

# The Role of Quality of Life in Business (Re)Location Decisions

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*Key decision-makers from 174 businesses that had relocated, expanded, or been launched in Colorado within the most recent 5-year period were surveyed to identify the role of quality-of-life (QOL) elements in their decision. A comprehensive set of elements considered by businesses in location decisions was developed, and their relative importance was assessed by the sample. Five domains of elements were derived. The set of QOL elements consistently ranked in importance behind labor and cost issues and daily living concerns. QOL was most important to companies that moved into Colorado from outside the state, had fewer than eight employees, were relatively footloose, employed a high proportion of professionals, who perceived ability to attract and retain professional personnel as being a primary concern, and whose ultimate decision-maker relocated with the company.*  
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In the last two decades, public and private economic development organizations have multiplied as states and local communities have sought to expand their economic bases by attracting or nurturing new businesses, expanding existing businesses, and retaining companies that are in situ. Initially much of their effort focused on developing government-sponsored incentive packages, which were typically composed of financial grants and loans, training aid and programs, tax abatements, and infrastructure improvements. Pressures of competition served to increase the magnitude of incentive packages to the point, where in a number of well-publicized examples, their cost far exceeded the value of resulting benefits to the community. Evidence of public backlash against politicians responsible for these types of packages is now emerging (Kotler, Haider, and Rein, 1993).

The inadequacies of reliance on incentives has led to that

approach being replaced by an alternative strategy, which involves designing a community to satisfy the needs of its key constituents. Its advocates suggest that communities succeed in becoming viable “when stakeholders such as citizens, workers, and business firms derive satisfaction from their community, and when visitors, new businesses, and investors find their expectations met” (Kotler et al., 1993, p. 18). Thus, Blair and Premus (1987), drawing conclusions from their comprehensive review of literature reporting the major factors influencing industrial location, advise that government should:

Focus its efforts on improving the overall locational attractiveness of regions. This inward-looking strategy would place primary emphasis on developing and improving local markets in skilled labor, research, risk capital, education, recreation, and cultural amenities. It would also emphasize long-run tax policy, management-labor relations, and quality-of-life factors. Industrial development would largely be a by-product of an improved, overall business climate and a better community in which to live.

This new strategic approach recognizes the increasing importance of quality of life (QOL) in business location decisions (Boyle, 1988; Harding, 1989; Myers, 1987; Ziegler, 1990). A growing body of literature has documented its role. Carn and Rabianski (1991) and Sarvis (1989) both noted that QOL was frequently a decisive factor when comparing one site to another. Tosh, Festervand, and Lumpkin (1988) reported that it was ranked second to labor concerns by a national sample of brokers, developers, and manufacturers. Other authors who have reported the influential role of QOL in business location decisions include Peskin and Halpern (1990), Epping (1986), Bramlage (1988), Rex (1987), Wardrep (1985), and Conway (1985).

QOL has been reported as being particularly influential for companies involved in research and development and high technology, and in enterprises employing highly skilled workers in information or knowledge-based services and production (Myers, 1987; Schmenner, 1982; Goldman, 1984; Rogers

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and Larsen, 1984). Probably the most comprehensive survey of high technology location decisions was undertaken by Premus (1982). It was based on responses from 691 high technology company executives, and they listed QOL factors considerably ahead of traditional business location elements in their location decisions. It seems likely that the nation's continued shift to these types of companies will lead to increasing emphasis on QOL.

The emphasis on QOL reflects increasing recognition that the economic success of a business is dependent on its workforce. Organizations that espouse this belief are referred to as "people intensive" (Festervand, Lumpkin, and Tosh, 1988). This means that their principal assets are ideas and a skilled workforce, rather than their inventories and capital equipment. It is argued that if a business selects a site that meets the sociopsychological needs of the workforce, then these individuals will be better prepared to meet the company's operating needs (Scanlon, 1984). This line of reasoning was supported by Taylor (1987) who asserted that the quality of employees' lives has a direct impact on an employer's bottom line through absenteeism, loyalty, turnover, productivity, and health-care costs.

Myers (1987) point out that a substantial economic literature exists on the need for "disamenity compensation" (Power, 1980). This documents the need for communities with less favorable QOL features to pay higher remuneration to attract the same quality employees: "The overall implication is that firms can reduce the salary levels needed to secure adequate labor (or secure more and better workers at the same price) if they locate in an area whose quality of life is attractive to workers" (Myers, 1987, p. 269). QOL is not only important in relocation, expansion, or initiation decisions, it is also important in employee retention, since it is expensive to go through the recruitment process particularly for key personnel.

