

**A MULTI-DIMENSIONAL SCALE FOR
REPOSITIONING PUBLIC PARK AND RECREATION SERVICES**

A Thesis

by

ANDREW THOMAS KACZYNSKI

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of
MASTER OF SCIENCE

May 2003

Major Subject: Recreation, Park and Tourism Sciences

**A MULTI-DIMENSIONAL SCALE FOR
REPOSITIONING PUBLIC PARK AND RECREATION SERVICES**

A Thesis

by

ANDREW THOMAS KACZYNSKI

Submitted to Texas A&M University
in partial fulfillment of the requirements
for the degree of

MASTER OF SCIENCE

Approved as to style and content by:

John L. Crompton
(Chair of Committee)

William M. Pride
(Member)

James F. Petrick
(Member)

Joseph T. O'Leary
(Head of Department)

May 2003

Major Subject: Recreation, Park and Tourism Sciences

ABSTRACT

A Multi-Dimensional Scale for Repositioning Public Park and Recreation Services.

(May 2003)

Andrew Thomas Kaczynski, B.A., University of Waterloo

Chair of Advisory Committee: Dr. John L. Crompton

The goal of this study was to develop an instrument to assist public park and recreation agencies in successfully repositioning their offerings in order to garner increased allocations of tax dollars. To achieve this, an agency must be perceived as providing public benefits, those that accrue to all members of its constituency. The scale sought to identify the importance of various community issues and perceptions of the agency's performance in contributing to those issues.

A valid and reliable 36-item instrument was developed that encompasses nine distinct dimensions: Preventing Youth Crime, Environmental Stewardship, Enhancing Real Estate Values, Attracting and Retaining Businesses, Attracting and Retaining Retirees, Improving Community Health, Stimulating Urban Rejuvenation, Attracting Tourists, and Addressing the Needs of People who are Underemployed. These dimensions represent community issues that a park and recreation agency can contribute towards, and can therefore use as a basis for its repositioning efforts.

Using a screening process by expert judges, a pretest sample of undergraduate students, and a sample of municipal residents, each of the importance and performance

dimensions in the scale was judged to possess content validity, internal consistency, construct validity, and split-half reliability. A shortened version of the instrument was also demonstrated to possess internal consistency and construct validity. In a practical application, the scale proved useful in identifying repositioning options for the park and recreation department, both in isolation and relative to a public agency 'competitor'. Limitations of the study and suggestions for future research are offered.

This thesis is dedicated to my wife Jennifer

ACKNOWLEDGEMENTS

Without the significant assistance and support of several people, this thesis would not have been possible. I wish to thank Dr. John Crompton for allowing me the privilege to work with him. He is an exemplary educator and researcher whose skills are paralleled only by his passion for bettering our important field. I am proud of the many things we have accomplished during my brief time at Texas A&M, and I will never forget the advice and knowledge he has imparted upon me.

I also wish to acknowledge the guidance provided to me by Dr. Peter Witt and Ms. Marguerite Van Dyke. Their counsel, both personal and professional, has facilitated the vast enjoyment and personal growth I have experienced while completing my master's degree and looking ahead to my Ph.D. Similarly, my fellow graduate students have left a lasting impression on me and I am confident that their contributions to our field, both individually and collectively, will be substantial. I would also like to recognize the valuable theoretical and practical suggestions offered by Dr. Bill Pride and Dr. Jim Petrick throughout this project.

On a more personal level, I sincerely thank my parents and parents-in-law for their support during my life-long education. Finally, and most importantly, I want to express my gratitude and love to my wife Jen for her constant love and understanding throughout our Texas adventure.

TABLE OF CONTENTS

	Page
ABSTRACT	iii
DEDICATION	v
ACKNOWLEDGEMENTS	vi
TABLE OF CONTENTS	vii
LIST OF FIGURES	x
LIST OF TABLES	xi
 CHAPTER	
I INTRODUCTION	1
Positioning	2
Repositioning Park and Recreation Services	3
Statement of the Problem	5
Purpose of This Study	7
Study Objectives	8
Definitions	8
II REVIEW OF LITERATURE	10
Positioning	10
The Origin of Positioning	11
What Is Positioning?	13
Determining the Position	15
Positioning Strategies	18
Positioning Typologies	22
Challenges in Positioning Services	24
Summary	27
Repositioning Park and Recreation Services	29
Attracting and Retaining Businesses	29
Attracting and Retaining Retirees	31
Enhancing Real-Estate Values	33
Attracting Tourists	35
Deriving Benefits from Trees	37

CHAPTER	Page
Stimulating Urban Rejuvenation	40
Expanding Retail Sales of Equipment	40
Preventing Youth Crime	41
Improving Community Health	44
Addressing Unemployment and Nonchallenging Employment	46
Summary	48
Importance-Performance Analysis	51
The Use of IPA in Repositioning Public Park and Recreation	
Services	54
Considerations in Using IPA for Repositioning	55
Wording of the Importance Item Rubric	55
Placement of the Grid Axes	58
Including Estimates of Variance	59
Interpreting the Grid Recommendations	60
III METHODOLOGY	62
Item Generation and Initial Content Validity Check	63
Pretest of Instrument	66
Instrument Validation	73
Sampling and Data Collection Procedures	73
Testing the Scale's Dimensionality	74
Testing the Scale's Reliability	75
Testing the Scale's Validity	75
Positioning Relative to Competitors	77
IV RESULTS	78
Residents Sample Profile	78
Testing the Scale's Dimensionality	79
Confirmatory Factor Analyses	80
Coefficient Alphas of Dimensions	85
Correlations Between Factor Grand Means and One-Item	
Ratings of Dimensions	85
Exploratory Factor Analyses	87
Summary of Dimensionality Tests	96
Testing the Scale's Validity	107
Testing the Scale's Reliability	109

CHAPTER	Page
V DISCUSSION AND CONCLUSIONS	111
Composition of the Park and Recreation Repositioning Scale	111
Scale Length Considerations	116
Repositioning Using Importance-Performance Analysis	121
Establishing the Park and Recreation Agency's	
Repositioning Options	122
Discussion of Repositioning Issues' Placement on the	
IP Grid	125
Positioning Relative to Competitors	128
Limitations of the Study	132
Suggestions for Future Research	134
REFERENCES	139
APPENDIX A	153
APPENDIX B	168
APPENDIX C	173
APPENDIX D	175
APPENDIX E	187
APPENDIX F	189
APPENDIX G	191
APPENDIX H	193
VITA	197

LIST OF FIGURES

	Page
Figure 1: Importance-Performance Analysis Action Grid	52
Figure 2: Scale Development Process	63
Figure 3: Multi-Step Procedure to Develop the Park and Recreation Repositioning Scale	112
Figure 4: Establishing the Park and Recreation Agency's Repositioning Options	124
Figure 5: Park and Recreation Department's Performance Relative to a Competitor	130
Figure 6: Model of the Repositioning Process	137

LIST OF TABLES

	Page
Table 1: Summary of Positioning Ideas and Strategies in the Context of Public Sector Parks and Recreation	27
Table 2: Domains of the Ten Repositioning Dimensions	49
Table 3: Factor Loadings for Pretest Scale Items Grouped by Factor	68
Table 4: Gender of Respondents	78
Table 5: Age of Respondents	79
Table 6: Number of Years Lived in Grapevine by Respondents	79
Table 7: Confirmatory Factor Analysis Loadings and Coefficient Alphas for Importance and Performance Factors	82
Table 8: Correlations of One-Item Importance and Performance Ratings with Respective Factor Grand Means	86
Table 9: Residents Sample Exploratory Factor Analysis Importance Item Loadings	88
Table 10: Residents Sample Exploratory Factor Analysis Performance Item Loadings	91
Table 11: Summary of Dimensionality Tests for Questionable Items	96
Table 12: Coefficient Alphas of Restructured Factors	100
Table 13: Preliminary Factor Analysis of Restructured Dimensions	103
Table 14: Exploratory Factor Analysis of Final Items	105
Table 15: Construct Validity Correlations	108
Table 16: Split-Half Reliability Correlations	110
Table 17: Means and Standard Deviations of Factors and Items in the Park and Recreation Repositioning Scale	113

	Page
Table 17: Means and Standard Deviations of Factors and Items in the Park and Recreation Repositioning Scale	113
Table 18: Paired Samples T-Tests Between “Economic” Importance Dimensions	116
Table 19: Coefficient Alpha and Construct Validity Correlations for Shortened Importance and Performance Dimensions	118
Table 20: Means and Confidence Intervals for Importance and Performance of Repositioning Dimensions	122

CHAPTER I

INTRODUCTION

To merit continued support, public park and recreation departments must justify their existence to tax-paying citizens and to elected officials responsible for allocating tax dollars. The shift from uninhibited government growth to greater restraint and accountability can be traced to the effects of the tax revolt, which emerged in the mid 1970's and continues to dominate the political landscape (Crompton, 1999a). In the fifty years prior, government spending increased annually and had swelled from one-tenth to one-third of the United States gross national product (Crompton & McGregor, 1994). However, uprisings by citizens across the country led to constraints imposed on taxation which had repercussions for public services in all levels of government. It was noted at the time: "This is the new environment in which many park and recreation agencies now have to operate" (Howard & Crompton, 1980, p. 37).

In response to this decline in tax revenue, a number of park and recreation agencies turned to operating principles used in the commercial sector. Consistent with this, many eventually adopted a marketing orientation with their primary mission being user satisfaction (Crompton & Lamb, 1986). The conventional wisdom has been that achievement of this goal is sufficient justification for an agency's continued existence.

However, the majority of a public park and recreation agency's constituents (i.e.

This thesis follows the style and format of the *Journal of Leisure Research*.

the jurisdiction's population) do not partake in most of the services it offers. Consequently, it is not surprising that the agency is perceived as providing primarily 'private' benefits, those which accrue only to the users of services. Unlike fire or police departments, few public benefits are attributed by residents to the provision of park and recreation programs.

Crompton (1999b) summarizes these sentiments in stating that "additional resources are likely to be forthcoming only when support for the field extends beyond that of existing participants" (p. 1). Similarly, Glyptis (1989) suggests that the provision of leisure for its own sake still lacks political clout; it has to show other more tangible returns to be worth funding. Positioning serves as an effective strategy for explicating the benefits that result from a public park and recreation agency's efforts.

Positioning

Positioning refers to the place an organization holds in the minds of stakeholders relative to competitive offerings. A public park and recreation agency competes with all other departments or agencies that lobby for a share of the public tax revenues. The central tenet of positioning is that agencies do not position services, stakeholders do. It is not the images created by competing organizations that matter, but rather how stakeholders perceive such positions. This idea was first articulated by Ries and Trout (1986) who suggested that advertising could foster a product's position in the minds of consumers. It is equally relevant today for park and recreation agencies wishing to position their services in the minds of elected officials.

As described above, park and recreation agencies have always maintained a position – that of satisfying the wants and needs of program participants. Thus, to gain expanded support from *all* citizens as well as elected officials, the task is not so much positioning their services as it is repositioning them. Three types of repositioning have been suggested (Crompton, 1999a). *Real* repositioning involves actually changing what the agency does so that its offerings are perceived as addressing community needs. *Psychological* repositioning means altering stakeholders’ beliefs about what an agency currently does. Finally, *competitive* repositioning means altering stakeholders’ beliefs about what an agency’s competitors do.

Repositioning Park and Recreation Services

The trend towards repositioning has been spurred by two dramatic changes in the conceptualization of public park and recreation services. The first is the push for the adoption of a Benefits Approach to Leisure (Driver & Bruns, 1999). Second, the assumptions on which public sector marketing had been developed have recently been challenged (Novatorov & Crompton, 2001a; 2001b). These two paradigm shifts are elaborated on below.

The Benefits Approach to Leisure (BAL) focuses the attention of managers and researchers on the positive outcomes that can be obtained from leisure. It views the provision of recreation programs and services as a means to an end, rather than as a private benefit or an end in themselves. The authors of the BAL acknowledge that “elected officials ... tend to hold the erroneous belief that most or all of the benefits of

leisure accrue to the individuals who use leisure services” (Driver & Bruns, 1999, p. 351). Stakeholders are generally unaware of the personal, social and cultural, economic, and environmental benefits which have been attributed to leisure through research. “While leisure is the leading economic sector and the most important social service sector, the scope and magnitude of the benefits of leisure are not recognized and appreciated” (Driver & Bruns, 1999, p. 351). Park and recreation agency programs must be repositioned so that taxpayers and elected officials recognize the valuable contribution they make to the community.

A second impetus for the trend towards repositioning is the recent reconceptualization of marketing in the context of public leisure services (Novatorov & Crompton, 2001a). As mentioned previously, the marketing model developed for commercial environments was widely adopted by park and recreation agencies in the early 1980s. This model posited that the service provision process involves a voluntary exchange between the agency and the citizen participants. However, many public programs are funded primarily through citizen tax dollars rather than from the participants’ direct payments. Elected officials responsible for distributing tax dollars to public departments serve as an intermediary in this exchange process of “mutually agreed upon coercion” (Novatorov & Crompton, 2001b, p. 66). Further, the majority of these taxpayers do not use public recreation programs and thus fail to see their importance to the community. The implications are that agencies must better communicate the public benefits resulting from leisure services and that elected officials must be led to understand the scope and magnitude of these benefits. Repositioning

illuminates the link between the public benefits of recreation and the issues confronting citizens and elected officials.

When repositioning their services, public park and recreation departments can adopt any of several issues with which to align themselves. The key is to ally with the prevailing concerns in the community. Elected officials responsible to tax-paying citizens are likely to be responsive to public agency efforts that contribute to the economic prosperity of the community. Several means by which a park and recreation agency can contribute to economic concerns, either through revenue generation or cost savings, have been suggested (Crompton, 2001; 2000; 1999a; 1999b). These include attracting and retaining businesses, attracting and retaining retirees, enhancing real-estate values, attracting tourists, protecting the environment, stimulating urban rejuvenation, expanding retail sales of equipment, preventing youth crime, improving community health, and addressing the needs of the underemployed.

Statement of the Problem

Attempting to accomplish all of the aforementioned positions would be both impractical and imprudent. “The positioning decision often means selecting those associations which are to be built upon and emphasized and those associations which are to be removed or de-emphasized” (Aaker & Shansby, 1982, p. 56). Attempting to align with too many community concerns is likely to create a fuzzy image in residents’ minds.

However, because public parks and recreation embraces such an eclectic array of services, it is unreasonable to expect that agencies should limit their positioning efforts

to only one of the aforementioned economic issues. Doing so would imply that aspects of an agency's service offerings must be discontinued or demarketed in order to create the focus necessary for the desired position to resonate with stakeholders. This is not feasible though because although private companies can position their products or services to the most responsive target markets without repercussions, public agencies are required to consider the implications of their actions on equity. Consequently, positioning must be careful not to preclude servicing certain citizen groups. Crompton (1999a) recognizes this pragmatic limitation stating: "An agency cannot immediately abandon many of its current tasks and switch those resources to strengthen its repositioning efforts. If this were done, existing clientele would probably make a loud outcry" (p. 113).

Thus, if a decision is made to position park and recreation services so they contribute to alleviating juvenile crime (a major problem identified by the jurisdiction), it may not be possible for the park services part of an agency's operations to contribute meaningfully to this goal. However, it may be possible for parks to contribute to a different community priority – such as economic development – by using them to stage festivals and events that attract visitors from out-of-town. Thus, it is likely to be productive for an agency to identify several priority issues and position different services from its eclectic array towards addressing those issues. In essence, this is a segmentation approach which matches potential positions for particular services with a selective set of different priority issues. This is analogous to a manufacturing firm positioning each of its products, rather than the company's offerings as a whole.

In conclusion, before the selective set of position strategies can be formulated, the marketer must identify key attitudes and perceptions of the consumer (Burnett, 1993). In the case of a public agency, the consumer can be conceived as both the citizens of a jurisdiction and the elected officials responsible for allocating tax revenues. A public agency must realize which public concerns these stakeholders perceive to be the most imperative. The agency can then align itself with the issues being given highest priority using real, competitive, and psychological repositioning. To date, no method or instrument has been developed which will aid managers in determining which issues should be given prominence.

Purpose of This Study

The purpose of this study is to develop and test a scale instrument that identifies the community issues, of those that a park and recreation agency could address, that are given highest priority by residents and elected officials. The scale would be used to measure both the issues deemed important by these stakeholders, as well as their perceptions of the extent to which the park and recreation agency contributes towards addressing those issues.

Agencies will benefit in that they will have a valid and reliable method for assessing which community issues citizens and elected officials feel public agencies should focus on. Further, the scale will outline current opinions of the park and recreation agency's effectiveness at helping to solve those issues. Assessing the difference between these two measures can focus the agency's attention on gaps in

expected service. Repositioning to reduce these differences would provide increased the justification for greater allocations of tax dollars.

Study Objectives

The objective of this study is:

- To develop and test a scale instrument that measures citizen perceptions of the public benefits that may accrue from the delivery of public park and recreation services.

Definitions

Positioning is the process of fostering a desired image of the park and recreation agency in the minds of citizens and elected officials relative to other public agencies who are competing for tax allocations.

The term **stakeholder** is used to describe citizens or elected officials whose opinions the park and recreation agency must take into account when considering which position to adopt. These groups represent potential respondents to the scale.

Importance refers to ratings given by stakeholders about the priority assigned to various community issues or concerns. The first part of the instrument will measure this facet of stakeholders' opinions.

Performance refers to ratings given by stakeholders indicating the degree to which they perceive that the park and recreation agency is addressing the community issues or concerns. This facet of stakeholders' opinions is measured in the second part of the instrument.

The remainder of this study is divided into four sections. Chapter II reviews the concept of positioning and its application in park and recreation services. Importance-performance analysis is also outlined as a means for implementing repositioning. Chapter III describes the methodology employed to develop and validate the multi-item scale. The results of the scale's dimensionality, reliability, and validity tests are reported

in Chapter IV. Finally, Chapter V provides discussion and implications of the development of the park and recreation repositioning scale.

CHAPTER II

REVIEW OF LITERATURE

This chapter describes the development of the concept of positioning in marketing, recreation and related fields. The initial sections present the notion of positioning as it has been discussed in the consumer behavior literature. Subsequently, the relevance of positioning for public recreation and park agencies is described, along with ten specific dimensions of positioning which have been proposed in the leisure literature. Finally, importance-performance analysis (IPA) is discussed and advocated as an appropriate technique for using the scale's results to implement park and recreation repositioning.

Positioning

The central role of positioning in strategic marketing is widely accepted. Along with the many examples in the contexts of consumer products and services, the importance of positioning has also been acknowledged in such contexts as business-to-business relationships (Webster, 1991; Kalafatis, Tsogas & Blankson, 2000), the marketing of hotels (Dev, Morgan & Shoemaker, 1995; Mazanec, 1995), images of regions or countries as tourist destinations (Crompton, Fakeye & Lue, 1992; Uysal, Chen & Williams, 2000; Gartner, 1989; Javalgi, Thomas & Rao, 1992), charity fundraising (Hibbert, 1995), referrals to hospitals (Javalgi, Joseph & Gombeski, 1995), food services (Verma, Pullman & Goodale, 1999), and political campaigning (Ries & Trout, 1986).

Despite this acknowledged importance, theoretical understanding of positioning remains incomplete and under-developed. The lack of development is evidenced by both the scarcity of documented empirical studies and the absence of a proposed conceptual framework that convincingly explains the concept of positioning. The following sections discuss the development and definition of positioning in the literature, along with alternate strategies that have been suggested for positioning.

The Origin of Positioning

The value of positioning was not always apparent. Prior to the 1960s, consumer goods industries were in a 'product era' characterized by the consistent development of new products designed to satisfy consumer wants and needs. Each of these products carried with it a "unique selling proposition" (USP) (Frazer, 1983), an innovative, differentiating physical feature or benefit that was promoted to consumers. However, technological advancements permitted the swift replication of product features which led to the proliferation of "me-too products" (Ries & Trout, 1986, p. 22). In response, many businesses concentrated on developing the reputation or image of the company to differentiate their products or services, rather than focusing consumers' attention on specific products or features. This was accomplished through the increased use of creative advertising designed to deliver persuasive messages. However, this type of advertising soon cluttered communication mediums, and the me-too companies killed the image era in the same way that the me-too products had killed the USP era (Ries & Trout, 1986). The profusion of advertising meant that a means of cutting through the

'noise' was necessary. A solution was advocated by Ries and Trout (1986): "the only answer to the problems of an overcommunicated society is the positioning answer" (p. 14).

Positioning is now regarded as a crucial element of marketing (Aaker & Shansby, 1982; Park, Jaworski & MacInnis, 1986; Kotler, 2000, Ries & Trout, 1986; Trout, 1996; Dovel, 1990; Hooley, Broderick & Moller, 1998). Recognition of the value of positioning strategies has emerged as firms have recognized the importance of adopting a marketing orientation. Blankson and Kalafatis (2001) state "just as marketing has become an increasingly important element of the strategic management process, so has the concept of positioning become fundamental to the success of firms' marketing strategies" (p. 36)

Although positioning began as a strategy meant solely for developing effective communications (Trout, 1969), the idea has expanded to embrace all aspects of the marketing mix. Promotional messages convey the product's or the service's distinct image, but other variables in the marketing mix also must contribute to operationalizing the selected position. Lovelock (1996) highlights this critical point saying: "copy positioning uses simply imagery or vague promises. Instead, improving a product's appeal involves substantive decisions on important attributes, price, and availability" (p. 168). Burnett (1993) concisely summarizes the significance of the positioning process: "Strong, accurate positioning represents the most important decision and action management has to make for the company and its marketing ... Everything else is execution" (p. 59).

What Is Positioning?

Several definitions abound but three fundamental tenets are common to most conceptualizations of positioning. First, positions are determined not by the image that the product or service supplier seeks to convey, but rather by how this image is perceived in the minds of consumers. Reis and Trout's (1986) early definition, which has been widely adopted, highlights this idea: "Positioning is not what you do to a product. Positioning is what you do to the mind of the prospect. That is, you position the product in the mind of the prospect" (p. 2).

Attention to the perceptions of consumers is central to effective positioning. This results from a realization that "meanings are not inherent in the [product] itself" (Burnett, 1993, p. 60), and that "people make their decisions based on their individual perceptions of reality, rather than on [the marketer's] definition of that reality" (Lovelock, 1996, p. 168). For this reason, marketers must adopt a customer perspective and understand how consumers perceive competing products (Fill, 1999).

Successful positioning results from an understanding of the attributes that are important to customers of a given product class. The firm should differentiate its product or service based on these important attributes, and then specifically communicate its distinctive, important qualities to customers. Kotler's (2000) commonly cited definition emphasizes manipulating the attributes of the product or service to create a niche in consumers' minds. He states that "positioning is the act of designing the company's offering and image to occupy a distinctive place in the target market's mind" (p. 298). Ries and Trout (1986) stress communicating these distinctions

to customers: “You have to select the material that has the best chance of getting through ... concentrate on the perceptions of the prospect” (p. 8). Clearly, consideration of the consumer’s perspective is paramount in all aspects of product or service positioning.

The second axiom of positioning is that a firm’s position is considered by the consumer not in isolation, but rather it is perceived in relation to that of its competitors. For example, Batra, Myers and Aaker (1996) state that “a brand’s position in a consumer’s mind is a relative concept, in that it refers to a comparative assessment by the consumer of how this brand is similar or different from the other brands that compete with it” (p. 191). Because consumers have a limited capacity for managing the excessive amounts of information they encounter (Bettman, 1979), they develop heuristics to aid in this process. To simplify their choices, consumers rank brands based on attributes (i.e. price, quality, etc.) relevant to their buying decisions. Ries and Trout (1986) use the analogy of product ladders in the mind. Each ladder represents a different product category and each rung on the ladder, a different brand. For example, a golfer may have a ladder for golf courses in his or her mind, and will position the public agency’s course on a rung on that ladder relative to other courses in the region. This ordering of brands by consumers highlights that competitors’ positions are often as important as that of the company of interest.

Positioning, then, involves a consideration of the firm’s two most important publics – consumers and competitors. Ries and Trout (1986) concisely summarize this idea: “To succeed in our overcommunicated society, a company must create a position

in the prospect's mind, a position that takes into consideration not only a company's own strengths and weaknesses, but those of its competitors as well" (p. 24).

A third important rule in positioning is that of consistency. A strong position can take many years to be solidified in the minds of consumers, so consistency of image is key over this time period. Consistency often is threatened because positioning usually implies a commitment to segmentation. Certain product features or associations must be de-emphasized so that others become more salient in the minds of targeted consumers (Aaker & Shansby, 1982). Some marketers are reluctant to preclude segments of the population in this way, and instead try to appeal to a wider constituency using a variety of positions. However, such a strategy is widely eschewed because consumers are likely to be confused and hold a fuzzy image of a brand (Batra, Myers & Aaker, 1996). Because of the time commitment necessary to build up a strong position, the choice of an intended position must be based on careful research.

Determining the Position

Several strategies for effectively positioning a product or service have been proposed by different authors. While they vary, it was noted in the previous section that almost all positioning strategies involve consideration of the competition. Thus, the initial development of a positioning strategy invariably requires an examination of the existing market (Burnett, 1993; Lovelock, 1996). While such analyses can be, and often are, based on managerial intuition or other fallible criteria (Piercy, 1991), most

empirically-based approaches to positioning have involved multi-dimensional scaling which is used to develop a perceptual map of the industry.

Multi-dimensional scaling is a market research technique that facilitates rigorous comparison of various brands within a product category. As described below, brands can either be compared on product attributes or simply in terms of their overall similarity to each other. The output of this process is a grid on which brands are plotted along two or more dimensions to illustrate how they are perceived by respondents. Such a perceptual map is considered useful because brand positioning implies a space and that space is defined by dimensions or attributes which consumers use to judge brands (Doyle, 1975).

Doyle (1975) proposes several advantages of developing a spatial representation of consumers' perceptions. First, the attributes most significant to consumers can be portrayed. Second, the extent of similarities and differences, and subsequent competition, between brands can be observed. Finally, preferred positions for developing new brands are suggested. Urban and Star (1991) concur with this latter benefit in stating, "a perceptual map can be used to identify gaps that may represent opportunities for new products" (p. 135). Lovelock (1996) offers a further advantage in that correlations between product attributes often can be observed from the perceptual map. For example, if price and quality are the axial dimensions used to define the perceptual space, it may emerge that brands which are high in quality are also high in price.

Multi-dimensional scaling techniques can either be attribute-based or non-attribute based. If the attributes used to differentiate brands are known, consumers can be asked to scale brands on these attributes. For example, using Likert-type scales, swimmers could be asked to agree or disagree that pools in a region possess qualities such as clean water, friendly staff, or sanitary changerooms. The computer scaling program can then create a perceptual map locating the brands along the attribute dimensions. Alternatively, Batra, Myers & Aaker (1996) propose that participants could scale products according to their perceptions of a brand's users or use contexts in which the brand would be appropriate. For example, on a scale of personality traits, respondents could give their perceptions of participants who patronize various public, private, and not-for-profit fitness centers.

An attribute-based approach to positioning seems more useful than Ries and Trout's (1986) analogy described above in which competing brands are ranked in consumers' minds on the rungs of product ladders. Attribute-based multi-dimensional scaling goes beyond such ordinal comparisons to provide information about the relevant attributes used to derive this ranking of brands. However, several disadvantages of attribute-based scaling have also been noted.

The most troublesome problem is that relevant attributes often are not known (Doyle, 1975). Attribute-based scaling requires that the qualities consumers use to differentiate products or services be those that are scaled (Batra, Myers & Aaker, 1996). It is likely to be difficult, however, to generate a valid attribute list without first conducting some other form of research. A second complication is that a consumer may

rate some products or services as a whole rather than disaggregate his or her perceptions into attribute ratings (Batra, Myers & Aaker, 1996; Doyle, 1975). Similarly, ratings of attributes may not be made completely independent of each other. Lovelock (1996) describes how the halo effect may work positively or negatively causing perceptions on one attribute to reflect poorly or badly on another attribute(s). For example, the neatness of employees' uniforms could affect perceptions of the service quality that an agency's staff provides.

Because of these limitations, an alternative approach called non-attribute based multi-dimensional scaling is often used. In this process, consumers are asked to assess the similarity between all pairs of brands within the product category using any criteria relevant to them. For example, all brands of running shoes could be presented, two at a time, to respondents until they have rated the similarity between each possible pair of brands. Multidimensional scaling programs can then create a grid in which the most similarly perceived brands will be mapped closest to each other and contrasting brands will be placed farther apart. A major disadvantage of this approach is that interpretation of the dimensions does not have attributes as a guide. The missing attributes for labeling the dimensions must be inferred intuitively or from external information such as accompanying questionnaires (Batra, Myers & Aaker, 1996).

Positioning Strategies

Market research using multi-dimensional scaling produces a perceptual map that plots the positions various brands hold in the minds of consumers. Armed with this

information, marketers must decide how to foster the desired position of the brand and influence the position of its competitors by altering consumers' perceptions about the brands on one or more of the attributes. A variety of empirical and non-empirical typologies for positioning have been proposed and are discussed in the next section. The following paragraphs, however, highlight generic strategies suggested by various authors.

Ries and Trout (1986) strongly emphasize the benefit of being the first brand to define the product category. A brand need not be the first of a certain product on the market, but it must be the first to attach itself to a particular position. In doing so, a firm may gain the invaluable corollary of having the brand name become synonymous with the product category (i.e. Kleenex, Xerox, FedEx). In an early work, Trout (1969) states, "it's almost impossible to dislodge a strongly dug-in leader who owns the high ground. You're a lot better off to open up a new front or position" (p. 54). Similarly, in advertising, messages that are not based on a unique idea will often be attributed to the leading brand or the one that originally procured the promoted position (Trout, 1971).

Kotler (2000) offers a novel alternative strategy for firms to pursue. He suggests that an organization position itself as part of an exclusive club. In doing so, the firms or products in the club will be perceived by consumers as different from other competing brands. For example, Kotler gives the example of the "Big 3" automakers, a club that was invented by the third-leading brand at the time. This strategy is most relevant for non-leading products or businesses that wish to be associated with the qualities of the

leading brand. It creates the perception that those included in the club are the superior brands on the market.

Another strategy is to reposition the competition relative to your own offering. Kotler (2000) describes how raising questions about a competing product's quality or authenticity can reduce consumer confidence in the market leader. Ries and Trout (1986) state that repositioning can be used to create an open position that the company can then fill. For instance, a public sector recreation agency could reposition the local police force as providing incarceration services, and then can promote itself as filling the community crime prevention role. This is an example of the way Crompton (1999a) adapts the ideas of Kotler et al. (1993) and proposes how recreation agencies can use competitive repositioning to successfully compete with other public departments for tax dollars.

Droge and Darmon (1987) suggest comparative advertising is appropriate for positioning purposes. Wilkie and Farris (1975) were the first to develop propositions about the effects of comparative advertising. They proposed that "product-attribute-based comparisons make it easier to position a brand in relation to competitors" (Droge & Darmon, 1987, p. 378). Since their initial proposition, others have reported that comparative advertising creates greater perceptions of similarity between challengers and leading brands than do non-comparative advertisements (Gorn & Weinberg, 1984; Walker, Swasy & Rethans, 1986).

Ries and Trout (1986) usefully distinguish between positioning and comparative advertising. Whereas comparative advertising that actually differentiates brands can be

an effective element in positioning, comparative advertisements that present no new ideas (positions) will be unsuccessful. Although comparative advertising has since exploded in the media, Trout (1969) once lamented, “too many companies embark on marketing and communications programs as if the competitor’s position did not exist. They advertise their product in a vacuum and are disappointed when their message fails to get through” (p. 52). In an updated work, Ries and Trout (1986) point out the prevalence and the benefit of using comparatives rather than superlatives in promotional messages.

A final general positioning strategy is to emphasize either the functional or symbolic attributes of a product or service. Park, Jaworski, and MacInnis (1986) proposed that a brand concept could be either symbolic or functional depending on the needs consumers seek to satisfy from use of that product. Brands that are functional satisfy practical needs, whereas symbolic brands confer image benefits. Bhat and Reddy (1998) investigated whether a brand concept could incorporate elements of both functionalism and symbolism, or whether these two properties existed at opposite ends of a continuum. Their empirical research concluded that “functionality and symbolism are distinct concepts and not really two ends of a brand concept continuum ... it is possible to have brands that have both functional and symbolic meanings for consumers” (Bhat & Reddy, 1998, p. 39).

Positioning Typologies

A typology is comprised of a set of categories or types and is created by the intersection of two or more variables or dimensions (Babbie, 2001). Typologies describing the dimensions that consumers use to differentiate brands have been proposed by several authors for the purpose of positioning products and services. Blankson and Kalafatis (2001) provide a thorough review of existing positioning typologies, but criticize this literature for its lack of development over the past two decades. The authors state that some of the most widely referenced conceptual typologies (Aaker & Shansby, 1992; Wind, 1982), as well as recently proposed ones (Hooley et al., 1998), have not been empirically validated. Other authors have expressed similar sentiments regarding the need for comprehensive empirical research on positioning (Porter, 1985; Rigger, 1995).

Several reasons for the lack of empirical research on positioning have been proffered. Rigger (1995) suggests that the lack of a rigorous definition of positioning has inhibited the development of appropriate measures for operationalizing this concept. Blankson and Kalafatis (2001) cite Arnott's (1992) assertion that the popularity of Ries and Trout's (1986) books on positioning have led to their suggestions being accepted without questioning their empirical validity. Others have contended that the concept of positioning is not widely understood (Pollay, 1985). Further, practitioners attempting to implement positioning strategies have often done so without the aid of comprehensive data analysis (de Chernatony, 1994).

Nevertheless, a handful of empirically based typologies have been proposed in the literature (Crawford, 1985; Easingwood & Mahajan, 1989; Arnott, 1992; Kalafatis, Glass & Cooper, 1997). However, Blankson and Kalafatis (2001) lament that attempts to use these typologies have not been fruitful. This is because either the classification scheme contains too many dimensions (e.g. Crawford, 1985) and/or is difficult to operationalize (e.g. Easingwood & Mahajan, 1989), or because the typology is based exclusively on a managerial perspective (e.g. Arnott, 1992). Recognizing that the importance of customer perceptions in positioning is crucial (Fill, 1999; Hooley et al., 1998; Dibb, Simkin, Pride & Ferrell, 1997; Hooley & Saunders, 1993), Blankson and Kalafatis (2001) suggest a typology of positioning strategies that is both empirically based and derived from the input of consumers. They contend that theirs is the first positioning classification system to incorporate both of these crucial qualities.

