

Telecommuting

REVIEW

THE Authoritative Source of Telecommuting Information and Analysis Since 1984

REAL ESTATE AND OFFICE SPACE

Special Report:

Making Telecenters Work – Can We? Should We?

SUMMARY: Close to two-thirds of this issue of TR is being devoted to a special feature that analyzes the current status of telecommuting centers in the U.S. It is a timely feature because of growing interest in these centers, as well as fairly significant levels of government spending to help establish and subsidize them. Though many people are optimistic about their future, it appears they are counting on the triumph of hope over experience. The results to date and the methods that have been used to set up centers seem to indicate that they are not living up to expectations. – Gil Gordon, Editor

EDITOR'S NOTE:

This story is the longest single feature in any issue of *Telecommuting Review* since the newsletter began in 1984. I was going to break it into two or three parts to be published in successive months, but decided to run it in one piece because it merits the space and your time.

As the writer Tom Durkin explains, this article came about because of the reaction to his article earlier this year about California's telebusiness centers. I hope this article stimulates some discussion and reactions, which I'll be glad to print in an upcoming issue. In general, I agree with his assessment and his conclusions – even though I gave him no direction about how to slant the article. The evidence he cites and the comments from a wide range of observers all support the contention that these centers have, in general, been only modestly successful at best. And there isn't much reason to believe that this picture will change dramatically.

The text printed in italics in the article are Tom's rhetorical questions to himself, and his observations that formed during his research. They provide a useful window into his thought process as he was working on the article.

Incidentally, Tom Durkin was quoted and profiled as a "Voice from the Industry" in the new book *Cyberscribes.1: The New Journalists*. For more details, see <www.ellipsys.com>

TELECENTERS ARE NO JOKE – SERIOUSLY

by Tom Durkin

Q: What's the difference between a telebusiness center and Kinko's?

A: Success.

But seriously, folks ...

A friend of mine asked me the other day, "Excuse my ignorance, but what's a telebusiness center?"

"Imagine a Kinko's without customers," I replied. I was only joking, but her eyes lit up with immediate understanding. Of course, a Kinko's service center and a telebusiness center aren't quite the same thing. One of them takes care of business, and other ... well, it has business in its name.

1. ALL KIDDING ASIDE – WHAT IS A TELEBUSINESS CENTER?

The best serious description I could give my friend of a telebusiness center (or "telework center," "telecommuting center," or "telecenter") is that it's sort of a small halfway office (anywhere from a few to a few dozen workstations) for telecommuters. It gets them out of the house, but they don't have to commute all the way to the main office – congesting the highways, polluting the air, and wasting their precious time and productivity.

A telebusiness center has almost all the amenities of the main office, but virtually none of the office politics – or camaraderie. Likewise, it has none of the comforts of home, but none of the distractions, either.

These days, most teleworkers only work at a telecenter one or two days a week. The rest of the time they are usually working at the "main" office, or telecommuting from home.

What's Wrong with This Picture?

My 2/97 TR article "California's Telebusiness Centers: A Big Letdown" generated enough heat that Gil asked me to do a follow-up article. He wanted me to really dig into what it takes to make telecenters work.

Contemplating the blisters on my hands from my last effort at digging into telecenters, I stepped outside of the box and asked myself a heretical question: *Do we really even need telecenters?*

Yes, say the experts. Telecenters serve both public policy and private enterprise, although the proof is still mostly anecdotal and hypothetical.

If we do need them, then why are they so hard to sell to employers?

Besides being hurt by the traditional employer resistance to telecommuting in general, telecenters have suffered in particular from misdirected and ineffective funding, planning, and marketing.

What do we have to do to make them work?

That's a very good question. Fortunately, there appear to be some pretty good answers – all yet to be tested.

2. MAKING THE BUSINESS CASE

If the idea of telecommuting is to eliminate the need to travel to a workplace, what's the point of traveling to a telework center?

There are at least three good business reasons for telecenters, according to Dan Nickell, the marketing consultant for the New Frederick Telework Center in Frederick, MD. He contends that telework centers provide:

1. Cost-effective access to high-tech equipment and services that would be too expensive or impractical to place in individual telecommuters' homes;
2. An appropriate venue for meetings with clients and the public, and
3. The telecommuting option to employees whose home circumstances are not conducive to working at home.

There are two more legitimate business reasons for telecenters: liability and equity.

