

5-1999

An Analysis of the impact of the internet as a marketing tool for economic development in municipal governments in the western region of the United States

Jacquelin Risner
University of Nevada Las Vegas

Follow this and additional works at: <https://digitalscholarship.unlv.edu/thesesdissertations>



Part of the [Growth and Development Commons](#), [Public Administration Commons](#), and the [Urban Studies Commons](#)

Repository Citation

Risner, Jacquelin, "An Analysis of the impact of the internet as a marketing tool for economic development in municipal governments in the western region of the United States" (1999). *UNLV Theses, Dissertations, Professional Papers, and Capstones*. 244.
<http://dx.doi.org/10.34917/1452675>

This Thesis is protected by copyright and/or related rights. It has been brought to you by Digital Scholarship@UNLV with permission from the rights-holder(s). You are free to use this Thesis in any way that is permitted by the copyright and related rights legislation that applies to your use. For other uses you need to obtain permission from the rights-holder(s) directly, unless additional rights are indicated by a Creative Commons license in the record and/or on the work itself.

This Thesis has been accepted for inclusion in UNLV Theses, Dissertations, Professional Papers, and Capstones by an authorized administrator of Digital Scholarship@UNLV. For more information, please contact digitalscholarship@unlv.edu.

AN ANALYSIS OF THE IMPACT
OF THE INTERNET
AS A MARKETING TOOL
FOR ECONOMIC DEVELOPMENT
IN MUNICIPAL GOVERNMENTS
IN THE WESTERN REGION
OF THE UNITED STATES

by

Jacquelin Risner

Bachelor of Science
University of Nevada, Las Vegas
1993

A professional paper submitted in partial fulfillment
of the requirements for the degree of

Master of Science

in

Public Administration

Department of Public Administration
University of Nevada Las Vegas
May 1999

Abstract

This professional paper is a cross-sectional analysis of the western United States that explores the research question of whether the internet, when used as a marketing tool, has an impact on urban economic development for municipal governments. Economic development has changed throughout the years. It is now global in perspective. The necessity for municipal governments to compete on a global level requires an investigation into new technology and its importance to economic development efforts. Specifically, the advent of the internet and its significance to economic development in municipal governments was explored. A survey was constructed and sent to one hundred fifty (150) western cities, townships or municipal economic development organizations. The null hypothesis stated that no significant impact had yet been made on economic development through the use of the internet as a marketing tool. The data collected did not disprove the null hypothesis. Contrary to popular belief expressed in the literature review, no significant increase in job creation, the cornerstone of economic development could be shown. While there was no direct impact displayed, the respondents overwhelmingly believed that the internet was important to the profession of economic development.

Table of Contents

Abstract	ii
Table of Contents	iii
Chapter 1 Introduction	1
Chapter 2 Review of Related Literature	5
History of Economic Development	5
Influence of the League of Cities	9
Changes in Economic Development	10
Site Selection Process	11
Marketing for Municipal Governments	13
Traditional Marketing Methods	15
Technology and the Internet	17
Origin and Evolution of the Internet	20
Marketing and the Internet	21
Advantages and Disadvantages of the Internet	24
Impact of the Internet on Economic Development	26
Chapter 3 Methodology	29
Concepts and Variables	29
Collection of Data	30
Treatment of Data	32
Chapter 4 Findings of the Study	33
Analysis of Data	33
Statistical Analysis of Research Question	35
Chapter 5 Conclusions and Recommendations	45
Conclusions	45
Recommendations	47
Appendix Survey and Letter to Participants	48
References	53

Running Head: An Analysis of the Impact of the Internet

Chapter 1

Introduction

It has been said that the only true constant is change itself. Change occurs continually at all levels of society--globally, nationally and locally. American society has gone from agrarian to industrial to service providing, and is now evolving into an information processing society. There has been a rapid growth in the supply and demand of information services and also accompanying technological changes in the last few years. According to Warf (1995, p.361), changes in electronic systems have changed "not only what we know, but how we know it." The world is a global society where technological advances occur on an almost daily basis. Information is now the "hot product" in today's marketplace and the demand for information and knowledge is accelerating. The problem is that the time available to find the information is scarce. A means to garner information quickly, efficiently and accurately is in greater need now than ever before.