Among larger companies, especially, the location decision is likely to be a complex, multistep process (Decker and Crompton, 1993; Milward and Newman, 1989; Blair and Premus, 1987). The stage in the process when QOL becomes central to the decision is debated. Some believe that its role is crucial from the outset (Myers, 1987), whereas others argue that it is usually not a "must have" but rather it is a "would like" element (Ritter, 1990). Both perspectives are likely to be partially correct. That is, in specific cases such as the highly visible national competition to secure location of the Microelectronics and Computer Technology Corporation (MCC), which eventually was won by Austin, Texas, QOL may be a major factor from the outset. In contrast, when the business is a manufacturing company, the primary factors may be such elements as proximity to the interstate system, a large pool of semi-skilled workers, utility costs, and so on. In this situation, QOL may only come under close scrutiny if production costs are approximately the same at two or more locations. Thus, Ryans and Shanklin (1989) in a study of over 100 firms reported that once the baseline elements of labor and infrastructure

were met, QOL factors were of primary importance. However, the same authors cited a survey of real estate executives in which 45% of respondents indicated that QOL elements dominated both the initial and final site selection process, whereas another 41% reported that these elements were the determining factor when sites were equivalent in cost.

Although there is wide recognition of the importance of QOL in business location decisions, the term remains elusive with little consensus as to how it should be operationalized. Festervand et al. (1988, p. 20) note: "Despite the increasing importance of quality of life factors, there is little, if any, agreement among industrial site location professionals as to what this nebulous concept actually is." It has been used to describe an array of different facets of life and usually embraces some combination of education, health care, child care, crime rate and personal safety, favorable social environment, cost and standard of living, cost of housing, population growth, climate, environmental issues, and a variety of recreational and cultural services and activities (Hack, 1984; Festervand et al., 1988; Bramlage, 1988; Boyle, 1988). Another more general term that has been used to encompass quality of life is "ambiance," which has been extended to include such elements as schools, culture, climate, and population density (Galbraith and DeNoble, 1988). It has been noted that before QOL can be used by economic development officials to market their community to potential businesses, they must identify the elements that constitute QOL and the relative importance of each to their potential targeted businesses (Festervand et al., 1988). The study reported here indicates how this was addressed in Colorado. Given the popular perception of Colorado as being a state whose residents consider QOL to be a primary concern and the favorable reputation the state enjoys in this area, it was anticipated that it would emerge as a relatively high priority among decision-makers of businesses who had chosen to locate in the state.

The study sample was comprised of key decision-makers who had recently been involved in relocating, expanding, or forming a business in Colorado. Three objectives guided the research:

1. To delineate a comprehensive set of facilities/amenities/services that constituted QOL and to assess their relative importance to key decision-makers who had recently made a decision to locate a business in Colorado.
2. To identify the relative importance of QOL to other factors among this sample of decision-makers.
3. To describe characteristics of companies that placed most importance on QOL in their location decisions.

## Instrument Development

Previous studies concerned with identifying the relative importance of elements in business location decisions have been criticized for including inappropriate and insufficient categories

on the survey instruments (Harding, 1989). Although QOL is comprised of multiple elements, most reported research of business location decisions has operationalized it by using a relatively few selected items. This leads to the possibility of drawing misleading conclusions. Armed with this warning, an effort was made in this study to develop a relatively exhaustive set of elements that may be important in location decisions.

An initial set of location items were derived from individual in-depth personal interviews with seven economic development agency officials and with 16 key decision-makers in businesses that had recently initiated, expanded, or relocated in Colorado. The interviews focused exclusively on interviewees' perspectives of the location process. The interview instruments used both unstructured and structured questions to elicit responses. These interviews were taped and content analyzed for items that were cited as being important. The list of items that emerged from this process was supplemented by additional items from a review of the literature.

The seven economic development officials represented agencies located in different geographic areas of the state. They were considered by state officials who guided the researchers to be from areas likely to attract most businesses seeking information about initiation, relocation, or expansion.

The selection of key decision-makers from businesses to be interviewed was guided by a desire to choose representatives from businesses of different sizes (as measured by number of employees), different types (for example, manufacturing, services, and high technology), from different geographical areas of the state, and from different types of communities (for example, large urban, small urban, and rural). Their identification and selection was aided by information supplied by economic development agency officials.

Much of the literature on the elements that are considered to be important in business initiation, expansion, or relocation decisions is anecdotal in nature (for example, Gabe, 1983; Wardrep, 1985; Carn and Rabianski, 1991; Flonder, 1988; Conway, 1985; Bramlage, 1988). This has been supplemented by studies that have adopted a more rigorous case study approach (Barber, 1982; Allen, 1985; Sarvis, 1989) and a relatively small number of quantitative studies (Epping, 1986; Decker and Crompton, 1990, 1993; Lopez and Henderson, 1989; Galbraith and DeNoble, 1988; Darragh, 1989). A review of these studies produced a number of additional items that did not emerge from the personal interviews.

