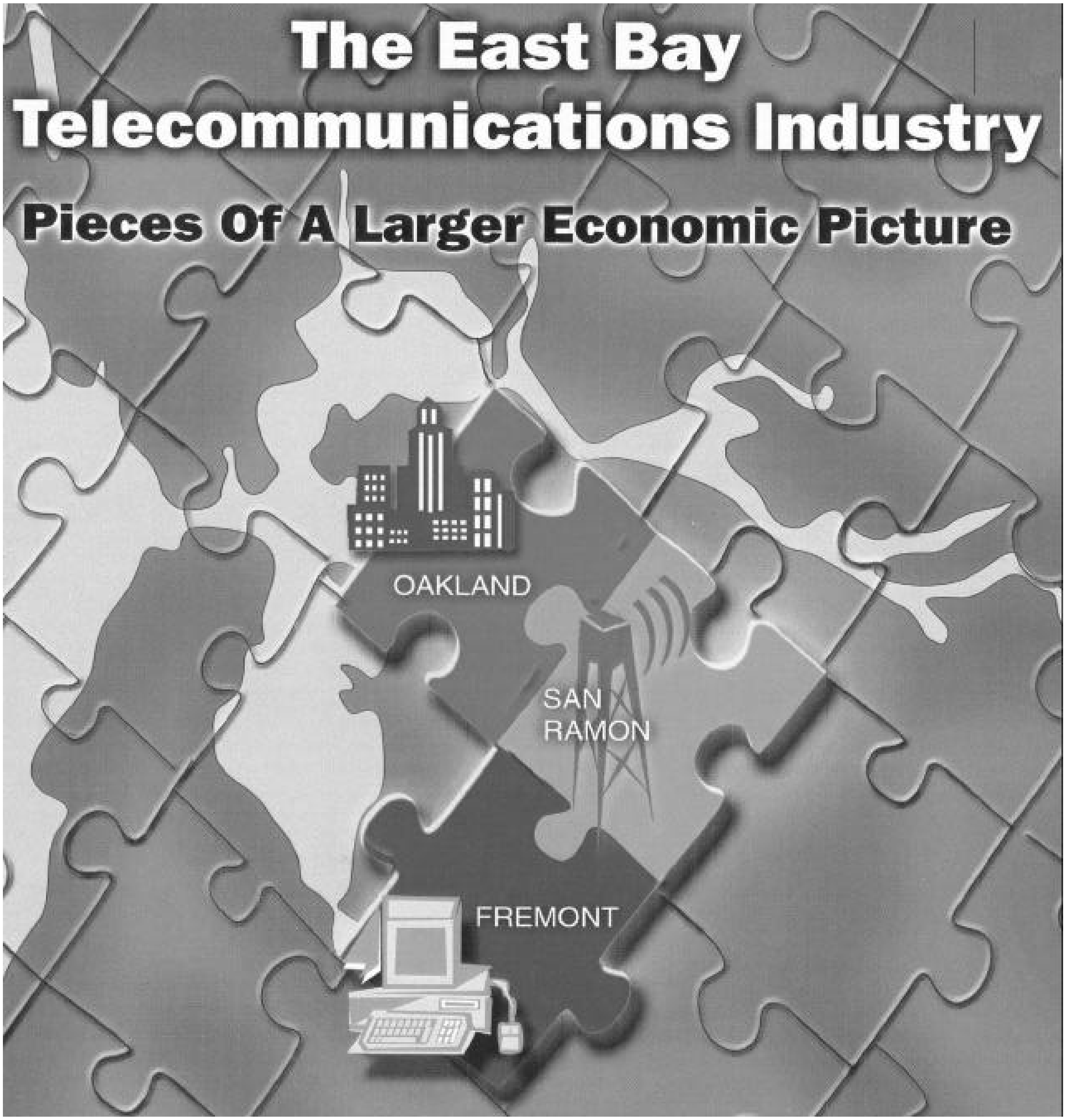
EXECUTIVE SUMMARY



January 2000

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EAST BAY TELECOMMUNICATIONS INDUSTRY STUDY

EXECUTIVE SUMMARY

Why and How Was This Study Conducted?

