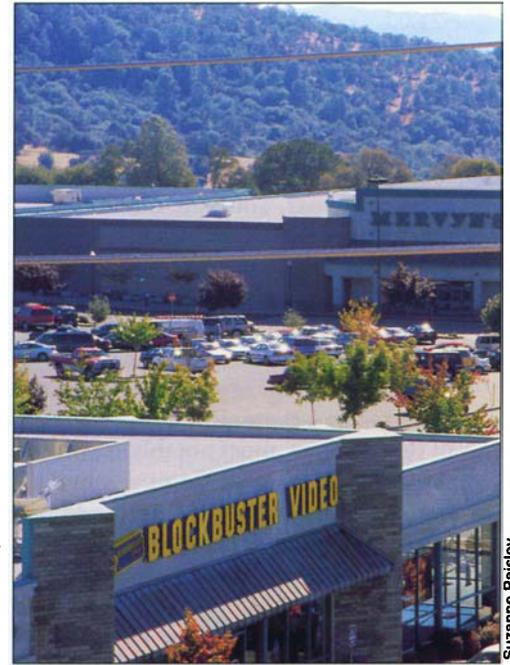


Convenience, location and service were the main reasons consumers shopped within the county.



This shopping center opened in Tuolumne County after the 1989 study of local shopping habits, in which consumers said they wanted to see department stores, discount stores and clothing stores expanded.

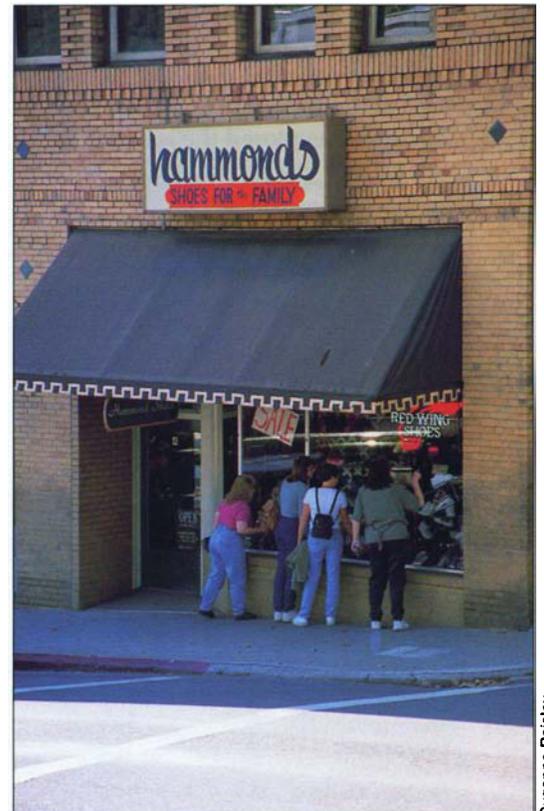
Tuolumne County shops capture local dollars

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Tuolumne County retail merchants think that they are not capturing the lion's share of local sales, but they are! County residents do not go out of the county to shop as much as businesses think. A survey conducted in 1997 by the UC Cooperative Extension Office in Tuolumne County surveyed shoppers and checked perceptions of local business owners. The survey found that the proportion of money that is spent out of the county is not as high as businesses surmised. This follow-up to a similar study conducted in 1989 also showed that businesses are capturing more local dollars than they were 8 years earlier.

"Shop Tuolumne County" is a slogan developed by the Tuolumne County Chamber of Commerce (the Chamber) several years ago. The idea is simple: encourage residents to buy goods and services locally. Traditionally rural communities have lost sales of goods and services to urban communities. The Chamber recognizes that improving the ability of businesses to capture local dollars is an effective economic development policy, one of several economic strategies that can be used to improve the local economy (Coppedge 1987; Coppedge and Treat 1987). Local circulation of money generates additional local employment and income.

Tuolumne County is in the rural foothills of California's southern Mother Lode. Its population was



Consumers are purchasing general merchandise, clothing, shoes, and farm and garden supplies more frequently within the county than they did in 1989.

52,800, as of January 1998. Seventy-eight percent of the land is publicly owned and includes about half of Yosemite National Park. The area attracts thousands of people who pass through or visit the local tourist attractions each year. Tourism, manufacturing, trade, services and financial institutions are the leading economic sectors. All have had \$2 million to \$3 million in annual sales in recent years.