"The conventional wisdom holds that employers might be more comfortable with a well-defined [worker's compensation] liability of a conventional office environment instead of a home-based telecommuter tripping over the computer cord at two o'clock in the morning," said Prof. Patricia L. Mokhtarian, director of the Telecommunications and Travel Research Program at the University of California, Davis (UCD).

As for the issue of equity, "If we only have home-based telecommuting available, then it may only be the affluent professionals who are able to afford the space and equipment to do it at home," Mokhtarian said.

This raises the specter of legally actionable economic discrimination cases in the workforce, both she and Nickell agreed. Clerical workers, for instance, can, need, and want to telecommute, but they are less likely to be able to afford a computer. Even if the employer provides the equipment, lower-level workers are less likely to have an appropriate workspace in their homes, Mokhtarian noted.

Employees Know Best

Employees have always been the driving force behind telecommuting, and there is growing anecdotal evidence that some employees do need or prefer to work at telecenters, reported Mokhtarian, citing the interim findings of the Residential Area-Based Offices (RABO) Project.

[Also known as the Neighborhood Telecenters Program, the RABO Project created many of the telework centers in California. UCD's Institute of Transportation Studies was contracted to conduct the three-year, \$3 million experiment by the California Department of Transportation (Caltrans) and the Federal Highway Administration. The purpose of the project was to study the feasibility and potential impact telecenters might have on mitigating traffic congestion and air pollution. Final results of the study are expected to be released this September.]

"I went into this program with some very clear hypotheses about the niche telecommuting centers would fill," said Mokhtarian, principal author of the interim report. "I figured there were going to be employees who would prefer telecommuting centers because there might be distractions at home – family or temptations of some kind – or just lack of self-discipline."

Moreover, "These workers would be better off in a more conventional work environment because of the desire to socialize, to have social and professional interaction at the workplace, and the need for some buffer zone between work and home," she added.

The interim findings appear to support Mokhtarian's hypotheses.

Ed Huestis, coordinator of the Vacaville Telecenter (between San Francisco and Sacramento), provided even stronger anecdotal evidence that some employees prefer to work at telecenters. He reported some of his clients like the telecenter so much that they pay for their own workstation rentals. "It's worth it to them," he said, just to avoid the horrendous commute into the San Francisco Bay area.

Huestis also said he's heard that some employees at other telecenters have offered to work nine-hour days if their employers will let them work at a telecenter.

This is powerful evidence that "telecommuting is driven by employees, not by employers," observed Jeff Charles, director of emerging technologies for the Institute for the Future in Menlo Park, CA. The employees' willingness to pay their own way and work extra hours, while laudable, could lead to problems for the employer with the IRS and the federal Fair Labor Standards Act, Charles warned.

3. THE NOT-SO-HIDDEN (TRAVEL) AGENDA

While telecommuting advocates are quick to sing the praises of telecenters as an asset to business, the truth is that telecenters – from California to Washington, D.C. – were originally devised as a means of mitigating air pollution and traffic congestion. Simply put, "We're experimenting with substituting telecommunications for travel," explained John Wolf, supervising transportation planner for Caltrans.

"I think they're quite effective at reducing travel," stated Mokhtarian. "Some of these things are intuitively obvious, but we're still wanting in terms of a clear picture of exactly what's happening," cautioned senior transportation planner Michael Seaman, who had direct oversight for the RABO Project for Caltrans. Both Wolf and Seaman are withholding judgment on the cost-effectiveness of telecenters as a transportation management strategy until the final RABO Report is issued in September.

Meanwhile, one other thing appears to be intuitively obvious: At this time, and as currently configured, these experiments in alternative officing will not survive without

massive direct or indirect public subsidy. The private sector has so far shown markedly little interest in either using them or operating them.

Why the Hard Sell?

Given the solid business reasons and worthy public policy goals of telecenters, why is the private sector so resistant to the concept?

In California, telecenters were spawned in an oppressive regulatory atmosphere, said Wolf. Government agencies attempted to impose trip reduction mandates in which businesses were told, in effect: Spend money to meet public policy goals, or pay heavy fines, he explained.

This strategy failed miserably and was ultimately abandoned, said Carol Buckinger, manager of UCD's Neighborhood Telecenters Program (RABO). Unfortunately, telecenters were offered to businesses as one of the ways to meet the trip reduction mandates. "I think they're still suffering from a very bad image because of that," asserted Buckinger.