Based on taxonomies suggested by others in this literature, the researchers assigned each of the location items a priori into one of five domains that were termed: government incentives, labor, proximity to publics, operating costs, and quality of life. The initial set of items was submitted to a panel of 15 experts who independently were asked to undertake three tasks: identify items that were unclear and suggest a rewording; identify duplicate items; and assign each of the items to one of the five a priori categories delineated by the researchers.

After these procedures, 50 items were retained for inclusion on the questionnaire.

In addition to the location items, a series of descriptor variables was included in the instrument. The intent of these was to facilitate analyses that would indicate whether importance of QOL in the decision process was likely to vary according to selected characteristics of the companies. The selected company descriptors were: place of origin (companies that relocated from outside the state of Colorado and those that moved their businesses from elsewhere within the state); current location (Denver metropolitan area, smaller urban areas, rural areas); size of company (small and large); perceived extent of being footloose; proportion of executives and professionals currently employed; ranking of the company's most basic concern with relation to location decision-making; and whether or not the ultimate decision-maker relocated with the company.

Initial drafts of the questionnaire were reviewed by 12 individuals who were either economic development specialists for the state of Colorado or experts in business research. Some of the individuals reviewed several iterations of the research instrument.

## Data Collection

In developing the sample, the researchers were cognizant of the need to avoid Harding's (1989) criticisms of reported work on business location decisions. He believed much of it was of limited value for two reasons. First, the information had been collected from individuals who were not considering a location decision at that time: "It reflects what a decision-maker believes would be important if he were to make a decision" (Harding 1989, p. 223). This makes it likely that responses are likely to be superficial, since respondents have had no reason to give the issue thoughtful consideration. To avoid this limitation, the sample was restricted to decision-makers in businesses that had initiated, expanded, or relocated to Colorado in the past 5 years. It was anticipated that these respondents would have been required to give serious thought to the relative importance of location elements to their companies. Companies that met this criterion were identified, at the request of the researchers, by officials from the state's 87 economic development agencies and chambers of commerce.

Harding's (1989) second criticism was that surveys were often not completed by the individual in a company who was the real decision-maker on the location issue. To minimize the possibility of this happening, after the initial list of companies had been assembled, each business was contacted by telephone. The telephone conversation determined each company's eligibility for inclusion in the study, identified the name of the key decision-maker who had been most involved in the relocation process, solicited his or her cooperation for the study, and verified the mailing address.

Of the 364 companies originally identified, 48 were no

**Table 1.** Survey Response Rates

	Businesses: Prior Contact	Businesses: No Prior Contact
	<i>n</i>	<i>n</i>
Original sample size	222	88
Undeliverable surveys	13	8
Ineligible companies	4	0
Unusable surveys	4	4
Wave 1 responses	78	12
Wave 2 responses	33	12
Wave 3 responses	22	9
Total responses	137	37
Effective response rate	67%	46%

longer in business, seven did not qualify for the study, and 87 had incomplete addresses and could not be contacted. When these companies were removed, the remaining sample size was 222. In addition to the 222 companies whose decision-makers were contacted by telephone and confirmed their willingness to cooperate, there were 88 businesses identified by economic development officials with complete addresses, but whose inclusion could not be verified due to incorrect telephone numbers, refusal of companies to respond to messages, or inability of the researchers to reach the key personnel. Nevertheless, this subset of businesses was incorporated into the study in an effort to receive insights from representatives in as many qualifying businesses as possible. Hence, the final sample consisted of 310 businesses.

The mailed questionnaire was accompanied by a postage-paid reply envelope, a cover letter that explained purpose of the study, and a letter of endorsement from the Colorado Office of Business Development. The initial mail-out was followed by a reminder postcard and two further mail-outs to nonrespondents. Between the second and third mail-outs, telephone follow-ups to all nonrespondents were undertaken. The final response rates are shown in Table 1. Businesses that received prior contact had an effective response rate of 67%, whereas among those that were not contacted in advance of the survey being mailed the response rate was 46%.

## Sample Profile

Respondents were asked to classify the type of business in which their firm engaged. One-third indicated they were in manufacturing, one-third in services, 17% in high-technology or research and development, and 15% in sales or gambling. Over three-quarters of the businesses had formed, expanded, or relocated to Colorado in the 2 years prior to the study being undertaken, whereas the others had made the location decision within 5 years. Officials were asked to indicate the type of location decision with which they were involved: 37% were characterized as relocations, 39% as expansions to a new site,

and 24% as initiations. The current locations of the businesses in the sample were 27% in the Denver metropolitan area, 48% in other urban areas in the state, and 25% in rural areas. Businesses that either expanded to another site or fully relocated were asked from where they originated. Almost one-third came from elsewhere in Colorado, 28% from California, and the other origins were distributed among the remaining states.

## Results

Respondents were asked, "Please rate each of the following specific elements according to the level of importance that each was given in your company's recent location decision." Their ratings were on 5-point scales ranging from "not important" to "extremely important." Their responses to the 50 specific location elements are shown in Table 2.