Even though the county is growing and diversifying, several major natural resource-based employers have closed in recent years, most notably the Louisiana Pacific Lumber Company and the gold mine owned by Sonora Mining Corporation. Unemployment is higher than the state average, and per capita spending is low. Growth in employment opportunities is expected to be in the areas of retail trade, service and medical services in the next few years.

Several business organizations in Tuolumne County were interested in finding out the extent of "leakage" of goods and services outside the county and what county merchants could do to increase local sales. In 1989, the UC Cooperative Extension (UCCE) and the Tuolumne County Chamber of Commerce explored the issue. Both organizations were interested in finding

out which goods and services households were bought from in-county businesses, which were bought from out-of-county businesses, and why.

The 1989 survey

The Consumer/Business Survey was conducted to more fully understand the extent of this leakage. This survey instrument is used to measure the extent to which consumers buy goods and services in and out of a local trade area. The original survey was developed at New Mexico State University (Coppedge and Treat 1987). It was used by the Western Rural Development Center in its pilot project around the western states. Tuolumne County was one of those pilot counties in 1989.

The survey was designed to gather information from both consumers and businesses. We mailed it randomly to 2,000 consumers and 1,500 businesses throughout Tuolumne County. Consumers were asked where they usually make their purchases of 20 selected goods and services, and why. Businesses were asked what they thought their customers were doing in the same categories.

The results of the 1989 survey showed that price, variety and selection were very strong reasons why

consumers left the county to shop. Location, loyalty and employee attitude were the main reasons for shopping locally. The goods and services that showed the best rates of local retention were groceries, hardware and building supplies, farm and garden supplies, office supplies, medical services, legal services, financial services, auto repair, restaurants, gas stations and drug stores. Sales often made outside the county were autos, clothing and shoes, furniture, appliances, sporting goods and entertainment. Consumers wanted to see department stores, discount stores and clothing stores expanded locally (Feldman et al. 1989).

During the next few years, the Chamber and UCCE conducted educational programs on topics such as marketing and customer service. They also worked with business owners to analyze their potential ability to attract more business. Department stores, discount stores and clothing stores were made aware of the results of the study.

Tuolumne County's businesses have changed dramatically over the past 8 years. Many stores have vanished, replaced by newcomers. Had consumer attitudes also changed? The Chamber and UCCE met again in 1997 to undertake a study similar to the 1989 study, identifying changes in consumer behavior and opportunities to reduce leakage of sales out of the county. The Economic Development Company of Tuolumne County (EDC) also joined in this effort.

The committee updated the survey questionnaire. They added new questions of local interest and more categories to the list of goods and services, such as electronics, computer products and insurance services. Surveys were mailed in March 1997 to 1,800 randomly selected homeowners and 500 businesses. In total, consumers returned 542 usable surveys and businesses returned 165, for return rates of 30% and 33% respectively. The data were analyzed at UC Davis (Feldman et al. 1997).

Who answered the 1997 survey

The largest numbers of questionnaires returned in the 1997 study were from residents of the Sonora area

TABLE 1. Percentages of consumers reporting out-of-county purchases and business persons' estimates of consumers' purchases*

| Goods and services | Consumer respondents | Business respondents | Significance (Chi-square) |
|---------------------------|----------------------|----------------------|---------------------------|
| | % | | |
| Insurance services | 38.3 | 20.3 | 0.000 |
| Banking/financial | 17.7 | 5.3 | 0.001 |
| Automotive repair | 23.3 | 11.0 | 0.004 |
| Gas stations | 24.7 | 12.8 | 0.005 |
| Drugs & medicine | 18.9 | 8.2 | 0.005 |
| Electrical goods | 44.1 | 74.6 | 0.000 |
| Office supplies/equipment | 29.0 | 45.1 | 0.001 |
| Furniture | 40.8 | 54.1 | 0.008 |
| Automobiles | 53.1 | 64.1 | 0.023 |
| Restaurants | 10.0 | 8.7 | NS† |
| Other services | 21.4 | 15.6 | NS |
| General merchandise | 24.7 | 27.5 | NS |
| Entertainment/events | 20.0 | 24.4 | NS |
| Other goods | 21.8 | 24.7 | NS |
| Clothing/shoes | 37.7 | 34.3 | NS |
| Legal services | 26.0 | 17.3 | NS |
| Sporting goods | 25.1 | 33.1 | NS |
| Medical/dental | 17.3 | 16.9 | NS |
| Farm & garden | 8.4 | 8.8 | NS |
| Hardware & building | 14.0 | 11.0 | NS |
| Hospital care | 19.1 | 20.9 | NS |
| Groceries | 8.4 | 2.4 | NS |

* Purchases are those reported as more frequent than "occasional."