Development of the typology presented by Blankson and Kalafatis (2001) followed recommended scaling procedures (i.e. Parasuraman et al., 1988; Churchill & Iacobucci, 2002). It was formulated by asking 234 MBA students to rate the relevance of a pool of statements for evaluating or comparing between various products and services. The resultant typology, derived from exploratory factor analyses, was comprised of eight dimensions containing three to five items each. The eight dimensions were labeled “top of the range”, “service”, “value for money”, “reliability”, “attractive”, “country of origin”, “the name” and “social class” (Blankson & Kalafatis, 2001, p. 45). With these dimensions, the authors believe that they “have come very close to capturing the overall consumer/customer perceptions [of positioning

dimensions]” (p. 46). However, they caution that their typology “is functional in nature (i.e. based on the positioning of offerings and not organizations) and consequently [they] do not claim that the typology can be applied in the positioning of organizations or countries without further replications and validations” (p. 46).

Challenges in Positioning Services

The concept of positioning is regarded as being equally relevant to both products and services (Cowell, 1989). However, several authors have highlighted the differences between physical goods and services, and consequently have claimed that there are considerations that differentiate the application of positioning in services compared to goods (Zeithaml & Bitner, 1996; Berry, 1980; Zeithaml, 1981). The necessity for differential positioning tactics results from services being relatively intangible, being produced and consumed simultaneously, and often being less standardized than goods (Berry, 1980). Further, consumers generally find services more difficult to define than products (Zeithaml & Bitner, 1996; Lovelock, 1984). These unique characteristics of services present special challenges for positioning (Cravens & Lamb, 1989; Bateson, 1995).

Most of the discussion about challenges in services positioning has centered on the intangibility issue. While some authors point out that almost all products or services contain some amount of intangibility (Levitt, 1981; Cowell, 1989), services generally contain a lesser degree of tangibility and are more likely to be fully intangible. This relative lack of tangibles creates several complications. For example, from a

communication standpoint, an organization is faced with promoting less tangible benefits that are likely to be less convincing to consumers than the more concrete benefits usually available from products (Assael, 1985). Further, service companies that have few tangible marketing assets must resort to positioning the *image* of the firm rather than the *specific service attributes* to effectively differentiate their services (Dibb & Simkin, 1993). Finally, the difficulty of undertaking good market research to determine positioning strategies (e.g. multi-dimensional scaling) is confounded by the inherent ambiguity and subjectivity of consumers' verbal descriptions about the attributes of services (Lovelock, 1984).

Zeithaml (1981) describes how consumers use search, experience, and credence, qualities to evaluate products and services. Search qualities are attributes that consumers can determine prior to purchasing the item (e.g. color). Experience qualities are those that can only be realized after purchase or during consumption (e.g. taste). Finally, credence qualities relate to the credibility of the service received because the consumer has difficulty evaluating these aspects of the service, even after it has been performed (e.g. auto repair). Zeithaml argues that services are high in experience and credence qualities. Consequently, defining a service and relating it to competitors for positioning purposes is especially challenging (Lovelock, 1996).

The variability or heterogeneity of services also complicates positioning. Because consistency is integral to fostering a desired image, services that are less standardized experience difficulty in achieving a desired position in consumers' minds (Blankson & Kalafatis, 1999). Positioning strategies that are based on differential levels

of quality can also be more difficult to accomplish in service industries. Service quality is an abstract and elusive construct (Parasuraman, Zeithaml & Berry, 1985) and cannot be measured as objectively as that of physical goods (Parasuraman, Zeithaml & Berry, 1988).

A variety of suggestions have been offered to address with the special challenges of positioning services. From an advertising standpoint, service firms often circumvent the lack of tangibles by avoiding focusing on specific attributes of the process. For example, service advertisements contain more emotional appeals than do product advertisements (Cutler & Javalgi, 1993). Rational appeals can also be effective, however, when attempting to tangibilize a service. In a case study in a higher education setting, Yost and Tucker (1995) describe how a Texas university promoted such tangibles as its small student population, impressive faculty qualifications and low student-faculty ratios.

Another tactic for countering the problem of intangibility is to explicitly diagram the components of services. Shostack's (1987) widely cited article on "blueprinting" describes how service firms can alter their complexity and/or divergence to effectively position their services. The complexity of a service refers to the number of steps and sequences that comprise the entire service process. Divergence refers to "the degree of freedom allowed or inherent in a process step" (p. 35). A bank that adds more services is increasing complexity whereas their customization of mortgages, for example, would signal increased divergence. By changing the level of complexity or divergence, an organization can differentiate its service from that of competitors, thereby appealing to a

distinct market of consumers. Lovelock (1996) acknowledges the impact of altering elements of the service process in stating:

The most successful service firms separate themselves from ‘the pack’ to achieve a distinctive position in relation to their competition. They differentiate themselves ... by altering typical characteristics of their respective industries to their competitive advantage (p. 167).

Summary

Table 1 below summarizes the major positioning ideas and strategies presented heretofore, and adapts them to the context of a public sector park and recreation agency.

TABLE 1
Summary of Positioning Ideas and Strategies in the
Context of Public Sector Parks and Recreation

-
- Positioning is fundamental to the success of public park and recreation agencies’ marketing strategies (p. 10-12).
 - Positioning involves not only promotion, but rather all aspects of the marketing mix (p. 12).
 - Positions exist only in the minds of consumers, as opposed to being determined by the image presented by the agency (p. 13-14).
 - The agency’s position is considered not in isolation, but rather in relation to that of other public agencies competing for tax dollars (p. 14-15).
 - Consistency of image over time is critical to solidifying a strong position (p. 15).
 - Certain service features or associations must be de-emphasized so that those that confer the desired position become more salient (p. 15).
 - Multi-dimensional scaling is a rigorous means of creating a perceptual map of the positions of competing agencies (p. 16-18).
 - It is advantageous to be the first agency to adopt a particular position (p. 19).
 - Non-leading agencies can position themselves as part of an exclusive club (p. 19-20).
 - An agency can reposition the competition relative to its own offering and then fill the hole created in the community (p. 20).
 - Comparative advertising that differentiates agency positions (i.e. contrasting) can facilitate positioning (p. 20-21).

TABLE 1 Continued

-
- Positioning typologies should be empirically based and derived from the input of residents and/or elected officials (p. 22-24).
 - The intangibility of services complicates communication and research (p. 24-25).
 - The variability/heterogeneity of services jeopardizes the consistency needed for effective positioning (p. 25-26).
 - ‘Blueprinting’ can aid in differentiating a service from other competitive offerings for positioning purposes (p. 26-27).
-

The vast majority of these ideas are applicable to positioning in the context of public park and recreation services. One notable exception is the sixth point, which implies that certain aspects of an agency’s service offerings may have to be discontinued or demarketed in order for the desired position to resonate with citizens or elected officials. A park and recreation agency offers such an eclectic array of services that adopting only one or two positions would be unreasonable. Instead, the agency should segment the population of residents and position its services to each of these constituencies based on which issues the group perceives as most important. For example, youth programs could be positioned towards advocates of crime prevention as contributing to this end. At the same time, other agency services, such as parks, can be positioned to proponents of economic development as attracting tourists or businesses. This is similar to the way a manufacturing company positions each of its products, rather than positioning the company’s offerings as a whole. In this way, the agency does not have to de-emphasize certain programs in order to foster perceptions of the positions it hopes to convey to distinct target markets.

Repositioning Park and Recreation Services

Chapter one introduced ten potential positions that a park and recreation agency could adopt in order to contribute to the community's economic prosperity (Crompton, 2001; 2000; 1999a; 1999b). The following sections present an overview of these economic issues as they have been discussed in the recreation, parks, and tourism literature. The intent of this study is to develop a scale that measures a wide range of potential stakeholders' opinions. Accordingly, the focus of the following sections is on covering the dimensionality of these topics and on demonstrating their relevance to a scale designed to measure stakeholders' existing perceptions of the position(s) held by park and recreation services.

Attracting and Retaining Businesses

The attraction and retention of business is an issue given high priority in many communities and is one that a park and recreation agency can significantly impact. Almost every jurisdiction has a private, public or not-for-profit organization charged with responsibility for economic development. However, these organizations often serve simply as facilitators of business (re)location, and are relatively inconsequential in the attraction of new business (Decker & Crompton, 1993). They tend to focus on traditional economic factors such as incentives and labor costs. However, many businesses are more likely to be persuaded by the opportunities for a superior quality of life that a prospective community affords. With this in mind, park and recreation

agencies need to take advantage of competitive repositioning to garner more recognition for their influence on businesses' relocation decisions.

Businesses that are likely to consider parks and recreation amenities important possess certain characteristics. For example, these companies can be characterized as 'footloose'. They are less constrained by the availability of natural resources than more traditional companies, such as manufacturers (Decker & Crompton, 1990). Instead, they rely on the knowledge and retention of employees as their primary resource (Love & Crompton, 1993). Consequently, it is not surprising that these types of firms often place greater weight on quality of life considerations when selecting an area in which to locate. This emphasis on quality of life results perhaps from an awareness of the impact that psychological well-being can have on employees' performance and the subsequent profitability of the firm (Scanlon, 1984; Taylor, 1987).

Footloose companies are particularly desirable because they infuse money into a community without also bringing many adverse effects (e.g. pollution) (Crompton, 2001). As well, their employees generally earn a higher salary than do manufacturing workers (Crompton, 2001), which further stimulates the local economy through their increased purchasing power.

A large majority of footloose businesses employ relatively few employees. Small firms have been found to be significantly less concerned with government incentives as a condition of their relocation choice than larger companies (Crompton, Love & More, 1997). As well, smaller companies often are more concerned with ambiance factors in a community, such as culture, climate, recreational activities, and

schools, than are larger firms (Galbraith & DeNoble, 1988). Similarly, Crompton, Love and More (1997) found that, among small companies, quality of life considerations were most important in relocation decisions, and that access to recreation, parks, and open spaces was the most important element among quality of life factors. The importance of recreation amenities to small business is encouraging because of the proliferation of these types of companies. Over the past two decades, employment growth in small firms has outpaced that in large businesses, and approximately 90 percent of all businesses employ fewer than 10 people (U.S. Department of Commerce, 1992).

Park and recreation agencies are presented, therefore, with a substantial repositioning opportunity. Given the documented evidence regarding their significance in relocation decisions, agencies should market to footloose businesses by providing the amenities they so desire (Kotler, Haider & Rein, 1993). Further, they must highlight research on their importance to legislators, and solicit testimonials from successfully attracted firms to further substantiate the agency's significant role (Crompton, 2001).

Attracting and Retaining Retirees

A second economic repositioning strategy that could be adopted is attracting and retaining retirees. Van der Merwe (1987) has coined the term GRAMPIES (Growing numbers of Retired Active Monied Persons In Excellent Shape) to describe the characteristics of an increasingly important segment of the North American population. McCarthy and Morrison (1979) identify the retiring and vacationing of older adults as a key economic growth area, and retiree relocation is indeed impacting many different

regions of the United States (Crispell & Frey, 1993; Cuba & Longino, 1991; Longino, 1995).

Retirees are seen as desirable residents for several reasons. First, retirees' incomes represent a significant amount of spending power that can benefit the economy of a city. Their incomes are derived mainly from private and government pensions – sources that are more stable than citizens' wages which are subject to economic fluctuations (Backman & Backman, 1993). As well, they often transfer substantial assets into local financial institutions (Longino, 1995). Second, retirees are generally positive taxpayers in that they pay more in taxes than they use in services (Crompton, 1999a). They usually create proportionately less of a strain on publicly funded services than do most other groups of citizens (e.g. families with school-aged children; youths and adults served by the criminal justice system). A final advantage of retirees is that they provide the community with a large pool of volunteers. This characteristic is likely to be particularly appealing to the recreation agency and other social services which can benefit from these peoples' time and talents.

The strategy of attracting and retaining retirees may be more desirable than attempting to woo businesses for two main reasons (Crompton, 1999a). First, as described above, businesses often demand financial incentives, such as land grants or tax abatements, as a condition of their relocation. In contrast, a strategy of attracting and retaining retirees will require fewer resources of these types. Second, attempts to attract and retain retirees usually improve the quality of life in the entire community. Retiree recruiting efforts will involve the construction of recreation amenities and other

facilities that are desired by all residents. As such, a strategy of attracting and retaining retirees carries less risk because, in the event of failure, the amenities constructed will benefit existing residents. This decreased probability of risk is likely to be appealing to both taxpaying citizens and the elected officials held accountable for public expenditures.

The many financial benefits conferred by the successful attraction and retention of retirees are likely to make retiree recruitment efforts particularly appealing to elected officials. The implication for park and recreation agencies is to reposition their offerings as central to the retiree relocation decision. It has been shown that, aside from climate considerations, retirees rank the prevalence and quality of recreation amenities as most important in their decisions on where to live (Haigood & Crompton, 1998). Further, retaining retirees is a gainful strategy for the public leisure agency because retirees already likely have social ties in the community that are central to their recreation (Crompton, 1999a). As this group grows as a proportion of the population, it becomes politically imperative to maintain the approval of this constituency by providing the amenities they desire.

Enhancing Real-Estate Values

In many areas, citizens and elected officials are hesitant to support the acquisition of parks because they perceive that dedication of open space precludes the financial benefits that might otherwise be obtained through development. However, in many cases, parks have the potential to provide economic returns to the city which are

superior to those conferred by development. This can result from two factors (Crompton, 2000).

First, parks frequently increase the value of proximate properties. The increase in the tax base of the city leads to greater tax revenues that are available to be used in the municipality's budget. In this way, parks can generally pay for themselves because the incremental property tax is sufficient to cover the annual principal and interest charges on the debt incurred to acquire and develop the open space. Further, revenue continues to accrue to the city even after the park has been fully repaid.

Although parks with certain characteristics (e.g. passive use patterns) exhibit greater effects on property values, even parks with potentially negative features (e.g. lighted sports complexes) demonstrate some positive consequences. From an exhaustive review of studies investigating the impact of park on property values, Crompton (2000) concludes that 20% is an appropriate point of departure for considering increases in value for homes abutting or fronting a passive park area. Because the property tax is the primary source of revenue in many jurisdictions, elected officials are likely to be responsive to any method that can augment this crucial source of funds.

A second way that parks often prove superior to development is in the lower costs that they impose upon taxpayers. Many jurisdictions have mandates that public land be allocated based on its "highest and best use". While, traditionally, this has been assumed to be development of the land, fiscal impact analyses commissioned in recent years "have consistently shown that the public costs associated with new residential

development exceed the public revenues that accrue from it” (Crompton, 2000, p. 3). Although property taxes do accrue from development, the services that are necessary to support the buildings and their residents (e.g. roads, schools, waste disposal, etc.) dramatically exceed those necessary to service a park.

Attracting Tourists

The tourism market can be divided into business travel, visiting friends and relatives, convention travel, and pleasure travel (Crompton, 1999b). Tourists classified in the pleasure travel segment are almost always motivated by the desire to visit a certain attraction (Crompton, 1999b). In many regions, the primary attractions that draw visitors are maintained by the public sector. Further, it is often the park and recreation agency specifically which has responsibility for providing these services. This has led Crompton (1999b) to conclude: “In most communities, pleasure travel is a business that the public sector drives, and park and recreation agencies are central to that business. Thus, in most communities, park and recreation agencies are the engines of tourism” (p. 10).

Public facilities that may stimulate tourism include, but are not limited to, arts venues such as museums and theatres, open spaces such as beaches and parks, historic sites, and sports facilities. Most people regard tourism as the exclusive domain of the private sector. However, private tourism developments account for only a fraction of the pleasure travel that occurs in the United States (Crompton, 1999b). The private sector is generally limited to providing integral support services such as transportation

and lodging. Although not a direct competitor, the importance of private amenities can be downplayed by highlighting the magnitude of visitation to public facilities.

Competitive repositioning may also serve to erode the importance attributed to the local convention and visitors bureau. Rather than actually driving the industry, the role of these organizations is usually limited to generating interest in the facilities offered by other private and public agencies. However, if the influence of the convention and visitors bureau (CVB) is particularly strong in the community, the park and recreation department may wish to real reposition itself by partnering with the established organization. For example, a relationship can be formed in which the CVB actively promotes the facilities provided by the park and recreation agency.

In order to convey the benefits of tourism, the park and recreation agency should also engage in psychological repositioning. This may involve undertaking economic impact studies to measure the impact of various public attractions on the community. Done properly, such analyses demonstrate the financial return that residents receive from the tax dollars they have invested in tourism through the local agency (Crompton, 1999b).

Tourism is a prominent local issue in both highly-visible and less notable regions of the United States. Because the dollars of outside visitors are transferred into the community, many citizens and elected officials see it as a panacea for economic development. As such, repositioning the park and recreation agency's role as central to tourism is a viable strategy in many jurisdictions.

Deriving Benefits from Trees

Although community landscaping is sometimes the domain of other public agencies (e.g. public works), responsibility for the purposeful planting of trees and other vegetation usually falls to the parks and recreation department in a jurisdiction. Effective use of trees can provide substantial economic benefits through a reduction in the need for pollution-controlling devices, through savings in energy costs, and through decreased erosion and flooding.

Plants efficiently remove many toxic chemicals from the air (Wolverton, 1996). Several studies have demonstrated how trees contribute to reducing carbon dioxide levels in the atmosphere. Increased levels of this greenhouse gas, attributable almost entirely to increased combustion of fossil fuels, are thought to be the primary cause of global warming (Galveston-Houston Association for Smog Prevention [GHASP], 1999). Trees absorb carbon dioxide to be used in photosynthesis, and store harmful carbon while releasing oxygen for humans to breathe. Planting trees may be the least expensive way to reduce atmospheric carbon dioxide. An acre of trees absorbs enough carbon dioxide over a year's time to equal the amount produced by driving a car 26,000 miles (American Forestry Association, 1992). Further, tree planting removes one pound of carbon dioxide for a cost of approximately 1 cent, whereas driving more efficient cars costs about 10 cents per pound (American Forestry Association, 1992).

A study of the benefits of tree cover in Atlanta, reported that the existing tree cover saved area residents \$15 million which they would otherwise have had to spend on pollution-control devices to maintain the same level of air quality (American Forests,

1997). The annual value of pollutant uptake by trees in Sacramento was estimated to be \$5 per tree or \$28.7 million annually (Scott, McPherson & Simpson, 1998). Similar studies in Coastal Southern California and the San Joaquin Valley of California reported annual pollutant uptake values of \$20 and \$12 per tree, respectively (McPherson et al., 1999; 2000).

Trees can also contribute substantially to reducing energy costs in cities. Temperatures in urban areas are often 8-18 degrees Fahrenheit greater than those of surrounding rural areas (U.S. Department of Energy, 1993). During the day, urban heat islands – areas of concrete, asphalt, and bricks – absorb and store solar energy. During the night, when temperatures should decline, these surfaces release this heat preventing significant overnight cooling in the city. “The higher heat increases the volatilization of (pollutant particles in the air) which then creates more pollution. The cloud of pollution lying over the city further traps heat” (GHASP, 1999, p. 34).

Trees can reduce temperatures by providing shade over such heat islands, and by using evapotranspiration to cool themselves and the surrounding air (McPherson et al., 2001). Shade from trees has been found to decrease the consumption of energy and subsequently reduce cooling costs by up to 50 percent (American Forestry Association, 1992; Dwyer, 1993). In Forth Worth, Texas, researchers estimate that the city’s tree cover provides over \$60 million in annual energy savings (The Davey Resource Group, 1997), and a study in Riverside, California, reported that shade from just three, carefully-sited 25-foot tall trees could reduce household air conditioning expenses by 23% (Simpson & McPherson, 1996).

Evapotranspiration is the process by which plants use moisture to cool the air around them and is “the exact same mechanism utilized in evaporative air conditioners” (GHASP, 1999, p. 35). A single large tree can transpire up to 100 gallons of water a day, producing a cooling effect similar to that of five average air conditioners running for 20 hours (American Forestry Association, 1992).

Trees provide further economic benefits by decreasing the need for flood-control measures. The primary cause of flooding is deforestation (GHASP, 1999). “Trees and other vegetation reduce flooding and wind-related damage by holding soils in place, and by absorbing through their roots and canopies significant volumes of rain water” (GHASP, 1999, p. 36). For example, urban trees in California were estimated to absorb up to 2,380 gallons annually (McPherson et al., 2000). Studies in Atlanta, Baltimore, Milwaukee, and Austin, demonstrate the significant economic benefits provided by the tree cover in these cities. Capital costs for stormwater retention facilities of \$122 million to \$883 million per city would otherwise have been necessary in order to provide equivalent flood-control measures (American Forests, 1997).

In summary, the shade producing effects of trees decreases the need for air conditioning. Subsequently, fossil fuel consumption to produce electricity for air conditioners is reduced. As a result of less fossil fuel consumption, pollution levels and the need for pollution-controlling devices decline significantly. Further, trees absorb great amounts of water, thereby reducing flooding. In these ways, the provision of open spaces with trees can provide economic benefits to communities that are often ignored in favor of developments that generally exacerbate temperature and pollution problems,

and subsequently require communities to make substantial investments in remedial technologies to resolve these problems. Psychological repositioning documenting the economic benefits of trees and other vegetation can garner increased support for allocating tax dollars to an agency's parks department.

Stimulating Urban Rejuvenation

In the same way that they are the catalysts for tourism, public recreation amenities also frequently stimulate the rejuvenation of downtown areas in cities. Crompton (1999a) describes several examples in which facilities such as aquariums, performing arts centers, and sports stadiums have been used to resurrect a previously blighted area.

By proactively engaging in economic development efforts with other relevant organizations, the agency may real reposition itself to be regarded as a key player in the revitalization process. Psychological repositioning must involve strategically emphasizing the benefits that park and recreation amenities contribute to the goal of urban rejuvenation.

Expanding Retail Sales of Equipment

In many municipalities, the public sector is the primary provider of recreation facilities. For example, due to their substantial acquisition and operating costs, ice arenas, swimming pools, and playing fields usually fall under the jurisdiction of the public park and recreation agency. The presence of these recreation facilities creates demand for equipment to partake in the associated activities. This nexus is further

substantiated when facilities are funded through the manufacturers' excise tax imposed on related equipment (e.g. taxes on boat fuel used to maintain public marinas) (Crompton, 1999a).

Consequently, Crompton (1999a) submits that "the economic viability of equipment retailers in a community and of manufacturers of all types of recreational equipment relies heavily on the availability of park and recreation facilities at which the equipment can be used" (p. 125). These retailers and manufacturers employ millions of people in jurisdictions across North America. Therefore, were the public sector to cease operating certain recreational facilities, the consequences to these industries and the communities in which they are located potentially could be catastrophic.

Armed with this linkage, public park and recreation agencies can promote the necessity of their services to a community's economic prosperity. Hence, it would appear reasonable that equipment retailers could be persuaded to lobby budgeting legislators on the agency's behalf. For without opportunities for participation, citizens would demonstrate little demand for the manufacturers' and retailers' products.

Preventing Youth Crime

Park and recreation services have a long history of serving at-risk youth (Sessoms, 1993). McKay (1993) provides a review of extant research on the potential of recreation in delinquency intervention. She concluded that youths' involvement in recreation consistently leads to reduced recidivism rates, a decline in the seriousness of delinquency, an increase in self-esteem among participants, and a decreased sense of

hopelessness. The decrease in recidivism for wilderness program participants was short-term, however (only 2 to 5 years). Nonetheless, this suggests that a real repositioning strategy in which community-based agencies partner with such programs may foster a positive *long-term* effect on the prevalence of youth crime.

For communities in which youth crime is a prominent social concern, the park and recreation agency may garner much citizen support by repositioning its services as a solution to this problem. Citizens frequently report a preference for preventative measures over those which 'solve' a problem after the crime has already been committed (Crompton & Witt, 1997). Results from such surveys of public opinion are likely to resonate with politicians who are invariably responsive to polls. This type of psychological repositioning will help to elevate the importance of parks and recreation in the minds of elected officials.

Psychological repositioning can also occur through the demonstration of the benefits that accrue from recreation programs that serve delinquent youth. These benefits are best articulated in terms of the financial savings that result (Kealy, 1991). Agencies should highlight the favorable conclusion that generally follows when the costs of imprisonment are compared to the costs of providing recreation programs. Incarceration costs must include not only the costs of apprehension and processing of criminals, but also the costs of the crimes to the community and its citizens. Recreation programs, in contrast, involve substantially fewer resources and usually offer greater effectiveness. When set against the exorbitant costs of incarceration, recreation programs are perceived as a substantial bargain.

As suggested by the above arguments, a final repositioning strategy is to subtly downplay the importance or effectiveness of law enforcement at reducing youth crime. Crompton and Witt (1997) estimate that a youth is prosecuted in roughly only 5% of the total number of cases when a major crime is committed. This means that 95% of delinquent youths remain on the street as serious threats to society. As such, programs aimed at intervention and reducing recidivism are integral and should be highly valued by citizens. The park and recreation agency's role in this arena can be substantial.

Crompton (1999a) offers three reasons why parks and recreation departments are likely to be successful when dealing with delinquent youth. First, the current widespread distribution of recreation centers and parks across a city makes them conducive to addressing gang and youth-related problems. Second, Crompton contends that "an agency's personnel are experienced in establishing empathetic relationships with their clients" (p. 130). Finally, because most youths are naturally drawn to recreation programs, these can be used successfully as a conduit for modeling and encouraging positive social behavior. The agency, therefore, should use these advantages to make a difference in addressing the problem of youth crime. Impacting this prominent issue will increase the justification legislators have for allocating more tax dollars to the park and recreation department.

Improving Community Health

One of the most widely hypothesized contributions of park and recreation programs is that of ameliorating participants' health. For example, Godbey (1991) proffers that:

These services provide sustained opportunities by which citizens can increase their physical fitness, reduce stress, reduce substance abuse, meditate, learn new skills which lead to higher self-esteem, lessen social isolation and depression and do many other things which improve health. They also provide parks and open spaces which improve air quality, moderate temperature and provide opportunities for tranquility (p. 74).

Many of Godbey's contentions are supported by empirical research. For example, Paffenbarger, Hyde and Dow (1991), and Froelicher and Froelicher (1991) provide substantial documentation of the various health benefits that can result from physical activity. Ulrich, Dimberg and Driver (1991) further corroborate the wellness-inducing effects of parks and recreation by citing several psychophysiological indicators of leisure benefits. Ulrich and Parsons (1992) thoroughly describe the aesthetic and health-related benefits that research has shown can result from exposure to flowers and vegetation in urban environments. The use of greenbelts around industrial or high-traffic sites reduces nearby residents' exposure to pollutants (GHASP, 1999; Smith, 1990), and areas with plants and trees can absorb high frequency noise which is distressing to people (Miller, 1997).

Public perceptions of the benefits of local park and recreation departments are also encouraging in this respect. In a national telephone survey, Godbey, Graefe and James (1993) found that people most frequently associated use of the local agency's

services with exercise and fitness benefits. This was true regardless of whether the respondent was asked about individual, household, or community benefits.

Formal definitions now widely-acknowledge health as not merely the absence of disease, but rather as a state of both physical and mental well-being (Paffenbarger et al., 1991). Similar to that discussed above for youth crime, proactive solutions to health care problems are generally favored by both citizens and elected officials alike. In the early 1990's, medical services accounted for 14% of the United States' gross national product (Godbey, 1991). As government debt continues to rise, the discovery of ways to curtail health care costs becomes imperative. To this end, preventative measures hold substantial appeal with budgeting legislators. Not only can recreation programs and opportunities for physical activity directly reduce the costs incurred from health care, they can also produce indirect economic benefits to the community through such outcomes as decreased employee absenteeism and increased worker productivity (Blumenfeld, 1994). A comparative cost-benefit analysis between the expensive medical system and the services of the park and recreation department could successfully reposition the agency relative to this competition for tax dollars.

Psychological repositioning should highlight the aforementioned financial benefits that can accrue from increased investiture in the agency's services. Another relatively simple psychological repositioning strategy might involve renaming the agency's programs or even the entire department. For example, Godbey (1993) suggests that "recreation and parks may, in fact, have a labeling problem. Such departments are labeled based upon the means used – recreation – rather than the ends

they hope to achieve – wellness” (p. 38). Changing the name of the agency and/or its programs may offer a tangible way of communicating the health benefits conferred by its services.

Agreement about recreation’s health benefits aside, Crompton (1999a) cautions that two concerns may limit the applicability of this repositioning strategy for local agencies. First, most health care services are funded by state or federal agencies and, therefore, are not at the top of most local politicians’ agendas. As such, local recreation departments may find financial success only through grants funded by these more remote levels of government. Second, while empirical evidence of the physiological benefits of recreation is mounting, demonstration of other health-producing benefits is more problematic and should be espoused with caution.

Addressing Unemployment and Nonchallenging Employment

Fluctuating conditions in the North American economy mean that unemployment periodically presents itself as a prominent social problem in many communities. Further, many individuals are forced to take positions in which they are not sufficiently challenged. As well, a great many more people are classified as ‘underemployed’ in that they are able to find only part-time positions when they actually desire to work full-time. Each of these situations presents many of the same problems in that individuals have increased amounts of free time, often face deteriorated physical and mental health, and may experience decreased life satisfaction (Crompton,

1999a). For the sake of expediency, throughout the remainder of this section the term underemployed is used to refer to people enduring any of these three conditions.

Park and recreation agencies can make a substantial contribution to addressing the situation of excessive underemployment in a community. Glyptis (1989) contends that if needs such as social contact, a sense of identity or purpose, self-confidence, self-esteem, and physical and mental well-being go unfulfilled due to the absence of work, leisure should be able to contribute to replacing these essential feelings.

Despite these contentions about leisure's benefits for the underemployed, it seems that agencies have not capitalized on this potential positioning opportunity. Havitz and Spigner (1993) investigated the extent of 280 municipal recreation agencies' efforts to serve the unemployed. Their research revealed that only 16% of responding agencies offered programs for low-income groups and that only 1% directed programs specifically at unemployed persons. Further, marketing mix strategies also were not found to be conducive to reaching unemployed participants. These findings led the authors to conclude: "municipal leisure service managers do a poor job addressing the needs of unemployed people" (p. 32). These findings were consistent with those reported by Reid (1988) who suggested that, the "leisure service delivery system does not have a good understanding of the barriers to increased participation by the unemployed" (p. 125).

The aforementioned conclusions suggest that public park and recreation agencies have failed to address a fairly substantial target market. The position of serving underemployed persons may indeed be viable in communities where this is a prevalent

problem. If residents perceive that underemployment is creating deteriorated social conditions or elected officials think the problem is particularly acute, the agency may succeed in engendering a broader constituency by aligning with this issue.

Real repositioning is likely to involve partnering with other community service agencies to implement a holistic approach to addressing the needs of these citizens. Unfortunately, Havitz and Spigner's (1993) research reported that fewer than half of all the recreation departments studied cooperated with unemployment and social welfare agencies. Smit and Reid (1990) and Spigner and Havitz (1992) suggest several relationships between professionals in communities that could increase the effectiveness of the programs provided to the underemployed. Capitalizing on these partnership opportunities will not only improve service to this population but will also increase the visibility of the park and recreation agency's contributions to this end.

Summary

The previous sections have discussed ten issues that have been suggested in the literature as potential positions a public park and recreation agency can adopt. Table 2 summarizes and explicates the domain of each of these issues.

TABLE 2
Domains of the Ten Repositioning Dimensions

Positioning Strategy	Domain of the Dimension
Attracting Businesses	<ul style="list-style-type: none"> • Parks and recreation contribute to a community's quality of life • Businesses whose primary resource is highly-qualified professional employees consider park and recreation amenities important • Small businesses place a high value on park and recreation amenities in evaluating alternate locations • Park and recreation agencies should provide amenities that businesses find desirable
Attracting Retirees	<ul style="list-style-type: none"> • Next to climate, retirees rank park and recreation amenities as most important to relocation decisions • Attracting retirees includes providing recreation amenities that benefit existing residents (in the event of success or failure) • One of the main needs of retirees – social interaction – is a central feature of many recreation activities • Must provide recreation amenities to satisfy current retiree residents (easier than attracting new retirees; large voting block) • Retirees are a growing force in economic development
Enhancing Real-Estate Values	<ul style="list-style-type: none"> • Proximity to natural, non-intensive use parks and open space increases property values • Parks pay for themselves through increased property tax revenue • Parks less costly to taxpayers than residential development (both acquisition/capital and operating costs) • Parks with passive use patterns exhibit greater positive effects on property values
Attracting Tourists	<ul style="list-style-type: none"> • Majority of the attractions that drive pleasure travel are provided by the public sector and non-profit organizations • The park and recreation agency is the main public agency responsible for the provision of these tourist attractions • Private tourism businesses are generally limited to providing integral support services (e.g. hotels, transportation) • Economic impact studies explicate the financial return that attractions provide for residents on the tax dollars 'invested'
Deriving Economic Benefits from Trees	<ul style="list-style-type: none"> • Trees remove toxic chemicals from the air • Trees reduce the need for pollution-controlling devices • Trees provide shade to buildings and homes, thus decreasing the consumption of energy used to operate air conditioners • Roots and canopies of trees absorb significant volumes of rainwater • Trees reduce the need for flood-control measures

TABLE 2 Continued

Stimulating Urban Rejuvenation	<ul style="list-style-type: none"> • Recreation amenities can resurrect a previously blighted area • A mix of use patterns is beneficial to the vitality of a downtown area
Expanding Retail Equipment Sales	<ul style="list-style-type: none"> • Public park and recreation agency provides a majority of recreation facilities in a community • Presence of facilities creates participation opportunities • Availability of opportunities creates demand for equipment • Absence of facilities inhibits the growth potential of manufacturers and retailers of recreational equipment (job loss, tax \$ lost, community recession, etc.)
Preventing Youth Crime	<ul style="list-style-type: none"> • Youths who participate in recreation have lower recidivism rates • Participation in recreation leads to a decline in delinquency • Youths participating in recreation experience increased self-esteem and a decreased sense of hopelessness • Recreation offers a preventative, rather than reactive, solution to youth crime • Recreation programs are substantially less expensive than policing and/or incarceration • Recreation programs reach delinquent youths who are not caught and prosecuted by the justice system • Youths are naturally drawn to recreation programs • Recreation personnel are experienced in establishing empathetic relationships with clients • Recreation programs are a positive way to fill youths' free time
Improving Community Health	<ul style="list-style-type: none"> • Recreation provides opportunities for citizens to increase physical fitness • Recreation provides opportunities for citizens to reduce stress • Recreation provides opportunities for citizens to reduce substance abuse • Recreation provides opportunities for citizens to meditate • Recreation provides opportunities for citizens to lessen social isolation • Parks and open space improve air quality • Recreation is a proactive approach to health care • Recreation is substantially less expensive than health care
Addressing Under- employment	<ul style="list-style-type: none"> • Participation in parks and recreation programs fulfills needs similar to those garnered from employment (e.g. social contact, sense of purpose, self-esteem, self-confidence, etc.) • Recreation programs can build skills for the workforce • Recreation provides a positive way to fill underemployed persons' free time

Importance-Performance Analysis

To articulate and implement an effective repositioning strategy, agencies need to empirically identify priority issues in a community and stakeholders' perceptions of the strengths and weaknesses of park and recreation services in addressing these issues. Identifying the proximity of alignment between the priority issues and the performance of park and recreation services in addressing them will provide the foundational knowledge needed to formulate a repositioning strategy, and provide the justification for increased allocations of tax dollars. A useful tool for presenting this foundational knowledge is importance-performance analysis (IPA) (Martilla & James, 1977), which has been applied in a variety of contexts including health care marketing (Dolinsky, 1991; Dolinsky & Caputo, 1991; Hawes & Rao, 1985), service quality measurement (Ennew, Reed & Binks, 1993), and education evaluation (Alberty & Mihalik, 1989; Ortinau, Bush, Bush & Twible, 1989).