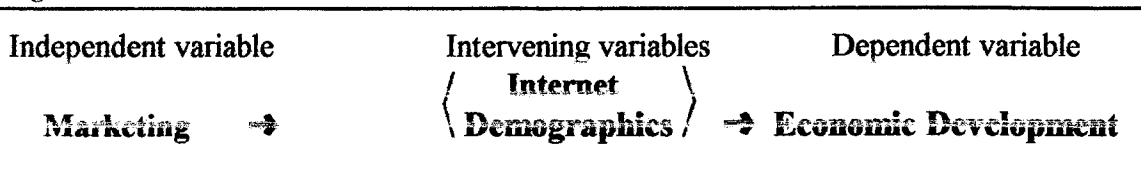
One of the most dramatic technological advances in recent years is the arrival of the internet. Using the internet as an information source has increased information gathering and dissemination to warp-speed. Vice President Al Gore likened the internet to the printing press in its ability to reshape human civilization (Holbrook, 1997). The internet is creating change in how business is conducted worldwide and this change is not confined to private business, but is making itself felt in government as well.

As an economic development manager for a municipal government, the subject of the internet and how it could be used by government was of great interest to me. As my

interest evolved, the impact that the internet would have as a marketing tool for the economic development of municipalities became the center of my focus. Could I definitively say that a presence on the internet would enhance the economic development activities in my own business arena? The local government entity I work for had been the first in the area to have a presence on the internet. The site was completely economic development oriented and was funded by private industrial enterprises in the city. Initial response to the internet presence was exciting in that a large number of "hits" (a hit being defined as a visit to the home page) were being recorded. Interest, was being documented from countries around the globe, but most particularly from the Pacific Rim countries of Japan and China. If the site were fully developed would that further increase the interest, or was this just a fad that would pass away quickly? These questions led me to tackle this subject as the basis for my professional paper.

The focus of the study then evolved into the research question of what impact the internet has as a marketing tool for economic development in municipal government in the western United States. The contention is that actual growth figures will reveal only minor increases attributed to internet usage. I designed a model to guide the research process as shown below in Figure 1, listing marketing as the independent variable, economic development as the dependent variable and the internet as the intervening variable, additional intervening variables being the demographics of the entities.

Figure 1



Responses about the use of the internet vary from community to community.

Many communities are finding that the home pages that have been set up on the internet provide a way for them to inform the community on a variety of issues. It has become a teaching tool to explain the workings of government. Some communities give a brief description of each department and the services offered. More than just a teaching tool, the internet is also a communications tool. Placing Planning Commission and City Council items on the internet, and the normal required posting locations, provides an increase in the level of community participation. Additionally, all of this information provides government with an aura of openness and candor to which citizens are responding favorably.

In speaking with local site selection specialists, they advise they look first at the internet to find information about possible location changes. Not only do they look for available land through internet real estate company home pages, they aggressively seek out information on possible relocation sites through municipal government and chambers of commerce sites. They want speed and up-to-date information. All these attributes and more can be found on the internet.

This professional paper is organized in American Psychological Association (APA) style as outlined in the Publication Manual (Storant, 1994). There are five chapters. Chapter one is the introduction and defines how and why the project was conceived. The introduction further reveals the model used to study the research question. Chapter two is the literature review. There is a growing field of literature on the subject of the internet and its use for economic development. The information is both current and timely. Chapter three is the methodology. This chapter defines how the study was conducted and

includes discussions of the concepts and variables, the participants and how they were selected, how the survey was developed and the information collected, as well as an explanation of how the data was analyzed. The findings of the study are then explained in chapter four. This chapter includes a detailed analysis of the information obtained and is reflected in both table format and descriptive prose. The final chapter, chapter five, is the conclusions and recommendations portion of the paper. A summarization of the findings of the research and the literature review are presented along with ideas for future research.

Chapter Two

Literature Review

Three basic topics required research to fully address the focus of this professional paper--the impact of the internet on economic development. The first was economic development, what it is and why it is important. Municipalities across the nation belong to an organization called the National League of Cities. The role of this organization on economic development for municipalities will also be explored. Additionally, a discussion of the history of economic development, the recent changes in that profession and specifically, the economic developer's site selection process need to be explored.