† Not significant (n.s.) refers to any probability greater than .05 that the difference is not a matter of chance.

(34%), the only incorporated city, followed by Twain Harte (14%), the Groveland area (14%) and Soulsbyville (13%). Additional returns came from scattered small communities in the county.

Information was collected on the respondents' ethnicity, gender, age and income level. As in the earlier study, those who responded to the survey reflected the general population.

Ethnicity was compared with the 1990 census to determine whether or not the survey respondents fairly represented the population. Most of the survey respondents (89%) were Caucasian; 5% were Native American; 3% were Hispanic/Latino; 1% were Asian/Pacific Islander; 1% were African American; and 1% claimed Other. This is similar to the ethnicity of the overall county population.

The most commonly reported household income was in the \$25,000 to \$49,999 range (45%), with 33% reporting income of \$50,000 or more and 23% reporting income of less than \$25,000.

Roughly 14% of respondents reported that one or more people in their household worked outside the county, 5% in the San Francisco Bay Area (3-hour commute) and 7% in the Central Valley (1-to-2-hour commute). Government, education, construction and office/business services were the largest sources of employment outside the county.

Consumer attitudes and behaviors

Because appearance is an important factor when consumers determine where to shop, respondents were asked to rate the physical appearance of Tuolumne County businesses. Nearly 60% rated the appearance "good," with 6% more rating it "excellent." About one-third of the respondents felt that the appearance was either "fair" or "poor." Interestingly, the appearances of businesses were rated better in 1989, with 75% of consumer respondents rating appearance either good or excellent in that survey.

Consumers were asked which, if any, of a list of businesses they would patronize if the business were located or expanded in the county. The stron-

gest responses came in relation to department stores (43%), discount stores (38%), clothing stores (37%), furniture stores (33%), shoe stores (28%), appliance repair (25%) and movie theaters (25%). This compares to the earlier study, in which consumers indicated that they would like to see more discount stores, department stores, clothing stores and furniture stores available locally. At that time there were no major discount or department stores. Since 1989, Wal-Mart, Mervyn's Department Store and full-service SaveMart and Pac-N-Save supermarkets have opened in the county. Gottschalk's Department Store and Staples Office Supply opened 2 months after the 1997 survey was completed.

In a separate question that asked consumers to list what additional businesses they wanted locally, 74 people responded recreation and amusement services such as a skating rink or a bowling alley; 64 responded more restaurants; and 41 responded various types of specialty food stores such as fresh produce, bakeries, Trader Joe's or fresh fish markets.

Local business respondents consistently underestimated the desire of consumers to see new businesses of all types expanded or provided locally. For example, 43% of consumers wanted to see department stores expanded, while business respondents perceived that only 29% of consumers wanted to see this expansion.

The exceptions were in the areas of electronics/computer stores (20% vs. 45% respectively), specialty stores (19% vs. 23% respectively) and office supplies/equipment (14% vs. 25% respectively).

Purchases in the county

To look at the leakage issue, it is important to identify which products and services Tuolumne residents frequently buy both in and out of the county and why. Survey participants were asked whether they purchased a selected list of goods and services in the county "rarely or never," "some of the time," "most of the time," or "almost always." Results indicated that respondents almost always use Tuolumne County businesses for certain products and services — groceries (80%), banks and financial services (75%), drugs and medicine (71%), medical and dental services (68%),

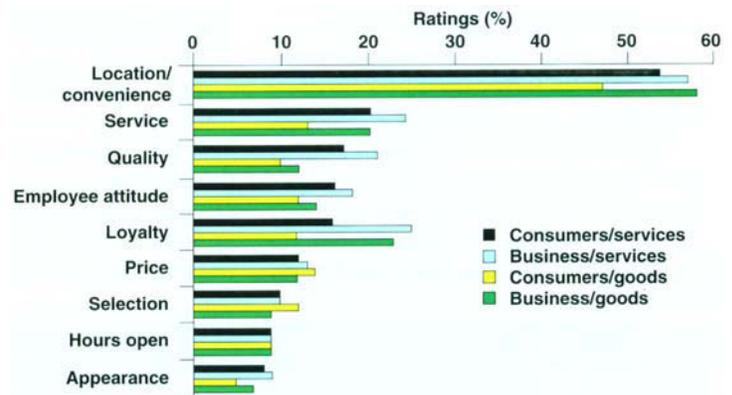


Fig. 1. Ratings of selected reasons for consumer purchases in Tuolumne County.