IPA asks respondents to rate the importance of service attributes and then to rate the organization's performance in delivering services that address each of these attributes. The mean importance and performance ratings are then plotted on a two-dimensional grid. The result is four quadrants that suggest different management actions relating to the allocation of resources (Figure 1). The quadrant with high importance and high performance ratings, labeled 'keep up the good work', suggests current resource levels on service attributes in this section should be maintained. For those attributes that fall in the low importance, high performance quadrant, titled 'possible overkill',

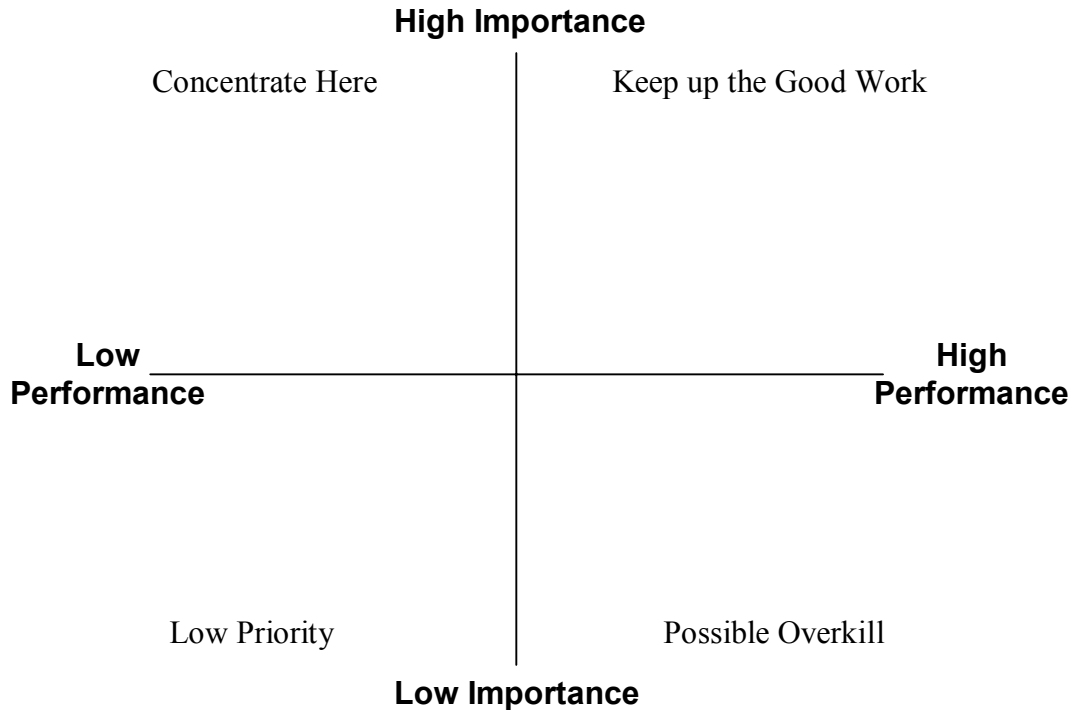


Figure 1: Importance-Performance Analysis Action Grid

resources may be retrenched. Service attributes in the low importance, low performance quadrant, are designated 'low priority' and merit little attention. Finally, when attributes are perceived as being high in importance but an agency's performance in providing them is substandard, the suggested management strategy is to 'concentrate here'.

Most empirically-based attempts at positioning in the marketing literature generally use multi-dimensional scaling (MDS), which facilitates comparison of different brands within a product category (Batra, Myers & Aaker, 1996; Bigne, Vila-Lopez & Kuster-Boluda, 2000; Carroll & Green, 1997; Cooper, 1983; Doyle, 1975; Green, Carmone Jr. & Smith, 1989; Van Auken & Lonial, 1991). However, in the

context of parks and recreation, IPA provides a simpler and more descriptive alternative to MDS. In an example of MDS, attributes such as clean water, friendly staff, sanitary changing rooms, and value for money would form the multiple dimensions along which competing aquatic facilities could be compared. However, in the context of park and recreation repositioning, only two dimensions – importance of the issue and performance of the agency – are needed to facilitate comparisons of community issues that could form the basis of an agency's position. Another limitation of MDS is that it plots only perceptions of performance, whereas IPA provides agency managers with an assessment of which community issues are most important, along with perceptions of the extent to which community organizations contribute to addressing those issues.

IPA has been applied in multiple recreation contexts. It was first introduced in a study evaluating runners' satisfaction with attributes of an organized race (Guadagnolo, 1985). Since then, IPA has been used to evaluate seniors' programs (Siegenthaler, 1994), state park cabins (Hollenshort, Olson & Fortney, 1992), visitor centers (Mengak, Dottavio & O'Leary, 1986), the design of a sports complex (Bartlett & Einert, 1992), satisfaction in outdoor recreation settings (Tarrant & Smith, 2002), communication effectiveness within an agency (Richardson, 1987), recreation employees' motivation and satisfaction with job-related tasks (Havitz, Twynam & DeLorenzo, 1991; Williams & Neal, 1993), and the efficacy of park impact fees (Fletcher, Kaiser & Groger, 1992).

The Use of IPA in Repositioning Public Park and Recreation Services

There are three contexts in which IPA data may inform park and recreation repositioning decisions: i) the importance placed on various community issues by residents and elected officials, and an agency's performance in resolving these issues; ii) an agency's performance in addressing relevant community issues *relative to other public agencies* that are competing for tax dollars; and iii) an agency's performance on selected community issues *relative to suppliers of similar services in the private and not-for-profit sectors*.

First, the agency should assess the importance stakeholders place on various community issues and their perceptions of the agency's contributions toward addressing those issues. However, this first IPA alone is insufficient for repositioning purposes because it does not consider the agency's "competitors". A second IPA must include stakeholders' perceptions of other public agencies and their perceptions of private and not-for-profit suppliers of similar services to those provided by the park and recreation agency. Elected officials have only a limited number of tax dollars to divide among numerous public agencies. Further, they are unlikely to support duplication of efforts in the community or to promote competition with private or not-for-profit suppliers of similar services. Consequently, legislators are likely to engage intuitively in this type of comparative assessment when allocating public funds. Because it is unreasonable to expect an agency to adopt a single position across its entire eclectic array of services, the second IPA should address *multiple* important community issues which were identified as such in the first IPA. The competitors included in this second IPA will depend on the

community issues identified as important, and differential repositioning strategies will be required for each issue depending on the agency's performance relative to pertinent competitors.

Considerations in Using IPA for Repositioning

There are at least four issues to resolve when using IPA for repositioning: 1) the wording of the rubric prefacing importance statements; 2) the placement of the IP grid axes; 3) including estimates of variance in the placing of attributes; and 4) interpreting the IP grid recommendations.

Wording of the Importance Item Rubric

A primary issue in IPA is the definition and wording of importance statements because importance has multiple meanings to people (Jaccard, Brinberg & Ackerman, 1986; Lego & Shaw, 1992). An agency has several options in selecting a rubric to precede a set of importance items. The first possibility is a phrase such as "Park and recreation services are important because they help to ... (prevent youth crime, etc.)" with an agree/disagree scale response format. This rubric assumes that respondents are knowledgeable about the potential social, economic and environmental contributions that park and recreation services can make towards given community issues. By using this rubric, respondents are agreeing or disagreeing with the importance of alternate roles of park and recreation services, rather than rating the importance of the community issue.

An alternative rubric could be: “The park and recreation department should focus on ... (preventing youth crime, etc.)”. Although this phrase better addresses respondents’ expectations of an agency, like the first rubric it assumes respondents understand the potentially wide-ranging contributions of park and recreation services. Respondents are likely to indicate support only for initiatives that reflect benefits they associate with parks and recreation (e.g. improving community health, preventing youth crime, etc.). They are unlikely to support initiatives focusing on issues which, because of their limited knowledge base, they perceive to be outside the capacity of a park and recreation department to impact (e.g. attracting businesses, stimulating urban rejuvenation, etc.). This type of expectations statement is likely to be appropriate only when respondents possess comprehensive knowledge about the array of potential contributions an agency could make.

A third importance rubric which is likely best for identifying the issues that are most important to stakeholders is: “In community X, preventing youth crime is ...”. The response categories would range from “not at all important” to “very important” on a five or seven point scale. No mention of the park and recreation department’s importance is made or implied in this rubric, which focuses exclusively on the importance of issues to the community. The items included in the two iterative scales must be issues which the park and recreation department can impact. There is no value in asking about the importance placed on a community issue if it is one that an agency cannot feasibly develop a position around. The performance items will then measure

perceptions of the park and recreation department's performance in contributing to these same issues.

This latter method enables an agency to ascertain which community issues should be given priority. Because many of the items included in the scale are issues not traditionally associated with parks and recreation, it is likely that stakeholders' ratings of the agency's performance on certain items will be fairly low. However, this latter rubric provides a lucid depiction of the importance citizens and elected officials attribute to various community issues, without requiring them to understand how parks and recreation fit into the equation. The burden is then on the agency to convince these stakeholders, using real, psychological, and competitive repositioning, of the merit of its potential for effectively addressing the important issues.

Appropriate selection of the wording for the importance statements represents a crucial step because accurately gauging which issues are most important is more critical than accurately assessing performance. If the agency is positioning around issues that are low in importance, the management strategy suggested by the IP grid, regardless of performance, is either 'low priority' or 'possible overkill'. Both of these suggest a reduction, rather than an increase, in resources is the appropriate legislative action. In contrast, if the agency is addressing high importance issues, it should receive greater allocations of resources, again regardless of performance, because the IP grid suggests a management strategy of either 'concentrate here' or 'keep up the good work'. Consequently, accurate measurement of which community issues are most important is vital to successful repositioning.

Placement of the Grid Axes

A second issue to be addressed when undertaking IPA is the placement of the grid axes, or “crosshairs” as they are commonly termed. Martilla and James (1977) identified this as a primary consideration and it remains an unresolved debate. Placement of the axes is critical to IPA because they determine the point of division between the various marketing strategies.

One option is to use the mean value of the scales being used to rate the importance and performance items. For example, if 1 to 7 point scales were used, then 4 would be where the axes would intersect. This approach is appropriate when comparing results to some absolute, pre-selected level of importance or performance (Martilla & James, 1977; Tarrant & Smith, 2002). However, if an absence of high or low ratings exists, a second option is to use the means of respondents’ actual importance and performance ratings. This approach identifies relative, rather than absolute, perceptions of importance and performance (Martilla & James, 1977).

Martilla and James (1977) noted, “positioning the vertical and horizontal axes on the grid is a matter of judgment” (p. 79). For the purposes of repositioning IPAs, it seems that the importance and performance crosshairs should be located at the grand mean of the importance and performance ratings, respectively. For example, if the five community issues examined exhibited a mean importance score of 5.7 on a 7-point scale, this is the location where the performance axis would intersect the vertical axis. Similarly, if performance scores on the same five issues had a grand mean of 3.5, the vertical axis would intersect the horizontal axis to the left of the midpoint of the scale.

In the context of park and recreation repositioning, comparisons are being drawn between community issues plotted on the grid, as opposed to comparing their importance and performance to some absolute criterion. Further, it seems likely that importance ratings for all of the community issues will be quite high, while ratings of the park and recreation agency's performance may be skewed towards the low end of the scale. Both of these characteristics of repositioning IPAs suggest that using the grand means of stakeholders' importance and performance ratings is the most appropriate way to locate the crosshairs on the grid.

Including Estimates of Variance

A third issue to be addressed in IPA was discussed by Tarrant and Smith (2002) who used a modified IPA framework that included a measure of standard error. In most applications of IPA, only the means of respondents' importance and performance ratings are used to locate each item on the grid. Items located within the same quadrant are assigned the same resource allocation strategy, regardless of their degree of proximity to one or both axes. Tarrant and Smith (2002) caution, "the question of validity arises because users of the current I-P framework may be reporting findings for differences falling close to the axes that do not truly exist" (p. 71). To ensure that the item belonged in the suggested quadrant, in addition to plotting the mean, they plotted a 95% confidence interval in the direction of both the importance and performance axes. The result was a crosspoint for each plotted item that could potentially overlap one or both axes, and, thus, move into a different quadrant.

The authors reported that many points that would have been classified into a distinct quadrant actually overlapped one or both axes. Because the size of the confidence interval is determined, in large part, by the standard error of the item ratings, the height and width of the crosspoint are highly sensitive to sample size. Thus, as sample size decreases, the number of items overlapping an axis is likely to increase. For a sample size of 400, for instance, Tarrant and Smith (2002) reported that an average of 42% of items overlapped one or both axes when both the mean and crosspoint were plotted on the I-P grid. A potential solution is that additional crosshairs could be built into the IP grid, creating more than four classification quadrants (Oh, 2001). Consequently, more specific marketing suggestions could be identified by the increased number of quadrants (Dolinsky & Caputo, 1991).

The idea of crosspoints is integral to repositioning park and recreation services. When apportioning scarce resources to or from a repositioning strategy, an agency must be confident that the issue falls distinctly within a particular quadrant of the I-P grid, and including estimates of variance is likely to enhance that level of confidence.

Interpreting the Grid Recommendations

A final IPA concern is the interpretation of points on the IP grid. The management strategy suggested for high importance, low performance items is 'concentrate here', while the strategy suggested for high importance, high performance items is 'keep up the good work'. Many authors have advocated that priority should be given to attributes of the service (or community issues in the context of this paper) that

fall in the ‘concentrate here’ quadrant (Bartlett & Einert, 1992; Martilla & James, 1977; Tarrant & Smith, 2002). However, because public agencies are likely to have only fixed resources, using this strategy implies that resources may have to be withdrawn from services related to other community issues. This may result in deterioration of the agency’s performance on issues falling in the ‘keep up the good work’ quadrant.

The resolution of this conundrum may be to afford most attention to the community issue(s) identified as most important, irrespective of whether they fall in the ‘concentrate here’ or the ‘keep up the good work’ quadrant. If the park and recreation agency is already perceived as performing well on some of these important issues (‘keep up the good work’) but is seeking increased tax allocations to enhance its contributions, then psychological and/or competitive positioning are likely to be effective. These strategies could highlight the agency’s contributions *relative to those of its competitors*. If the agency’s performance on the important issues is perceived as deficient (‘concentrate here’), and the deficiency reflects a lack of programs with potential to effectively address that issue, then substantive real repositioning is likely to be required. In doing so, however, resources devoted to ‘keep up the good work’ issues should not automatically be reallocated to issues classified in the ‘concentrate here’ category. Such action may overlook the community concern that is truly most important, and may also necessitate shifting significant amounts of resources away from other agency efforts.

CHAPTER III

METHODOLOGY

The previous chapters described ten issues identified in the literature that could form the basis for a park and recreation agency's repositioning efforts. This chapter outlines the steps undertaken in developing a scale to measure stakeholders' ratings of the importance of these issues and their perceptions of the agency's performance in these areas. The chapter is divided into sections that address development of the initial instrument, pretest of the instrument, and establishment of its dimensionality, reliability, and validity.

Development of the scale for repositioning park and recreation services followed the multi-step procedure advocated by Churchill (1979) for developing measures of marketing constructs (Figure 2). This process has been employed effectively in related fields such as marketing (Parasuraman, Zeithaml & Berry, 1988; Zaichowsky, 1985; Petrick, 2002) and tourism (Lee & Crompton, 1992).

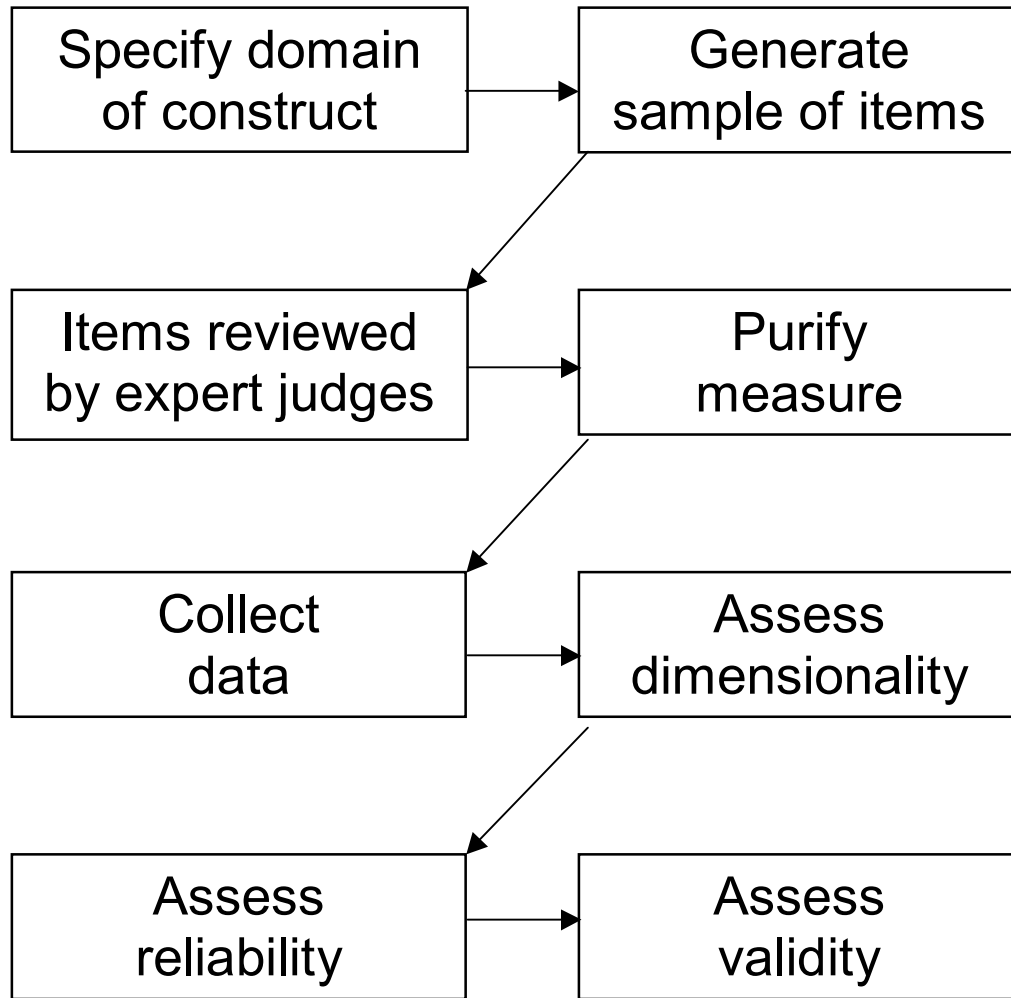


Figure 2: Scale Development Process

Item Generation and Initial Content Validity Check

An initial pool of 55 items was generated from reviewing the scholarly and popular literature related to the aforementioned ten repositioning dimensions (see Chapter II for a review of this literature). All of these 55 items included in the initial pool were issues that a park and recreation agency could potentially contribute towards. Prior to administering the items in the form of a scale to any sample of respondents, a

group of eight expert judges was used to refine and edit the initial items for content validity (Zaichowsky, 1985; Lee & Crompton, 1992; Petrick, 2002). These judges consisted of faculty and graduate students who were thought to be knowledgeable with regards to community recreation. Appendix A presents the instructions given to the expert judges and the 55 items that were generated initially. Eight ‘placebo’ items (# 5, 11, 22, 31, 41, 51, 57, 63) thought to be irrelevant to park and recreation repositioning were interspersed among the 55 relevant items.

Specifically, these expert judges were asked to complete three tasks. First, to assess the relevance of each item by rating it as “clearly relevant”, “somewhat relevant”, or “not relevant” to a park and recreation agency’s repositioning efforts. Second, each judge was asked to assign each item to one of the ten positions that were used as a framework to develop the items. Finally, judges were asked to: “a) edit the items to improve their clarity, readability, and content, b) identify any items which they believed may be objectionable to respondents, and c) offer any suggestions they felt may improve the study” (Petrick, 2002).

A series of decision rules was used to filter items to be included in the pretest scale. Primarily, if fewer than seven of the eight judges rated an item as either “clearly relevant” or “somewhat relevant”, it was discarded (this is equivalent to excluding an item based on more than one judge rating the item as “not relevant”). Items were also amended for clarity and acceptability to respondents as suggested by at least one judge and as agreed by the researcher.

Appendix A shows the relevance ratings given by the judges for each item. In total, 45 of the 55 initial items were accepted based on the aforementioned criterion, some with amendments to their wording. Wording amendments to items are indicated in Appendix A and revised in the pretest scale in Appendix B. Six new items were suggested by the judges and accepted by the researcher for use in the pretest scale, and these are designated as such in Appendix B.

The judges' assignments of each initial item to a repositioning dimension are also shown in Appendix A. The dimension listed is the one to which the item was assigned by a majority of the judges. Although many judges expressed difficulty in assigning relevant items to a single dimension, only four items (#19, 27, 43, 47) that were accepted as relevant were assigned by a majority of judges to a different dimension than the item was created to represent. However, these four items were assigned to their intended dimension by a minority of judges, and were still included in the pretest scale to examine how they fit with the rest of the variables.

In total, 51 items passed this initial content validity check stage and were carried forth to the pretest stage of the study. Based on the suggestion of multiple judges, the "deriving benefits from trees" dimension was expanded to embrace a broader mandate of "environmental stewardship". Indeed, research has shown that parks and recreation can make substantial environmental contributions to a community (American Forestry Association, 1992; American Forests, 1998; 1997; GHASP, 1999; McPherson et al., 2001; 2000; 1999; Shafer, Scott & Mixon, 2002). Accordingly, two of the new items (#22 and #47 in Appendix B) reflected this broader focus. None of the items a priori

conceptualized to belong to the “expanding retail sales of equipment” dimension were accepted by the judges as relevant to an agency’s repositioning, so this dimension was removed from the scale. Comments made by the judges’ on the items are also included in the latter section of Appendix A.

Pretest of Instrument

To examine the dimensionality and internal consistency of the 51 scale items, the instrument (Appendix B) was administered to a convenience sample of 281 undergraduate students. The sample size was guided by the general guideline that there should be at least five times as many respondents as there are items to be factor analyzed (Hair, Anderson, Tatham & Black, 1998). Ideally, the instrument would have been tested within the population to whom it was to be eventually administered. However, temporal and fiscal constraints prevented mailing the instrument to citizens or elected officials for the pretest. Nonetheless, using undergraduate students can provide a rigorous evaluation of the scale because use of such a homogeneous sample reduces the variance contributed by intervening variables (Calder, Phillips & Tybout, 1982; Mitchell & Bates, 1998). Therefore, any relationships that are observed can be attributed with greater confidence to the scale rather than extraneous factors.

To provide a context for rating the items, participants were asked to complete the instrument in relation to the importance of the issues in their hometown. Principal components factor analysis with oblique rotation was undertaken to initially examine the dimensionality of the scale. Although items were developed using the ten economic

issues as a framework, it was thought that exploratory factor analysis was more appropriate for the initial development of the scale because the factors were heretofore unverified. Oblique rotation was used since all the repositioning dimensions related to economic contributions, so it was expected that they would be intercorrelated.

From the rotation, ten factors emerged with eigenvalues greater than 1.0 (Table 3). Factors 1 through 9 accounted for the dimensions of enhancing real estate values, attracting tourists, addressing the needs of the underemployed, attracting and retaining retirees, preventing youth crime, environmental stewardship, attracting and retaining businesses, improving community health, and stimulating urban rejuvenation, respectively. The tenth factor was comprised of an unrelated set of saliently-loading items and consequently was not labeled. In Table 3, the retained items are grouped by factor, bolded, and underlined, while the discarded items are found at the bottom of the table.

Items were retained if they exhibited salient loadings on a factor with which they were conceptually consistent. For this initial test, a salient loading was defined as a minimum of .30 (Churchill & Iacobucci, 2002). Eight items (#5, 25, 27, 32, 35, 37, 42, 46) were dropped because they did not meet this prerequisite. Item 36 loading saliently on the attracting and retaining retirees dimension, but was dropped because it was considered redundant with item 14, which also loaded saliently on this dimension. Item 47, “reducing summer temperatures in urban areas” was dropped due to cross loadings on three different factors. Item 44, “maintaining quiet parks in every neighborhood”, was one of six items representing the enhancing real estate values dimension. In order to

TABLE 3
Factor Loadings for Pretest Scale Items Grouped by Factor

Item No.	Item	1	2	3	4	5	6	7	8	9	10
38	ensuring that parks are easily accessible to residents from their homes	<u>.71</u>	.08	-.06	-.13	-.03	.07	.06	.08	-.07	-.02
3	keeping neighborhood parks well-maintained requiring that developers provide park space in their developments	<u>.62</u>	.05	-.07	.06	.18	-.01	.12	.14	.06	.12
50	providing trails so that people can walk or bike to work	<u>.53</u>	.07	.14	-.06	.02	.08	.23	.16	.14	.03
13	ensuring there is open green space near every home	<u>.30</u>	.15	-.11	-.17	-.08	.22	.05	.20	-.20	.16
8	developing attractions that draw people from other cities	<u>.25</u>	.17	-.29	-.28	.15	.41	-.14	.10	-.09	.21
6	getting tourists to spend money in the community	.03	<u>.79</u>	-.08	.06	.14	.00	.03	-.09	.06	.06
51	hosting events that bring tourism revenue to local businesses	.06	<u>.78</u>	.05	-.01	-.13	-.04	.08	-.02	.01	-.16
12	developing travel packages for visitors to the city	-.12	<u>.78</u>	.01	.06	-.06	.09	.11	.19	-.13	-.05
39	ensuring that the heart of the city is prosperous	.08	<u>.69</u>	.18	-.08	-.10	.05	.03	-.03	.08	-.03
18	providing programs to lower income people at a reduced or no charge	.11	<u>.36</u>	-.15	-.10	.10	.14	.30	-.08	-.09	.21
21	offering programs that meet the needs of people who are unemployed	-.17	.04	<u>.80</u>	-.04	.03	.06	-.03	.02	-.05	.03
49	supporting and working with community welfare and employment agencies	.10	-.02	<u>.77</u>	-.13	.03	-.05	.04	.01	.05	.03
43	helping adults build skills that can be used in the workforce is	.03	.10	<u>.62</u>	-.12	.05	.01	.00	.16	-.09	-.10
29	encouraging senior citizens to become involved with the community	-.09	.15	<u>.37</u>	.00	.49	-.02	.04	.17	.11	-.08
30	providing amenities in the community that older adults want	-.01	.04	.04	<u>-.84</u>	.07	-.15	.00	.02	-.02	-.01
26	designing programs specifically for older adults	-.11	-.05	.00	<u>-.80</u>	-.03	.13	.17	-.03	.05	-.02
40		.02	.04	.16	<u>-.80</u>	-.07	-.05	-.06	.00	.02	-.09

TABLE 3 Continued

Item No.	Item	1	2	3	4	5	6	7	8	9	10
14	providing programs at which retired people can socialize together	.07	-.04	-.01	<u>-.79</u>	.01	.10	-.05	-.01	-.10	.05
48	encouraging wealthy retirees to settle in this community	.07	.08	.03	<u>-.32</u>	-.13	-.24	.60	.08	.13	.14
4	helping youth to develop into productive citizens	.11	-.07	-.14	.03	<u>.79</u>	-.03	.10	.06	.03	-.13
9	reducing the rate of repeat offenses by young offenders	-.08	.04	.01	.00	<u>.67</u>	.24	.12	-.08	-.02	.12
23	increasing the self-esteem of teenagers in the community	.19	-.03	.22	-.12	<u>.59</u>	.05	-.11	-.01	-.14	.09
16	providing positive role models for adolescents	.20	-.07	.11	-.13	<u>.51</u>	-.04	.13	.04	-.40	-.18
34	providing kids with positive ways to fill their free time	.16	-.12	.10	-.26	<u>.44</u>	.02	.07	.06	-.06	-.23
10	preventing erosion and flooding	.00	.11	-.06	-.03	<u>.08</u>	<u>.69</u>	-.11	.09	-.08	-.02
22	protecting environmentally sensitive areas	.18	.08	.13	-.01	.03	<u>.58</u>	.03	.11	-.14	-.07
24	improving the quality of groundwater	-.19	-.04	.07	-.07	.20	<u>.57</u>	.16	.06	.15	-.27
15	reducing the amount of energy consumed in residential areas	.20	.07	.25	-.12	.05	<u>.47</u>	-.08	.08	.10	.03
2	improving air quality	.25	.02	.30	.05	.09	<u>.35</u>	.07	.21	.23	.17
33	reducing the amount of money spent on controlling pollution	.19	.02	.26	.11	-.13	<u>.34</u>	.04	-.10	.13	-.21
20	making executives and professionals want to live in this community	.07	.17	-.01	.08	.11	.11	<u>.69</u>	-.01	-.04	.02
31	convincing businesses to locate in this community	.02	.27	.08	.08	.09	-.11	<u>.66</u>	.17	.00	-.02
19	using landscaping to beautify public areas	.32	.03	-.11	-.05	.19	.09	<u>.49</u>	-.15	-.21	-.21
11	educating residents on the benefits of physical activity	-.01	.07	.12	-.01	.00	.02	-.09	<u>.82</u>	-.11	.12
1	providing opportunities for residents to increase their physical fitness	.01	-.06	-.03	.09	-.11	.01	.10	<u>.80</u>	.09	-.05
45	helping people build healthy lifestyles	.32	.01	.10	-.05	.14	.05	-.13	<u>.53</u>	-.04	-.18

TABLE 3 Continued

Item No.	Item	1	2	3	4	5	6	7	8	9	10
17	supporting and working with community health organizations	.03	-.01	.25	-.22	.09	.05	.35	<u>.14</u>	-.42	-.09
41	revitalizing the community's downtown area	.19	.23	-.06	-.05	.08	-.06	.04	.08	<u>.39</u>	-.45
28	developing new facilities in the core of the city	.00	.22	-.19	-.13	.15	-.07	.30	.30	<u>.36</u>	-.04
7	building facilities in rundown areas	.00	.29	.13	-.11	.48	-.17	-.18	.05	<u>.35</u>	.02
35	offering opportunities for residents to reduce stress	.25	.15	.10	-.25	.18	.04	-.13	.22	.08	-.31
46	facilitating opportunities for families to recreate together	.39	-.06	.13	-.19	.11	.05	.07	.28	-.07	-.16
37	increasing the quality of life in the community	.28	-.15	-.03	-.14	.20	.07	.11	.30	.01	-.37
27	creating open space that increases nearby property values	.06	.02	-.26	-.30	.03	.35	.26	.20	.04	-.02
47	reducing summer temperatures in urban areas	.32	-.08	.21	-.05	-.11	.31	.23	-.05	.36	.02
32	preserving sites of historical significance	-.16	.24	.03	-.08	-.08	.09	-.07	-.03	-.14	-.69
25	preventing illness in the community	-.26	-.07	.10	-.17	.23	.37	.14	.28	.19	-.25
44	maintaining quiet parks in every neighborhood	.65	.09	-.01	-.15	.03	.12	.06	.10	-.03	-.01
5	assisting adults who are in unsatisfying jobs to increase their life satisfaction	-.04	-.03	.12	-.39	.34	.20	-.03	.01	.18	.05
36	providing adults with a way to socialize with other adults	.33	.03	.08	-.50	.07	-.10	-.10	.02	.04	-.30
42	maintaining park areas within business districts	.50	.24	.01	-.02	.11	-.01	.12	.12	.14	-.19
	coefficient alpha	.81	.83	.78	.81	.82	.79	.76	.72	.68	n/a
	eigenvalue	16.65	3.50	2.49	2.13	1.81	1.60	1.35	1.22	1.19	1.07
	cumulative percentage of variance	32.66	39.53	44.41	48.60	52.15	55.28	57.92	60.31	62.64	64.74

Key to Factor Labels in Table 3

- 1 – enhancing real estate values
2 – attracting tourists
3 – addressing the needs of the underemployed
4 – attracting and retaining retirees
5 – preventing youth crime
6 – environmental stewardship
7 – attracting and retaining businesses
8 – improving community health
9 – stimulating urban rejuvenation
10 – n/a

make the dimension more parsimonious, this item was removed because the researchers deemed that this aspect of the construct was already adequately covered by the remaining items. A total of six items were retained for the environmental stewardship factor, however, because each item captured a distinct facet of the dimension.

There were certain items whose removal or retention was less straightforward. Both item 13, “providing trails so that people can walk or bike to work”, and item 18, “ensuring that the heart of the city is prosperous”, did not load saliently on their intended factors (attracting businesses and stimulating urban rejuvenation, respectively), but did so on another factor with which they were conceptually consistent. Consequently, item 13 was retained as part of the enhancing real estate values dimension and item 18 as part of the attracting tourists dimension. Item 17, “supporting and working with community health organizations”, was retained (despite a relatively insignificant loading on its intended factor) because this item was considered integral to repositioning around the issue of improving community health. For the same reason, item 8, “ensuring there is open green space near every home”, was retained despite a loading of only .25. Finally, items 7, 29, and 48 all exhibited salient loadings on their intended factor, but also showed salient loadings on one other factor. Nevertheless, each of these items was retained because they all demonstrated a strong relationship with other conceptually consistent items. In general, decisions to remove items were made cautiously at the pretest stage of instrument development. The population with which the pretest was conducted was different than that which would respond to the scale in future, practical applications. As well, it was considered more prudent to retain a borderline item and

submit it to further tests than it was to dispose of it prematurely. Therefore, given that each of the retained items loaded saliently on a factor with which they were conceptually consistent, and that coefficient alpha for each dimension was all fairly high (see below), the set of retained items was considered acceptable to carry forth to the instrument validation phase.

In summary, 40 items were retained for inclusion in the final instrument to be mailed to a sample of community residents. After the aforementioned decisions, the nine dimensions of enhancing real estate values, attracting tourists, addressing underemployment, attracting and retaining retirees, preventing youth crime, attracting and retaining businesses, environmental stewardship, improving community health, and stimulating urban rejuvenation were represented by 5, 5, 4, 5, 5, 3, 6, 4, and 3 items, respectively. Coefficient alphas for the nine factors ranged from .68 to .83. With the exception of the stimulating urban rejuvenation dimension, all of the alphas exceeded the recommended reliability standard of .70 (Nunnally & Bernstein, 1994). Moreover, the deletion of any one item from any factor resulted in only a minimal improvement in its coefficient alpha.