Consequently, "that left the centers in a position where they were scrambling to redefine themselves and integrate themselves into the business community," said Buckinger. Some have been integrating "fairly successfully," others are "grimly hanging on," and about half have failed, she said.

At last count, 45 telecenters have opened in California since 1991, and 22 still exist, reported Buckinger, whose daunting job it is to attempt to track the status of both RABO and non-RABO telecenters in the state. This is no mean feat because there are no reporting requirements imposed on the non-RABO telecenters, and the market is so volatile. In just the past few months, two new centers have opened, and another two have shut down, she said.

4. A GRIM RECORD

The 50 percent mortality rate of California's telecenters can be traced to short-term planning, under-funding and misguided marketing, according to just about everybody interviewed for this article. "A lot of these centers were set up with not a lot of money and not a lot of planning," Buckinger observed, citing the adage, "Failing to plan is planning to fail."

"We're not business incubators *per se* here," said Wolf, pointing out that the RABO telecenters were set up as experiments to test the viability of telecenters, not establish them as long-term enterprises. "Clearly, some of the ones that started and stopped didn't work," but, he added, "If you look at it in the grand perspective of things, you have to notice that most of the telecenters that we set up are still open even though we pulled [funding] out a year ago."

Seven out of the 15 RABO telecenters that participated in the project at one time or another are still operating, Buckinger confirmed. None, however, is self-supporting and all are still dependent on direct or indirect subsidies (e.g. use of public facilities) from local government agencies. The non-RABO telecenters are also struggling with the same problems of shortsighted planning and inadequate funding, especially for time-

intensive, labor-intensive market research and employer outreach, according to Buckinger.

Hazards of Doing "Business" with Government

Lack of funds for marketing efforts is the near universal complaint of telecenter administrators from coast to coast.

Chuck Hauswirth, owner of Pacific Neighborhood Telecenters, which operates the San Juan Capistrano TeleBusiness Center under a partnership contract with the city of San Juan Capistrano in southern California, said his three-year business plan to grow a chain of telecenters fell apart when expected public funding was cut off after his first year of operation.

This is the hazard of doing "business" with the government, Buckinger said. It is typical of what can and does happen to an entrepreneur who tries to use government seed money to establish a telecenter as a private enterprise, Buckinger said bluntly.

"Trying to set up an entrepreneurial enterprise with public funding just adds tremendously to the load," she said, "because you're having to deal with the protocols of accountability, petty politics, and the vagaries of public funding – you know: here today, gone tomorrow. How do you plan for that? You can't!"

Nevertheless, Hauswirth intends to persevere. "I'm in a positive cash-flow here, but I'm certainly not making money to speak of," he said. "The return on investment just isn't there to interest venture capitalists."

Regardless, as a self-described "loose cannon," Hauswirth vowed to keep at it, "pumping arms at the Chamber of Commerce and sticking my face in front of news cameras." He added, "You can't be a one-trick pony – you have to have a plethora of services available. You have to have what people want. You can't just build it and [expect] they will come."

East Does Not Meet West

Meanwhile, back east in Frederick, MD, Dan Nickell has his own problems with government money.

Unlike California's meager governmental support of widely scattered telecenters, the federal government has allocated millions of dollars to blanket the Washington, D.C., metropolitan area with telecenters.

The General Services Administration is operating 12 telecenters and plans to open perhaps another 10 this year in partnership with other agencies such as colleges, libraries, nonprofit organizations, state agencies, and even National Guard armories, said Warren Master, acting director of GSA Office of Workplace Initiatives.

The GSA also subsidizes state-sponsored telecenters like Frederick, which is "full of federal workers," Nickell reported. "As soon as the availability of the center was announced, the GSA picked up a two-year option which, combined with the grant from the Maryland Department of Transportation, covers all of our costs and provides a good short-term profit."

Therefore, Nickell intends to report this month to the national Telecommuting Advisory Council's TAC '97 conference in Washington, D.C., that "from a financial perspective, the Frederick Telework Center is and will be reasonably successful for the first 2-3 years. From an objectives perspective, however, it is quite likely to be a complete failure." This is because "we have yet to recruit one private sector client, and I am somewhat skeptical that we will do much better anytime soon," he said.

The purpose of the grant from the Maryland Department of Transportation was to establish and operate a for-profit telework center targeting the private sector, Nickell explained. "This task would be easier if I had more marketing money for billboards, newspapers, radio, television, etc.," Nickell claimed. "Corporate ignorance, unawareness, and indifference is so great, though, that for the Frederick Telework Center to overcome this inertia requires more marketing money than we could possibly ever justify. If we had it and spent it, we would never realize a profit."