The 50 items were subjected to a principal components factor analysis with varimax rotation. A five-factor solution was specified, since this was consistent with the a priori identification of domains and the scree plot suggested this was a natural cut-off point. The lowest eigenvalue of the five factors was 1.85. Table 3 reports the five resulting factors, along with corresponding Cronbach alphas.

Loadings on the factors shown in Table 3 were similar to the a priori domain categorization of the 50 items. The items on each factor in Table 3 appear to be logically consistent with the domains on which they load. There were three major differences between the a priori loadings and the empirical results. First, in the a priori designations, labor and operating costs were identified as two distinct domains, whereas the factor analysis appeared to detect latent similarities between the two categories and combined them into one factor that was labeled labor and cost issues. Second, the a priori domain of government incentives was expanded and retitled government involvement and taxes. It embraced items that had previously been classified into QOL (health/medical services and taxes on personal income and property), labor issues (labor unionization), and operating costs (taxes on business income and property, including city, county, and state taxes; availability of capital financing; and cost of utilities, including water, electricity, and power). Several of these items can arguably be considered issues under the control or influence of government, or more definitively, beyond the control of a business. The third difference was emergence of a factor entitled daily living concerns. The four elements of daily living concerns had all been a priori items in the QOL domain, but appeared to possess distinctive qualities that differed somewhat from the general QOL designation.

The grand mean scores of items on each factor were calculated. A series of ANOVA and Tukey tests were undertaken to see if importance of the QOL domain varied according to selected characteristics of companies. A summary of these results appears in Table 4.

Table 4 indicates that companies that relocated from out-

**Table 2.** Level of Importance of Specific Items in Location Decisions

Category	Not Important %	Slightly Important %	Somewhat Important %	Very Important %	Extremely Important %	Mean
Libraries	55	15	19	3	2	1.8
Workers' compensation	29	15	23	17	16	2.8
Proximity to corporate headquarters	65	6	9	8	12	2
Size of the new community	26	10	37	22	5	2.7
Local government cooperation	25	9	16	32	18	3.1
Availability of nearby foot or bike trails	64	14	14	4	4	1.7
Outdoor recreation opportunities at state or national parks	27	19	35	13	6	2.5
Environmental quality	15	11	23	40	11	3.2
Cost to relocate employees	30	16	26	21	7	2.6
Skill level of local labor force	10	10	28	30	22	3.4
Local recreation opportunities	31	27	31	11	1	2.2
Commuting time	15	16	30	27	12	3.0
Crime rate	13	16	31	27	14	3.1
Availability of capital financing	48	14	19	9	11	2.2
Natural environment of Colorado	19	13	25	27	16	3.1
Proximity to colleges or universities	29	15	29	17	11	2.7
Labor costs	13	10	22	31	21	3.4
Availability of child care	46	23	22	9	1	2.0
Potential for expansion	14	7	22	36	21	3.4
Cost of utilities	17	18	25	25	16	3.1
State government support/cooperation	26	8	20	25	22	3.1
Health/medical services	22	15	38	23	2	2.7
Commercial entertainment opportunities	50	20	24	5	1	1.9
Potential for interaction with other companies	29	20	23	17	11	2.6
Ambiance of the area	19	15	27	31	9	3.0
Business operating costs	8	4	22	41	26	3.7
Access to transportation	10	6	24	39	22	3.6
Spouse employment opportunities	45	21	23	9	2	2.0
Taxes on personal income and property	21	15	31	24	9	2.9
Proximity to competitors	57	10	13	14	6	2.0
Availability of labor	13	5	20	35	28	3.6
Government assistance with labor training	50	10	25	10	6	2.1
Quality of the local community parks, open space, and treescape	33	18	27	16	5	2.4
Climate/weather	16	11	30	30	13	3.1
Proximity to wildlife sanctuaries	55	18	17	8	2	1.8
Tax incentives or site/infrastructure subsidies	40	11	22	16	11	2.5
Labor unionization	54	6	16	14	10	2.2
Quality of landscaping in the community	46	24	23	6	1	1.9
Cultural opportunities	37	25	30	9	0	2.1
Personal safety	17	14	28	29	12	3.1
Proximity of suppliers	41	12	23	17	7	2.4
Cost of relocating the business	18	10	30	30	11	3.1
Private recreation opportunities	33	21	31	9	6	2.3
Cost of office or plant	10	6	19	31	35	3.8
Proximity to customers	34	9	18	18	22	2.8
Housing costs	21	15	20	31	14	3.0
Work ethic of the local labor force	13	11	23	29	23	3.4
Quality of primary/secondary education	24	17	21	29	10	2.8
Taxes on business income and property	16	13	26	32	13	3.2
Proximity to state and national forests	45	22	21	8	5	2.1