This study was sponsored by the Economic Development Alliance for Business (EDAB), the City of Oakland and the Contra County Economic Partnership because of the growing global and regional importance of the telecommunications industry. The East Bay's telecom industry employs nearly 30,000 people in over 400 firms located in Alameda and Contra Costa Counties. These are relatively high paying jobs that support 145,000 additional jobs. East Bay telecom firms are a diverse and balanced representation of a global industry that is having a profound impact on our daily lives. The constant flow of new telecom products and services is fueling our appetite for being "connected" to "anyone, anywhere, anytime."

The study was performed by The Compass Group and was based on the "industry cluster economics" theories developed by Dr. Michael Porter at the Harvard Business School. Data collection included a detailed review of prior studies, the creation of a customized demographic database, three regional employer focus groups, and input from site selection and telecom recruiting specialists.

What is the East Bay Telecom Industry?

There are three East Bay geographic concentrations of telecom firms:

- Tri Valley/680 corridor’s service providers
- Fremont/880 corridor's equipment manufacturers
- Oakland/880 corridor's eclectic combination of large and small, service and product firms

The economic and competitive strengths of each of these sub-regions provide essential and inter-related components of the Bay Area's high-tech economy:

- The Tri Valley/680 service providers are where they are because of their proximity to Bay Area customers and the historically ideal balance of facility and labor market costs they enjoy;
- Fremont's equipment firms are there because of their proximity to the high concentration of computer and electronic equipment firms of the Silicon Valley and the venture capital firms on the Peninsula; while
- Oakland provides a big city and telecom-friendly environment with excellent public transportation systems.

While Alameda and Contra Costa Counties have significant economic resources within their boundaries, the unique competitive strength of East Bay telecom firms is tied to the complex network of personal interactions with the rich economic resources of the total Bay Area.

Key Retention and Attraction Issues

The results of three telecom employer focus groups are reported in the table below. The widest gaps are a reflection of the pressure industry growth is putting on labor markets, local governments and the transportation infrastructure.

Location Factor	Importance*	Satisfaction*	Gap
Labor Availability & Costs	4.6	2.2	-2.4
Taxes/Regulatory Environment	3.8	2.5	-1.3
Hard Infrastructure	3.9	2.7	-1.2
Real Estate Costs	3.4	2.5	-0.9
Quality of Life	4.2	3.5	-0.7
Accessibility	3.8	3.4	-0.4
Local Resources	3.8	3.7	-0.1
Site Factors	3.1	3.5	+0.4

Ranking based on 1 to 5 scale (1=very low, 5=very high)

Notwithstanding the above data, the East Bay, with its proximity to greater San Francisco Bay Area, is a highly desirable location for telecom firms of all types and sizes, especially when compared to other national locations. This position of national leadership offers promise for the growth of East Bay communities, but it must be consciously nurtured.

Strategies for Retention and Attraction

"First Priority " economic development issues for the East Bay telecom industry based on the foregoing "gap" analyses are: (1) labor availability and costs, (2) taxes and the regulatory environment, and (3) hard infrastructure (especially transportation).

In developing effective strategies, several conditions must be satisfied:

- **One Size Does Not Fit All.** Large "anchor tenant" firms have different economic needs than smaller firms; there must be mechanisms for identifying these differences, assessing their impacts (regional cost/benefit analyses), and designing solutions for <u>both</u> audiences. In theory, this requires a complex real-time dialogue between all stakeholders. Innovation will be required to deal with this because there are ready solutions or precedents.
- **Vehicles for Collaboration are Not Well Known Among Telecom Employers.** Sixty-five telecom firms were contacted about focus group participation for this study and 90% of them were unaware of EDAB, sister agencies, and the benefit to them of economic development.

Recommendations to Respond to These Opportunities and Challenges

The following is a summary and partial listing of the recommendations made in the study.