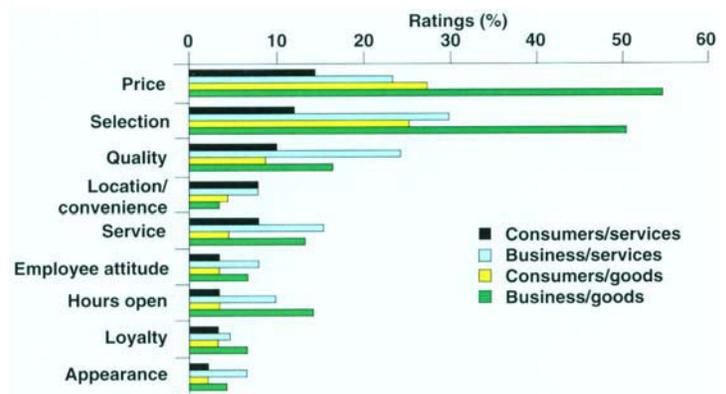


Fig. 2. Ratings of selected reasons for consumer purchases out of Tuolumne County.

hospital care (61%), farm and garden supplies (57%), hardware and building supplies (54%) and automobile repair and insurance groups (52% each).

Generally, businesses accurately estimated the in-county shopping behavior of consumers. However, consumers purchased automobiles and patronized restaurants and legal services significantly less frequently in the county than business people suspected. They also bought hardware and building supplies and patronized medical services and hospital care significantly more frequently in the county than business people thought.

Out-of-county purchases

Nearly 48% of respondents rarely or never bought automobiles in the county. More than 36% of respondents rarely or never bought electronics and computer products in the county. Roughly 21% rarely or never bought furniture and appliances or sporting goods in the county. In contrast to other services, in-county legal services were rarely or never used by 24% of residents.

Business people significantly underestimated the frequency with which consumers made some purchases out of the county, particularly for insurance services, banking/finan-

cial services, auto repairs, gasoline and drugs/medicine (table 1). On the other hand, business respondents overestimated the frequency with which consumers purchased electrical goods, office supplies/equipment, furniture and automobiles from outside the county.

Why people shop in the county

Survey participants were asked which of a list of considerations influenced their decision to shop in the county. Across all products and services, location and convenience were far and away the most significant reasons consumers listed for purchasing products in the county (fig. 1). Regarding products, price and service were the next most important reasons, followed by selection, loyalty and employee attitude, the three of which were equally important. Service, quality, employee attitude and loyalty followed location and convenience in importance for the purchase of services in the county.

In response to open-ended questions, 315 consumers emphasized that location and convenience are what they like most about buying products and services in Tuolumne County. An additional 138 indicated that helping to support the community is what

they like about buying in the county, while 135 identified service and quality and 60 listed other factors.

When businesses were asked in an open-ended question what they thought consumers liked about shopping in Tuolumne County, they offered the following responses: location and convenience (49%); service and quality (26%); community (16%); and other (9%). These answers approximate the responses given by consumers.

When asked what they think consumers disliked most about buying products and services in the county, they listed price (38%), selection (36%), service (16%), quality (4%), parking and traffic (4%) and other (2%). Again, the pattern closely resembled the responses given by consumers. Businesses significantly overestimated loyalty to local businesses, quality and service as reasons why consumers shop in the county.

Why people shop out of county

The three most frequently cited reasons for buying goods or services outside of the county were price, selection and quality (fig. 2). However, just over 10% cited any of those reasons.

Automobiles and electronics and computers were the products most frequently purchased out of the county. For both, price and selection were the reasons most frequently cited by consumers. It should come as no surprise to either merchants or consumers that maintaining competitive pricing and high levels of inventory and selection are difficult for retailers in small markets.

Businesses dramatically overestimated the importance of nearly all of the reasons why consumers purchase both goods and services out of the county. In short, businesses wrongly suspected that consumers had more reasons to shop out of the county than consumers actually reported.