**Table 3.** Results of a Factor Analysis of the 50 Location Items

Factors	Factor Loadings	Cronbach Alphas
Factor I—Quality of Life		0.94
Outdoor recreation opportunities at state or national parks	0.85	
Quality of the local community parks, open space, and treescape	0.83	
Local recreation opportunities (e.g., swimming pools, recreation centers, ball fields, etc.)	0.83	
Cultural opportunities	0.76	
National environment of Colorado	0.75	
Private recreation opportunities (e.g., golf courses, ski facilities, fitness clubs, country clubs, etc.)	0.74	
Ambience of the area	0.74	
Proximity to state and national forests	0.74	
Environmental quality	0.71	
Proximity to wildlife sanctuaries	0.68	
Availability of nearby foot or bike trails	0.67	
Commercial entertainment opportunities (e.g., professional sports franchises, popular concerts, etc.)	0.65	
Proximity to colleges or universities	0.62	
Quality of landscaping in the community	0.61	
Quality of primary/secondary education	0.61	
Libraries	0.60	
Climate/weather	0.59	
Commuting time	0.49	
Size of the new community	0.42	
Spouse employment opportunities	0.36	
Factor II—Labor and cost issues		0.91
Availability of labor	0.84	
Skill level of local labor force	0.84	
Labor costs	0.82	
Work ethic of the local labor force	0.75	
Potential for expansion	0.64	
Business operating costs	0.61	
Cost of office or plant	0.59	
Workers' compensation	0.50	
Potential for interaction with other companies	0.50	
Cost to relocate employees	0.45	
Cost to relocate the business	0.45	
Availability of child care	0.38	
Factor III—Government involvement and taxes		0.90
State government support/cooperation	0.82	
Local government cooperation	0.76	
Government assistance with labor training	0.72	
Tax incentives or site/infrastructure subsidies	0.72	
Taxes on business income and property (city, county, state, etc.)	0.63	
Local unionization	0.63	
Health/medical services	0.57	
Availability of capital financing	0.54	
Cost of utilities (water, electricity, power, etc.)	0.53	
Taxes on personal income and property	0.48	
Factor IV—Daily living concerns		0.80
Crime rate	0.64	
Personal safety	0.63	
Housing costs	0.54	
Access to transportation (airport, highways, rail, etc.)	0.42	
Factor V—Proximity to relevant publics		0.68
Proximity to customers	0.79	
Proximity to competitors	0.75	
Proximity to suppliers	0.61	
Proximity to corporate headquarters	0.54	

**Table 4.** Differences in the Importance of Location Domains between Selected Characteristics of Companies

Factors	Place of Origin		Size of Company		Perceived Extent of Being Footloose		Proportion of Executives and Professionals Currently Employed 0%–11% 63%–100%		Ability to Attract and Retain Professional Personnel		Ultimate Decision-Maker's Action	
	Outside Colorado	Within Colorado	Small Company	Large Company	Not at All Footloose	Very/Extremely Footloose	0%–11%	63%–100%	Of Primary Concern	Of Least Concern	Did Relocate	Did Not Relocate
	Means	Means	Means	Means	Means	Means	Means	Means	Means	Means	Means	Means
Quality of life	2.6 <sup>b</sup>	2.2	2.6 <sup>a</sup>	2.3	2.1	2.8 <sup>b</sup>	2.2	2.7 <sup>b</sup>	2.7 <sup>b</sup>	2.3	2.5 <sup>b</sup>	2.2
Labor and cost issues	3.3 <sup>b</sup>	2.8	2.7	3.4 <sup>b</sup>	2.8	3.1 <sup>c</sup>	3.4 <sup>b</sup>	3.0	2.9	3.3 <sup>a</sup>	3.0	3.4 <sup>b</sup>
Government involvement and taxes	2.8 <sup>b</sup>	2.4	2.2	2.9 <sup>b</sup>	2.5	2.6	2.8 <sup>b</sup>	2.5	2.3	2.9 <sup>b</sup>	2.6	2.9 <sup>b</sup>
Daily living concerns	3.5 <sup>b</sup>	2.6	3.1	3.1	2.9	3.5 <sup>b</sup>	3.0	3.5 <sup>b</sup>	3.5 <sup>b</sup>	3.2	3.2 <sup>a</sup>	3.1
Proximity to relevant publics	2.0	2.3 <sup>a</sup>	2.4	2.4	2.7	1.8 <sup>b</sup>	2.3	2.6 <sup>a</sup>	2.1	2.4 <sup>b</sup>	2.1	2.7 <sup>b</sup>

<sup>a</sup>  $p < .01$ . <sup>b</sup>  $p < .001$ . <sup>c</sup>  $p < .05$ .

side of Colorado placed significantly more importance on four of the five factors than companies moving within the state (QOL, labor and cost issues, government involvement and taxes, and daily living concerns). The remaining factor, proximity to relevant publics, was significantly more important to companies relocating within the state.