Nobody Wants a Pilot Program

One of the most intuitively obvious reasons business won't buy into telecenter programs in either California or Washington is because "companies won't be interested as long as telework centers are in the pilot or experimental stage," Nickell stated.

Buckinger concurred. "I think that because these centers have been somewhat short-term, because they have been publicly subsidized, and because they don't have good track records or strong long-term business plans. I think an employer has every reason to be reluctant to invest in them."

This is where the federal plan shows some promise in terms of long-term planning. Right now, an average telecenter workstation costs about \$500 a month, said Master, but due to the largess of Congress, GSA is able to charge client agencies just \$100 per month. That's an 80 percent subsidy, he noted.

"The plan is to reduce the subsidy over time to get the client agencies to pay whatever the market rate is," Master revealed. "Once they've got enough telecommuters and they've put together a management strategy that supports telecommuting – both home-based and center-based – it will be impossible to go back to the old way because space at the main office will be gone."

Not Just Leading by Example

Faith Wohl, in her role as director of GSA's Office of Workplace Initiatives, announced at the TELECOMMUTE '94 conference in San Francisco that "telecommuting is now federal public policy."

And it still is, according to Master. "The President has set a goal of 160,000 federal telecommuters by the end of fiscal 2002. We've got an interim target of 60,000 by the end of 1998 – that's a little more than 3 percent of the current federal civilian workforce of 2 million federal workers, he said. "The last survey we did through last summer reflected telecommuting at about 9,000 to 10,000. We're hopeful that we'll be up to 15,000 to 20,000 at mid-fiscal year update."

On a national basis, the only way to meet the mandate, and keep up with the demand, Master said, has been to send 95 percent of federal telecommuters into home-based telecommuting one to 1.5 days a week until enough telecenters can be set up. The emphasis, however, will remain primarily on home-based, as opposed to center-based, telework, he added.

The large-scale federal commitment to home- and center-based telecommuting is not just leading the private sector by example, said Master. The government has a real self-interest in telecommuting. "For us, it's not just an environmental benefit that we're trying to achieve, but a quality of life benefit for the employees, and a workplace productivity improvement activity for the agencies."

5. WHAT WILL IT TAKE?

There's a consensus that telecenters will eventually become self-sustaining one way or another, but how will public- and private-sector advocates make it happen – and what will telecenters of the future look like?

Telecenters Are Inevitable

Although the experts don't necessarily agree on how telecenters of the future will be configured, they all assume that, just as telecommuting is destined to become a workplace norm, telecenters of some sort will be an integral component of that norm.

In the May issue of TR, Prof. Franklin Becker, director of Cornell University's International Workplace Studies Program, predicted: "The typical alternative office (an oxymoron) is likely to be a company-specific telework center located relatively close to an employee's residence or her customer base."

When asked if establishing enough company-specific telework centers to serve all its employees in a given geographic region might be cost-prohibitive and/or cost-ineffective, Becker told me, "My basic point is that home-based telework, while remaining as one place to work, is unlikely to become the primary non-office location for most people."

Most other telecenter advocates envision telecenters that serve multiple clients, but their visions diverge from there. Some believe telework centers may always need to be somewhat subsidized for the public good, much as libraries and community centers are now. Others anticipate widespread public/private telebusiness center partnerships. Still others foresee a private-sector takeover – the so-called "Kinko's model."

Actually, it appears intuitively obvious that telecenters will evolve into all of the above, and more, depending upon the specific demographics, geography, and economics of the regions and organizations they serve. There will be no one-size-fits-all telecenter ideal.

As Becker said, "There will be a whole range of telecenters, ranging definitely from the Kinko's type to companies setting up shop in each others' offices (of alliance partners and so on), as well as using underutilized space in their own (sometimes non-office) facilities, such as warehouses."

An Investment Too Big for Private Industry?

Dan Nickell compared the ubiquitous establishment of telework centers throughout the country to the U.S. space program. Maybe only an entity as large as the federal government could or would take on the risk and make the massive investment necessary to challenge the frontiers of workspace, he speculated.

Although she is open to the idea of the "alleged Kinko's model," Mokhtarian was not bothered by the idea ongoing public subsidy. "We could conclude that telecommuting centers are such a public good from the transportation benefits and other benefits that they offer, that therefore, it's something we might want to continue to subsidize," she said.