Instrument Validation

Sampling and Data Collection Procedures

The instrument was validated by administering it to a sample of community residents, the population for whom the scale was designed. The chosen study setting was the City of Grapevine, a municipality of approximately 30,000 people located on the

northwest edge of Dallas, Texas. The City of Grapevine Parks and Recreation Department operates and maintains a community activities center, a senior activities center, two swimming pools, and over 700 acres of parkland, and these facilities and the department's programs are managed through eight divisions: Administration, Senior Citizens, Parks, Recreation, Aquatics, Athletics, Recreation Programming, and Community Activities Center (City of Grapevine website). With the cooperation of the Parks and Recreation Department, 11,303 homes and 5,891 apartments were identified in the 76051 zip code which covers all of Grapevine. A sample of 900 respondents was systematically drawn from this sampling frame using a sampling interval of every 19th dwelling. It was hoped that a response rate of approximately 50% would yield about 400 useable questionnaires, sufficient to conduct most statistical tests, including factor analyses (Hair, Anderson, Tatham & Black, 1998).

A modified Dillman technique (Dillman, 2000) was used to collect data from these households. Initially, each of these sample households was mailed a survey package comprised of a personalized cover letter (Appendix C) signed by the Director of the City of Grapevine Parks and Recreation Department and the questionnaire which is described below (Appendix D). A self-addressed, stamped envelope was provided in which to return the questionnaire. Three days after the initial mailing, each home was mailed a reminder postcard (Appendix E) asking them to complete and return the previously mailed questionnaire and thanking them if they had already done so. Two weeks after the initial mailing, an amended cover letter (Appendix F) and the questionnaire were mailed to those who had not yet responded. A final mailing of

another revised cover letter (Appendix G) with the questionnaire was undertaken two weeks after the second full mailing. As questionnaires were returned, participants were tracked to avoid unnecessary future mailings to those who had already responded.

A total of 339 questionnaires were returned out of the 900 that were originally mailed. Of these, 331 questionnaires were useable. Further, 66 of the questionnaires were returned by the postal service as undeliverable. Excluding these non-deliverables resulted in an effective response rate of 40.1%. This is somewhat lower than the 55% response rate that Crompton and Tian-Cole (1999) suggest might be expected from samples of general populations whose interest in parks and recreation is unknown. This outcome may be attributable to the substantial length of the questionnaire, which was required for the initial purposes of developing and validating the scale. Despite the lower-than-expected response rate, the potential for non-response bias was not evaluated because the purpose of the study was to demonstrate the instrument's internal dimensionality, reliability and validity, rather than to provide results that were representative of a particular population.

Testing the Scale's Dimensionality

Four different tests were employed to assess the scale's dimensionality. First, confirmatory factor analysis (CFA) was performed on both the importance and performance scale data obtained from Grapevine residents. For these CFAs, items were assigned to factors based on the conclusions obtained from the pretest data, and the degree to which the specified models fit the data was observed. Second, the effect of

deleting an item on each importance and performance factor's coefficient alpha was examined. Third, correlations between each factor's grand mean and the respective one-item importance or performance rating (sections A and C in Appendix D) was investigated. This method of assessing construct validity also provided information about whether the content of a dimension should be altered to make it more representative of the underlying dimension. Finally, exploratory factor analyses were undertaken on the importance and performance data to further investigate the scale's dimensionality.

Testing the Scale's Reliability

Split-half reliability measures the degree of consistency across items within a scale (Parasuraman, 1991). After the data were collected, the items for each dimension were randomly split into two groups. The importance and performance scores obtained for each dimension from the first group were correlated to the respective scores from the second group in order to assess this form of reliability (DeVellis, 1991).

Testing the Scale's Validity

Content validity (also called face validity) indicates the adequacy with which the domain of a characteristic is captured by the measure (Churchill & Iacobucci, 2002). Alternatively stated, content validity is the extent to which the content of a measurement scale seems to tap all relevant facets of an issue that can influence respondents' attitudes (Parasuraman, 1991). Although content validity is mainly a matter of judgment (Parasuraman, 1991), it can be accomplished by formulating "a large collection of items

that broadly represent the variable” (Churchill & Iacobucci, 2002, p. 409) and by including items from all the relevant dimensions of the variable. Further, DeVellis (1991) suggests having colleagues familiar with the context of the study review the initial list of items and suggest content areas that have been omitted but which should be included. This latter step was accomplished through the use of the expert judges as described above.

Demonstrating construct validity involves determining what concept the instrument is in fact measuring (Churchill & Iacobucci, 2002). It “is directly concerned with the theoretical relationship of a variable (e.g. a score on some scale) to other variables” (DeVellis, 1991, p. 46). Construct validity was directly assessed by asking respondents to complete two scales (sections A and C in Appendix D) assessing the overall importance and performance that they attribute to each of the nine repositioning dimensions revealed in the pretest factor analysis. The importance or performance score for each of these one-item ratings was correlated to the grand mean of the respective importance or performance factor.

Further, the importance and performance that residents attribute to the agency’s economic, social, and environmental contributions was gauged using the constant sum approach (sections B and D in Appendix D). Respondents were asked to divide 100 points between these three positions based on how important they perceived each to be, and how they felt the park and recreation agency is performing in each area. Similar to sections A and C described above, these sections were included to provide additional overall indications of residents’ importance and performance ratings that could validate

the results obtained from the scale. For example, had the dimensionality tests produced a factor that represented ‘social issues’, this dimension’s importance could have been correlated to the points allocated to “social concerns” in section A as a measure of construct validity.

Positioning Relative to Competitors

One of the axioms of positioning described in Chapter II was that the agency’s position exists relative to those of its competitors. Accordingly, two additional sections were included on the questionnaire in order to demonstrate the utility of the scale for positioning the Grapevine Parks and Recreation Department relative to other public agencies. Respondents’ perceptions of the contribution of the Grapevine Convention and Visitors Bureau (CVB) were measured on the items pertaining to the attracting tourists dimension (section G in Appendix D). Similarly, perceptions of the Grapevine Police Department’s contribution to the preventing youth crime items were identified (section H in Appendix D). Combined with the importance attributed to these dimensions in section E of the instrument, the performance of the Parks and Recreation Department, the CVB, and the Police Department were plotted on an I-P grid. Subsequently, repositioning strategies for the Parks and Recreation Department were identified.

CHAPTER IV

RESULTS

This chapter describes the results of the tests undertaken on the data received from City of Grapevine residents. Characteristics of the sample are initially described, followed by the tests to establish the scale's dimensionality, validity and reliability.

Residents Sample Profile

The 331 useable questionnaires that were returned from Grapevine residents were evenly divided among males and females (Table 4), and respondents' ages ranged from 22 to 85 years with an average age of 46.6 years (Table 5). Respondents had lived in Grapevine between 0.5 and 75 years with a mean of 11.0 years lived in the city (Table 6).

TABLE 4
Gender of Respondents

Gender	N	Percent	Cumulative Percent
Male	167	50.5%	50.5%
Female	163	49.2%	99.7%
Not specified	1	0.3%	100.0%
Total	331	100.0%	

TABLE 5
Age of Respondents

Age	N	Percent	Cumulative Percent
60-85	38	11.5%	11.7%
50-59	75	22.7%	34.2%
40-49	128	38.7%	72.9%
30-39	67	20.2%	93.1%
22-29	18	5.4%	98.5%
Not specified	5	1.5%	100.0%
Total	331	100.0%	

TABLE 6
Number of Years Lived in Grapevine by Respondents

Years Lived	N	Percent	Cumulative Percent
0-5	118	35.7%	35.7%
5.5-10	82	24.8%	60.5%
10.5-15	61	18.4%	78.9%
15.5+	69	20.8%	99.7%
Not specified	1	0.3%	100.0%
Total	331	100.0%	

Testing the Scale's Dimensionality

The pretest of the scale described in Chapter Three produced a set of 40 items representing nine factors. In analyzing the responses of residents, the dimensionality and stability of the scale were assessed by four different methods. First, confirmatory factor analyses were undertaken on both the importance and performance scales. Second, coefficient alpha was calculated for each importance and performance factor,

and the effect on this reliability measure of deleting an item from a dimension was examined. Third, correlations between the factor grand means and the one-item importance or performance ratings for each dimension were calculated. Finally, exploratory factor analyses of the importance and performance data were performed to examine the scales' dimensionality without pre-imposed constraints. The results of each of these processes are described below.

Confirmatory Factor Analyses

Using the EQS structural equations modeling software, confirmatory factor analysis (CFA) was performed on both the importance and performance scales. In CFA, all items comprising a particular factor are hypothesized to have non-zero loadings on that factor and zero loadings on all other factors (Byrne, 1994). Identical nine-factor models were specified for the two scales, with the 40 items assigned to their respective factors as determined from the pretest of the instrument.

The first column in each of the importance and performance sections of Table 7 shows the CFA loading of each item on its respective factor. Only five importance items (#5, 38, 29, 26, 20) and only one performance item (#18) demonstrated a loading of less than .50. Further, the tests of the models indicated that, for both importance and performance, every item was significantly ($p < .01$) assisting in the prediction of its assigned factor.

However, despite these significant item loadings, both of the specified importance and performance models were not deemed good fits of the data. Following

recommendations by Hu and Bentler (1998), the indices used to determine model fit included the comparative fit index (CFI) (Bentler, 1989), the normed fit index (NFI) (Bentler & Bonett, 1980), and the root mean-square residual (RMSR) (Joreskog & Sorbom, 1981). For both the CFI and NFI, values can range from 0.0 to 1.0, with a value of 0.9 or greater indicating a good fit (Hu and Bentler, 1998). The RMSR should be less than 0.10 if the model is a good fit (Joreskog & Sorbom, 1981).

For the Grapevine residents' data, the importance factor model exhibited values for the CFI, NFI, and RMSR of .768, .818, and .171, respectively. The performance factor model exhibited CFI, NFI, and RMSR values of .752, .822, and .150, respectively. None of these indices met the minimum criteria for concluding that the models were good fits of the data. Therefore, although each item was significantly assisting in the prediction of its assigned factor, the data suggest that the items were not *uniquely* related to their assigned factors. Resultant Wald and Lagrange tests did not produce any conceptually sound suggestions for altering the content of any dimensions.

These results suggest that the scale's dimensionality may not yet be sufficiently developed to apply confirmatory factor analysis. Indeed, Byrne (1994) states:

Confirmatory factor analysis [CFA] of a measuring instrument is most appropriately applied to assessment measures that have been fully developed and have had their factor structures validated. In other words, application of CFA procedures to measures that are still in the initial stages of development represents a serious misuse of the technique (p. 74).

Given this reservation about the appropriateness of using CFA at this early stage, additional sources of information were investigated to assess the dimensionality of the residents sample data.

TABLE 7
Confirmatory Factor Analysis Loadings and Coefficient Alphas for Importance and Performance Factors

Item No.	Item	Importance			Performance		
		CFA Loading	Factor Alpha	Alpha if item deleted	CFA Loading	Factor Alpha	Alpha if item deleted
Attracting Tourists							
11	hosting events that bring tourism revenue to local businesses	.84	.88	.83	.84	.90	.86
41	getting tourists to spend money in the community	.81		.84	.82		.86
32	developing travel packages for visitors to the city is	.71		.86	.74		.89
17	ensuring that the heart of the city is prosperous	.70		.88	.79		.89
5	developing attractions that draw people from other cities	.40		.84	.80		.87
Preventing Youth Crime							
30	providing youth with positive ways to fill their free time	.83	.89	.86	.80	.92	.91
22	increasing the self-esteem of teenagers in the community	.80		.87	.90		.89
15	providing positive role models for adolescents	.80		.86	.87		.89
4	helping youth to develop into productive citizens	.80		.86	.84		.90
8	reducing the rate of repeat offenses by young offenders	.72		.87	.80		.92
Attracting and Retaining Businesses							
28	convincing businesses to locate in this community	.67	.62	.53	.86	.71	.50
19	encouraging executives and professionals to live in this community	.61		.29	.76		.44
18	using landscaping to beautify public areas	.52		.66	.44		.80

TABLE 7 Continued

Item No.	Item	CFA Loading	Factor Alpha	Alpha if item deleted	CFA Loading	Factor Alpha	Alpha if item deleted
Enhancing Real Estate Values							
31	ensuring that parks are easily accessible to residents from their homes	.74	.78	.71	.80	.84	.79
3	keeping neighborhood parks well-maintained	.71		.74	.67		.82
7	ensuring there is open green space near every home	.69		.73	.78		.80
40	requiring that developers provide park space in their developments	.60		.75	.72		.82
12	providing trails so that people can walk or bike to work	.58		.76	.67		.82
Attracting and Retaining Retirees							
33	designing programs specifically for older adults	.88	.85	.79	.89	.90	.86
27	encouraging senior citizens to become involved with the community	.86		.80	.85		.87
13	providing programs at which retired people can socialize together	.85		.80	.84		.87
24	providing amenities in the community that older adults want	.78		.82	.88		.86
38	encouraging wealthy retirees to settle in this community to improve the tax base	.44		.91	.61		.92
Environmental Stewardship							
2	improving air quality	.74	.76	.70	.77	.88	.86
23	improving the quality of groundwater	.72		.70	.80		.85
21	protecting environmentally sensitive areas	.70		.72	.65		.88
14	reducing the amount of energy consumed by residents	.67		.71	.79		.86
9	preventing erosion and flooding	.57		.73	.71		.86
29	reducing the amount of money that the city must spend on controlling pollution	.26		.81	.76		.86

TABLE 7 Continued

Item No.	Item	CFA Loading	Factor Alpha	Alpha if item deleted	CFA Loading	Factor Alpha	Alpha if item deleted
Improving Community Health							
37	helping people build healthy lifestyles	.86	.85	.76	.80	.85	.79
10	educating residents on the benefits of physical activity	.79		.78	.83		.78
16	supporting and working with community health organizations	.78		.82	.76		.84
1	providing opportunities for residents to increase their physical fitness	.62		.84	.70		.83
Addressing the Needs of People who are Underemployed							
39	offering programs that meet the needs of people who are unemployed	.90	.89	.83	.85	.89	.85
36	supporting and working with community welfare and employment agencies	.86		.84	.82		.86
26	helping adults build skills that can be used in the workforce is	.39		.89	.88		.85
20	providing programs to lower income people at a reduced or no charge	.35		.86	.74		.89
Stimulating Urban Rejuvenation							
34	revitalizing the community's downtown area	.76	.74	.60	.78	.79	.74
25	developing new facilities in the core of the city	.74		.62	.81		.62
6	redeveloping facilities in run-down areas	.60		.73	.68		.79

Coefficient Alphas of Dimensions

Also listed in Table 7 are the coefficient alphas for each importance and performance factor. Only one dimension's alpha, that for the importance of attracting businesses, failed to meet the minimum reliability standard of .70 (Nunnally & Bernstein, 1994).

The effect on coefficient alpha of deleting an item from a factor is also illustrated in Table 7. Deleting item 29 from the environmental stewardship importance factor, item 38 from both attracting retirees factors, and item 18 from both attracting businesses factors would improve the internal consistency of the items in these factors.

Correlations Between Factor Grand Means and One-Item Ratings of Dimensions

To assess the overall importance and performance residents attributed to each of the repositioning strategies, respondents were asked to complete single item ratings for each dimension (sections A and C in Appendix D). Responses to these single item scales were correlated to the aggregated responses to items within the respective factor as a measure of construct validity. For example, in Table 8, the value in the "one-item mean" column for the enhancing real estate values dimension represents the mean of responses to item 1 in section A of the questionnaire (Appendix D). The value in the "factor mean" column for the same dimension represents the grand mean of responses to items 3, 7, 12, 31, and 40 in section E of the questionnaire. The degree of correlation between these two means indicates how well the items within a factor capture the overall importance or performance attributed to that dimension.

TABLE 8
Correlations of One-Item Importance and Performance Ratings with
Respective Factor Grand Means

Dimension	One-Item Mean	Factor Mean	N	r	p<
Enhancing home real-estate values					
Importance	6.11	5.71	330	.31	.001
Performance	5.16	5.22	328	.46	.001
Attracting tourists to the community					
Importance	4.83	4.97	330	.66	.001
Performance	4.76	4.70	327	.54	.001
Addressing the needs of people who are underemployed					
Importance	5.12	4.71	330	.62	.001
Performance	3.60	3.98	326	.58	.001
Attracting and retaining retirees					
Importance	4.64	5.11	330	.56	.001
Performance	4.30	4.69	328	.53	.001
Preventing youth crime					
Importance	6.45	5.96	330	.54	.001
Performance	5.21	4.79	328	.58	.001
Attracting and retaining businesses					
Importance	6.03	5.51	330	.43	.001
Performance	4.67	4.88	326	.51	.001
Environmental stewardship					
Importance	6.13	5.61	330	.48	.001
Performance	5.34	4.62	328	.48	.001
Improving community health					
Importance	5.88	5.32	329	.56	.001
Performance	5.08	5.02	328	.48	.001
Stimulating urban rejuvenation					
Importance	5.45	5.18	330	.61	.001
Performance	4.72	4.72	328	.57	.001

Because these correlations provide an indication of the validity of a factor, they offer valuable information about whether the content of a dimension should be maintained or altered. For every importance and performance factor, the grand mean of

the items within the factor was positively and significantly correlated to the mean of the respective one-item rating (Table 8). The exhibited correlations are comparable to those reported by Petrick (2002) and Zaichowsky (1985) for demonstrating construct validity. However, despite all correlations being sufficiently high, this construct validity measure might be *further* improved by adjusting the content of the dimension. For example, eliminating those items which were less consistent with the other items in their factor, as suggested by coefficient alpha calculations (Table 7), may increase the degree to which the factor's grand mean correlates with the overall importance or performance rating.

Exploratory Factor Analyses

Because the confirmatory factor analysis models were not a good fit, and because certain factors' coefficient alphas and construct validity correlations could be improved if the content of the dimensions was altered, exploratory factor analyses were undertaken to further examine the dimensionality of the residents sample data. Comrey (1988) suggests that a factor analytic solution that is consistent with anticipated item groupings provides evidence of the scale's factorial validity. DeVellis (1991) further supports the utility of exploratory factor analysis stating:

Finding by means of conventional exploratory factoring methods that items group together as suspected should be even more reassuring to the investigator because the analysis has not been instructed to 'look for' a specific pattern (p. 108).

TABLE 9
Residents Sample Exploratory Factor Analysis Importance Item Loadings

Item No.	Item	Factor							
		1	2	3	4	5	6	7	8
15	providing positive role models for adolescents	<u>0.75</u>	0.00	-0.11	0.07	-0.15	0.08	0.09	0.07
4	helping youth to develop into productive citizens	<u>0.73</u>	-0.01	0.16	0.09	-0.03	-0.02	0.05	0.05
30	providing youth with positive ways to fill their free time	<u>0.71</u>	-0.04	0.25	0.09	-0.13	-0.06	0.08	-0.04
8	reducing the rate of repeat offenses by young offenders	<u>0.64</u>	-0.06	0.01	-0.04	0.02	0.02	0.13	0.36
22	increasing the self-esteem of teenagers in the community	<u>0.59</u>	-0.05	0.06	0.21	-0.14	-0.01	0.20	0.06
28	convincing businesses to locate in this community	0.07	<u>0.75</u>	-0.06	-0.09	-0.17	0.08	-0.14	0.17
41	getting tourists to spend money in the community	0.02	<u>0.73</u>	0.10	0.08	-0.02	0.16	0.06	0.06
11	hosting events that bring tourism revenue to local businesses	-0.07	<u>0.67</u>	-0.14	0.20	-0.03	0.28	0.13	0.02
32	developing travel packages for visitors to the city	0.03	<u>0.61</u>	0.13	0.10	0.08	0.16	0.28	0.01
5	developing attractions that draw people from other cities	-0.08	<u>0.43</u>	0.01	0.20	-0.04	0.07	0.02	-0.21
19	encouraging executives and professionals to live in this community	0.40	<u>0.42</u>	-0.01	-0.03	-0.11	0.32	-0.29	0.01
40	requiring that developers provide park space for people in their developments	0.00	0.06	<u>0.77</u>	-0.06	-0.13	-0.07	0.10	0.00
31	ensuring that parks are easily accessible to residents from their homes	0.22	0.03	<u>0.66</u>	0.10	-0.02	0.08	0.00	0.04
7	ensuring there is open green space near every home	0.11	-0.18	<u>0.54</u>	0.09	0.01	0.32	-0.07	0.15
3	keeping neighborhood parks well-maintained	0.05	-0.06	<u>0.50</u>	0.24	-0.01	0.22	-0.17	0.23
12	providing trails so that people can walk or bike to work	-0.14	-0.01	<u>0.48</u>	0.40	-0.12	-0.01	0.05	0.05
38	encouraging wealthy retirees to settle in this community to improve the tax base	0.26	0.37	0.38	-0.09	-0.13	0.09	-0.01	0.01
10	educating residents on the benefits of physical activity	0.10	0.11	-0.04	<u>0.74</u>	-0.18	0.00	0.00	0.08
1	providing opportunities for residents to increase their physical fitness	-0.01	0.03	0.13	<u>0.74</u>	-0.10	-0.01	-0.13	0.04

TABLE 9 Continued

Item No.	Item	Factor							
		1	2	3	4	5	6	7	8
37	helping people build healthy lifestyles	0.22	0.15	0.02	<u>0.70</u>	-0.08	-0.05	0.20	-0.03
16	supporting and working with community health organizations	0.25	0.08	0.02	<u>0.39</u>	-0.22	0.05	0.23	0.15
13	providing programs at which retired people can socialize together	-0.06	-0.05	0.11	0.07	<u>-0.87</u>	-0.02	0.02	0.04
33	designing programs specifically for older adults	0.04	-0.02	0.13	0.05	<u>-0.78</u>	0.08	0.11	-0.03
24	providing amenities in the community that older adults want	0.08	-0.04	-0.14	0.12	<u>-0.75</u>	0.14	0.00	0.14
27	encouraging senior citizens to become involved with the community	0.17	0.01	0.05	0.06	<u>-0.75</u>	0.03	0.14	-0.02
18	using landscaping to beautify public areas	0.01	<u>-0.06</u>	0.35	0.06	-0.05	0.65	-0.17	-0.04
17	ensuring that the heart of the city is prosperous	0.00	<u>0.29</u>	-0.08	0.09	-0.10	0.60	0.13	0.09
34	revitalizing the community's downtown area	-0.11	0.29	0.06	-0.02	-0.16	<u>0.60</u>	0.06	0.00
6	redeveloping facilities in run-down areas	0.19	-0.09	0.08	-0.04	-0.14	<u>0.54</u>	0.12	0.21
25	developing new facilities in the core of the city	-0.04	0.27	0.05	0.00	-0.18	<u>0.54</u>	0.13	-0.01
36	supporting and working with community welfare and employment agencies	0.19	0.10	0.11	0.05	-0.12	0.04	<u>0.70</u>	-0.04
39	offering programs that meet the needs of people who are unemployed	0.23	0.03	0.07	0.05	-0.14	-0.05	<u>0.69</u>	0.07
26	helping adults build skills that can be used in the workforce	0.01	0.13	-0.07	-0.02	0.00	-0.08	<u>0.57</u>	0.14
20	providing programs to lower income people at a reduced or no charge	-0.01	-0.17	0.01	-0.01	-0.16	0.19	<u>0.43</u>	-0.07
23	improving the quality of groundwater	0.10	-0.12	0.09	0.13	0.06	0.05	0.14	<u>0.67</u>
9	preventing erosion and flooding	0.12	-0.05	-0.16	0.11	-0.05	0.31	-0.07	<u>0.59</u>
29	reducing the amount of money that the city must spend on controlling pollution	-0.02	0.41	0.26	-0.31	-0.25	-0.30	-0.15	<u>0.59</u>
2	improving air quality	0.06	-0.09	0.00	0.42	0.18	0.10	0.16	<u>0.55</u>

TABLE 9 Continued

Item No.	Item	Factor							
		1	2	3	4	5	6	7	8
14	reducing the amount of energy consumed by residents	0.08	0.04	0.02	0.13	-0.20	-0.01	0.19	<u>0.51</u>
21	protecting environmentally sensitive areas	-0.16	-0.20	0.24	0.25	-0.05	0.13	0.29	<u>0.42</u>
	eigenvalue	12.76	3.57	2.25	1.83	1.78	1.41	1.16	1.14
	percentage of variance	31.89	8.92	5.63	4.57	4.46	3.52	2.89	2.86
	cumulative % of variance	31.89	40.82	46.45	51.02	55.48	59.00	61.89	64.75

Key to Factor Labels in Table 9

- 1 – preventing youth crime
- 2 – attracting tourists; attracting and retaining businesses
- 3 – enhancing real estate values
- 4 – improving community health
- 5 – attracting and retaining retirees
- 6 – stimulating urban rejuvenation
- 7 – addressing the needs of people who are underemployed
- 8 – environmental stewardship

TABLE 10
Residents Sample Exploratory Factor Analysis Performance Item Loadings

Item No.	Item	Factor					
		1	2	3	4	5	6
24	providing amenities in the community that older adults want	<u>0.73</u>	0.01	0.11	-0.05	0.20	0.09
33	designing programs specifically for older adults	<u>0.72</u>	0.02	0.15	-0.19	0.16	0.16
27	encouraging senior citizens to become involved with the community	<u>0.71</u>	0.06	0.01	-0.04	0.11	0.21
13	providing programs at which retired people can socialize together	<u>0.69</u>	0.00	0.21	-0.21	0.22	0.08
38	encouraging wealthy retirees to settle in this community to improve the tax base	<u>0.48</u>	0.34	-0.01	0.22	-0.12	0.17
5	developing attractions that draw people from other cities	0.04	<u>0.81</u>	0.10	-0.16	0.11	0.02
11	hosting events that bring tourism revenue to local businesses	0.09	<u>0.80</u>	0.07	-0.13	0.11	-0.01
34	revitalizing the community's downtown area	0.02	<u>0.78</u>	0.08	0.10	0.07	-0.05
41	getting tourists to spend money in the community	0.00	<u>0.78</u>	0.01	0.01	0.15	0.05
17	ensuring that the heart of the city is prosperous	0.06	<u>0.74</u>	-0.05	0.16	0.07	0.05
28	convincing businesses to locate in this community	0.25	<u>0.72</u>	-0.04	0.16	-0.07	0.05
32	developing travel packages for visitors to the city	0.15	<u>0.61</u>	-0.01	0.01	0.17	0.11
19	encouraging executives and professionals to live in this community	0.33	<u>0.54</u>	-0.04	0.20	-0.17	0.18
25	developing new facilities in the core of the city	0.36	<u>0.53</u>	0.13	0.19	0.03	-0.08
3	keeping neighborhood parks well-maintained	0.15	0.00	<u>0.66</u>	0.17	-0.08	0.11
18	using landscaping to beautify public areas	0.32	<u>0.11</u>	0.66	0.18	-0.10	-0.13
1	providing opportunities for residents to increase their physical fitness	-0.08	0.14	0.65	-0.29	<u>0.33</u>	0.20
12	providing trails so that people can walk or bike to work	0.12	-0.07	<u>0.62</u>	0.19	0.08	0.03
31	ensuring that parks are easily accessible to residents from their homes	0.09	0.07	<u>0.57</u>	0.14	-0.02	0.34
7	ensuring there is open green space near every home	0.22	-0.03	<u>0.45</u>	0.42	0.10	0.01
29	reducing the amount of money that the city must spend on controlling pollution	0.20	0.19	-0.03	<u>0.62</u>	-0.08	0.19
23	improving the quality of groundwater	0.03	-0.03	-0.02	<u>0.62</u>	0.11	0.31
2	improving air quality	-0.15	0.10	0.10	<u>0.57</u>	0.26	0.21
9	preventing erosion and flooding	-0.10	0.05	0.27	<u>0.57</u>	0.22	0.09
40	requiring that developers provide park space for people in their developments	0.10	-0.02	<u>0.33</u>	0.53	0.12	0.07

TABLE 10 Continued

Item No.	Item	Factor					
		1	2	3	4	5	6
6	redeveloping facilities in run-down areas	0.08	0.29	0.15	0.48	0.24	-0.04
14	reducing the amount of energy consumed by residents	0.07	0.16	-0.15	0.47	0.19	0.38
21	protecting environmentally sensitive areas	0.14	-0.09	0.33	0.42	0.23	0.05
20	providing programs to lower income people at a reduced or no charge	0.26	0.01	-0.08	0.14	0.73	-0.09
36	supporting and working with community welfare and employment agencies	0.13	0.15	-0.21	0.21	0.63	0.13
10	educating residents on the benefits of physical activity	0.11	0.04	0.39	-0.17	0.55	0.14
16	supporting and working with community health organizations	0.06	0.09	0.12	0.05	0.52	0.32
26	helping adults build skills that can be used in the workforce	0.25	0.07	-0.22	0.20	0.51	0.25
39	offering programs that meet the needs of people who are unemployed	0.31	-0.03	-0.20	0.30	0.48	0.17
37	helping people build healthy lifestyles	0.01	0.12	0.38	-0.32	0.46	0.32
4	helping youth to develop into productive citizens	0.03	-0.02	0.16	-0.02	0.06	0.81
15	providing positive role models for adolescents	0.16	0.02	-0.08	0.01	0.09	0.80
30	providing youth with positive ways to fill their free time	0.17	-0.04	0.25	-0.05	0.03	0.70
22	increasing the self-esteem of teenagers in the community	0.19	-0.05	0.00	0.08	0.18	0.70
8	reducing the rate of repeat offenses by young offenders	0.14	0.00	-0.18	0.27	0.19	0.59
	eigenvalue	17.06	3.83	2.57	2.24	1.21	1.07
	percentage of variance	42.64	9.58	6.44	5.59	3.02	2.66
	cumulative percentage of variance	42.64	52.23	58.66	64.26	67.27	69.94

Key to Factor Labels in Table 10

- 1 – attracting and retaining retirees
- 2 – attracting tourists; attracting and retaining businesses; stimulating urban rejuvenation
- 3 – enhancing real estate values
- 4 – environmental stewardship
- 5 – addressing the needs of people who are underemployed; improving community health
- 6 – preventing youth crime

Tables 9 and 10 present the results of the exploratory factor analyses undertaken on the data obtained from Grapevine residents. The importance scale revealed eight factors with eigenvalues greater than 1.0, which explained 65% of the variance in residents' responses (Table 9). Factor 1 and factors 3 through 8 represent the dimensions of preventing youth crime, enhancing real estate values, improving community health, attracting retirees, stimulating urban rejuvenation, addressing the needs of the underemployed, and environmental stewardship, respectively. Factor 2 encompasses almost all of the items for both the attracting tourists and the attracting businesses dimensions.

From the performance scale data, only six factors emerged with eigenvalues greater than 1.0, collectively explaining 70% of the variance (Table 10). Factors 1 and 6 represented the dimensions of attracting retirees and preventing youth crime, respectively. Factor 2 seemed to encompass several of the economic repositioning strategies, including attracting tourists, attracting businesses, and stimulating urban rejuvenation. Factor 5 included the items for both the addressing the needs of the underemployed and the improving community health dimensions. The enhancing real estate values and environmental stewardship items loaded relatively saliently on factors 3 and 4, respectively, although there were some items that cross-loaded on both of these factors (e.g. #7, 40, 21). A likely explanation for the inconsistencies in the factor structure of the performance data is provided below.

There were certain items whose factor loadings departed from expectations (the loading shown in bold for each item designates the item's loading on its expected

factor). In the importance scale analysis (Table 9), five items loaded fairly saliently ($>.30$) on two factors (#12, 38, 18, 29, 2). In the performance scale analysis (Table 10), this occurred with items 1, 7, 40, 21, 10 and 37. As well, some items loaded more saliently on an unexpected factor than they loaded on their expected factor. In the importance analysis, this was the case for item 38, “encouraging wealthy retirees to settle in this community to improve the tax base”, for item 18, “using landscaping to beautify public areas”, and for item 17, “ensuring the heart of the city is prosperous”. In the performance analysis, this occurred again for item 18, for item 1, “providing opportunities for residents to increase their physical fitness”, for item 40, “requiring that developers provide park space for people in their developments”, and for item 6, “redeveloping facilities in run-down areas”.

Overall, the exploratory factor analyses revealed dimensions that were fairly consistent with the nine dimensions expected. The importance scale revealed eight factors while the performance scale revealed six factors. The performance scale also had more individual items that exhibited unexpected factor loadings than did the importance scale.

That the performance scale’s dimensionality is less lucid is not surprising. Many of the items included in the iterative scales are issues that are not traditionally associated with parks and recreation. This is especially true of many of the economic repositioning strategies that loaded on the same factor in the residents sample data (e.g. Factor 3 in Table 10 comprised the dimensions of attracting businesses, stimulating urban rejuvenation, and attracting tourists). As a result, respondents are less likely to equate

the individual items within a factor with some overall contribution provided by the agency. It is this overriding construct that explains why items within a factor load together, but it is somewhat less salient in the case of certain performance dimensions. In contrast, the importance scale asks respondents about the importance they attribute to various community issues *without* requiring them to understand how parks and recreation fit into the equation. Residents are generally more able to offer their opinions about which issues they feel need to be addressed in the community than they are to accurately assess the contributions of the park and recreation agency. Consequently, their responses to items within a factor are more consistent with the overall importance they attribute to an issue and, as a result, the importance scale conforms more to dimensionality expectations than the performance scale.

This is encouraging because explicating dimensionality is likely to be more essential for the importance scale than for the performance scale. As was described in Chapter II, accurately measuring which community concerns are most important is more critical than accurately assessing performance. This is because the agency is unlikely to garner increased resources if it is repositioning around unimportant issues. If the agency can simply gauge which issues are most important, it can then use real, psychological, and competitive repositioning to convince elected officials of its performance at effectively addressing these concerns. Given these practical considerations, results from the importance scale are likely to be more useful in making decisions about the dimensionality of the iterative sets of items. The summary section below addresses such decisions using results from all of the dimensionality measures described thus far.

Summary of Dimensionality Tests

The analyses described above provided four different sources of information on which to assess the merits of including or excluding an item from the final instrument. In examining the characteristics exhibited by four items (#17, 18, 29, and 38) on the four tests, it was deemed that the assignment of these items to their current dimensions was debatable. Table 11 presents the evidence pertaining to these contentious items on three of the tests, and each item is discussed in the paragraphs that follow. The construct validity correlations between the factor grand means and the one-item dimension ratings

TABLE 11
Summary of Dimensionality Tests for Questionable Items

Item	Importance			Performance		
	CFA Loading	Alpha change if item deleted	*EFA Loading	CFA Loading	Alpha change if item deleted	*EFA Loading
ensuring the heart of the city is prosperous	.70	none	.29 (.60)	.79	-.01	.74
using landscaping to beautify public areas	.52	+.04	.06 (.35)(.65)	.44	+.09	.11 (.66)
reducing the amount of money the city must spend on controlling pollution	.26	+.05	.59 (.41)	.76	-.02	.62
encouraging wealthy retirees to settle in this community to improve the tax base	.44	+.06	-.13 (.37)(.38)	.61	+.02	.48 (.34)

*Factor loading not in parentheses is the item's loading on its intended dimension.