Companies were grouped into three categories to represent their current location: the Denver metropolitan area, other urban areas (comprising Boulder, Greeley, Fort Collins, Colorado Springs, Pueblo, and Grand Junction), or rural areas, which included all areas not previously designated in the two urban categories. The analyses revealed that decision-makers from companies locating in other urban areas rated the QOL factor to be significantly (0.05 level) more important than did those that relocated to Denver or rural areas.

Businesses were classified by size according to the number of full-time personnel they employed. The size categories were delineated by using quartiles of the sample. Large companies were comprised of those in the highest quartile and consisted of businesses that employed 88 or more people. Small companies were those whose size placed them in the lowest quartile and were defined as companies with fewer than eight employees. QOL was significantly more important to small companies, whereas large companies placed significantly greater importance of labor and cost issues, and government involvement and taxes (Table 4).

Company representatives were asked to rate their company's extent of being footloose on a Likert-type scale, ranging from 1 (not at all footloose) to 5 (extremely footloose). Comparisons were made between companies that perceived themselves to be not at all footloose (24% of the sample) and those companies that perceived themselves to be very or extremely footloose (30% of the sample). Results shown in Table 4 indicate that very or extremely footloose companies placed significantly more importance on QOL, labor and cost issues, and daily living concerns than did decision-makers from companies that perceived themselves to be not at all footloose. In contrast, proximity to relevant publics was perceived to be significantly more important by companies that perceived themselves as not at all footloose when compared to very or extremely footloose companies. Further analyses revealed that among decision-makers of the non-footloose companies, QOL was considered to be significantly (0.05 level) less important than the other four factors.

Respondents were asked to report the percentage of current employees who were considered to be professional or executive personnel. Companies in the lowest quartile with relatively few professionals and executives (0% to 11%) were compared with companies in the highest quartile that employed many professional and executive staff (63% to 100%). Companies employing relatively few professional or executive personnel placed significantly more importance on labor and cost issues and government involvement and taxes, than did companies employing a large percentage of professionals and executives. QOL, daily living concerns, and proximity to relevant publics

were significantly more important to companies employing 63% to 100% of their personnel in professional or executive positions (Table 4). Among companies employing relatively few of these key personnel, QOL was rated least important of the five factors.

Decision-makers were asked to rank (1 thorough 3) the relative importance of three basic concerns that may prevail when companies consider locations:

- The existence of a well-established local labor force: very concerned about labor costs, fringe benefits, and work attitudes in the community.
- The cost of doing business: very concerned about the cost of acquiring raw materials, utilities, transportation, taxes, and proximity to customers.
- The ability to attract and retain skilled or professional personnel: very concerned about the quality of life and amenities that aid in the attraction of these professionals.

Analyses focused on the third of these concerns and compared businesses that considered the ability to attract and retain professionals as their most important concern and those who ranked it least important of the three concerns (Table 4). Those ranking it highest assigned significantly more importance to QOL and daily living concerns than did those ranking it lowest. Companies ranking this concern lowest considered QOL to be the least important factor in their decisions.

When the ultimate decision-maker relocated with the company, significantly more importance was placed on QOL and daily living concerns than when he or she did not physically relocate (Table 4). Labor and cost issues, government involvement and taxes, and proximity to relevant publics were all factors on which companies that were not accompanied by the ultimate decision-maker placed significantly more importance.

The sample was asked to respond to four open-ended questions. Five categories were developed ex post facto, guided by the need to exhaustively classify every response on each question. They were: government incentives, QOL, labor, proximity to relevant publics, and cost of doing business. The distributions of responses to these questions are summarized in Table 5.

The first of these open-ended questions requested the decision-makers to list the three most important reasons that prompted the move from their original location. Proximity to relevant publics was listed by 39%, whereas QOL and cost of doing business issues each accounted for 23% of the total responses.

When asked to cite reasons that other communities they considered were *not* selected, 31% of respondents indicated that the cost of doing business in them was too excessive, whereas a further 27% noted that relatively low QOL was a main reason a community was eliminated from a list of possibilities.

A third open-ended question requested respondents to list, in order of importance, the three primary criteria used for choosing the community in which they eventually located. Weights were distributed to the elements, so those first in order

**Table 5.** Decision-Maker's Responses to Four Open-ended Questions

Category	Most Important Reasons that Prompted the Move		Main Reasons Communities Were Not Selected		Criteria Used for Choosing the Final Location		Deciding Factor in the Final Selection of a Specific Community	
	Frequency	Percentage	Frequency	Percentage	Weighted Percentages	Frequency	Percentage	
Government incentives and economic development assistance	9	2	29	11	9	21	12	
	82	23	67	27	26	35	19	
	41	12	18	7	14	19	11	
	139	39	60	24	29	53	30	
	82	23	78	31	22	51	28	



of importance were assigned a weight of three, whereas those listed third received a weight of one. Table 5 shows that these responses resulted in a 29% weighting for proximity to relevant publics, followed by a 26% weighting for QOL issues.