"We subsidize libraries and community centers and so forth, and we conclude that the public good that they offer is worth their cost to the taxpayer," she reasoned. "And that leads one to the televillage model of the telecommuting center where it is part of a community facility of some kind," she concluded.

Of Televillages and "Smart Communities"

Although pioneered by the Scandinavians in the 1980s, the Kentucky Science and Technology Council first brought the Televillage™ concept to national attention in 1991 with working models in Pikeville and Elizabethtown, KY.

Meanwhile, in California, Caltrans, San Diego State University (SDSU), UC Davis, and the Center for the New West pooled their resources to build a "Smart Community"™ model in the city of Chula Vista, south of San Diego.

The purpose of the project was to create a "telecommunity" in which "one or more telecommunity centers would serve as the core for remote delivery of services, including telework, distance-learning, telemedicine, telecommerce, and other applications of the electronic highway alternative," according to the SDSU project description.

Wolf and Seaman of Caltrans, and Buckinger of UCD, all mentioned the Highland Telebusiness Workcenter as an exemplary "smart community." Buckinger said Highland was what she calls "a stayer" – a telecenter that opened early and has stayed open. Seaman noted that Highland has partnered not only with the High Desert community in Southern California but also with the local economy by incubating businesses and linking with the Chamber of Commerce, as well as serving its core telework function.

"The idea is to generate multiple revenue streams," stressed Master of GSA. "By doing that, you're taking some of the cost burden off telecommuting *per se*. Doing this will have a dampening effect on the pricing."

The Three-Legged Stool Theory

Both Nickell and Hauswirth, coming from the private sector side, endorsed public/private partnerships – and each has his own model of how to do it.

Hauswirth espoused a "three-legged stool" business plan:

1. "The public sector should come up with some seed money because a telecenter is not going to be a Burger King." Because telebusiness centers serve the public policy agenda, the public sector should contribute its fair share, he reasoned.
2. "The manufacturers and service providers should be providing assistance." Telecenters offer manufacturers and providers the opportunity to beta-test and showcase new products and services, Hauswirth argued.
3. "The most important leg is the private operator, the entrepreneur, who has enough business savvy and work ethic," he emphasized. Many ailing telecenters are being run by public-sector employees. "The civil service mentality is the antithesis of profit," he said.

David Fleming, the telework program consultant for the state of California, is supportive of Hauswirth's theory. "I've been saying for years that government should support telecenters with seed money, and then take a hands-off approach. Just let the private sector do what it does best. We need to quit micromanaging them."

Sell Service, Not Location

"We have an impasse," according to Nickell. "Private employers will be reluctant to warm up to telework centers as a significant workplace alternative until there are enough centers, distributed broadly throughout the region and marketed as an integrated unit to make center location irrelevant."

"As a representative for the Frederick Telework Center, I am forced to sell a single location," he said. "This limits me tremendously. If, on the other hand, I represent a consortium of centers throughout the region, then my sales position is a question of brokering a service, not selling a location," he said.

GSA has already established a framework of telecenters for Nickell to draw upon. "Our emphasis has been to saturate the entire metro area – to have a fairly ubiquitous system of telecenters so that in whichever direction you turn there will be a telecenter not too far from you," Master explained.

"In addition to all the GSA telecenters, there are disparate other state and local telecenters scattered around this region with different rates and services," Nickell noted. "Therefore, I've proposed to put together a program to broker telework center space to employers at any and all telework centers in the region," he revealed.

As a broker, Nickell said he could approach employers with the promise that "We will take care of all the contracting and coordinating for you. We will provide you with a single point of contact for contracts and a single bill per month."

Nickell suggested he might even attempt to contract with private enterprises like HQ Executive Suites and Kinko's to increase the range of services he could sell.

What's Wrong with Kinko's?

To me, at least, it's intuitively obvious that Kinko's, as a highly successful and ubiquitous private enterprise, has positioned itself perfectly to seize the telecenter market. It already has most of the infrastructure in place. It has the permanence

and utility that proves attractive to business. And it has a brand-name reputation for business-level quality and service that employers can trust.

So why isn't Kinko's gobbling up the market?

Well, apparently, Kinko's is beginning to nibble.

Kinko's Inc. declined a live interview. However, public relations executive Laura McCormick did e-mail responses to some, but not all, of the written questions I submitted by fax.