Loadings in parentheses are the item's loading(s) on other factor(s).

are not presented or discussed because each of these was already significant. Nonetheless, improvements to these correlations resulting from amendments to the content of the dimensions *are* presented in the following section addressing the scale's validity.

Item 17, “ensuring the heart of the city is prosperous”, belonged to the attracting tourists dimension, as determined in the pretest of the instrument. Although this item exhibited salient loadings on its assigned factor in both the importance and performance confirmatory factor analyses (CFA), its deletion from the attracting tourists factor would have little effect on coefficient alpha (Table 7). Further, the exploratory factor analysis (EFA) of the importance scale data revealed only a .29 loading on the ‘economic’ factor (factor 2) for this item, but a .60 loading on the stimulating urban rejuvenation dimension. The addition of this item to the urban rejuvenation factor would increase that dimension's importance alpha from .74 to .81 and its performance alpha from .79 to .85. Moreover, stimulating urban rejuvenation was the dimension for which this item was originally written, and to which it was originally assigned by the expert judges. Only as a result of the pretest was the item moved to the attracting tourists dimension. Therefore, given the EFA importance loading, the various reliability improvements that could be realized, and the item's conceptual origin, item 17 was retained in the instrument but as part of the stimulating urban rejuvenation dimension.

Item 18, “using landscaping to beautify public areas”, belonged to the attracting and retaining businesses dimension. Deleting this item would elevate the coefficient alpha for the importance factor from .62 to .66, and from .71 to .80 for the performance

factor. As well, in the exploratory factor analyses, this item loaded very minimally on the economic dimension in both the importance and performance solutions (factor 2 in Tables 9 and 10). Instead, it loaded highly on the stimulating urban rejuvenation dimension (.65) in the importance scale EFA, and on the enhancing real estate values dimension in the performance scale EFA (.66). Because the use of “landscaping to beautify public areas” is an action that can contribute towards several community issues, knowing residents’ opinions on this item does not appear to help prioritize the importance they place on various initiatives. Consequently, this item was excluded from the final instrument.

Item 29, “reducing the amount of money the city must spend on controlling pollution”, belonged to the environmental stewardship dimension. In the importance scale CFA, it exhibited the lowest loading (.26) of any item on its assigned factor. As well, the coefficient alpha for the importance of environmental stewardship dimension would increase from .76 to .81 if this item were deleted. Further, in the importance scale EFA, item 29 loaded saliently on its assigned factor (.59) but also quite highly (.41) on the economic factor (factor 2). Given these considerations, this item was dropped from the scale.

Finally, item 38, “encouraging wealthy retirees to settle in this community to improve the tax base” belonged to the attracting and retaining retirees dimension. At .44, its importance scale confirmatory factor analysis loading was low relative to most other items’ loadings. Further, deleting this item would improve the coefficient alpha for the importance of attracting retirees dimension from .85 to .91, and from .90 to .92

for the performance dimension. Most significantly, item 38 exhibited a high degree of cross-loading during both the importance and performance exploratory factor analyses, and had only a .13 loading on its assigned factor during the importance scale EFA. Given the potential internal consistency improvements and the minimal association with the other items in the attracting retirees factor, item 38 was excluded from the final instrument.

Table 12 lists the coefficient alphas for the restructured dimensions. With the exception of the attracting businesses importance dimension which had an alpha of .66, the coefficient values for all dimensions range from .78 to .92. For scales with less than six items, which describes each of the restructured repositioning dimensions, an alpha coefficient of .60 is often acceptable (Cortina, 1993). Moreover, for two-item scales (e.g. the attracting businesses dimension), an alpha coefficient can be as low as .50 and still be acceptable (Nunnally & Bernstein, 1994). Therefore, each of the dimensions was deemed to possess the necessary degree of internal consistency.

With the move of item 17 into the stimulating urban rejuvenation dimension (as described above), item 6, “redeveloping facilities in run down areas” became less consistent with the other items in this factor. Deleting it from the factor would result in an increase in coefficient alpha for both the importance and performance dimensions (Table 12). Further, when the retained importance scale items were subjected to another principal components factor analysis with oblique rotation, item 6 loaded saliently on only the environmental stewardship factor (Table 13). The remainder of the stimulating urban rejuvenation items loaded together in factor 2, which represented a combination of

‘economic’ repositioning strategies. Indeed, item 6 was the only retained item that did not load saliently on its expected dimension. Given the ambiguity about this item’s dimensionality, it was dropped from further consideration.

After item 6 was deleted, a final principal component factor analysis with oblique rotation was conducted on the importance data for the final set of 36 items (Table 14). A factor structure emerged that was identical to that shown in Table 13, with the exception of the absence of item 6. All of the items had salient loadings of at least .40 on their intended factors and non-salient loadings on all other factors. The seven factors explained 68% of the variance in residents’ responses.

TABLE 12
Coefficient Alphas of Restructured Factors

Item No.	Item	Importance		Performance	
		Factor Alpha	Alpha if item deleted	Factor Alpha	Alpha if item deleted
Attracting Tourists		.88		.89	
11	hosting events that bring tourism revenue to local businesses		.84		.83
41	getting tourists to spend money in the community		.84		.84
32	developing travel packages for visitors to the city is		.88		.88
5	developing attractions that draw people from other cities		.84		.85
Preventing Youth Crime		.89		.92	
30	providing youth with positive ways to fill their free time		.86		.91
22	increasing the self-esteem of teenagers in the community		.87		.89
15	providing positive role models for adolescents		.86		.89
4	helping youth to develop into productive citizens		.86		.90
8	reducing the rate of repeat offenses by young offenders		.87		.92

TABLE 12 Continued

Item No.	Item	Importance		Performance	
		Factor Alpha	Alpha if item deleted	Factor Alpha	Alpha if item deleted
Enhancing Real Estate Values		.78		.84	
31	ensuring that parks are easily accessible to residents from their homes		.71		.79
3	keeping neighborhood parks well-maintained		.74		.82
7	ensuring there is open green space near every home		.73		.80
40	requiring that developers provide park space in their developments		.75		.82
12	providing trails so that people can walk or bike to work		.76		.82
Attracting and Retaining Retirees		.91		.92	
33	designing programs specifically for older adults		.87		.89
27	encouraging senior citizens to become involved with the community		.88		.91
13	providing programs at which retired people can socialize together		.88		.90
24	providing amenities in the community that older adults want		.90		.89
Environmental Stewardship		.81		.86	
2	improving air quality		.75		.82
23	improving the quality of groundwater		.76		.82
21	protecting environmentally sensitive areas		.77		.85
14	reducing the amount of energy consumed by residents		.78		.84
9	preventing erosion and flooding		.80		.83
Improving Community Health		.85		.85	
37	helping people build healthy lifestyles		.76		.79
10	educating residents on the benefits of physical activity		.78		.78
16	supporting and working with community health organizations		.82		.84
1	providing opportunities for residents to increase their physical fitness		.84		.83
Addressing the Needs of the Underemployed		.89		.89	
39	offering programs that meet the needs of people who are unemployed		.83		.85
36	supporting and working with community welfare and employment agencies		.84		.86
26	helping adults build skills that can be used in the workforce is		.89		.85
20	providing programs to lower income people at a reduced or no charge		.86		.89

TABLE 12 Continued

Item No.	Item	Importance		Performance	
		Factor Alpha	Alpha if item deleted	Factor Alpha	Alpha if item deleted
Attracting and Retaining Businesses		.66		.80	
28	convincing businesses to locate in this community		n/a		n/a
19	encouraging executives and professionals to live in this community		n/a		n/a
Stimulating Urban Rejuvenation		.81		.85	
34	revitalizing the community's downtown area		.73		.86
25	developing new facilities in the core of the city		.75		.79
6	redeveloping facilities in run-down areas		.82		.86
17	ensuring that the heart of the city is prosperous		.74		.79

TABLE 13
Preliminary Factor Analysis of Restructured Dimensions

Item No.	Item	Factor						
		1	2	3	4	5	6	7
10	educating residents on the benefits of physical activity	<u>0.77</u>	0.05	-0.02	-0.16	0.03	0.10	0.00
1	providing opportunities for residents to increase their physical fitness	<u>0.75</u>	0.01	0.20	-0.07	-0.05	0.00	-0.11
37	helping people build healthy lifestyles	<u>0.71</u>	0.08	0.01	-0.04	0.14	-0.02	0.23
16	supporting and working with community health organizations	<u>0.43</u>	0.06	0.03	-0.18	0.23	0.15	0.24
5	developing attractions that draw people from other cities	0.13	<u>0.79</u>	0.02	-0.09	-0.02	-0.04	0.07
41	getting tourists to spend money in the community	0.12	<u>0.77</u>	0.13	-0.03	0.06	-0.02	0.09
11	hosting events that bring tourism revenue to local businesses	0.24	<u>0.76</u>	-0.10	-0.07	-0.06	0.06	0.11
28	convincing businesses to locate in this community	0.01	<u>0.72</u>	-0.04	-0.17	0.14	0.02	-0.10
32	developing travel packages for visitors to the city	0.12	<u>0.66</u>	0.14	0.07	0.04	-0.02	0.30
34	revitalizing the community's downtown area	-0.09	<u>0.54</u>	0.20	-0.30	-0.16	0.22	0.04
17	ensuring that the heart of the city is prosperous	0.06	<u>0.52</u>	0.02	-0.23	-0.06	0.33	0.08
19	encouraging executives and professionals to live in this community	0.01	<u>0.51</u>	0.04	-0.22	0.36	0.09	-0.26
25	developing new facilities in the core of the city	-0.04	<u>0.47</u>	0.14	-0.29	-0.12	0.19	0.16
40	requiring that developers provide park space for people in their developments	-0.05	-0.02	<u>0.74</u>	-0.11	0.05	-0.13	0.14
31	ensuring that parks are easily accessible to residents from their homes	0.08	0.05	<u>0.70</u>	-0.02	0.22	-0.04	0.08
7	ensuring there is open green space near every home	0.01	-0.03	<u>0.66</u>	-0.05	0.09	0.24	-0.05
3	keeping neighborhood parks well-maintained	0.21	0.04	<u>0.61</u>	-0.02	0.07	0.21	-0.15
12	providing trails so that people can walk or bike to work	0.42	-0.06	<u>0.47</u>	-0.09	-0.14	-0.01	0.06
13	providing programs at which retired people can socialize together	0.11	-0.13	0.11	<u>-0.83</u>	0.00	-0.04	0.08
33	designing programs specifically for older adults	0.05	-0.06	0.15	<u>-0.77</u>	0.07	-0.04	0.16
24	providing amenities in the community that older adults want	0.13	-0.06	-0.08	<u>-0.76</u>	0.09	0.18	0.03

TABLE 13 Continued

Item No.	Item	Factor						
		1	2	3	4	5	6	7
27	encouraging senior citizens to become involved with the community	0.10	-0.05	0.05	-0.72	0.19	-0.04	0.19
15	providing positive role models for adolescents	0.10	0.03	-0.10	-0.15	0.73	0.12	0.11
4	helping youth to develop into productive citizens	0.10	-0.01	0.18	-0.01	0.73	0.03	0.08
30	providing youth with positive ways to fill their free time	0.11	-0.06	0.26	-0.09	0.70	-0.10	0.16
8	reducing the rate of repeat offenses by young offenders	-0.03	-0.06	0.05	0.05	0.65	0.34	0.11
22	increasing the self-esteem of teenagers in the community	0.24	-0.06	0.04	-0.12	0.57	0.07	0.20
9	preventing erosion and flooding	0.07	0.06	-0.03	-0.07	0.12	0.68	-0.06
23	improving the quality of groundwater	0.11	-0.16	0.12	0.09	0.14	0.65	0.10
2	improving air quality	0.39	-0.08	0.07	0.20	0.04	0.60	0.12
21	protecting environmentally sensitive areas	0.19	-0.20	0.27	-0.03	-0.17	0.48	0.29
6	redeveloping facilities in run-down areas	-0.18	0.14	0.25	-0.24	0.12	0.46	0.16
14	reducing the amount of energy consumed by residents	0.18	-0.05	0.00	-0.16	0.13	0.46	0.14
39	offering programs that meet the needs of people who are unemployed	0.06	-0.04	-0.02	-0.05	0.18	0.07	0.79
36	supporting and working with community welfare and employment agencies	0.06	0.08	0.02	-0.06	0.14	-0.02	0.79
20	providing programs to lower income people at a reduced or no charge	0.08	-0.07	0.01	-0.21	-0.08	0.04	0.72
26	helping adults build skills that can be used in the workforce	0.16	0.11	-0.11	-0.10	0.15	0.16	0.63
	eigenvalue	12.94	3.77	2.16	1.80	1.72	1.34	1.20
	percentage of variance	34.97	10.20	5.83	4.87	4.66	3.62	3.23
	cumulative percentage of variance	34.97	45.16	50.99	55.87	60.53	64.14	67.37

Key to Factor Labels in Table 13

- 1 – improving community health
- 2 – attracting tourists; attracting and retaining businesses; stimulating urban rejuvenation
- 3 – enhancing real estate values
- 4 – attracting and retaining retirees
- 5 – preventing youth crime
- 6 – environmental stewardship
- 7 – addressing the needs of people who are underemployed

TABLE 14
Exploratory Factor Analysis of Final Items

Item No.	Item	1	2	3	Factor 4	5	6	7
10	educating residents on the benefits of physical activity	.80	.01	-.04	-.15	.04	.11	-.01
1	providing opportunities for residents to increase their physical fitness	.75	-.03	.18	-.06	-.05	.03	-.11
37	helping people build healthy lifestyles	.75	.03	-.01	-.02	.15	.00	.22
16	supporting and working with community health organizations	.43	.05	.02	-.17	.23	.16	.24
5	developing attractions that draw people from other cities	.16	.78	.01	-.09	-.01	-.06	.06
41	getting tourists to spend money in the community	.12	.77	.13	-.03	.06	-.02	.09
11	hosting events that bring tourism revenue to local businesses	.25	.75	-.11	-.06	-.06	.05	.11
28	convincing businesses to locate in this community	.00	.72	-.04	-.17	.15	.02	-.10
32	developing travel packages for visitors to the city	.13	.66	.14	.07	.04	-.02	.29
34	revitalizing the community's downtown area	-.03	.56	.19	-.30	-.15	.16	.03
17	ensuring that the heart of the city is prosperous	.08	.54	.02	-.23	-.06	.31	.07
19	encouraging executives and professionals to live in this community	.04	.51	.03	-.21	.37	.07	-.27
25	developing new facilities in the core of the city	.03	.48	.13	-.29	-.11	.13	.15
40	requiring that developers provide park space for people in their developments	-.08	.00	.75	-.12	.05	-.10	.15
31	ensuring that parks are easily accessible to residents from their homes	.11	.05	.69	-.02	.23	-.05	.07
7	ensuring there is open green space near every home	.01	-.01	.65	-.06	.08	.23	-.05
3	keeping neighborhood parks well-maintained	.20	.05	.60	-.02	.07	.22	-.15
12	providing trails so that people can walk or bike to work	.36	-.08	.46	-.09	-.13	.00	.05
13	providing programs at which retired people can socialize together	.09	-.13	.12	-.83	.00	-.02	.08
33	designing programs specifically for older adults	.05	-.05	.16	-.77	.07	-.03	.16

TABLE 14 Continued

Item No.	Item	Factor						
		1	2	3	4	5	6	7
24	providing amenities in the community that older adults want	.11	-.05	-.08	<u>-.76</u>	.09	.20	.03
27	encouraging senior citizens to become involved with the community	.09	-.04	.05	<u>-.72</u>	.19	-.01	.19
4	helping youth to develop into productive citizens	.12	-.02	.17	.00	<u>.73</u>	.03	.08
15	providing positive role models for adolescents	.09	.02	-.09	-.15	<u>.73</u>	.14	.11
30	providing youth with positive ways to fill their free time	.12	-.08	.25	-.09	<u>.70</u>	-.08	.16
8	reducing the rate of repeat offenses by young offenders	-.06	-.04	.06	.04	<u>.64</u>	.36	.11
22	increasing the self-esteem of teenagers in the community	.20	-.07	.05	-.13	<u>.56</u>	.12	.20
23	improving the quality of groundwater	.01	-.12	.15	.06	.12	<u>.71</u>	.11
9	preventing erosion and flooding	.03	.10	-.02	-.08	.10	<u>.69</u>	-.06
2	improving air quality	.37	-.07	.07	.20	.03	<u>.61</u>	.11
21	protecting environmentally sensitive areas	.11	-.16	.29	-.05	-.19	<u>.53</u>	.29
14	reducing the amount of energy consumed by residents	.13	-.03	.01	-.17	.12	<u>.49</u>	.14
39	offering programs that meet the needs of people who are unemployed	.05	-.03	-.01	-.06	.18	.09	<u>.79</u>
36	supporting and working with community welfare and employment agencies	.06	.09	.03	-.06	.13	.00	<u>.79</u>
20	providing programs to lower income people at a reduced or no charge	.12	-.07	.01	-.21	-.08	.03	<u>.71</u>
26	helping adults build skills that can be used in the workforce	.16	.12	-.10	-.11	.14	.17	<u>.62</u>
	eigenvalue	12.54	3.77	2.15	1.80	1.72	1.26	1.18
	percent of variance	34.85	10.48	5.97	5.01	4.78	3.50	3.27
	cumulative percent of variance	34.85	45.33	51.30	56.31	61.10	64.59	67.87

Key to Factor Labels in Table 14

- 1 – improving community health
- 2 – attracting tourists; attracting & retaining businesses; stimulating urban rejuvenation
- 3 – enhancing real estate values
- 4 – attracting & retaining retirees
- 5 – preventing youth crime
- 6 – environmental stewardship
- 7 – addressing the needs of people who are underemployed

The result of these iterative factor analyses and coefficient alpha examinations was the retention of 36 items, representing nine conceptually distinct dimensions, to form the park and recreation repositioning scale. The following sections examine the validity and reliability of the dimensions.

Testing the Scale's Validity

Construct validity is the extent to which a measure taps the quality it is intended to measure (Babbie, 2001). Construct validity of each of the dimensions was investigated by examining the correlations between the one-item ratings for each importance and performance dimension (sections A and C in Appendix D) and the grand mean of the items within the respective factor. Table 15 shows that each of these correlations is highly significant. Further, restructuring five of the dimensions, as described above, produced several improvements in these validity indicators (as compared with Table 8). The correlations for the importance and performance dimensions of attracting tourists, attracting businesses, and environmental stewardship each improved by between .01 and .06. The importance correlation for stimulating urban rejuvenation improved by .03, while the performance correlation for this dimension remained constant. The attracting retirees importance correlation actually dropped .01, from .56 to .55, as a result of deleting item 38, while the performance correlation stayed the same.

TABLE 15
Construct Validity Correlations

Dimension	One-Item Mean	Factor Mean	N	r	p<
Enhancing home real-estate values					
Importance	6.11	5.71	330	.31	.001
Performance	5.16	5.22	328	.46	.001
Attracting tourists to the community					
Importance	4.83	4.82	330	.69	.001
Performance	4.76	4.69	327	.56	.001
Addressing the needs of people who are underemployed					
Importance	5.12	4.70	330	.62	.001
Performance	3.60	3.97	326	.58	.001
Attracting and retaining retirees					
Importance	4.64	5.18	330	.55	.001
Performance	4.30	4.84	328	.53	.001
Preventing youth crime					
Importance	6.45	5.96	330	.54	.001
Performance	5.21	4.79	328	.58	.001
Attracting and retaining businesses					
Importance	6.03	5.35	330	.48	.001
Performance	4.67	4.50	326	.54	.001
Environmental Stewardship					
Importance	6.13	5.74	330	.54	.001
Performance	5.34	4.69	328	.49	.001
Improving community health					
Importance	5.88	5.32	329	.56	.001
Performance	5.08	5.02	328	.48	.001
Stimulating urban rejuvenation					
Importance	5.45	5.17	330	.64	.001
Performance	4.72	4.75	327	.57	.001

Overall, with the exception of the enhancing real estate values importance dimension, all correlations exceeded a value of .45 and are similar to the construct validity correlations reported by other scale developers (Petrick, 2002; Zaichowsky,

1985). These positive and significant correlations provide evidence of the scale's construct validity.

Testing the Scale's Reliability

The scale's reliability was investigated using split-half reliability which measures the degree of consistency within a set of items (Parasuraman, 1991). The items for each of the nine dimensions were randomly split into two groups, with different groupings used for the importance and performance tests. Table 16 shows the items that comprised the two groups for each of the eighteen comparisons. Split half reliability was measured by examining the degree of correlation between the mean of the items in the first group and the mean of the items in the second group (DeVellis, 1991).

Table 16 illustrates the correlations between the groups of items, all of which were statistically significant. These strong correlations demonstrate the scale's split half reliability. Using different item groupings for the importance and performance correlations lends even further support to this claim because it provides an additional test of the consistency within the dimensions' items.

TABLE 16
Split-Half Reliability Correlations

Dimension	Group 1 Items	Group 2 Items	Group 1 Mean	Group 2 Mean	N	r	p<
Enhancing home real-estate values							
Importance	3,12,40	7,31	5.77	5.61	331	.67	.001
Performance	3,7,31	12,40	5.37	5.01	329	.73	.001
Attracting tourists to the community							
Importance	5,11	41,32	4.93	4.74	330	.79	.001
Performance	11,41	32,5	4.84	4.55	329	.80	.001
Addressing the needs of people who are unemployed							
Importance	26,20	39,361	4.73	4.68	331	.80	.001
Performance	26,36	20,39	4.00	3.96	327	.79	.001
Attracting and retaining retirees							
Importance	13,24	27,33	5.28	5.11	331	.85	.001
Performance	13,33	24,27	4.92	4.76	327	.83	.001
Preventing youth crime							
Importance	8,22,4	15,30	5.98	5.94	331	.82	.001
Performance	15,22,4	8,30	4.80	4.77	329	.86	.001
Attracting and retaining businesses							
Importance	19	28	5.30	5.41	331	.50	.001
Performance	19	28	4.39	4.61	326	.66	.001
Protecting the environment							
Importance	2,9,23	14,21	5.89	5.51	330	.65	.001
Performance	2,23,14	9,21	4.46	5.02	329	.68	.001
Improving community health							
Importance	1,37	16,10	5.47	5.17	331	.77	.001
Performance	10,37	1,16	4.94	5.11	328	.74	.001
Rejuvenating the city's downtown							
Importance	25,17	34	5.18	5.17	331	.68	.001
Performance	17	25,34	4.74	4.76	326	.46	.001

CHAPTER V

DISCUSSION AND CONCLUSIONS

The goal of this study was to develop an instrument that would assist public park and recreation agencies in repositioning their services in order to garner increased allocations of tax dollars. Research has suggested that parks and recreation can contribute to addressing a variety of community concerns. The key is that the public agency must position itself around the issues regarded as highest priority by stakeholders in its jurisdiction. Accordingly, this scale identifies the issues deemed most important in the community, and also can be used to measure the performance of the park and recreation agency or other public agency ‘competitors’ in addressing those issues.

A valid and reliable 36-item instrument was developed that represented nine interrelated but distinct repositioning dimensions. The scale was judged to have content validity by an initial panel of expert judges, and it was found to also possess construct validity and split-half reliability. The initial sections of this chapter discuss the dimensionality of the scale, including adjustments that can be made in order to increase its efficacy in different settings. A practical demonstration of the utility of the scale is then provided. Finally, suggestions for future research are offered.

Composition of the Park and Recreation Repositioning Scale

Initially, the park and recreation repositioning scale was conceptualized to be comprised of ten dimensions represented by 61 items, which were derived from research compiled by Crompton (2001; 2000; 1999a; 1999b). After the content validity check by

the expert judges, 51 items were deemed relevant and the expanding retail sales of equipment dimension was completely removed. The remaining 51 items were administered to a sample of undergraduate students, asking them to rate the importance of each issue in the context of their hometown. Exploratory factor analyses of these data removed twelve more items, and the remaining set of 40 items was formatted for both importance of the issue and performance of the park and recreation agency and was sent to a sample of municipal residents. The data provided by these citizens indicated that the deletion of four additional items would improve the internal consistency, validity, and reliability of the scale. Figure 3 illustrates the multi-step procedure that was used to arrive at the final 36-item instrument.

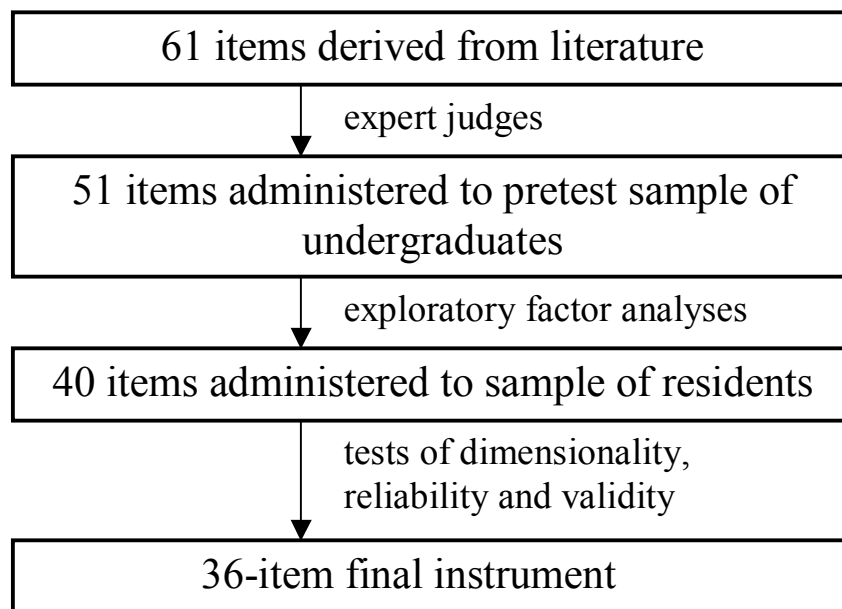


Figure 3: Multi-Step Procedure to Develop the Park and Recreation Repositioning Scale

The final scale is comprised of nine dimensions and 36 items. These dimensions and their respective items are shown in Table 17. Also provided are means and standard deviations for the importance and performance of each factor and each item, as rated by the sample of City of Grapevine residents. The factors and items are listed in order of residents' importance ratings.

TABLE 17
Means and Standard Deviations of Factors and Items
in the Park and Recreation Repositioning Scale

Dimension and Items	Imp. Mean	Standard Deviation	Perf. Mean	Standard Deviation
<u>Preventing Youth Crime</u>	5.96	1.01	4.79	1.33
helping youth to develop into productive citizens	6.21	1.03	5.12	1.36
reducing the rate of repeat offenses by young offenders	6.02	1.21	4.32	1.70
providing positive role models for adolescents	5.90	1.23	4.64	1.54
providing youth with positive ways to fill their free time	5.98	1.19	5.22	1.44
increasing the self-esteem of teenagers in the community	5.70	1.39	4.61	1.54
<u>Environmental Stewardship</u>	5.73	.93	4.69	1.19
improving the quality of groundwater	6.01	1.12	4.77	1.54
preventing erosion and flooding	5.85	1.15	4.97	1.40
improving air quality	5.81	1.28	4.60	1.52
protecting environmentally sensitive areas	5.74	1.17	5.08	1.31
reducing the amount of energy consumed by residents	5.27	1.45	4.01	1.66
<u>Enhancing Real Estate Values</u>	5.71	.88	5.22	1.08
ensuring there is open green space near every home	6.29	.78	5.89	1.09
ensuring that parks are easily accessible to residents from their homes	5.64	1.30	4.83	1.44
keeping neighborhood parks well-maintained	5.59	1.29	5.30	1.50
requiring that developers provide park space for people in their developments	5.44	1.38	4.70	1.50
providing trails so that people can walk or bike to work	5.19	1.12	4.84	1.22
<u>Attracting and Retaining Businesses</u>	5.36	1.17	4.50	1.37
convincing businesses to locate in this community	5.41	1.38	4.61	1.54
encouraging executives and professionals to live in this community	5.30	1.33	4.39	1.46

Table 17 Continued

Dimension and Items	Imp. Mean	Standard Deviation	Perf. Mean	Standard Deviation
<u>Improving Community Health</u>	5.31	1.08	5.02	1.12
providing opportunities for residents to increase their physical fitness	5.75	1.15	5.54	1.23
supporting and working with community health organizations	5.37	1.18	4.67	1.37
helping people build healthy lifestyles	5.18	1.41	5.05	1.38
educating residents on the benefits of physical activity	4.96	1.46	4.83	1.37
<u>Attracting and Retaining Retirees</u>	5.18	1.26	4.84	1.31
providing amenities in the community that older adults want	5.24	1.25	4.70	1.41
encouraging senior citizens to become involved with the community	5.24	1.25	4.70	1.41
designing programs specifically for older adults	5.23	1.23	4.82	1.35
providing programs at which retired people can socialize together	4.97	1.28	4.82	1.34
<u>Stimulating Urban Rejuvenation</u>	5.17	1.06	4.75	1.29
ensuring that the heart of the city is prosperous	5.53	1.17	4.74	1.43
revitalizing the community's downtown area	5.17	1.29	4.88	1.47
developing new facilities in the core of the city	4.85	1.24	4.64	1.48
<u>Attracting Tourists</u>	4.82	1.23	4.69	1.25
getting tourists to spend money in the community	5.32	1.33	4.75	1.50
hosting events that bring tourism revenue to local businesses	5.04	1.42	4.93	1.52
developing attractions that draw people from other cities	4.83	1.41	4.95	1.39
developing travel packages for visitors to the city	4.15	1.56	4.13	1.42
<u>Addressing the Needs of People who are Underemployed</u>	4.70	1.39	3.97	1.29
helping adults build skills that can be used in the workforce	4.87	1.57	4.00	1.49
offering programs that meet the needs of people who are unemployed	4.69	1.62	3.87	1.52
supporting and working with community welfare and employment agencies	4.67	1.59	4.00	1.40
providing programs to lower income people at a reduced or no charge	4.59	1.64	4.03	1.46

In many of the exploratory factor analyses reported in Chapter IV, several of the economic-oriented repositioning dimensions combined to form a single factor.

Conventional scale development guidelines might suggest that these three dimensions be amalgamated into a single factor addressing economic issues. However, several arguments can be made for keeping these dimensions as distinct repositioning strategies.

The primary rationale is that a public agency likely retains greater information by keeping these dimensions separate. Very few public agencies are likely to undertake a factor analysis of the data received from stakeholders to determine the underlying repositioning dimensions. Instead, it is likely that grand means of each dimension will be plotted on an importance-performance grid and appropriate resource allocation actions interpreted from there (see later section). Automatically aggregating responses to items within multiple dimensions to form a composite factor (e.g. “stimulating economic growth”) would obscure potential variations about residents’ economic wishes. Indeed, paired samples t-tests of the differences between the means of the attracting tourists, attracting businesses, and stimulating urban rejuvenation importance dimensions were all significant (Table 18). Further, amalgamating these strategies lends little guidance to the agency as to how to achieve this ‘economic’ mandate. Moreover, the premise underlying *all* of the repositioning strategies is that each can contribute to a community’s economic prosperity, either through revenue generation or cost savings. This axiom is not exclusive to those repositioning dimensions that are more conspicuously economic. Finally, an agency that adopts too many positions, even those that are somewhat related, runs the risk of creating a ‘fuzzy’ image in stakeholders’ minds.

In communities where these economic issues are highly interrelated (and thereby might combine to form a single factor), this is likely to be evident when the individual dimensions are plotted on the I-P grid; the importance attributed to each should be fairly comparable. Observing this, the agency then has the choice to address multiple concerns

TABLE 18
Paired Samples T-Tests Between “Economic” Importance Dimensions

Dimensions Compared	Mean	Difference	N	t	df	p<
attracting tourists attracting businesses	4.82 5.35	-.52	331	-9.15	330	.001
attracting tourists stimulating urban rejuvenation	4.82 5.17	-.35	331	-6.23	330	.001
attracting businesses stimulating urban rejuvenation	5.35 5.17	.18	331	3.03	330	.005

or only the one or two that are most important. However, because it is unlikely that the dimensions will always be interrelated, a much safer approach would be to preserve the distinctness of the economic repositioning strategies. The measurements of coefficient alpha, split-half reliability, and construct validity for the individual dimensions were all sufficiently high to support their independence.

Scale Length Considerations

As described above, the park and recreation repositioning scale is comprised of 36 items representing nine dimensions. Each of the retained items has been included

because it contributes to the reliability, internal consistency and validity of its respective dimension. Nonetheless, respondents are likely to experience some degree of fatigue in completing a scale of this length. This fatigue element is exacerbated by the necessity to complete both of the iterative importance and performance scales, and may have contributed to the lower than expected response rate attained in this study (see Chapter IV). Consequently, park and recreation agencies may wish to administer a shortened version of the scale when measuring their constituents' opinions.

Three options are available for formulating a shortened instrument. The first option involves simply removing a certain number of items from each dimension. Retaining the two attracting businesses items and three items for each of the other eight dimensions would result in a 26-item instrument. Following this guideline, a recommended shortened instrument is presented in Table 19. The content of the stimulating urban rejuvenation and the attracting businesses dimensions is unchanged because these dimensions already contained only two and three items, respectively. However, for dimensions with more than three indicators, the selection of a set of three items was based on retaining those that were most internally consistent and thereby produced the highest value for coefficient alpha. When the alphas for the importance and performance aspects of a dimension were inconsistent in their recommendations as to which item(s) should be selected, the importance factor alpha was given priority. When the reliability coefficients were comparable for alternative sets of three items, discretion was used to select the group that most thoroughly explicated the domain of the dimension, thereby ensuring the greatest degree of content validity.

The alphas for the two or three-item importance and performance factors are shown in Table 19. With the exception of the attracting businesses dimension which was unchanged, the coefficient alpha for each of the abridged factors exceeds the recommended minimum of .70 (Nunnally and Bernstein, 1994).