In the last of these four questions, the decision-makers were asked to identify the one deciding factor that was most crucial in selection of their current location. As reported in Table 5, the dominant deciding issues were those concerned with proximity to relevant publics (30%) and cost of doing business (28%). QOL issues were identified by 19% as being the deciding element in the location decision.

## Discussion and Conclusions

The results showed that the most important factors among this sample of companies were labor and costs issues and daily living concerns. The individual items rated as being most important by the whole sample were cost of office or plant, and business operating costs which had mean scores of 3.8 and 3.7, respectively, on the 5-point scale. In contrast, the highest QOL item was environmental quality with a substantially lower mean of 3.2. The relatively low ranking of QOL was not anticipated. Given the increasing focus in the business relocation literature on the role of QOL in business location decisions, and the popular perception of Colorado as having a relatively high QOL, the authors expected it to emerge as a much higher priority.

These findings suggest that Ritter (1990, p. 156) is correct when he observes:

Using the concept of maximizing profits as a basis for understanding may seem simplistic, but it works. It accommodates the endless exceptions to the rules. It gives the practitioner a genuine starting point for building a program. And, as much as possible, it logically explains when and to what extent each of the many factors involved will come into play.

The mean scores suggest that for a predominant number of businesses in the sample, the “must have” items appear to be cost and labor elements and only after they are in place are the “would like” items considered. When a relatively small set of communities that all possess the set of “must have” elements has been identified (Decker and Crompton, 1993), the “would like” QOL items become important in differentiating between them. This interpretation appears to be reinforced by responses to the open-ended question indicating that QOL issues were ranked behind those concerned with proximity to relevant publics and cost of doing business, as the leading factor that was most crucial in selection of current location.

Nevertheless, responses to the remaining three open-ended questions suggested that QOL issues were perceived to be important elements in the decision process. These issues as a group were ranked second by the decision-makers as reasons for moving from an original location, not selecting other com-

munities that were considered, and among criteria for choosing the community in which the company eventually located.

Most of the items that comprised the dominant labor and cost issues domain are difficult for local public policy to influence. Labor force characteristics, which load most saliently on this factor, cannot be directly influenced by local government. They are primarily a function of tradition and market forces. Incentive packages can address cost items that comprise the other main category of items on the domain but, given the emerging backlash to these arrangements if they are excessive, which was noted earlier, it is unlikely that a community will be able to exercise a significant differential advantage in this area over competitors. Communities are all likely to offer similar incentive packages so these become qualifying or necessary conditions, rather than determining or sufficient conditions for attracting businesses.

In contrast, many of the QOL items can be substantially influenced by local governments’ investment decisions and do have the potential to markedly differentiate a community’s attractiveness to business. Glaser and Bardo (1991, p. 58) noted, “There is little information about the relative significance of various quality of life attributes.” This study was able to address this issue in the context of Colorado. Crime rate and personal safety were the items that loaded most saliently on the four-item daily living concerns factor, and both received a mean score of 3.1. In other studies, these items have frequently been defined as components of QOL. Other QOL items which ranked as being of relatively high importance were: environmental quality (3.2); natural environment of Colorado (3.1); climate/weather (3.1); ambience of area (3.0); commuting time (3.0); quality of primary/secondary education (2.8). With the exception of climate, public sector investment and development decisions can substantially influence these items, either positively or negatively, and in so doing can affect a community’s ability to attract and retain businesses.

The analyses of selected company characteristics confirmed that the high importance rankings of labor and cost issues and daily living concerns was pervasive across all of the subgroups. However, these analyses did give useful insight into the characteristics of companies that placed a relatively high level of importance on QOL.

Companies that relocated from outside Colorado placed significantly more importance on QOL issues, than did those which moved within the state. This finding was supported by a comparison of companies based on the type of location decision the company made: relocating companies assigned significantly more importance to quality of life than did expanding or initiating companies. Both findings suggest that companies within Colorado may take the QOL they enjoy for granted. That is, QOL was not considered to be especially important by companies moving within the state, because it was the norm to which they had grown accustomed. In contrast, companies that originated from areas outside Colorado

were more appreciative of these amenities, since they may be superior to those they experienced at their previous location.

Festervand et al. (1988, p. 21) observed, "Occurring concomitantly with the increase in the importance of quality of life factors is the increasing tendency of industrial firms to locate in small towns and rural areas." This relationship was confirmed by respondents in this study. Decision-makers from businesses that settled in small urban areas outside the Denver metropolitan area, placed significantly more importance on QOL issues than did businesses locating in Denver or rural areas. Smaller "second-tier" urban communities offer company personnel many of the amenities of large cities, but do not experience many of the problems. The growing sophistication of computer networks reduces the need for physical proximity to corporate headquarters or client companies. This removes a major advantage of locating in major metropolitan areas.