Here are her responses; you can imagine the questions:

- Currently the majority of our branches have Internet access. By June, all of our locations will have Internet access. Target customer for Internet access will primarily be our SOHO (small-office/home-office) customer. Mobile professionals and the job search category will also be important markets.
- Many of our branches offer quiet workspaces. Some are private offices. The branches that have videoconferencing facilities (currently 145 worldwide) gladly allow customers to use the conference rooms at no charge when they are not booked for a videoconference.
- Our branches offer telephones for customers to use. The majority have Sprint swipe phones that facilitate long distance calls.
- We continually assess our product and service offerings to insure that we are meeting the needs of our key audiences, which are comprised of SOHOs, large commercial businesses, as well as mobile professionals, and the *growing telecommuter audience*. [Emphasis added.]

It may be inferred from the above that Kinko's is definitely going after the drop-in telecommuter market – and possibly, but not probably, the center-based telecommuter market. Government-sponsored telecenters and the few startup entrepreneurs seem to have center-based telecommuters all to themselves. The trick is to get employers to buy into the concept.

However, it looks like the private sector and the public sector could go into head-to-head competition for the business of drop-in home-based telecommuters and SOHOs. Especially in California, attracting home-based telecommuters and SOHOs on an occasional, *ad hoc* basis to telecenters is becoming an increasingly important secondary revenue stream to fill in the many gaps among the long-term, center-based telecommuter leases.

6. QUO VADIS?

What now?

Most of the experts conceded that the Kinko's model is good in theory, but not in practice. Kinko's centers are too busy, too noisy, too expensive, too retail-oriented, and too public for anyone to try to work there on a regular basis, they said.

"We need a company that is willing to create a combination of a Kinko's and an HQ Business Center," Nickell declared. "I see us at a period where everyone is designing their own solutions and throwing up telecenters wherever and however they can. What I am looking for is the standardized Holiday Inn analog, a company with the resources to underwrite the proper business model we need."

Whether they believe telecenters are fated to become permanently subsidized fixtures of government or become the next hot growth industry, or both, all the players agreed that telecenters are a good idea – whose time has not yet come.

"It often takes some sort of catalytic event to propel an idea," Charles of the Institute for the Future observed. A good idea, such as telecenters, will spend an indefinite amount of time "just hovering around," undergoing debate and discussion, getting a few takers who see the benefits, but nothing is happening to make it really take off. "Then a catalytic event occurs, and it just changes the curve."

Charles did not hazard a guess as to what that catalytic event might be.

However, according to private-sector advocates Hauswirth and Nickell, the catalytic event that will bend the curve upward will be when they can go out on sales calls and prove to a company that its competition is beating them by using telework centers.

Q: So, now, what's the difference between a telebusiness center and Kinko's?

A: A catalytic converter.

CONTACT:

Frank Becker
(607) 255-1950
fdb2@cornell.edu

Carol Buckinger
(916) 752-4203
cbuckinger@ucdavis.edu

Jeff Charles
(415) 854-6322

David Fleming
(916) 327-9143
dmfleming@smtp.dpa.ca.gov

Chuck Hauswirth
(714) 443-3444
commute@asyst.net

Ed Huestis
(707) 449-5424

Patricia L. Mokhtarian
(916) 752-7062
plmokhtarian@ucdavis.edu

Warren Master
(202) 273-4662
warren.master@gsa.gov

Laura McCormick
(805) 652-4000
lauram@kinkos.com
www.kinkos.com

Dan Nickell
(703) 760-7874
dnickell@netinc-usa.com

Michael Seaman
(916) 653-1991

John Wolf
(916) 654-2627

Chula Vista Eastern Telecenter:
www.engr.ucdavis.edu/~its/tcenters/sites/chula_h.stm

Highland Telebusiness Workcenter:
www.eee.org/bus/htb/centerl.htm

New Frederick Telework Center:
www.ibasys.net/telework.htm

San Juan Capistrano TeleBusiness Center:
www.telebusiness.org
www.engr.ucdavis.edu/~its/tcenters/sites/sanjuan.stm

UC Davis Neighborhood Telecenters Program:
www.engr.ucdavis.edu/~its/tcenters/tc.stm

Vacaville Telecenter:
www.engr.ucdavis.edu/~its/tcenters/sites/vaca.stm

Tom Durkin
(916) 885-0566
tdurkin@vfr.net www.vfr.net/~tdurkin/