Changes from 1989 to 1997

Because the 1989 and 1997 surveys were similar, it was possible to tell whether consumers' reasons for shopping in or out of the county had changed for specific business types, and whether consumers are reporting

TABLE 2. Comparison of average frequency of consumer purchases, 1997 vs. 1989*

| Goods and services | In county | | | Out of county | | |
|---------------------------|-----------|------|--------|---------------|------|-------|
| | 1997 | 1989 | Prob.† | 1997 | 1989 | Prob. |
| Banking/financial | 3.7 | 3.7 | NS | 1.7 | 1.6 | NS |
| Groceries | 3.7 | 3.7 | NS | 1.5 | 1.6 | NS |
| Drugs & medicine | 3.5 | 3.6 | NS | 1.6 | 1.5 | NS |
| Medical/dental | 3.5 | 3.5 | NS | 1.8 | 1.8 | NS |
| Farm & garden | 3.4 | 3.2 | 0.000 | 1.5 | 1.7 | 0.000 |
| Hardware & building | 3.4 | 3.1 | 0.000 | 2.1 | 2.1 | NS |
| Hospital care | 3.4 | 3.4 | NS | 1.7 | 1.7 | NS |
| Automotive repair | 3.2 | 3.2 | NS | 1.8 | 1.7 | NS |
| Insurance services | 3.2 | NA | — | 2.3 | NA | — |
| Gas stations | 3.1 | 3.0 | NS | 2.2 | 2.4 | 0.000 |
| Restaurants | 3.1 | 3.0 | NS | 1.9 | 1.9 | NS |
| Other services | 3.0 | 3.1 | NS | 2.2 | 2.4 | 0.000 |
| General merchandise | 3.0 | 2.8 | 0.000 | 2.0 | 2.3 | 0.000 |
| Entertainment/events | 2.9 | 2.9 | NS | 2.0 | 2.0 | NS |
| Other goods | 2.9 | 2.5 | 0.000 | 2.3 | 2.6 | 0.000 |
| Clothing/shoes | 2.8 | 2.5 | 0.000 | 2.3 | 2.6 | 0.001 |
| Legal services | 2.7 | 2.8 | NS | 1.8 | 1.6 | 0.044 |
| Sporting goods | 2.6 | 2.4 | NS | 2.0 | 2.1 | NS |
| Furniture | 2.5 | 2.4 | NS | 2.4 | 2.5 | NS |
| Office supplies/equipment | 2.7 | 2.8 | NS | 2.0 | 1.8 | 0.002 |
| Electrical goods | 2.0 | NA | — | 2.4 | NA | — |
| Automobiles | 1.8 | 1.8 | NS | 2.6 | 2.4 | 0.001 |

* Average frequency ranges from 1 (rarely or never purchases) to 4 (almost always purchases).

† Probability that the difference is not a matter of chance. Not significant (NS) refers to any probability greater than 0.05.



In both 1989 and 1997, Tuolumne County shoppers said they bought most of their groceries locally.

buying more frequently in or out of the county than before.

Table 2 shows the changes in frequency of purchase of different goods and services both in and out of the county from 1989 to 1997. Consumers have made the following significant changes in their buying habits:

- Purchasing general merchandise, clothing, shoes, farm and garden supplies more frequently in county and less frequently out of county in 1997 than in 1989
- Purchasing hardware and building supplies more frequently in county in 1997 than in 1989
- Purchasing gasoline less frequently out of county in 1997 than in 1989
- Purchasing automobiles, office supplies and equipment more frequently out of county in 1997 than in 1989
- Purchasing legal services more frequently out of county in 1997 than in 1989

Capturing more local dollars

The purposes of this follow-up study were to determine the extent of leakage of goods and services outside the county, to identify new opportunities to reduce leakage and to identify changes in consumer attitudes and behavior. The similarity of the two surveys allowed analysis of changes in consumer and business views over the past 8 years. The results indicate that business development seems to have

happened in the direction recommended by the consumers in the 1989 survey. It appears that the business community did follow the advice of their customers. The 1997 survey pointed out where people currently spend their dollars locally, and what kinds of businesses they would still like to see expanded or brought into the county.

George Segarini, executive vice president of the Chamber, explained the results of the study to the local newspaper by saying, "I think we can be proud of ourselves that people are staying home more. This is a wake-up call to local business people to recognize shoppers are patronizing them and they need to appreciate that more to hold on to them. It emphasizes even more the importance of customer service."

Given what is generally important to consumers (such as location, convenience, price and selection), future activities should include inexpensive tracking of various marketing efforts to help determine which messages appeal to customers and what attributes each business can work on to develop a strong base of satisfied customers.

UCCE can help local communities maintain a healthy commercial sector. The Consumer/Business Survey is one example of applied research that can be done to aid rural communities in determining what is needed to sustain local enterprises. Tuolumne County



showed that businesses in rural areas can improve and capture more of the market. This survey is one way to find out what those possibilities are.

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