TABLE 19
Coefficient Alpha and Construct Validity Correlations for
Shortened Importance and Performance Dimensions

Dimension and Items	Importance		Performance	
	Coefficient Alpha	Validity Correlation	Coefficient Alpha	Validity Correlation
<u>Improving Community Health</u> educating residents on the benefits of physical activity helping people build healthy lifestyles supporting and working with community health organizations	.84	.58*	.83	.48*
<u>Environmental Stewardship</u> improving air quality reducing the amount of energy consumed by residents protecting environmentally sensitive areas	.74	.58*	.77	.48*
<u>Attracting Tourists</u> developing attractions that draw people from other cities getting tourists to spend money in the community hosting events that bring tourism revenue to local businesses	.88	.68*	.88	.54*
<u>Stimulating Urban Rejuvenation</u> revitalizing the community's downtown area ensuring that the heart of the city is prosperous developing new facilities in the core of the city	.82	.64*	.86	.57*

TABLE 19 Continued

Dimension and Items	Importance		Performance	
	Coefficient Alpha	Validity Correlation	Coefficient Alpha	Validity Correlation
<u>Attracting and Retaining Businesses</u> encouraging executives and professionals to live in this community convincing businesses to locate in this community	.66	.48*	.80	.54*
<u>Enhancing Real Estate Values</u> requiring that developers provide park space for people in their developments ensuring that parks are easily accessible to residents from their homes keeping neighborhood parks well-maintained	.70	.28*	.75	.47*
<u>Attracting and Retaining Retirees</u> providing programs at which retired people can socialize together designing programs specifically for older adults encouraging senior citizens to become involved with the community	.90	.53*	.89	.52*
<u>Preventing Youth Crime</u> providing positive role models for adolescents helping youth to develop into productive citizens providing youth with positive ways to fill their free time	.85	.52*	.90	.55*
<u>Addressing the Needs of People who are Underemployed</u> offering programs that meet the needs of people who are unemployed supporting and working with community welfare and employment agencies helping adults build skills that can be used in the workforce	.88	.62*	.89	.60*

* indicates correlation significant at the .001 level

Table 19 also shows the correlations between each of the factors in the shortened instrument and their respective one-item importance or performance ratings. These correlations are very comparable to those reported when all of the dimension's items were used to compute the factor grand mean (Table 15). All of the correlations are again significant, indicating that each of these abridged dimensions possesses strong construct validity.

In addition, paired samples t-tests were used to compare the grand means of the shortened factors with those of the full factors. Difference tests were not possible for the attracting businesses and stimulating urban rejuvenation because these dimensions were unchanged. Out of the fourteen remaining comparisons that were possible (both importance and performance for seven dimensions), eleven were significant, indicating that the two instruments produced somewhat different results. However, the absolute difference between each pair of significantly different grand means ranged from .04 to .23 (on the 7-point scale). Such a small difference alters the placement of the dimension on the importance-performance (I-P) grid only minimally, and is unlikely to change the implications that the I-P analysis (IPA) suggests (see next section for IPA example). Therefore, given the shortened dimensions' internal consistency and construct validity, an agency can use these with confidence if they desire an instrument that allows them to assess stakeholders' perceptions on *all* of the potential repositioning issues.

A second option for obtaining a shortened instrument is to include items from only a limited number of dimensions. If an agency were certain that a particular issue(s) is unimportant in its jurisdiction, it would be futile to develop a repositioning strategy

around that community concern. Further, gauging the agency's current performance on the issue is fruitless. Consequently, when the instrument is administered to residents or elected officials, an agency will likely want to exclude the items representing irrelevant repositioning dimensions. For example, if the agency is certain that stakeholders do not perceive unemployment (4 items) and youth crime (5 items) to be pervasive community concerns, excluding these dimensions might be appropriate. Such an action would shorten the instrument to a more manageable length of only 27 items.

A final option for reducing the instrument's length involves a two-stage process. The first stage would involve measuring only the importance that residents attribute to the nine dimensions. A subsequent questionnaire would investigate perceptions of the agency's performance as well as that of competing public and community agencies. As is described below, contributions of the agency and its competitors need only be examined for important issues that could feasibly form the basis of the agency's repositioning efforts. Consequently, this second instrument would address the agency's performance on only a few dimensions, and would require that competitor sections be included for only that limited set of important issues.

Repositioning Using Importance-Performance Analysis

The primary advantage of importance-performance analysis (IPA) is its ease of application and interpretation. Using the scale developed in this study, an agency can identify the importance of community issues, as well as the agency's performance in addressing those same issues. This information can then be plotted fairly simply on an

importance-performance (IP) grid, and potential repositioning strategies identified. A practical example of this process is described below, with the agency's performance examined first in isolation, then relative to other public agency 'competitors'.

Establishing the Park and Recreation Agency's Repositioning Options

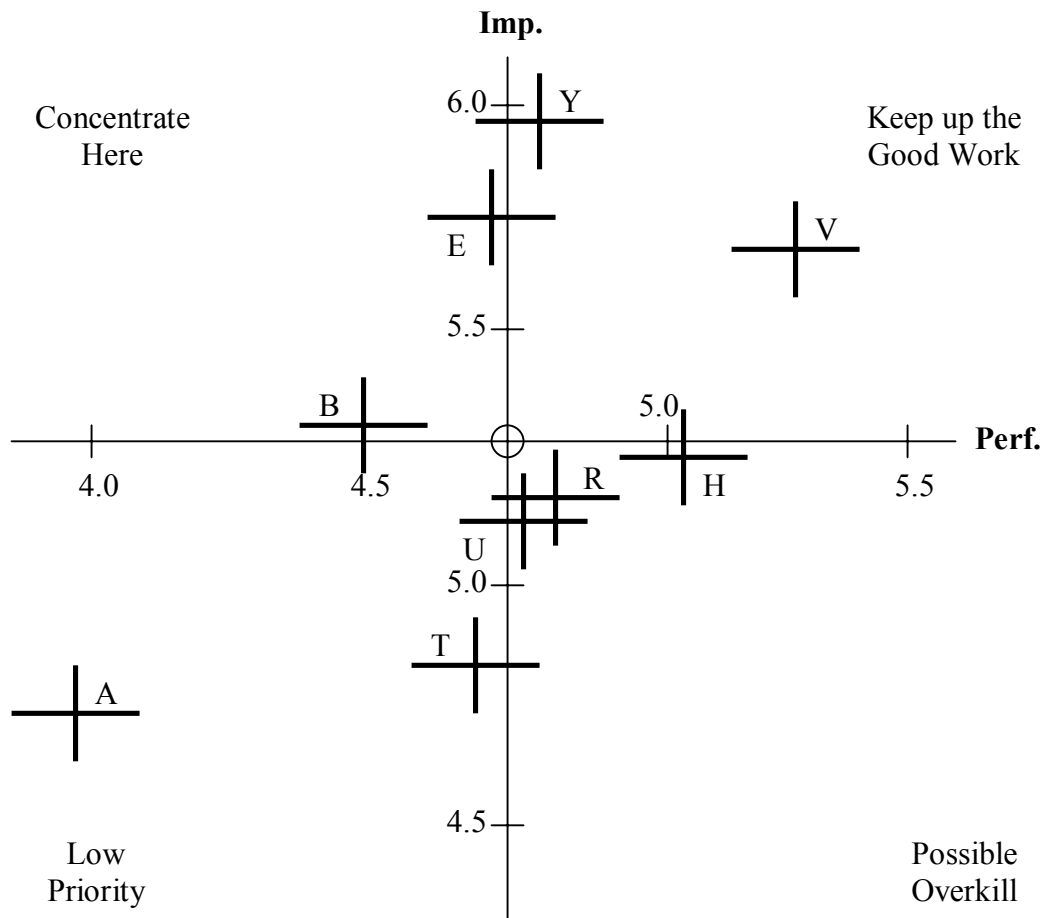
Table 20 lists the mean importance attributed to each repositioning dimension, as well as residents' mean perceptions of the park and recreation agency's performance in addressing each issue. These means were used to plot each community concern on an IP grid (Figure 4).

TABLE 20
Means and Confidence Intervals for Importance and
Performance of Repositioning Dimensions

Repositioning Dimension	Imp. Mean	Imp. C.I.	Perf. Mean	Perf. C.I.
Preventing youth crime	5.96	(5.84, 6.07)	4.78	(4.63, 4.92)
Environmental stewardship	5.73	(5.63, 5.83)	4.68	(4.55, 4.81)
Enhancing real estate values	5.70	(5.61, 5.80)	5.22	(5.10, 5.34)
Attracting and retaining businesses	5.35	(5.22, 5.48)	4.50	(4.35, 4.64)
Improving community health	5.31	(5.19, 5.42)	5.02	(4.90, 5.14)
Attracting and retaining retirees	5.18	(5.06, 5.30)	4.84	(4.70, 4.97)
Stimulating urban rejuvenation	5.17	(5.06, 5.29)	4.75	(4.61, 4.89)
Attracting tourists	4.82	(4.69, 4.96)	4.69	(4.55, 4.82)
Addressing the needs of the underemployed	4.70	(4.54, 4.85)	3.97	(3.83, 4.11)
Grand Mean	5.33		4.73	

The crosshairs of the IP grid were located using the grand means of all nine importance factors and all nine performance factors. The alternative option was to have the axes intersect each other at the midpoint of the scale (i.e. 4 on the 7 point scale). This is appropriate when comparing scores to some *absolute* criterion. However, for purposes of repositioning, using the grand mean of the dimensions being plotted is more prudent because the *relative* importance or performance of the issues is what is being examined. Importance-performance analysis (IPA) helps the user make resource allocation decisions based on the placement of issues within the IP grid. If the scale midpoint were used to place the axes, all of the dimensions would be deemed important because they would fall in the top two quadrants of the grid. This does little to assist the agency in determining which issues should be given priority. Based on the ratings of Grapevine residents, the grand mean of the nine importance factors was calculated to be 5.33, and this is where the vertical axis is intersected by the horizontal axis. The grand mean of the performance factors was 4.73, and this is where the horizontal axis is intersected by the vertical axis (Figure 4).

Also listed in Table 20 is the 95% confidence interval on each dimension's importance and performance mean. Following suggestions by Tarrant and Smith (2002), these confidence intervals were also plotted on the IP grid in the direction of both the importance and performance axes. The result is a cross-shaped figure termed a "crosspoint". These crosspoints are included to increase an agency's confidence that an issue falls distinctly within a specific quadrant of the IP grid. The confidence intervals



Legend

O – crosshairs intersect at 4.73 performance, 5.33 importance

A = addressing the needs of people who are underemployed

B = attracting businesses

E = environmental stewardship

H = improving community health

R = attracting retirees

T = attracting tourists

U = stimulating urban rejuvenation

V = enhancing real estate values

Y = preventing youth crime

Figure 4: Establishing the Park and Recreation Agency's Repositioning Options

highlighted in bold in Table 20 are those which overlap either the importance or the performance axis.

Discussion of Repositioning Issues' Placement on the IP Grid

Figure 4 shows the placement of each repositioning dimension on the IP grid and the respective resource allocation tactics that are suggested. The issues of preventing youth crime, environmental stewardship, and enhancing real estate values are all clearly rated high in importance, while addressing underemployment, attracting tourists, stimulating urban rejuvenation, and attracting retirees fall distinctly into the low importance quadrants. However, the importance attributed to attracting businesses and improving community health is less clear, given that the crosspoints for these dimensions overlap the horizontal axis. Similarly, the crosspoints for the agency's performance in preventing youth crime, attracting tourists, attracting retirees, stimulating urban rejuvenation, and environmental stewardship all overlap the vertical axis. Relative to other issues, residents rate the agency's performance on these dimensions as neither high nor low.

These results suggest that a repositioning strategy should be structured around preventing youth crime, environmental stewardship, and/or enhancing real estate values. On the issue of enhancing real estate values, the park and recreation agency is already perceived as making a fairly strong contribution. In order to garner increased tax allocations, all that may be necessary is strategic competitive repositioning. However, if the agency is already perceived as performing better than any of its competitors in this

arena, further repositioning is unlikely to yield significantly greater resources. A more fruitful alternative may be to reposition around the issue of either preventing youth crime or environmental stewardship. These dimensions are located quite close together on the IP grid, with high importance ratings and relatively mediocre agency performance ratings. Real and psychological repositioning tactics might improve perceptions of the agency's performance on either of these high priority issues. However, any such repositioning actions must be considered in light of the performance of relevant public agency competitors. This idea is discussed in the next section.

The park and recreation agency may also find some utility in segmenting its constituency prior to selecting and implementing a repositioning strategy. Using multivariate analyses of variance, the tables in Appendix H illustrate the differences in importance and performance ratings of the nine dimensions when the sample of residents is segmented by gender, age, and number of years lived in Grapevine. For the gender variable, several significant differences existed between males and females for both the importance and performance ratings of the nine issues. With respect to age, few differences existed in the importance ratings but, on many of the issues, the park and recreation agency's performance was rated differentially by the various age groups. Finally, for the longevity variable, a number of significant differences were observed among the groups for the importance and performance ratings of the dimensions.

Segmenting the agency's constituency prior to repositioning may be more useful for certain community issues than for others. For example, the importance and performance ratings for the enhancing real estate values dimension were relatively similar

between the groups within the gender, age, and longevity variables. Similarly, ratings of improving community health differed only when the sample was split by gender. When repositioning around either of these issues, the effort expended on segmenting residents is likely to be fruitless. In contrast, many of the other repositioning issues exhibited significant differences for some or all of the three segmentation variables examined. For example, the importance and performance attributed to addressing the needs of people who are underemployed varied significantly among the groups on all three variables. Segmentation prior to repositioning around this issue would be more valuable.

The agency must also use caution when interpreting the results of analyses of variance of segmentation variables. Most of the significant differences observed between groups in the age and longevity tables are attributable solely to the consistently higher importance and performance ratings provided by people over the age of 60, and by people who had resided in Grapevine for more than 15 years. Given this observation, a reasonable assumption would be that older persons' opinions differ significantly from those of younger residents (18-59) who are relatively homogeneous in their ratings of the issues' importance and the agency's performance. Therefore, rather than develop diverse strategies for each age group, the agency should realize that differential repositioning tactics may be necessary only for older residents.

The utility of segmentation to repositioning efforts may be inherently limited. Traditional conceptualizations of public sector leisure service delivery suggested that segmentation was essential to effective marketing (Crompton & Lamb, 1986). Target markets were identified and then services were developed, priced, distributed, and

promoted to satisfy the wants of the agency's clientele. However, under the new model of public sector marketing (Novatorov & Crompton, 2001a; 2001b), marketing tactics are directed towards the entire jurisdiction of residents, not just the agency's participants. This marketing will take the form of repositioning, and substantially greater dependence will be placed on promotion, especially when using psychological and competitive repositioning. Public agencies have traditionally been somewhat limited in the extent to which they can engage in promotion, and even further limited in the extent to which they can accomplish segmentation in these communications. Therefore, as was described in Chapter II, an agency can still adopt multiple important community issues and position different aspects of its services as addressing one of those concerns, but the recipients of its repositioning messages will likely be undifferentiated.

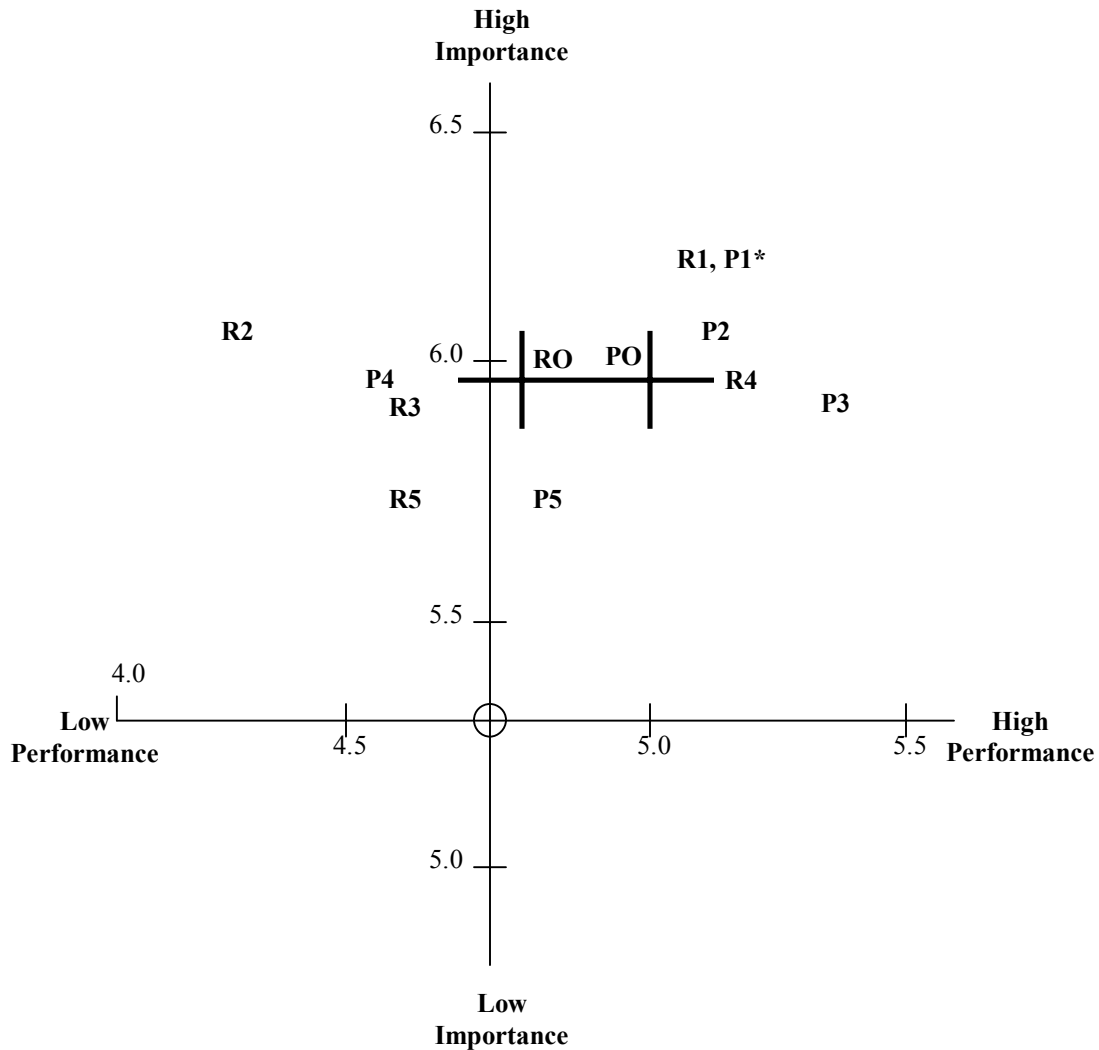
Positioning Relative to Competitors

The previous IPA (Figure 4) established the priority issues in the community and the agency's performance in addressing those issues. However, as was noted in Chapter II, the position that residents hold for the park and recreation agency exists relative to other public agency competitors. Consequently, this first IPA alone is insufficient for successful repositioning. The second type of IPA should investigate competitors' performances on only the important issues, because these are the only ones around which a successful repositioning strategy can feasibly be developed. For example, in this study, residents' perceptions of the police department's performance in preventing youth crime were sought (section H in Appendix D). Although it was not known

beforehand that this issue would be rated highest in importance in the study setting, an agency will usually have at least some understanding of its constituency. Accordingly, for each issue that is thought to be important in the community, a section(s) could be included addressing the performance of at least one competitor.

Based on residents' responses, Figure 5 plots the performance of the park and recreation agency and the police department on the issue of preventing youth crime. The importance of the overall issue (5.96) remains constant from the first IPA to the second, but the second grid allows the park and recreation agency's performance to be compared to that of another public agency with similar objectives. The police department received a mean performance rating of 5.01 (with a 95% confidence interval ranging from 4.87 to 5.16), whereas the park and recreation agency's mean performance rating was previously identified to be 4.78. According to these results, the police department's contribution to preventing youth crime is perceived to be significantly greater than that of the park and recreation agency. Indeed, although the confidence intervals overlapped slightly, a paired samples t-test confirmed this significant difference ($p < .001$) between residents' performance ratings of the two 'competitors'.

Given these results, GPARD's efforts to obtain increased tax allocations should include the coordinated use of real, psychological and competitive repositioning. In the second IPA, the individual items have also been plotted in order to provide GPARD with greater information about the elements of the preventing youth crime dimension. The placement of individual items on the grid for the two departments offers some advice as



Legend

O – crosshairs intersect at 4.73 performance, 5.33 importance

R = Parks and Recreation Department's overall performance in preventing youth crime

P = Police Department's overall performance in preventing youth crime

1 = helping youth to develop into productive citizens

2 = reducing the rate of repeat offenses by young offenders

3 = providing positive role models for adolescents

4 = providing youth with positive ways to fill their free time

5 = increasing the self-esteem of teenagers in the community

* performance of Parks and Recreation Department and Police rated equally

Figure 5: Park and Recreation Department's Performance Relative to a 'Competitor'

to how to apply the three repositioning tactics. With regard to real repositioning, attention should be focused on the issues for which GPARD received deficient performance ratings relative to the Police Department. In this scenario, the lowest rated item for GPARD was “reducing the rate of repeat offenses by young offenders”, but the Police Department’s perceived performance was rated drastically higher. Developing and distributing programs directly aimed at young offenders is integral to increasing perceptions of GPARD’s contributions to reducing recidivism. In contrast, the Parks and Recreation Department is already perceived as “providing youth with positive ways to fill their free time” and “helping youth to develop into productive citizens”. For these issues, competitive repositioning showing GPARD’s contributions and downplaying those of the Police Department may be most rewarding. Finally, psychological repositioning may be most appropriate for those items on which the agency is performing close to average, specifically “providing positive role models for adolescents” and “increasing the self-esteem of teenagers in the community”. To close the gap between Parks and Recreation and the Police on these two items, the challenge is to change stakeholders’ perceptions of what GPARD is currently doing by putting a different spin on the functions of their personnel and programs.

In general, it would seem that some consideration should be given to timing and order when applying the three repositioning strategies. While all three tactics should be employed by a park and recreation agency, real repositioning, if necessary, is a definite prerequisite to successful psychological and competitive repositioning. Once the agency has sufficient programs in place to address the priority community issue(s),

psychological repositioning can be used to educate stakeholders' on the public benefits that accrue from these services. Finally, when stakeholders' are convinced of the agency's contributions to broader community concerns, competitive repositioning must be engaged to demonstrate how parks and recreation better accomplishes these mandates than other public departments.

In summary, the two importance-performance analyses described demonstrate how a park and recreation agency can use the results obtained from the scale to develop its repositioning strategy. The first IPA establishes the priority issues in the community and the second permits more in-depth comparisons with competitor(s) on these important issues.

Limitations of the Study

There are several potential limitations of the study which should be noted. First, there may be other dimensions of park and recreation repositioning that are not captured in the instrument developed herein. The scale was originally conceptualized to be comprised of ten dimensions derived from reviewing literature on park and recreation repositioning and the public benefits of recreation. Although substantial literature supports including these dimensions, other literature may exist that would suggest other repositioning options for a park and recreation agency.

Another possible limitation related to the scale's dimensionality may be found in the conceptualization of the preventing youth crime dimension. Although the prevention of youth crime provides a park and recreation agency with a verifiable financial

contribution to the municipality, the agency's efforts may actually involve a broader mandate of youth development. For example, real repositioning strategies may involve programs aimed at developing youths' life and job skills, rather than simply those aimed at keeping kids out of trouble. Although the items comprising this dimension in the scale represent both perspectives on this issue, labeling the dimension "preventing youth crime" for the purposes of the construct validity check (sections A and C in Appendix D) may have been somewhat inappropriate.

Decisions made during the pretest stage of the study may also have altered the results obtained. For example, in recognition of fiscal and temporal constraints, a practical decision was made to pretest the instrument with undergraduate students rather than residents. Although the use of undergrads is commonplace in instrument pretests and the benefits of using such a homogeneous sample were noted earlier, students are not the population for whom the scale was developed and to which it would be administered in the future.

Another potential limitation arising from the pretest stage of the study involves decisions regarding the retention or removal of questionable items after data were collected from the student sample. When making these decisions, caution was used so as to not exclude potentially useful items from further testing of the instrument with its intended population. However, incorporating some degree of researcher discretion may have altered the composition of the dimensions, thereby potentially producing different results when the scale was administered to the sample of residents. Somewhat similarly, exploratory factor analysis was again used to ultimately verify the scale's dimensions

and a very 'simple' solution was revealed in which each item loaded saliently on only its intended dimension. Nevertheless, the use of confirmatory factor analysis on this final set of items would have further demonstrated the veracity of the model.

Finally, it is possible that the phrasing of the performance rubric in the final instrument may have been interpreted differentially by residents (see section F in Appendix D). The rubric, "The contribution of the Grapevine Parks and Recreation Department to" was meant to elicit residents' perceptions of how effective the department actually is at addressing each of the community issues. However, some residents may have interpreted the performance scale to be investigating the scope of benefits that the department could potentially provide. In future administrations of the scale, a clearer definition of performance should be included to guide residents' ratings. This may be accomplished by including some indication of a time frame over which the agency's contributions should be judged.

Suggestions for Future Research

This scale has provided researchers and agency managers with a valuable tool to assess citizens' perceptions of the importance of community issues and the park and recreation agency's respective performance. However, several avenues for future research remain to be explored. In this study, the dimensionality of the scale was assessed using data obtained from a pretest sample of undergraduate students, as well as data collected from a sample of municipal residents. The Grapevine residents' data verified the internal consistency, split-half reliability and construct validity of the items

within each factor. Nonetheless, future applications of the scale, possibly with different populations or in jurisdictions with differing political environments, are necessary to further substantiate these dimensions.

Efforts should also be made to better explicate the attracting businesses dimension. In its current form, the park and recreation repositioning scale contains only two items that embody this repositioning option. Other items originally developed to represent this dimension were either dropped from the scale due to a lack of salient loadings or were moved to other factors with which the data suggested they were more consistent. Further review of the recreation or business retention literature may uncover other aspects of this domain that could be tested for inclusion in the scale. Additionally, interviews with park and recreation professionals may provide greater insights into a park and recreation agency's involvement with this community objective.

In addition to dimensionality improvements, further tests of the scale's validity and reliability would be valuable. In this study, the scale was evaluated by establishing its construct validity and split-half reliability. Construct validity is an essential quality in a scale because it indicates the degree to which an instrument actually measures what it purports to measure (Babbie, 2001; Churchill & Iacobucci, 2002). Split-half reliability, like Cronbach's (1951) alpha, evaluates the degree of internal consistency within a set of items (Parasuraman, 1991). While the scale was shown to possess these important characteristics, other forms of reliability and validity should be investigated. For example, test-retest reliability measures the stability of ratings over time (DeVellis, 1991). Respondents could complete the scale twice with a period of two to four weeks

between administrations. Attitudes, such as those about the importance of community issues, are generally quite entrenched, and are unlikely to change over such a short interval (Parasuraman, 1991). Accordingly, barring any intermittent, significant events, the scale should produce highly correlated ratings across the two measurements.

Another type of validity that must be established is criterion-related validity. Also called predictive validity, this method of validation relates the measurements obtained from a scale to some external criterion (Babbie, 2001). For example, residents rating an issue as a high priority in the community should lead to elected officials allocating more resources to address that concern. Similarly, perceiving the agency's contributions to be substantial should be associated with an increased willingness to fund park and recreation services. These ideas are ways to measure the scale's criterion-related validity and are further elaborated on below.

Finally, in order for this scale to realize its full utility, the premises underlying repositioning must be substantiated. According to the model shown in Figure 6, repositioning a public park and recreation agency is a multi-step process. The impetus for developing this scale is that it will assist an agency with steps 2 and 3 obtaining stakeholders' input about community issues and identifying a desirable position. The agency can then use real, psychological, and competitive repositioning to improve stakeholders' perceptions of their contributions to important community concerns. The premise underlying repositioning is that addressing an important community issue(s), and doing so more effectively than other public agency competitors, will increase the

agency's share of finite public resources. However, this assertion about the rewards of successful repositioning has not been confirmed by empirical research.

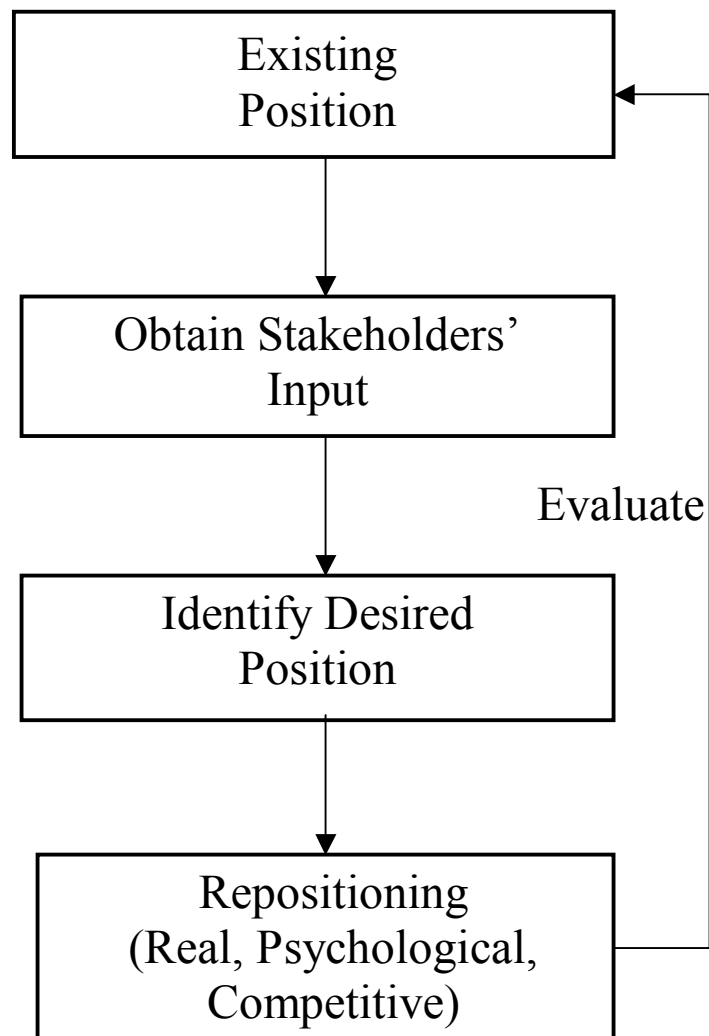


Figure 6: Model of the Repositioning Process

Studies are needed that put repositioning into action and then measure the results. Ideally, this would involve a longitudinal study design in which a municipal agency's efforts and rewards are tracked throughout the steps outlined in Figure 6. More practically, however, repositioning could be operationalized in an experimental setting. For example, initially, study participants' perceptions of the importance of community issues and the park and recreation agency's contributions to these issues could be investigated by administering the scale developed herein. Additional sections could also address the contributions of other public agency 'competitors' (similar to sections G and H in Appendix D). Subjects would then be exposed to various repositioning messages that pertain to the issue they rated as most important. Following exposure to these hypothetical agency communications, participants would again be asked to complete the scales rating each competitor (including the park and recreation agency). Assuming intervening variables are properly controlled, any changes in their attitudes towards the public departments can be attributed to the park and recreation agency's repositioning efforts. Moreover, participants' willingness to allocate tax dollars to the park and recreation department relative to other public agencies can be examined before and after the administration of the repositioning messages. Similar experimental designs employing informational messages as treatments have been used effectively in other recreation settings to influence changes in participants' attitudes and behaviors (Gramann, Bonifield & Kim, 1995; McCarville & Crompton, 1987; McCarville, Crompton & Sell, 1993). Comparable research would be invaluable for explicating the relationship between repositioning and increased agency funding.

REFERENCES

- Aaker, D.A. & Shansby, J.G. (1982). Positioning your product. *Business Horizons*, 3, 56-62.
- Alberty, S., & Mihalik, B. (1989). The use of importance-performance analysis as an evaluative technique in adult education. *Evaluation Review*, 13(1), 33-44.
- American Forestry Association. (1992). *Tree facts: Growing greener cities: The global releaf tree planting handbook*. Los Angeles: Living Plant Press.
- American Forests. (1997). *The state of the urban forest: Assessing tree cover and developing goals*. Washington, DC: American Forests.
- Ap, J. & Crompton, J.L. (1998). Developing and testing a tourism impact scale. *Journal of Travel Research*, 37(2), 120-130.
- Arnott, D.C. (1992). *Bases of financial services positioning in the personal pension, life assurance and personal equity plan sectors*. Ph.D. Thesis, Manchester Business School, University of Manchester, United Kingdom.
- Assael, H. (1985). *Marketing management*. Belmont, CA: Kent Publishing.
- Babbie, E. (2001). *The practice of social research*. (9th ed.). Belmont, CA: Wadsworth.
- Backman, S.J. & Backman, K.F. (1993). The role of park and recreation services on retiree relocation decisions. *Trends*, 30(4), 19-22.
- Bartlett, P., & Einert, A.E. (1992). Analysis of the design function of an adult softball complex in a new public recreational park. *Journal of Park and Recreation Administration*, 10(1), 71-81.
- Bateson, J. (1995). *Managing services marketing*. (3rd ed.). London: The Dryden Press.
- Batra, R., Myers, J.G. & Aaker, D.A. (1996). *Advertising management*. (5th ed.). Upper Saddle River, NJ: Prentice Hall.
- Bentler, P.M. (1989). *EQS structural equations program manual*. Los Angeles: BMDP Statistical Software.

- Bentler, P.M. & Bonnett, D.G. (1980). Significance tests and goodness-of-fit in the analysis of covariance structures. *Psychological Bulletin*, 88, 588-606.
- Berry, L.L. (1980). Services marketing is different. *Business*, 30(3), 24-29.
- Bettman, J.B. (1979). *An information processing theory of consumer choice*. Reading, MA: Addison-Wesley.
- Bhat, S. & Reddy, S.K. (1998). Symbolic and functional positioning of brands. *Journal of Consumer Marketing*, 15(1), 32-43.
- Bigne, E., Vila-Lopez, N., & Kuster-Boluda, I. (2000). Competitive positioning and market orientation: Two interrelated constructs. *European Journal of Innovation Management*, 3(4), 190-198.
- Blankson, C. & Kalafatis, S.P. (2001). The development of a consumer/customer-derived generic typology of positioning strategies. *Journal of Marketing Theory and Practice*, Spring, 35-53.
- Blankson, C. & Kalafatis, S.P. (1999). Issues and challenges in the positioning of service brands: A review. *Journal of Product and Brand Management*, 8(2), 106-118.
- Blumenfeld, E. (1994). Pollution prevention, the Clean Air Act and motor vehicles: Bicycling is a healthy transportation alternative. *Rethink, Reduce, Reuse Review: A USEPA Region II Pollution Prevention Triannual Publication, Volume 3*.
- Booms, B.H. & Bitner, M.J. (1981). Marketing strategies and organization structures for service firms. In *Marketing of services*, J. Donnelly and W.R. George (Eds.). Chicago, IL: American Marketing Association.
- Burnett, J.J. (1993). *Promotion management*. Boston, MA: Houghton Mifflin.
- Byrne, B.M. (1994). *Structural equation modeling with EQS and EQS/Windows*. Thousand Oaks, CA: Sage Publications.
- Calder, B.J., Phillips, L.W. & Tybout, A.M. (1982). The concept of external validity. *Journal of Consumer Research*, 9(December), 240-244.
- Carroll, J.D., & Green, P.E. (1997). Psychometric methods in marketing research: Part 11, multidimensional scaling. *Journal of Marketing Research*, 34(May), 193-204.

