. Technology-related companies are universally recognized as desirable corporate citizens, and many areas court them aggressively. Considering the high cost of living in San Luis Obispo, without tangible incentives to offer, we should keep our expectations modest.

Business Week magazine ran an article in July 2007 (http://www.businessweek.com/magazine/content/07_30/b4043066.htm) on the incentives that Lenoir, N.C., offered to attract a Google server farm — up to \$1,000,000 per job created by the facility over a 20-year period. As another example, Michigan recently advertised a billion-dollar incentive pool, including training subsidies, tax subsidies and help in finding suitable buildings for a qualifying firm relocating to the state.

California has set up 42 “enterprise zones” where new employers can get tax credits of up to \$36,000 per new employee, if the hourly wage is at least 150% of the state minimum wage. They also can qualify for sales tax credit on up to \$1 million in new business equipment purchased for use in an EZ. The Santa Maria Airport Authority has begun the process of applying for one of these zones, but it is doubtful that San Luis Obispo could qualify since our average income is well above many other communities in the state.

Incentives also can be used to offset advantages of moving elsewhere once locally started firms start to grow. Without them, San Luis Obispo is likely to lose some companies as they get bigger and possibility come to be seen as an “incubator” of new businesses that move on once established.

But the obvious question with incentives is: who should pay?

While many probably recognize the benefits of a robust technology

industry, those who would benefit enough to be willing to pay for an incentive program are probably few. From the city and county perspective, the area's natural endowments give us a competitive advantage in agriculture and tourism, so it makes sense to support those industries. The lost opportunities of a lack of high-tech firms are speculative while the costs of the incentives are real, so building political support to provide tax or other incentives would be difficult.

At the least, then, the Chamber could take steps to announce our interest in hosting technology-related businesses, to "put out the welcome mat," so to say. This could be done on the various web sites operated by the Chamber, the VCB, the city and the county, since founders and employees of technology-related companies generally start their searches on the web. The sites could connect visitors to a knowledgeable (and motivated) respondent. There is a chance that this "unbaited hook" will catch a few fish, so it could be worth funding for a year or so.

RECOMMENDED ACTIONS

Based on the survey, internet dialog and analysis, TAC recommends the following actions:

- Continue to support a research park at Cal Poly, but gear that support toward a tech-transfer/innovation center-type program rather than sponsored research projects for large corporations.
- Support the creation of a UCSD Connect-type program through Cal Poly that could bring together students, faculty, alumni and local firms with a tech focus.
- Monitor "distance workforce" trends and determine if there is a role for TAC or the Chamber to play in affecting or responding to those trends.
- Support an effort to "put out the welcome mat" on various web sites and connect potential relocating companies to a motivated and knowledgeable local contact.
- Continue to conduct the technology survey and dialog every two years as a barometer of trends, attitudes and developments and as the basis for future recommendations.