Small companies employing fewer than eight employees placed significantly more importance on quality of life when compared with large companies with 88 or more employees. This was consistent with the findings of Galbraith and DeNoble (1988) who reported that smaller companies were more concerned with ambiance facilities than were larger firms. Almost 90% of all U.S. businesses employ fewer than 10 people (U.S. Department of Commerce, 1982), and many commentators have suggested that in the past decade employment growth in small businesses has outpaced job growth in large businesses. For example, Hale (1992) noted that since 1980 Fortune 500 companies cut 4 million jobs, whereas small businesses created more than 20 million jobs. In the 14-state region in which Colorado is located, it was reported by U.S. West that, "93% of all commercial establishments in the Western states are small businesses that are creating new jobs at two and a half times the rate of large businesses" (*Denver Post*, 1989, p. C1). It has been argued that as the trend from large to small companies continues, the relative importance of factors in business location decisions will also change so QOL will increase in importance (Allen and Levine, 1986). This conventional wisdom that the key to job generation rests in the hands of the small entrepreneur has been challenged, and a debate about the contribution of small and large companies in job creation is emerging (Harrison, 1994). However, there is no doubt that small companies will continue to play a major role in enhancing the tax base and that they will be attracted to areas offering good QOL.

Footloose companies may be defined as businesses whose financial performance is relatively independent of location decisions. Their principal resource is their employees and they are not tied to raw materials, natural resources, energy supplies, or local geographical markets. Given this definition, it was anticipated that decision-makers who perceived their companies to be very or extremely footloose would rank QOL as being significantly more important than those who perceived their companies to be not at all footloose. The study results confirmed this distinction.

Blair and Premus (1987) noted that although profit maximization is implicit in most approaches to locational analysis, economists recognize that this is sometimes compromised because, "Personal preferences are an increasingly recognized locational factor" (p. 73). Myers (1987, p. 269) goes further in stating, "Executive convenience and personal preferences regarding quality of life often loom as large in industrial location decisions as does rational analysis of labor supply, wages or other production factors." Similar emphasis on personal preference has been made by Glaser and Bardo (1991). Results from this study appeared to reinforce the importance of executive preference.

Decision-makers whose companies relocated a large proportion of executives and professionals assigned significantly more importance to QOL issues than did companies relocating relatively few of these personnel. Similarly, those who ranked the ability to attract and retain professional personnel as their company's primary concern placed significantly more importance on QOL than did companies ranking this scenario as the least of their concerns. Finally, companies in which the ultimate decision-maker relocated with the company placed substantially more importance on quality of life than did those in which the ultimate decision-maker did not relocate. These findings were consistent with the observations made by Ritter (1990, p. 155) "If the work force will be drawn locally, quality of life factors are apt to be less important. Conversely, research and development facilities looking to recruit professionals from other areas and states will be highly sensitive to quality of life issues." A business is likely to have a nucleus of key personnel that is critical to its success (Glaser and Bardo, 1991). If QOL attributes are important to attracting or retaining those personnel, then they play an important role in defining that business's economic future.

The study found that QOL was ranked lower than labor and cost elements in decisions made by businesses that initiated, expanded, or relocated to Colorado. When a set of locations that meets a company's criteria on these elements has been defined, then QOL elements are likely to become important among companies whose characteristics were identified in the study. Clearly, places that have a good QOL can compete for a wider range of businesses more effectively than those communities that have not developed and protected these amenities (Kotler et al., 1993). For this reason, Myers (1987) has indicated that QOL in a community should be consistently monitored as part of its strategy for long-term economic development.

A focus on QOL enables communities to be more flexible and responsive to business recruitment. The traditional approach of trying to attract business by packaging incentives has been characterized as product driven rather than market driven. It has focused on selling a community as it is, rather than adapting the community to meet business' needs:

The severe competition for the limited number of new facilities located each year, whether in high-tech or tradi-

tional industries, is ultimately forcing communities to become more market oriented. Examples include the creation of a physical environment attractive to high-technology companies (Harding, 1989, p. 223).

The published literature on business location reveals wide variations in elements that are considered important. Differences may be accounted for by specific industries investigated; centrality of respondents to an actual location decision; age of a sample's firms; different geographic regions of the country; different methodological approaches used to collect information; and changes over time in technology. The results of this study are not generalizable because the company decision-makers who comprised the sample self-selected themselves since their companies located in Colorado. Nevertheless, the study reported here makes four important contributions to the literature. It reflects the perspective of individuals who had recently been responsible for making a business location decision; it identifies the relative importance of QOL elements to each other and to other elements that enter the decision process; it describes characteristics of a sample of companies that placed most importance on QOL in their location decisions; and it reports an approach to identifying attributes that are important in the location decision, which may be adopted for use by organizations in other states or jurisdictions.

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