- Churchill, G.A. (1979). A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research*, 16, 64-73.
- Churchill, G.A. & Iacobucci, D. (2002). *Marketing research: Methodological foundations*. (8th ed.). Orlando, FL: Harcourt.
- City of Grapevine website. <http://www.cityofgrapevine.org>. December 14, 2002.
- Comrey, A.L. (1988). Factor analytic methods of scale development in personality and clinical psychology. *Journal of Consulting and Clinical Psychology*, 56, 754-761.
- Cooper, L.G. (1983). A review of multidimensional scaling in marketing research. *Applied Psychological Measurement*, 7(4), 427-50.
- Cortina, J.M. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of Applied Psychology*, 78(1), 98-104.
- Cowell, D. (1989). *The marketing of services*. London: Heinemann.
- Cravens, D.W. & Lamb, C.W. (1989). Services marketing – who’s the customer and what’s the competition? *Business*, 39(October-December), 3-10.
- Crawford, C.M. (1985). A new positioning typology. *Journal of Product Innovation Management*, 4, 243-253.
- Crispell, D. & Frey, W.H. (1993). American maturity. *American Demographics*, 15(3), 31-42.
- Crompton, J.L. (2001). *Parks and economic development*. Chicago, IL: American Planning Association.
- Crompton, J.L. (2000). *The impact of parks and open space on property values and the property tax base*. Ashburn, VA: National Recreation and Park Association.
- Crompton, J.L. (1999a). *Financing and acquiring park and recreation resources*. Champaign, IL: Human Kinetics.
- Crompton, J.L. (1999b). *Measuring the economic impact of visitors to sports tournaments and special events*. Ashburn, VA: National Recreation and Park Association.

- Crompton, J.L., Fakeye, P. & Lue, C. (1992). Positioning: The example of the Lower Rio Grande Valley in the winter long stay destination market. *Journal of Travel Research*, 31(2), 20-26.
- Crompton, J.L. & Lamb, C.W. (1986). *Marketing government and social services*. New York: John Wiley & Sons.
- Crompton, J.L., Love, L.L. & More, T.A. (1997). An empirical study of the role of recreation, parks and open space in companies' (re)location decisions. *Journal of Park and Recreation Administration*, 15(1), 37-58.
- Crompton, J.L. & McGregor, B.P. (1994). Trends in the financing and staffing of local government park and recreation services 1964/65-1990/91. *Journal of Park and Recreation Administration*, 12(3), 19-37.
- Crompton, J.L. & Tian-Cole, S. (1999). What response rate can be expected from questionnaire surveys that address park and recreation issues? *Journal of Park and Recreation Administration*, 17(1), 60-72.
- Crompton, J.L. & Witt, P.A. (1997). Repositioning: The key to building community support. *Parks and Recreation*, October, 80-90.
- Cronbach, L.J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297-334.
- Cuba, L. & Longino, C.F. (1991). Regional retirement migration: The case of Cape Cod. *Journal of Gerontology: Social Sciences*, 46(1), 533-542.
- Cutler, B.D. & Javalgi, R.G. (1993). Analysis of print advertisement features: services versus products. *Journal of Advertising Research*, 33(2), 62-69.
- de Chernatony, L. (1994). Developing a more effective brand positioning. *The Journal of Brand Management*, 1(6), 373-379.
- Decker, J.M. & Crompton, J.L. (1993). Attracting footloose companies: An investigation of the business location decision process. *Journal of Professional Services Marketing*, 9(1), 69-94.
- Decker, J.M. & Crompton, J.L. (1990). Business location decisions: Importance of quality of life, recreation, park and cultural amenities. *Journal of Park and Recreation Administration*, 8(2), 26-43.

- Dev, C.S., Morgan, M.S. & Shoemaker, S. (1995). A positioning analysis of hotel brands – based on travel-manager perceptions. *Cornell Hotel and Restaurant Administration Quarterly*, December, 48-55.
- DeVellis, R.F. (1991). *Scale development: Theory and applications*. Newbury Park, CA: Sage.
- Devlin, J., Ennew, C. & Mirza, M. (1995). Organizational positioning in retail financial services. *Journal of Marketing Management*, 11(1-3), 119-132.
- Dibb, S., Simkin, L., Pride, W.M. & Ferrell, O.C. (1997). *Marketing: Concepts and strategies*. (3rd ed.). Boston: Houghton Mifflin.
- Dibb, S. & Simkin, L. (1993). The strength of branding and positioning in services. *International Journal of Service Industry Management*, 4(1), 25-35.
- Dillman, D.A. (2000). *Mail and internet surveys: The tailored design method*. (2nd ed.). New York: John Wiley & Sons.
- Dolinsky, A.L., & Caputo, R.K. (1991). Adding a competitive dimension to importance-performance analysis: An application to traditional health care systems. *Health Care Marketing Quarterly*, 8(3/4), 61-79.
- Doyle, P. (1975). Brand positioning using multidimensional scaling. *European Journal of Marketing*, 9(1), 20-34.
- Driver, B.L. & Bruns, D.H. (1999). Concepts and uses of the benefits approach to leisure. In *Leisure studies: Prospects for the twenty-first century*, E.L. Jackson & T.L. Burton (Eds). State College, PA: Venture.
- Droge, C. & Darmon, R.Y. (1987). Associative positioning strategies through comparative advertising: Attribute versus overall similarity approaches. *Journal of Marketing Research*, 24 (November), 377-388.
- Dwyer, J.F. (1993). The economic contribution of trees to urban communities. *Trends*, 30(4), 44-45.
- Easingwood, C.J. & Mahajan, V. (1989). Positioning of financial services for competitive strategy. *Journal of Product Innovation Management*, 6(September), 207-219.
- Ennew, C.T., Reed, G.V., & Binks, M.R. (1993). Importance-performance analysis and the measurement of service quality. *European Journal of Marketing*, 27(2), 59-70.

- Fill, C. (1999). *Marketing communications: Contexts, contents and strategies*. (2nd ed.). Hemel Hempstead: Prentice Hall Europe.
- Fletcher, J.E., Kaiser, R.A., & Groger, S. (1992). An assessment of the importance and performance of park impact fees in funding park and recreation infrastructure. *Journal of Park and Recreation Administration*, 10(3), 75-87.
- Fornell, C. & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18, 39-50.
- Frazer, C.F. (1983). Creative strategy: A management perspective. *Journal of Advertising*, 12(4), 40.
- Froelicher, V.F. & Froelicher, E.S. (1991). Cardiovascular benefits of physical activity. In *Benefits of leisure*, B.L. Driver, P.J. Brown & G.L. Peterson (Eds.). State College, PA: Venture, pp. 59-72.
- Galbraith, C. & DeNoble, A.F. (1988). Location decisions by high technology firms: A comparison of firm size, industry type and institutional form. *Entrepreneurship: Theory and Practice*, 13, 31-47.
- Galveston-Houston Association for Smog Prevention (GHASP). (1999). *Trees and our air: The role of trees and other vegetation in Houston-area air pollution*.
- Gartner, W.C. (1989). Tourism image: Attribute measurement of state tourism products using multidimensional scaling techniques. *Journal of Travel Research*, 30(3), 10-16.
- Glyptis, S. (1989). *Leisure and unemployment*. Milton Keynes, England: Open University.
- Godbey, G. (1993). The contribution of recreation and parks to reducing health care costs: From theory to practice. *Trends*, 30(4), 37-41.
- Godbey, G. (1991). Redefining public parks and recreation. *Parks and Recreation*, 26(10), 58-61, 74.
- Godbey, G., Graeffe, A. & James, S. (1993). Reality and perception – Where do we fit in? *Parks and Recreation*, January, 77-83, 110-111.

- Gorn, G.J. & Weinberg, C.B. (1984). The impact of comparison advertising on perception and attitude: Some positive findings. *Journal of Consumer Research*, 11(September), 719-727.
- Gramann, J.H., Bonifield, R.L. & Kim, Y. (1995). Effect of personality and situational factors on intentions to obey rules in outdoor recreation areas. *Journal of Leisure Research*, 27(4), 326-343.
- Green, P.E., Carmone Jr., F.J., & Smith, S.M. (1989). *Multidimensional scaling: Concepts and applications*. Boston, MA: Allyn and Bacon.
- Guadagnolo, F. (1985). The importance-performance analysis: An evaluation and marketing tool. *Journal of Park and Recreation Administration*, 3(2), 13-22.
- Haigood, T.L. & Crompton, J.L. (1998). The role of recreation amenities in retiree relocation decisions. *Journal of Park and Recreation Administration*, 16(1), 25-45.
- Hair Jr., J.F., Anderson, R.E., Tatham, R.L. & Black, W.C. (1998). *Multivariate data analysis*. (5th ed.). Upper Saddle River, NJ: Prentice Hall.
- Havitz, M.E. & Spigner, C. (1993). Unemployment, health and leisure: The role of park and recreation services. *Trends*, 30(4), 31-36.
- Havitz, M.E., Twynam, G.D., & DeLorenzo, J.M. (1991). Importance-performance analysis as a staff evaluation tool. *Journal of Park and Recreation Administration*, 9(1), 43-54.
- Hawes, J.M., & Rao, C.P. (1985). Using importance-performance analysis to develop health care marketing strategies. *Journal of Health Care Marketing*, 5(4), 19-25.
- Hibbert, S.A. (1995). The market positioning of British medical charities. *European Journal of Marketing*, 29(10), 6-26.
- Hollenshort, S., Olson, D., & Fortney, R. (1992). Use of importance-performance analysis to evaluate state-park cabins: The case of the West Virginia state park system. *Journal of Park and Recreation Administration*, 10(1), 1-11.
- Hooley, G., Broderick, A. & Moller, K. (1998). Competitive positioning and the resource-based view of the firm. *Journal of Strategic Marketing*, 6, 97-115.
- Hooley, G.J. & Saunders, J. (1993). *Competitive positioning: The key to market success*. London: Prentice Hall.

- Howard, D.R. & Crompton, J.L. (1980). *Financing, managing and marketing recreation and park resources*. Dubuque, IA: Brown.
- Hu, L. & Bentler, P.M. (1998). Fit indices in covariance structure modeling: Sensitivity to underparameterized model misspecification. *Psychological Methods*, 3(4), 424-453.
- Jaccard, J., Brinberg, D., & Ackerman, L.J. (1986). Assessing attribute importance: A comparison of six methods. *Journal of Consumer Research*, 12, 463-468.
- Javalgi, R.G., Joseph, W.B. & Gombeski Jr., W.R. (1995). Positioning your service to target key buying influences: The case of referring physicians and hospitals. *Journal of Services Marketing*, 9(5), 42-52.
- Javalgi, R.G., Thomas, E.G. & Rao, S.R. (1992). US pleasure travelers' perceptions of selected European destinations. *European Journal of Marketing*, 26(7), 45-64.
- Joreskog, K.G. & Sorbom, D. (1981). *LISREL V: Analysis of linear structural relationships by the method of maximum likelihood*. Chicago: National Educational Resources.
- Kalafatis, S.P., Glass, B. & Cooper, R.J. (1997). *Positioning strategies in the UK timber sector*. Paper presented at the IUFRO conference, Tofino, British Columbia, Canada, June.
- Kalafatis, S.P., Tsogas, M.H. & Blankson, C. (2000). Positioning strategies in business markets. *Journal of Business and Industrial Marketing*, 15(6), 416-437.
- Kealy, M.J. (1991). Economic quantification of leisure benefits. In *Benefits of leisure*, B.L. Driver, P.J. Brown & G.L. Peterson (Eds.). State College, PA: Venture, pp. 431-438.
- Kotler, P. (2000). *Marketing management, the millennium edition*. Prentice Hall: Upper Saddle River, NJ.
- Kotler, P. Haider, D.H. & Rein, I. (1993). *Marketing places: Attracting investment, industry, and tourism to cities, states, and nations*. New York: Free Press.
- Lee, T.H. & Crompton, J. (1992). Measuring novelty seeking in tourism. *Annals of Tourism Research*, 19(4), 732-751.
- Lego, R., & Shaw, R.N. (1992). Convergent validity in tourism research: An empirical analysis. *Tourism Management*, 13(4), 387-393.

- Levitt, T. (1981). Marketing intangible products and product intangibles. *Harvard Business Review*, May-June, 94-102.
- Longino, C.F. (1995). *Retirement migration in America*. Houston: Vacation Publications.
- Love, L.L. & Crompton, J.L. (1993). A profile of companies that considered recreation and park amenities to be important in their (re)location decisions. *Trends*, 30(4), 14-18.
- Lovelock, C.H. (1996). *Services marketing*. (3rd ed.). Upper Saddle River, NJ: Prentice Hall.
- Lovelock, C.H. (1984). *Services marketing: Text, cases & readings*. Englewood Cliffs, NJ: Prentice Hall.
- Martilla, J.A. & James, J.C. (1977). Importance-performance analysis. *Journal of Marketing*, 41, 77-79.
- Mazanec, J.A. (1995). Positioning analysis with self-organizing maps: An exploratory study on luxury hotels. *Cornell Hotel and Restaurant Administration Quarterly*, December, 80-95.
- McCarthy, K.F. & Morrison, P.A. (1979). *The changing demographic and economic structure of nonmetropolitan areas in the United States*. Santa Monica, CA: The Rand Corporation.
- McCarville, R.E. & Crompton, J.L. (1987). An empirical investigation of the influence of information on reference prices for public swimming pools. *Journal of Leisure Research*, 19(3), 223-235.
- McCarville, R.E., Crompton, J.L. & Sell, J.A. (1993). The influence of outcome messages on reference prices. *Leisure Sciences*, 15, 115-130.
- McKay, K. (1993). The potential of recreation in delinquency intervention. *Trends*, 30(4), 19-22.
- McPherson, E.G., Simpson, J.R., Peper, P.J., Scott, K., Xiao, Q. (2000). *Tree guidelines for coastal Southern California communities*. Sacramento, CA: Local Government Commission.

- McPherson, E.G., Simpson, J.R., Peper, P.J., Xiao, Q. (1999). *Tree guidelines for San Joaquin Valley communities*. Sacramento, CA: Local Government Commission.
- McPherson, E.G., Simpson, J.R., Peper, P.J., Xiao, Q., Pettinger, D.R. & Hodel, D.R. (2001). *Tree guidelines for inland empire communities*. Sacramento, CA: Local Government Commission.
- Mengak, K., Dottavio, F., & O'Leary, J. (1986). Use of importance-performance analysis to evaluate a visitor center. *Journal of Interpretation*, 11(2), 1-13.
- Miller, R.W. (1997). *Urban forestry: Planning and managing urban greenspaces*. (2nd ed.). Upper Saddle River, NJ: Prentice Hall.
- Mitchell, V.M. & Bates, L. (1998). UK consumer decision-making styles. *Journal of Marketing Management*, 14(1-3), 199-225.
- Novatorov, E.V. & Crompton, J.L. (2001a). A revised conceptualization of marketing in the context of public leisure services. *Journal of Leisure Research*, 33(2), 160-185.
- Novatorov, E.V. & Crompton, J.L. (2001b). Reformulating the conceptualization of marketing in the context of public leisure services. *Leisure Studies*, 20, 61-75.
- Nunnally, J. & Bernstein, I. (1994). *Psychometric theory*. (3rd ed.). New York: McGraw Hill.
- Oh, H. (2001). Revisiting importance-performance analysis. *Tourism Management*, 22, 617-627.
- Ortinou, D.J., Bush, A.J., Bush, R.P., & Twible, J.L. (1989). The use of importance-performance analysis for improving the quality of marketing education: Interpreting faculty-course evaluations. *Journal of Marketing Education*, Summer, 78-86.
- Paffenbarger, R.S., Hyde, R.T. & Dow, A. (1991). Health benefits of physical activity. In *Benefits of leisure*, B.L. Driver, P.J. Brown & G.L. Peterson (Eds.). State College, PA: Venture, pp. 49-57.
- Parasuraman, A. (1991). *Marketing research*. (2nd ed.). Reading, MA: Addison-Wesley.
- Parasuraman, A., Zeithaml, V. & Berry, L. (1988). SERVQUAL: A multi-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64 (Spring), 12-40.

- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49(Fall), 41-50.
- Park, C.W., Jaworski, B.J. & MacInnis, D.J. (1986). Strategic brand concept-image management. *Journal of Marketing*, 50(October), 135-145.
- Petrick, J.F. (2002). Development of a multi-dimensional scale for measuring the perceived value of a service. *Journal of Leisure Research*, 34(2), 119-134.
- Piercy, N. (1991). *Market-led strategic change*. London: Thorsons.
- Pollay, R.W. (1985). The subsidizing sizzle: a descriptive history of print advertising, 1900-1980. *Journal of Marketing*, 50(October), 135-145.
- Porter, M. (1985). *Competitive advantage*. New York: Free Press.
- Reid, D.G. (1988). The needs of the unemployed and the ability of leisure providers to respond. *Society and Leisure*, 11(1), 117-148.
- Richardson, S.L. (1987). An importance-performance approach to evaluating communication effectiveness. *Journal of Park and Recreation Administration*, 5(4), 71-83.
- Ries, A. & Trout, J. (1986). *Positioning: The battle for your mind*. New York: McGraw-Hill.
- Rigger, W. (1995). Positioning in theory and practice: towards a research agenda. 24th EMAC Conference Proceedings, Vol. 1, 16-19 May, ESSEC, France, pp. 991-1009.
- Rolston, H. III (1991). Creation and recreation: Environmental benefits and human leisure. In *Benefits of leisure*, B.L. Driver, P.J. Brown & G.L. Peterson (Eds.). State College, PA: Venture, pp. 393-403.
- Scanlon, J.R. (1984). Site selection and design for growth industries. *Industrial Development*, 153, 26-29.
- Scott, K.I., McPherson, E.G. & Simpson, J.R. (1998). Air pollutant uptake by Sacramento's urban forest. *Journal of Arboriculture*, 24(4), 224-234.
- Sessoms, H.D. (1993). Justification for our services: Have we lost our way? *Trends*, 30(4), 6-8.

- Shafer, C.S., Scott, D. & Mixon, J. (2000). A greenway classification system: Defining the function and character of greenways in and around communities. *Journal of Park and Recreation Administration*, 18(2), 88-106.
- Shostack, G.L. (1987). Service positioning through structural change. *Journal of Marketing*, 51(January), 34-43.
- Siegenthaler, K.L. (1994). Importance-performance analysis: Application to senior programs evaluation. *Journal of Park and Recreation Administration*, 5(4), 57-70.
- Simpson, J.R. & McPherson, E.G. (1996). Potential of tree shade for reducing residential energy use in California. *Journal of Arboriculture*, 22(1), 10-18.
- Smit, P. & Reid, D.G. (1990). Intervention in community leisure service systems. *Journal of Applied Recreation Research*, 15, 146-158.
- Smith, W.H. (1990). *Air pollution and forests: Interactions between air contaminants and forest ecosystems*. New York: Springer-Verlag.
- Spigner, C. & Havitz, M.E. (1992). Health, recreation and the unemployed: An interactive model. *International Quarterly of Community Health Education*, 13(8), 31-45.
- Tarrant, M.A. & Smith, E.K. (2002). The use of a modified importance-performance framework to examine visitor satisfaction with attributes of outdoor recreation settings. *Managing Leisure*, 7, 69-82.
- Taylor, H. (1987). Evaluating our quality of life. *Industrial Development* (March/April), 1-4.
- The Davey Resource Group (A Division of The Davey Tree Expert Company). (1997). *Urban forest benefit and cost analysis report for Fort Worth, Texas*. Fort Worth, TX: The National Urban and Community Advisory Council.
- Trout, J. (1996). *The new positioning: The latest on the world's #1 business strategy*. New York: McGraw-Hill.
- Trout, J. (1971). Positioning revisited: Why didn't GE and RCA listen? *Industrial Marketing*, November, 116-118.
- Trout, J. (1969). Positioning is a game people play in today's me-too market place. *Industrial Marketing*, June, 51-55.

- Ulrich, R.S., Dimberg, U. & Driver, B.L. (1991). Psychophysiological indicators of leisure benefits. In *Benefits of leisure*, B.L. Driver, P.J. Brown & G.L. Peterson (Eds.). State College, PA: Venture, pp. 73-89.
- Ulrich, R.S. & Parsons, R. (1992). Influences of passive experiences with plants on individual well-being and health. In *The role of horticulture in human well-being and social development*, D. Relf (Ed.). Portland, OR: Timber Press, pp. 93-105.
- U.S. Department of Commerce. (1992). *Enterprise Statistics, Table 3*. Washington, DC: U.S. Government Printing Office.
- U.S. Department of Energy Office of Energy Efficiency and Renewable Energy. (1993). *Tomorrow's energy today for cities and counties*. Washington, DC: Technical Information Program.
- Urban, G.L. & Star, S.H. (1991). *Advanced marketing strategy: Phenomena, analysis, and decisions*. Englewood Cliffs, NJ: Prentice Hall.
- Uysal, M., Chen, J.S. & Williams, D.R. (2000). Increasing state market share through a regional positioning. *Tourism Management*, 21, 89-96.
- Van Auken, S., & Lonial, S.C. (1991). Multidimensional scaling and retail positioning: An appraisal. *International Journal of Retail & Distribution Management*, 19(3).
- Van der Merwe, S. (1987). GRAMPIES: A new breed of consumers comes of age. *Business Horizons*, November-December, 14-19.
- Verma, R., Pullman, M.E. & Goodale, J.C. (1999). Designing and positioning food services for multicultural markets. *Cornell Hotel and Restaurant Administration Quarterly*, December, 76-87.
- Walker, B.A., Swasy, J.L. & Rethan, A.J. (1986). The impact of comparative advertising on perception formation in new product introductions. In *Advances in consumer research, volume 13*, R.J. Lutz (Ed.). Ann Arbor, MI: Association for Consumer Research, pp. 121-125.
- Webster, F.E. Jr. (1991). *Industrial marketing strategy*. New York: John Wiley and Sons.
- Wilkie, W.L. & Farris, P.W. (1975). Comparison advertising: Problems and potential. *Journal of Marketing*, 39 (October), 7-15.

- Williams, A.F., & Neal, L.L. (1993). Motivational assessment in organizations: An application of importance-performance analysis. *Journal of Park and Recreation Administration, 11*(2), 60-71.
- Wind, Y. (1982). *Product policy: Concepts, methods and strategy*. Reading, MA: Addison-Wesley.
- Wolverton, B.C. (1996). *How to grow fresh air*. New York: Penguin Books.
- Yost, M. & Tucker, S. (1995). Tangible evidence in marketing a service: the value of a campus visit in choosing a college. *Journal of Marketing for Higher Education, 6*(1).
- Zaichowsky, J.L. (1985). Measuring the involvement construct. *Journal of Consumer Research, 12*(December), 341-352.
- Zeithaml, V.A. (1981). How consumer evaluation processes differ between goods and services. In *Marketing of services*, J.H Donnelly and George (Eds.). Chicago, IL: American Marketing Association.
- Zeithaml, V.A. & Bitner, M.J. (1996). *Services marketing*. New York: McGraw Hill.

APPENDIX A

RESULTS OF CONTENT VALIDITY CHECK WITH EXPERT JUDGES

July 1, 2002

**To: Dr. Mark Havitz Dr. Joseph O’Leary Dr. David Scott Ms. Stephanie West
Ms. Kindal Hunt Dr. James Petrick Dr. Scott Shafer Dr. Peter Witt**

From: Andy Kaczynski CC: Dr. John Crompton

**Subject: Assistance with content validity check of the Park and Recreation
Repositioning Scale**

You are one of eight judges who have been selected to assist with a content validity check of the scale for repositioning public park and recreation services. When administered to citizens or elected officials, the scale will assist the public park and recreation agency to identify which issues these stakeholders perceive as most important, as well as the stakeholders’ perceptions of the agency’s performance on these issues. The agency can then determine a repositioning strateg(ies) based on this information.

To assist with this content validity check, I would request that you perform each of the following tasks:

- 1) In the first column of the item sheets (titled “Relevance”), please rate each item as being:
 - 1 – *Clearly relevant* to repositioning public park and recreation services
 - 2 – *Somewhat relevant* to repositioning public park and recreation services
 - 3 – *Not relevant* to repositioning public park and recreation services
- 2) At the top of each page of items, ten dimensions of public park and recreation repositioning are listed. It has been suggested that a public park and recreation agency can potentially impact all of these issues. In the second column of the item sheets (titled “Dimension”), please assign each item that was rated as *clearly relevant* or *somewhat relevant* in column one into one (and only one) of the ten dimensions of repositioning. If an item does not fit into any dimension, please indicate this by leaving the dimension column blank for that item (and see #3 below).
- 3) Review those items which were rated as clearly or somewhat relevant in column one but which do not fit into one of the ten specified dimensions. If possible, suggest additional dimension(s) of public park and recreation repositioning into which these items might fit. Please do this on a separate sheet of paper by noting the item number and the suggested alternate dimension.
- 4) Edit and improve the items to improve their clarity, readability, and content. Feel free to make legible amendments directly on the list of items.

- 5) Identify any items that you believe may be objectionable to respondents by noting these on a separate piece of paper.
- 6) Suggest any additional items (along with a corresponding repositioning dimension) that you feel would improve the content validity of the scale. Please do this on a separate piece of paper.
- 7) Offer any other suggestions that you feel might contribute to improving the study by noting these on a separate piece of paper.

Please contact me in person or via email (akaczynski@rpts.tamu.edu) if you have any questions about these tasks. It would be appreciated if they could be completed by Monday, July 8, 2002. Please return your responses to me via email or to my mailbox on the first floor of Francis Hall. Thank you for your participation and assistance.

Public Park and Recreation Repositioning Scale

Relevance

- 1 = Clearly relevant
2 = Somewhat relevant
3 = Not relevant

Dimension

- 1 = Attracting and retaining businesses
2 = Attracting and retaining retirees
3 = Enhancing real estate values
4 = Attracting tourists
5 = Deriving benefits from trees
6 = Stimulating urban rejuvenation
7 = Expanding retail sales of equipment
8 = Preventing youth crime
9 = Improving community health
10 = Addressing underemployment

The park and recreation department should focus its efforts on:

	Relevance (1-3)	Dimension (1-10)
1. providing opportunities for residents to increase their physical fitness	A	9
2. improving air quality	A	5
3. keeping neighborhood parks well-maintained	A	3
4. forming positive relationships with youth in the community (4)	A	8
5. lobbying legislators to legalize marijuana	placebo	-
6. assisting adults who are in unsatisfying jobs to improve their self-esteem (5)	A	10

A – Accepted by judges as to relevance (at least 7 of 8 judges rated item clearly or somewhat relevant). Item subsequently included in the pretest scale.

NR – Deemed not relevant by judges and subsequently dropped from further use.

Dimension – Dimension to which a majority of the judges assigned the relevant item.

() - A number in parentheses after an item indicates that the item, prior to its inclusion in the pretest scale, was reworded based on the suggestion of one or more judges and agreed by the researcher. Wording amendments can be found in the corresponding item number in the pretest scale in Appendix B.

Relevance

- 1 = Clearly relevant
 2 = Somewhat relevant
 3 = Not relevant

Dimension

- 1 = Attracting and retaining businesses
 2 = Attracting and retaining retirees
 3 = Enhancing real estate values
 4 = Attracting tourists
 5 = Deriving benefits from trees
 6 = Stimulating urban rejuvenation
 7 = Expanding retail sales of equipment
 8 = Preventing youth crime
 9 = Improving community health
 10 = Addressing underemployment

The park and recreation department should focus its efforts on:	Relevance (1-3)	Dimension (1-10)
7. developing attractions that draw people from other cities	A	4
8. ensuring that residents have sufficient opportunities to participate in recreation	NR	-
9. encouraging citizens to volunteer in the community	NR	-
10. building facilities in run-down areas	A	6
11. manufacturing and promoting its own brand of health care products	placebo	-
12. forming relationships with local businesses	NR	-
13. making its facilities accessible to people of all ages and abilities	NR	-

A – Accepted by judges as to relevance (at least 7 of 8 judges rated item clearly or somewhat relevant). Item subsequently included in the pretest scale.

NR – Deemed not relevant by judges and subsequently dropped from further use.

Dimension – Dimension to which a majority of the judges assigned the relevant item.

() - A number in parentheses after an item indicates that the item, prior to its inclusion in the pretest scale, was reworded based on the suggestion of one or more judges and agreed by the researcher. Wording amendments can be found in the corresponding item number in the pretest scale in Appendix B.

Relevance

- 1 = Clearly relevant
 2 = Somewhat relevant
 3 = Not relevant

Dimension

- 1 = Attracting and retaining businesses
 2 = Attracting and retaining retirees
 3 = Enhancing real estate values
 4 = Attracting tourists
 5 = Deriving benefits from trees
 6 = Stimulating urban rejuvenation
 7 = Expanding retail sales of equipment
 8 = Preventing youth crime
 9 = Improving community health
 10 = Addressing underemployment

The park and recreation department should focus its efforts on:

	Relevance (1-3)	Dimension (1-10)
14. ensuring there is open green space near every home	A	3
15. reducing the rate of repeat offenses by young offenders	A	8
16. preventing erosion and flooding	A	5
17. educating residents on the benefits of physical activity	A	9
18. hosting special events (12)	A	4
19. providing trails so that people can walk or bike to work	A	9

A – Accepted by judges as to relevance (at least 7 of 8 judges rated item clearly or somewhat relevant). Item subsequently included in the pretest scale.

NR – Deemed not relevant by judges and subsequently dropped from further use.

Dimension – Dimension to which a majority of the judges assigned the relevant item.

() - A number in parentheses after an item indicates that the item, prior to its inclusion in the pretest scale, was reworded based on the suggestion of one or more judges and agreed by the researcher. Wording amendments can be found in the corresponding item number in the pretest scale in Appendix B.

Relevance

- 1 = Clearly relevant
 2 = Somewhat relevant
 3 = Not relevant

Dimension

- 1 = Attracting and retaining businesses
 2 = Attracting and retaining retirees
 3 = Enhancing real estate values
 4 = Attracting tourists
 5 = Deriving benefits from trees
 6 = Stimulating urban rejuvenation
 7 = Expanding retail sales of equipment
 8 = Preventing youth crime
 9 = Improving community health
 10 = Addressing underemployment

The park and recreation department should focus its efforts on:	Relevance (1-3)	Dimension (1-10)
20. providing programs at which retired people can socialize together	A	2
21. encouraging adults to fill their free time in a constructive manner	NR	-
22. helping to prosecute and incarcerate criminals	placebo	-
23. reducing residents' energy bill costs (15)	A	5
24. providing positive role models for adolescents	A	8
25. forming partnerships with community health organizations (25)	A	9
26. ensuring that a good variety of land uses exists in the city (18)	A	6

A – Accepted by judges as to relevance (at least 7 of 8 judges rated item clearly or somewhat relevant). Item subsequently included in the pretest scale.

NR – Deemed not relevant by judges and subsequently dropped from further use.

Dimension – Dimension to which a majority of the judges assigned the relevant item.

() - A number in parentheses after an item indicates that the item, prior to its inclusion in the pretest scale, was reworded based on the suggestion of one or more judges and agreed by the researcher. Wording amendments can be found in the corresponding item number in the pretest scale in Appendix B.

Relevance

- 1 = Clearly relevant
 2 = Somewhat relevant
 3 = Not relevant

Dimension

- 1 = Attracting and retaining businesses
 2 = Attracting and retaining retirees
 3 = Enhancing real estate values
 4 = Attracting tourists
 5 = Deriving benefits from trees
 6 = Stimulating urban rejuvenation
 7 = Expanding retail sales of equipment
 8 = Preventing youth crime
 9 = Improving community health
 10 = Addressing underemployment

The park and recreation department should focus its efforts on:	Relevance (1-3)	Dimension (1-10)
27. using landscaping to beautify public areas	A	5
28. making executives and professionals want to live in this community	A	1
29. making programs accessible to everyone, regardless of their ability to pay (21)	A	10
30. getting outsiders to spend money in the community	A	4
31. exploiting the area's natural resources	placebo	-
32. improving the quality of groundwater	A	5
33. increasing the self-esteem of teenagers in the community	A	8

A – Accepted by judges as to relevance (at least 7 of 8 judges rated item clearly or somewhat relevant). Item subsequently included in the pretest scale.

NR – Deemed not relevant by judges and subsequently dropped from further use.

Dimension – Dimension to which a majority of the judges assigned the relevant item.

() - A number in parentheses after an item indicates that the item, prior to its inclusion in the pretest scale, was reworded based on the suggestion of one or more judges and agreed by the researcher. Wording amendments can be found in the corresponding item number in the pretest scale in Appendix B.

Relevance

- 1 = Clearly relevant
 2 = Somewhat relevant
 3 = Not relevant

Dimension

- 1 = Attracting and retaining businesses
 2 = Attracting and retaining retirees
 3 = Enhancing real estate values
 4 = Attracting tourists
 5 = Deriving benefits from trees
 6 = Stimulating urban rejuvenation
 7 = Expanding retail sales of equipment
 8 = Preventing youth crime
 9 = Improving community health
 10 = Addressing underemployment

The park and recreation department should focus its efforts on:	Relevance (1-3)	Dimension (1-10)
34. preventing illness in the community	A	9
35. finding out what recreation amenities older adults want (26)	A	2
36. providing facilities so that residents can participate in the activities of their choice	NR	-
37. enforcing that developers provide park space in their developments	A	3
38. developing new recreation complexes in the core of the city (28)	A	6
39. luring companies with a small number of employees	NR	-
40. helping adults build skills that can be used in the workforce	A	10

A – Accepted by judges as to relevance (at least 7 of 8 judges rated item clearly or somewhat relevant). Item subsequently included in the pretest scale.

NR – Deemed not relevant by judges and subsequently dropped from further use.

Dimension – Dimension to which a majority of the judges assigned the relevant item.

() - A number in parentheses after an item indicates that the item, prior to its inclusion in the pretest scale, was reworded based on the suggestion of one or more judges and agreed by the researcher. Wording amendments can be found in the corresponding item number in the pretest scale in Appendix B.

Relevance

- 1 = Clearly relevant
 2 = Somewhat relevant
 3 = Not relevant

Dimension

- 1 = Attracting and retaining businesses
 2 = Attracting and retaining retirees
 3 = Enhancing real estate values
 4 = Attracting tourists
 5 = Deriving benefits from trees
 6 = Stimulating urban rejuvenation
 7 = Expanding retail sales of equipment
 8 = Preventing youth crime
 9 = Improving community health
 10 = Addressing underemployment

The park and recreation department should focus its efforts on:

	Relevance (1-3)	Dimension (1-10)
41. offering financial advice to underprivileged families	placebo	-
42. encouraging senior citizens to participate in the department's programs (30)	A	2
43. preserving sites of historical significance	A	3,6
44. reducing the amount of money spent on controlling pollution	A	5
45. providing kids with a positive way to fill their free time (34)	A	8
46. offering opportunities for residents to reduce stress	A	9

A – Accepted by judges as to relevance (at least 7 of 8 judges rated item clearly or somewhat relevant). Item subsequently included in the pretest scale.