1. **Organize an "East Bay Telecom Network" to Address Industry Development Issues in Real-time**
   It is necessary to create a vehicle to bring together public and private telecom industry interests. Since the telecom industry moves at "web-speed," public sector efforts to support them must adopt the same standards of interaction and performance. The "Telecom Network" could be an innovative web-based focal point for government/employer/educator collaboration in identifying economic development needs, solutions, participation requirements, etc. It could address individual company needs as well as aggregate requirements. It could also be a standing answer to:

   - "Who is EDAB (and other economic development orgs) and what could they do for me?"
   - "What are the demographics of the East Bay Telecom Industry?"
   - "What's going on with such-and-such a program I just heard about?"
   - "Is there anyone who can help me with XXX?" "Who can I contact?"

2. **Develop a Strategy for Growing the East Bay's Telecom Industry**
   Determine size and type of companies East Bay telecom cluster wants to attract, develop a strategy to determine number and type of large “anchor” firms and a marketing plan to target

these firms. Since over 80 percent of the cluster's growth usually comes from "home-grown" firms, not from "transplanted" firms, the strategy should also address measures to retain firms of all sizes.

3. Strengthen the East Bay Telecom Workforce

Increase the local labor force through the better utilization of several large labor pools:

- Inform, prepare, provide classes and attract the interest of high school students;
- Develop marketing programs with schools and employers and present forums and panel discussions to target community;
- Solicit funds from telecom firms to provide scholarships and financial assistance for students enrolled in high-demand majors, offer more telecom certification programs through adult education centers, develop streamlined skill and certification standards and special curriculum, and identify and invite more vocational training centers to the East Bay;
- Establish mentor, internship and co-op programs, compile, publish, and update a list of the vocational centers and community colleges and the courses they offer, sponsor events that bring employers, educators, recent graduates and students together, conduct and disseminate research on best employer/training center collaboration practices
- Determine East Bay telecom industry requirements for BS, MS, and Ph.D. electrical engineers and other majors over the next 5 years and if demand exceeds supply and it is appropriate, address issues/opportunities to increase migration to the Bay Area.
- Encourage telecom firms to sponsor projects at TELCOT at Cal State at Hayward, subsidize work/study and internship programs, sponsor job fairs and other events to introduce employers and students to each other and provide/publicize website for employers to post job openings and for applicants to post resumes; and
- Publish a listing of recruiting firms that specialize in telecom placements, and streamline and assist with process for employers to receive Federal funds for retraining workers.

4. Reduce Traffic Congestion

The second most important challenge to telecom employers is the traffic congestion during rush hour. Actions to reduce traffic snarls include:

- Cooperate with established Bay Area organizations that understand traffic patterns and are working to reduce congestion.
- Respond to telecom employers' specific requests such as subsidized shuttles from Fremont BART station to employer sites.
- Survey the extent, success of, and future plans for remote commuting facilities set up by Silicon Valley companies. If appropriate, develop plan to promote more remote facilities in San Ramon area to reduce area-wide traffic congestion.

5. Promote Favorable Government Attitude

The third most important factor to telecom employers is being located in an area in which local government has a favorable attitude toward business. Actions to promote employers' perception that government agencies are responsive include:

- Establish a East Bay telecom incubator (already in progress) in San Ramon, offer fast track permit and inspection process, follow-up with new telecom businesses, invite them to industry events, inform them of resources and pair with a sponsor.
- Assist in locating suitable larger quarters when firm outgrows current location, help East Bay firms to gain a larger share of Bay Area venture capital, lure high-profile national research consortium to the East Bay, influence regulatory bodies to adopt favorable policies toward telecom businesses and assist key government organizations to become sophisticated buyers and beta testers of telecom products and services.

To Request a Copy of the 100 page East Bay Telecommunications Study, contact EDAB staff person, Mia Hughes at (510) 272-3832 or mia@edab.org. The author of the Study, The Compass Group, can be reached at (650) 941-1080 or emailed at denniswooo@aol.com