NR – Deemed not relevant by judges and subsequently dropped from further use.

Dimension – Dimension to which a majority of the judges assigned the relevant item.

() - A number in parentheses after an item indicates that the item, prior to its inclusion in the pretest scale, was reworded based on the suggestion of one or more judges and agreed by the researcher. Wording amendments can be found in the corresponding item number in the pretest scale in Appendix B.

Relevance

- 1 = Clearly relevant
 2 = Somewhat relevant
 3 = Not relevant

Dimension

- 1 = Attracting and retaining businesses
 2 = Attracting and retaining retirees
 3 = Enhancing real estate values
 4 = Attracting tourists
 5 = Deriving benefits from trees
 6 = Stimulating urban rejuvenation
 7 = Expanding retail sales of equipment
 8 = Preventing youth crime
 9 = *Improving community health*
 10 = Addressing underemployment

The park and recreation department should focus its efforts on:	Relevance (1-3)	Dimension (1-10)
47. providing adults with a way to socialize with other adults	A	9
48. creating a reason for people to purchase sporting goods	NR	-
49. providing a high quality of life in the community (37)	A	9
50. ensuring that parks are easily accessible to residents from their homes	A	3
51. testing and treating the city's sewage and garbage	placebo	-
52. revitalizing the community's downtown area	A	6
53. developing travel packages for visitors to the city	A	4

A – Accepted by judges as to relevance (at least 7 of 8 judges rated item clearly or somewhat relevant). Item subsequently included in the pretest scale.

NR – Deemed not relevant by judges and subsequently dropped from further use.

Dimension – Dimension to which a majority of the judges assigned the relevant item.

() - A number in parentheses after an item indicates that the item, prior to its inclusion in the pretest scale, was reworded based on the suggestion of one or more judges and agreed by the researcher. Wording amendments can be found in the corresponding item number in the pretest scale in Appendix B.

Relevance

- 1 = Clearly relevant
 2 = Somewhat relevant
 3 = Not relevant

Dimension

- 1 = Attracting and retaining businesses
 2 = Attracting and retaining retirees
 3 = Enhancing real estate values
 4 = Attracting tourists
 5 = Deriving benefits from trees
 6 = Stimulating urban rejuvenation
 7 = Expanding retail sales of equipment
 8 = Preventing youth crime
 9 = Improving community health
 10 = Addressing underemployment

The park and recreation department should focus its efforts on:	Relevance (1-3)	Dimension (1-10)
54. designing programs specifically for older adults	A	2
55. maintaining park areas within business districts	A	1
56. forming partnerships with community welfare agencies (43)	A	10
57. developing retail complexes in wealthy suburban areas	placebo	-
58. maintaining quiet parks in every neighborhood	A	3
59. helping people build healthy lifestyles	A	9
60. offering structured programming during regular work hours	NR	-

A – Accepted by judges as to relevance (at least 7 of 8 judges rated item clearly or somewhat relevant). Item subsequently included in the pretest scale.

NR – Deemed not relevant by judges and subsequently dropped from further use.

Dimension – Dimension to which a majority of the judges assigned the relevant item.

() - A number in parentheses after an item indicates that the item, prior to its inclusion in the pretest scale, was reworded based on the suggestion of one or more judges and agreed by the researcher. Wording amendments can be found in the corresponding item number in the pretest scale in Appendix B.

Relevance

- 1 = Clearly relevant
 2 = Somewhat relevant
 3 = Not relevant

Dimension

- 1 = Attracting and retaining businesses
 2 = Attracting and retaining retirees
 3 = Enhancing real estate values
 4 = Attracting tourists
 5 = Deriving benefits from trees
 6 = Stimulating urban rejuvenation
 7 = Expanding retail sales of equipment
 8 = Preventing youth crime
 9 = Improving community health
 10 = Addressing underemployment

The park and recreation department should focus its efforts on:	Relevance (1-3)	Dimension (1-10)
61. attracting people without children to the community	NR	-
62. facilitating opportunities for families to recreate together	A	9
63. maintaining accurate counts of the city's homeless population	placebo	-

A – Accepted by judges as to relevance (at least 7 of 8 judges rated item clearly or somewhat relevant) . Item subsequently included in the pretest scale.

NR – Deemed not relevant by judges and subsequently dropped from further use.

Dimension – Dimension to which a majority of the judges assigned the relevant item.

() - A number in parentheses after an item indicates that the item, prior to its inclusion in the pretest scale, was reworded based on the suggestion of one or more judges and agreed by the researcher. Wording amendments can be found in the corresponding item number in the pretest scale in Appendix B.

Judges' Comments

One or more expert judges provided the following comments regarding the initial scale dimensions and items.

Suggestions for additional dimensions:

- Enhancing the natural environment
- A safe environment
- Access to service
- Creating a sense of place
- Involving residents in their community
- Opportunity and access
- Family recreation opportunities
- Preserving natural environment
- Building social capital
- Providing recreation opportunities/facilities
- Providing green space areas/trails
- Providing accessible programs
- Creating social opportunities
- Helping youth grow to be productive citizens
- Improving community *mental and physical* health

Additional comments regarding dimensions:

- Deriving benefits from trees is pretty narrow, particularly since there is not another dimension that focuses on the environment.
- Expanding retail sales of equipment not a good position for a municipal agency.

Comments on items:

#4 – who?

#11 – simplify

#12 – may be an aspect of doing business, but not part of a position

#13 – not a position, a minimum requirement, can be marketed though; reword to “providing facilities that are accessible ...”

#15 – \$ necessary to impact repeat offenders is too great

#16 – double-barreled

#23 – resident responsibility on private property

#26 – zoning – P&R has limited role; not clear

#28 – change “making” to “encouraging”

#29 – all public sector must, not a position; change “making” to “providing”

Comments on items (continued):

- #30 – change “getting” to “encouraging”; change “outsiders” to “people outside the community” or “tourists”
- #32 – expansion of traditional role; too limiting
- #33 – not clear what self-esteem means
- #34 – change “preventing” to “reducing”
- #35 – reword to “determining the recreation amenities desired by older adults”
- #37 – reword to “monitoring developers to ensure that they provide ...”; change “enforcing that” to “requiring”
- #39 – poor business practice, too risky position for P&R; remove “with a small number of employees”; change “luring” to “attracting”
- #40 – community/adult ed? (do not focus on relationship to work)
- #42 – change “senior citizens” to “older adults”
- #44 – avoid reverse coding; what kind of pollution?
- #48 – not a mandate for public sector to create private sector business
- #49 – change “providing a high” to “increasing”
- #50 – consider changing “easily accessible” to “nearby”
- #53 – must also have direct benefit for current residents
- #60 – ambiguous – not sure what you mean
- #61 – sound callous here as if P&R should be anti-kids people will automatically decline this option; not clear if *older* adults

APPENDIX B
PRETEST SCALE

We are interested in your perceptions of the importance of various community issues. Please think about the community where you have spent the majority of your life and indicate how important each of the following issues is by circling a number below.

In (your hometown),	Not at all		Neutral			Extremely	
	Important					Important	
1. providing opportunities for residents to increase their physical fitness is	1	2	3	4	5	6	7
2. improving air quality is	1	2	3	4	5	6	7
3. keeping neighborhood parks well-maintained is	1	2	3	4	5	6	7
4. helping youth to develop into productive citizens is	1	2	3	4	5	6	7
5. assisting adults who are in unsatisfying jobs to increase their life satisfaction is	1	2	3	4	5	6	7
6. developing attractions that draw people from other cities is	1	2	3	4	5	6	7
7. building facilities in run-down areas is ...	1	2	3	4	5	6	7
8. ensuring there is open green space near every home is	1	2	3	4	5	6	7
9. reducing the rate of repeat offenses by young offenders is	1	2	3	4	5	6	7
10. preventing erosion and flooding is	1	2	3	4	5	6	7
11. educating residents on the benefits of physical activity is	1	2	3	4	5	6	7
12. hosting events that bring tourism revenue to local businesses is	1	2	3	4	5	6	7
13. providing trails so that people can walk or bike to work is	1	2	3	4	5	6	7
14. providing programs at which retired people can socialize together is	1	2	3	4	5	6	7
15. reducing the amount of energy consumed in residential areas is	1	2	3	4	5	6	7
16. providing positive role models for adolescents is	1	2	3	4	5	6	7

In (your hometown),	Not at all Important		Neutral			Extremely Important	
17. supporting and working with community health organizations is	1	2	3	4	5	6	7
18. ensuring that the heart of the city is prosperous is	1	2	3	4	5	6	7
19. using landscaping to beautify public areas is	1	2	3	4	5	6	7
20. making executives and professionals want to live in this community is	1	2	3	4	5	6	7
21. providing programs to lower income people at a reduced or no charge is	1	2	3	4	5	6	7
22. protecting environmentally sensitive areas is*	1	2	3	4	5	6	7
23. increasing the self-esteem of teenagers in the community is	1	2	3	4	5	6	7
24. improving the quality of groundwater is ...	1	2	3	4	5	6	7
25. preventing illness in the community is	1	2	3	4	5	6	7
26. providing amenities in the community that older adults want is	1	2	3	4	5	6	7
27. creating open space that increases nearby property values is*	1	2	3	4	5	6	7
28. developing new facilities in the core of the city is	1	2	3	4	5	6	7
29. helping adults build skills that can be used in the workforce is	1	2	3	4	5	6	7
30. encouraging senior citizens to become involved with the community is	1	2	3	4	5	6	7
31. convincing businesses to locate in this community is*	1	2	3	4	5	6	7
32. preserving sites of historical significance is	1	2	3	4	5	6	7
33. reducing the amount of money spent on controlling pollution is	1	2	3	4	5	6	7

In (your hometown),	Not at all Important		Neutral			Extremely Important	
34. providing kids with positive ways to fill their free time is	1	2	3	4	5	6	7
35. offering opportunities for residents to reduce stress is	1	2	3	4	5	6	7
36. providing adults with a way to socialize with other adults is	1	2	3	4	5	6	7
37. increasing the quality of life in the community is	1	2	3	4	5	6	7
38. ensuring that parks are easily accessible to residents from their homes is	1	2	3	4	5	6	7
39. developing travel packages for visitors to the city is	1	2	3	4	5	6	7
40. designing programs specifically for older adults is	1	2	3	4	5	6	7
41. revitalizing the community's downtown area is	1	2	3	4	5	6	7
42. maintaining park areas within business districts is	1	2	3	4	5	6	7
43. supporting and working with community welfare and employment agencies is	1	2	3	4	5	6	7
44. maintaining quiet parks in every neighborhood is	1	2	3	4	5	6	7
45. helping people build healthy lifestyles is ...	1	2	3	4	5	6	7
46. facilitating opportunities for families to recreate together is	1	2	3	4	5	6	7
47. reducing summer temperatures in urban areas is*	1	2	3	4	5	6	7
48. encouraging wealthy retirees to settle in this community is*	1	2	3	4	5	6	7
49. offering programs that meet the needs of people who are unemployed is*	1	2	3	4	5	6	7

In (your hometown),	Not at all		Neutral			Extremely	
	Important					Important	
50. requiring that developers provide park space in their developments is	1	2	3	4	5	6	7
51. getting tourists to spend money in the community is	1	2	3	4	5	6	7

You have completed the scale. Thank you for your participation!

* indicates a new item that was included in the pretest scale based upon the suggestion of one or more judges and as agreed by the researcher

APPENDIX C

1st MAILING COVER LETTER

October 7, 2002

Dear «prefix» «last_name»:

The City of Grapevine Parks and Recreation Department strives to be responsive to the needs and desires of residents when prioritizing investments in facilities, services and programs. The enclosed questionnaire is designed to help us identify those priorities.

The questionnaire lists a number of concerns which it has been suggested a city government could address. We want to know how important you consider each of these concerns to be. In addition, we want to learn how well you perceive the Parks and Recreation Department currently contributes to addressing those concerns.

You are one of a relatively small number of people who have been selected by a scientific sampling procedure to receive this questionnaire. For the results to be a valid representation of the views of city residents, it is very important that the questionnaire is completed and returned by those who receive it. The survey should be filled out by someone in your home who is 18 years of age or older. Please be assured that the responses of all respondents will be kept confidential and will be grouped together so you will not be personally identified in any way in the results.

The questionnaire will take approximately 20 minutes to complete. A reply-paid envelope addressed to the Department of Recreation, Park and Tourism Sciences is enclosed for your convenience. The results are being analyzed for us by Dr. John Crompton in that department at Texas A&M. All costs of the survey are being met from a grant to Texas A&M University, so it is being done at no cost to the City of Grapevine.

If you would like a summary of the results, please check the box at the end of the questionnaire and we will send it to you in approximately three months when the study is completed. If you have any questions about the study, feel free to contact Dr. Crompton at (979) 845-5320.

Thank you for your assistance with this project.

Sincerely,



Douglas Evans
Director

APPENDIX D
QUESTIONNAIRE

CITY OF
GRAPEVINE

**Parks and
Recreation
Survey**

Section A

On this first page, we are interested in how **important** you feel various community issues are. Please indicate how **important** each of the following issues is to you by circling a number below.

In Grapevine,	Not at all Important			Neutral			Extremely Important		
1. enhancing home real-estate values is	1	2	3	4	5	6	7		
2. attracting tourists to the community is	1	2	3	4	5	6	7		
3. addressing the needs of people who are unemployed is	1	2	3	4	5	6	7		
4. attracting and retaining retirees is	1	2	3	4	5	6	7		
5. preventing youth crime is	1	2	3	4	5	6	7		
6. attracting and retaining businesses is	1	2	3	4	5	6	7		
7. protecting the environment is	1	2	3	4	5	6	7		
8. improving community health is	1	2	3	4	5	6	7		
9. rejuvenating the city's downtown is	1	2	3	4	5	6	7		

Section B

Assume that you have 100 points to divide among the following three categories of community issues. Please allocate these 100 points based on how **important** you perceive each category of concerns to be. For example, if you consider environmental concerns to be twice as important as the other two concerns, you would assign it 50 points and give the other two concerns 25 points each.

1. Economic concerns _____ points
2. Environmental concerns _____ points
3. Social concerns _____ points

Total: 100

Section C

Now we are interested in your perceptions of the **Grapevine Parks and Recreation Department's contribution** to each of the issues.

The Grapevine Parks and Recreation Department's contribution to:	Very Small		Neutral			Very Large	
1. enhancing home real-estate values is	1	2	3	4	5	6	7
2. attracting tourists to the community is	1	2	3	4	5	6	7
3. addressing the needs of people who are unemployed is	1	2	3	4	5	6	7
4. attracting and retaining retirees is	1	2	3	4	5	6	7
5. preventing youth crime is	1	2	3	4	5	6	7
6. attracting and retaining businesses is	1	2	3	4	5	6	7
7. protecting the environment is	1	2	3	4	5	6	7
8. improving community health is	1	2	3	4	5	6	7
9. rejuvenating the city's downtown is	1	2	3	4	5	6	7

Section D

Again, assume that you have 100 points to divide among the three categories. This time, however, divide up the 100 points based on your perceptions of the Grapevine Parks and Recreation Department's **current contribution** to each category of concerns.

- 1. Economic concerns _____ points
- 2. Environmental concerns _____ points
- 3. Social concerns _____ points

Total: 100

Section E

In this section, the concerns you considered in the previous questions are specified in much more detail. Again, we are interested in your perceptions of how **important** the following community issues are. Please indicate how **important** you feel each issue is by circling a number below.

In Grapevine,	Not at all Important		Neutral			Extremely Important	
1. providing opportunities for residents to increase their physical fitness is	1	2	3	4	5	6	7
2. improving air quality is	1	2	3	4	5	6	7
3. keeping neighborhood parks well-maintained is	1	2	3	4	5	6	7
4. helping youth to develop into productive citizens is	1	2	3	4	5	6	7
5. developing attractions that draw people from other cities is	1	2	3	4	5	6	7
6. redeveloping facilities in run-down areas is	1	2	3	4	5	6	7
7. ensuring there is open green space near every home is	1	2	3	4	5	6	7
8. reducing the rate of repeat offenses by young offenders is	1	2	3	4	5	6	7
9. preventing erosion and flooding is	1	2	3	4	5	6	7
10. educating residents on the benefits of physical activity is	1	2	3	4	5	6	7
11. hosting events that bring tourism revenue to local businesses is	1	2	3	4	5	6	7
12. providing trails so that people can walk or bike to work is	1	2	3	4	5	6	7
13. providing programs at which retired people can socialize together is	1	2	3	4	5	6	7
14. reducing the amount of energy consumed by residents is	1	2	3	4	5	6	7

In Grapevine,	Not at all Important		Neutral			Extremely Important	
15. providing positive role models for adolescents is	1	2	3	4	5	6	7
16. supporting and working with community health organizations is	1	2	3	4	5	6	7
17. ensuring that the heart of the city is prosperous is	1	2	3	4	5	6	7
18. using landscaping to beautify public areas is	1	2	3	4	5	6	7
19. encouraging executives and professionals to live in this community is	1	2	3	4	5	6	7
20. providing programs to lower income people at a reduced or no charge is	1	2	3	4	5	6	7
21. protecting environmentally sensitive areas is	1	2	3	4	5	6	7
22. increasing the self-esteem of teenagers in the community is	1	2	3	4	5	6	7
23. improving the quality of groundwater is ...	1	2	3	4	5	6	7
24. providing amenities in the community that older adults want is	1	2	3	4	5	6	7
25. developing new facilities in the core of the city is	1	2	3	4	5	6	7
26. helping adults build skills that can be used in the workforce is	1	2	3	4	5	6	7
27. encouraging senior citizens to become involved with the community is	1	2	3	4	5	6	7
28. convincing businesses to locate in this community is	1	2	3	4	5	6	7
29. reducing the amount of money that the city must spend on controlling pollution is	1	2	3	4	5	6	7
30. providing youth with positive ways to fill their free time is	1	2	3	4	5	6	7

In Grapevine,	Not at all		Neutral			Extremely	
	Important					Important	
31. ensuring that parks are easily accessible to residents from their homes is	1	2	3	4	5	6	7
32. developing travel packages for visitors to the city is	1	2	3	4	5	6	7
33. designing programs specifically for older adults is	1	2	3	4	5	6	7
34. revitalizing the community's downtown area is	1	2	3	4	5	6	7
36. supporting and working with community welfare and employment agencies is	1	2	3	4	5	6	7
37. helping people build healthy lifestyles is ..	1	2	3	4	5	6	7
38. encouraging wealthy retirees to settle in this community to improve the tax base is ..	1	2	3	4	5	6	7
39. offering programs that meet the needs of people who are unemployed is	1	2	3	4	5	6	7
40. requiring that developers provide park space for people in their developments is ..	1	2	3	4	5	6	7
41. getting tourists to spend money in the community is	1	2	3	4	5	6	7

Section F

In this section, we are interested in your perceptions of the **Grapevine Parks and Recreation Department's contribution** to each of the items.

The Grapevine Parks and Recreation Department's contribution to:	Very Small		Neutral			Very Large	
1. providing opportunities for residents to increase their physical fitness is	1	2	3	4	5	6	7
2. improving air quality is	1	2	3	4	5	6	7
3. keeping neighborhood parks well-maintained is	1	2	3	4	5	6	7
4. helping youth to develop into productive citizens is	1	2	3	4	5	6	7
5. developing attractions that draw people from other cities is	1	2	3	4	5	6	7
6. redeveloping facilities in run-down areas is	1	2	3	4	5	6	7
7. ensuring there is open green space near every home is	1	2	3	4	5	6	7
8. reducing the rate of repeat offenses by young offenders is	1	2	3	4	5	6	7
9. preventing erosion and flooding is	1	2	3	4	5	6	7
10. educating residents on the benefits of physical activity is	1	2	3	4	5	6	7
11. hosting events that bring tourism revenue to local businesses is	1	2	3	4	5	6	7
12. providing trails so that people can walk or bike to work is	1	2	3	4	5	6	7
13. providing programs at which retired people can socialize together is	1	2	3	4	5	6	7
14. reducing the amount of energy consumed by residents is	1	2	3	4	5	6	7
15. providing positive role models for adolescents is	1	2	3	4	5	6	7

The Grapevine Parks and Recreation Department's contribution to:							
	Very Small	Neutral					Very Large
16. supporting and working with community health organizations is	1	2	3	4	5	6	7
17. ensuring that the heart of the city is prosperous is	1	2	3	4	5	6	7
18. using landscaping to beautify public areas is	1	2	3	4	5	6	7
19. encouraging executives and professionals to live in this community is	1	2	3	4	5	6	7
20. providing programs to lower income people at a reduced or no charge is	1	2	3	4	5	6	7
21. protecting environmentally sensitive areas is	1	2	3	4	5	6	7
22. increasing the self-esteem of teenagers in the community is	1	2	3	4	5	6	7
23. improving the quality of groundwater is ..	1	2	3	4	5	6	7
24. providing amenities in the community that older adults want is	1	2	3	4	5	6	7
25. developing new facilities in the core of the city is	1	2	3	4	5	6	7
26. helping adults build skills that can be used in the workforce is	1	2	3	4	5	6	7
27. encouraging senior citizens to become involved with the community is	1	2	3	4	5	6	7
28. convincing businesses to locate in this community is	1	2	3	4	5	6	7
29. reducing the amount of money that the city must spend on controlling pollution is ...	1	2	3	4	5	6	7
30. providing youth with positive ways to fill their free time is	1	2	3	4	5	6	7
31. ensuring that parks are easily accessible to residents from their homes is	1	2	3	4	5	6	7

The Grapevine Parks and Recreation Department's contribution to:	Very Small		Neutral			Very Large	
32. developing travel packages for visitors to the city is	1	2	3	4	5	6	7
33. designing programs specifically for older adults is	1	2	3	4	5	6	7
34. revitalizing the community's downtown area is	1	2	3	4	5	6	7
35. supporting and working with community welfare and employment agencies is	1	2	3	4	5	6	7
36. helping people build healthy lifestyles is ..	1	2	3	4	5	6	7
38. encouraging wealthy retirees to settle in this community to improve the tax base is	1	2	3	4	5	6	7
39. offering programs that meet the needs of people who are unemployed is	1	2	3	4	5	6	7
40. requiring that developers provide park space for people in their developments is ..	1	2	3	4	5	6	7
41. getting tourists to spend money in the community is	1	2	3	4	5	6	7

Section G

In this section, we are interested in your perceptions of the contributions of the Grapevine **Convention and Visitors Bureau** to each of the items.

The Grapevine Convention and Visitors Bureau's contribution to:	Very Small		Neutral			Very Large	
1. getting tourists to spend money in the community is	1	2	3	4	5	6	7
2. developing attractions that draw people from other cities is	1	2	3	4	5	6	7
3. hosting events that bring tourism revenue to local businesses is	1	2	3	4	5	6	7
4. ensuring that the heart of the city is prosperous is	1	2	3	4	5	6	7
5. developing travel packages for visitors to the city is	1	2	3	4	5	6	7
6. attracting tourists to the community is	1	2	3	4	5	6	7

Section H

In this final section, we are interested in your perceptions of the contributions of the Grapevine **Police Department** to each of the items.

The Grapevine Police Department's contribution to:	Very Small		Neutral			Very Large	
1. helping youth to develop into productive citizens is	1	2	3	4	5	6	7
2. reducing the rate of repeat offenses by young offenders is	1	2	3	4	5	6	7
3. providing positive role models for adolescents is	1	2	3	4	5	6	7
4. increasing the self-esteem of teenagers in the community is	1	2	3	4	5	6	7
5. providing youth with positive ways to fill their free time is	1	2	3	4	5	6	7
6. preventing youth crime is	1	2	3	4	5	6	7

APPENDIX E
REMINDER POSTCARD

October 10, 2002

Last week a questionnaire was mailed to you seeking your opinions about the importance of various community issues and your perceptions of the Grapevine Parks and Recreation Department's contributions to those issues. You are one of a small number of people who were randomly chosen to receive the questionnaire. For the results to be a valid representation of the views of city residents, it is very important that you complete and return it.

If you have already completed and returned the questionnaire, please accept our sincere thanks. If not, please do so today. We appreciate your help because it is only by asking people like you for your opinions that we can understand and respond to the needs and desires of Grapevine residents.

If you did not receive a questionnaire, or if it was misplaced, please call (979) 845-5320. Dr. John Crompton at Texas A&M University who is assisting us with this project will be happy to get another one in the mail to you today. Thank you again for your assistance with this project.

Douglas Evans
Director, City of Grapevine Parks and Recreation Department

APPENDIX F

2nd MAILING COVER LETTER

October 21, 2002

Dear «prefix» «last_name»:

About two weeks ago, a questionnaire was sent to you inquiring about the importance that you place on a variety of community issues. We were also interested in your perceptions of the Grapevine Parks and Recreation Department's contributions to each of these issues. Once all of the questionnaires are returned, we think that the results will be very useful in improving our service to City of Grapevine residents.

We are writing again because of the importance that your questionnaire has for helping to get accurate results. You are one of a relatively small number of people who have been selected by a scientific sampling procedure to receive this questionnaire. In order for the results to be representative of the views of city residents, it is very important that the questionnaire is completed and returned by those who receive it.

A questionnaire identification number is printed on the front of each questionnaire so that we can check your name off of the mailing list when it is returned. Please be assured that all responses to the questionnaire will be grouped together and that, at no time, will your answers ever be identified with you.

The questionnaire will take approximately 20 minutes to complete. A reply-paid envelope addressed to the Department of Recreation, Park and Tourism Sciences is enclosed for your convenience. The results are being analyzed for us by Dr. John Crompton in that department at Texas A&M. Again, we remind you that all costs of the survey are being met from a grant to Texas A&M University, so it is being done at no cost to the City of Grapevine.

We hope that you will fill out and return the questionnaire soon. If you have already done so, please accept our sincere thanks. If you have any questions about the study, please feel free to contact Dr. Crompton at (979) 845-5320.

Thank you again for your assistance with this project.

Sincerely,



Douglas Evans
Director, Grapevine Parks and Recreation Department

APPENDIX G

3rd MAILING COVER LETTER

November 5, 2002

Dear «prefix» «last_name»:

The Grapevine Parks and Recreation Department is seeking to identify the importance that residents place on a variety of community issues. We are also interested in your perceptions of the Department's contributions to each of these issues. We believe this information will be very useful in helping us to improve our service to City of Grapevine residents. For this reason, we would be very appreciative if you would complete and return the enclosed questionnaire.

We have contacted you again with this request because you are one of a relatively small number of residents scientifically selected to receive the questionnaire and in order for the results to be representative of residents, it is important that it is returned by the sample who receive it. We hope that you will take the opportunity to provide us with your input by filling out and mailing back this final survey.

We assure you that all responses will be kept confidential. An identification number is printed on the front of each questionnaire so that your name can be checked off the mailing list when it is returned. All responses to the questionnaire will be statistically aggregated and at no time will your answers ever be identified with you.

The questionnaire will take approximately 20 minutes to complete. A reply-paid envelope addressed to the Department of Recreation, Park and Tourism Sciences is enclosed for your convenience. The results are being analyzed for us by Dr. John Crompton in that department at Texas A&M University at no cost to the City of Grapevine.

If you have already completed the questionnaire and returned it, please accept our sincere thanks. If you have any questions about the study, please feel free to contact Dr. Crompton at (979) 845-5320. Thank you again for your assistance with this project.

Sincerely,



Douglas Evans
Director, Grapevine Parks and Recreation Department

APPENDIX H
COMPARISONS OF RESIDENTS' IMPORTANCE AND PERFORMANCE
RATINGS BY SELECTED DEMOGRAPHIC CHARACTERISTICS

TABLE J-1
Comparison of Dimensions' Importance and Performance Ratings by Gender

Dimension	Male	Female	df	F	p
Enhancing home real-estate values					
Importance	5.64	5.77	1	1.78	.18
Performance	5.18	5.26	1	.53	.47
Attracting tourists to the community					
Importance	4.72	4.95	1	2.87	.09
Performance	4.48	4.91	1	9.85	.00
Addressing the needs of people who are underemployed					
Importance	4.41	5.01	1	16.07	.00
Performance	3.83	4.12	1	4.16	.04
Attracting and retaining retirees					
Importance	5.00	5.40	1	11.21	.00
Performance	4.58	5.11	1	15.83	.00
Preventing youth crime					
Importance	5.77	6.15	1	12.08	.00
Performance	4.60	4.98	1	6.95	.01
Attracting and retaining businesses					
Importance	5.33	5.39	1	.19	.66
Performance	4.37	4.62	1	2.81	.10
Environmental stewardship					
Importance	5.61	5.88	1	7.15	.01
Performance	4.56	4.81	1	3.75	.05
Improving community health					
Importance	5.19	5.45	1	4.60	.03
Performance	4.83	5.23	1	10.42	.00
Stimulating urban rejuvenation					
Importance	5.08	5.28	1	3.23	.07
Performance	4.58	4.94	1	6.32	.01

TABLE J-2
Comparison of Dimensions' Importance and Performance Ratings by Number of Years Lived in Grapevine

Dimension	0-5	5.5-10	10.5-15	15.5+	df	F	p
Enhancing home real-estate values							
Importance	5.68	5.73	5.63	5.79	3	.41	.75
Performance	5.18	5.16	5.16	5.41	3	.88	.45
Attracting tourists to the community							
Importance	4.89	4.62	4.71	5.09	3	2.07	.10
Performance	4.71	4.54 ^x	4.27 ^x	5.19 ^y	3	6.57	.00
Addressing the needs of people who are underemployed							
Importance	4.60 ^x	4.57	4.61	5.16 ^y	3	3.13	.03
Performance	3.99	3.78 ^x	3.65 ^x	4.44 ^y	3	5.00	.00
Attracting and retaining retirees							
Importance	5.04 ^x	5.15	5.14	5.57 ^y	3	3.43	.02
Performance	4.74	4.86	4.62	5.15	3	2.43	.07
Preventing youth crime							
Importance	5.92	5.92	6.01	6.07	3	.42	.74
Performance	4.70 ^x	4.63 ^x	4.60 ^x	5.24 ^y	3	3.66	.01
Attracting and retaining businesses							
Importance	5.49	5.17	5.30	5.39	3	1.26	.29
Performance	4.56	4.35	4.08 ^x	4.92 ^y	3	4.50	.00
Environmental stewardship							
Importance	5.73	5.55 ^x	5.78	5.96 ^y	3	2.46	.07
Performance	4.66	4.53 ^x	4.40 ^x	5.12 ^y	3	4.74	.00
Improving community health							
Importance	5.30	5.24	5.34	5.42	3	.36	.78
Performance	4.96	5.02	4.92	5.24	3	1.15	.33
Stimulating urban rejuvenation							
Importance	5.22	5.14	4.95	5.37	3	1.82	.14
Performance	4.78 ^x	4.56 ^x	4.33 ^x	5.31 ^y	3	7.42	.00

* Different superscripts indicate group means that are significantly different ($p < .05$).

TABLE J-3
Comparison of Dimensions' Importance and Performance Ratings by Age

Dimension	60+	50- 59	40- 49	30- 39	18- 29	df	F	p
Enhancing home real-estate values								
Importance	5.65	5.67	5.67	5.80	5.88	4	.50	.74
Performance	5.30	5.35	5.08	5.33	5.10	4	1.10	.36
Attracting tourists to the community								
Importance	4.88	5.03	4.64	4.95	4.75	4	1.44	.22
Performance	4.79	4.99 ^x	4.44 ^y	4.70	4.78	4	2.49	.04
Addressing the needs of people who are underemployed								
Importance	5.16	4.63	4.50	4.91	4.85	4	2.21	.07
Performance	4.77 ^x	3.95 ^y	3.77 ^y	4.07	3.46 ^y	4	5.43	.00
Attracting and retaining retirees								
Importance	5.56	5.40	5.09	5.01	4.75	4	3.16	.01
Performance	5.30 ^x	4.97	4.64 ^y	4.90	4.29 ^y	4	3.44	.01
Preventing youth crime								
Importance	6.19	5.87	5.92	6.03	5.98	4	.80	.52
Performance	5.36 ^x	4.80	4.71	4.80	3.91 ^y	4	3.93	.00
Attracting and retaining businesses								
Importance	5.49	5.55	5.19	5.31	5.44	4	1.33	.26
Performance	4.81	4.73	4.22	4.64	4.17	4	2.81	.03
Environmental stewardship								
Importance	5.82	5.74	5.62	5.90	5.79	4	1.08	.36
Performance	5.22 ^x	4.66	4.53 ^y	4.75	4.30	4	2.95	.02
Improving community health								
Importance	5.56	5.34	5.11	5.43	5.38	4	.16	.33
Performance	5.37	4.98	4.97	5.09	4.61	4	1.66	.16
Stimulating urban rejuvenation								
Importance	4.99	5.17	5.14	5.25	5.61	4	1.17	.32
Performance	4.89	5.01	4.49	4.77	5.00	4	2.39	.05

* Different superscripts indicate group means that are significantly different ($p < .05$).

VITA

Personal Data

Name: Andrew Thomas Kaczynski

Born: January 20, 1977 in Kitchener, Ontario, Canada

Permanent Address: 1765 Featherston Court, Mississauga, Ontario, Canada L5L 3E2

Education

Master of Science, Texas A&M University, College Station, Texas

- 2001-2003
- Major: Recreation, Park and Tourism Sciences

Bachelor of Arts, University of Waterloo, Waterloo, Ontario

- 1995-2000
- Major: Recreation and Leisure Studies

Professional Experience

Teaching Assistant, Department of Recreation, Park and Tourism Sciences

- September 2001 – December 2002
- RPTS 403 – Financing and Marketing Recreation and Park Resources

Research Assistant, Department of Recreation, Park and Tourism Sciences

- May 2002 – September 2002
- Principal researcher on visitation project for Texas Parks & Wildlife Department

Membership Team Leader, YMCA of Greater Toronto

- June 2000 – July 2001
- Responsible for all aspects of membership service and sales while effectively managing a \$4.3 million budget

Publications

Kaczynski, A.T. & Havitz, M.E. (2001). Relational benefits in recreation services: Examining differences between operating sectors. *Journal of Park and Recreation Administration*, 19(2), 20-42.

Kaczynski, A., Charette, J., John, A. & Yuja, E. Acquiring resources through exactions. In M.E. Havitz and T.D. Glover (2001), *Financing and Acquiring Park and Recreation Resources: A Canadian Supplement*. Champaign, IL: Human Kinetics.