The next topic was marketing and how that applies to economic development. A tremendous amount of money is spent each year by economic development organizations to attract new business. Traditional marketing methods will be examined as well as the coming of new technology and what role that plays in marketing.

Lastly, the topic of the internet and its function as a marketing tool was researched. The history and evolution of the internet will be reviewed briefly before exploring the marketing capabilities of the internet. There is a wealth of information available about generalized marketing principles and the internet. More recently, articles on the use of the internet to conduct economic development have emerged. Included in this discussion will be the advantages and disadvantages of the internet. The section will end with a look at the impact of the internet on economic development for municipalities.

History of Economic Development

There are almost as many definitions of economic development as there are economic development agencies. Probably the most commonly accepted definition is the

process of creating wealth within a community. This would involve the use of all the resources available to the community, such as financial, capital, physical, human and natural resources. The outcome of all these resources would be to produce marketable goods and services (Swager, 1991). An alternate definition from the same source says that economic development is a choice that the community makes. It occurs when local leaders invest in and develop comparative advantages to enable their businesses and labor force to be more competitive in regional, national and international markets (Swager, 1991). Possibly the most concise definition would be that economic development is the process used to create, retain and invest wealth and improve the quality of life in a community (Swager, 1991)

Economic development is central to overall development and will continue to be well into the next century. To achieve community wealth, the local economic base must be expanded to create new jobs and increase income (Swager, 1991). Most economic developers have seen the near ghost-town effect on inner cities when the businesses and jobs move out to the suburbs. Rebuilding core cities while building new growth areas is critical to the economic welfare of a community.

The history of economic development can be traced back to Thomas Jefferson and Alexander Hamilton. It was during this revolutionary era that the first rules for economic development were established. Thomas Jefferson believed in the decentralization of government. He was a leader with a belief that government should be run at the township or village level, where real democracy could occur (Harris, 1997). The United States being an agrarian rather than an industrial society, economic development and the stability of the economy revolved around land ownership and farming interests. Alexander

Hamilton, on the other hand, was a firm believer in a strong central government. In 1786 he was called to serve on the Annapolis Convention that had been convened to study interstate commerce and other economic issues. He believed in allowing the market to dictate economic development—he believed the process of acquiring and spending kept the economy running smoothly (Harris, 1997)

Historically, modern economic development has been rooted in industrial development. Expansion through manufacturing--industrial development--has had the greatest multiplier effect when looking at job creation. However, industrial development is only one aspect of general economic development. The creation of wealth within a community is what drives overall economic development. This wealth is achieved in many ways--though job creation, through increased income and through increased quality of life. Job creation may be geared specifically to warehouse/distribution businesses, to traditional manufacturing, such as automobile manufacturing, or the generation of highly skilled and therefore more highly paid jobs. The higher the skill-set, the higher the income. With more disposable income, quality of life is enhanced. However, the bottom line is still employment.

The structure of an economy can be described in terms of employment distribution—not only how many jobs are available, but also what types of jobs are represented. The Bureau of Labor Statistics uses the major categories of manufacturing, construction and service industries to delineate job growth. So the question is, where are the jobs being created? Since economic development has traditionally focused on industrial development or manufacturing jobs it should be determined whether this is still the primary source of new jobs. Swager states in Economic Development Tomorrow

(1991, p. 8) that, "Manufacturing remains the engine that drives the American economy (i.e. creates wealth), but it is no longer the primary job generator." If this is true, then the economic developer must determine what the primary job generator is. The results from that determination may change to whom and how an area is marketed.

As the chart below shows, the primary job creator in the western United States is the service industry. Eighty-seven percent (87%) of new jobs created are in the service sector. The Bureau of Labor Statistics breaks down employment into the basic categories of goods producing and service producing. Goods producing is defined as mining, construction and manufacturing, and services producing is defined as retail and wholesale trade, finance, insurance, real estate, government, transportation and public utilities and services, including engineering management, computer and data processing and help services (<http://stats.bls.gov>).

Table 1 (Numbers in Thousands/Seasonally adjusted)			Last update February 1999	
Industry Type	Employment Category	Jan 98	Jan 99	Change
Goods Producing	Mining	70.7	66.4	(4.3)
	Construction	1,117.2	1,217.6	100.4
	Manufacturing	3,044.9	3,044.6	(0.3)
	Total Goods Producing	4,232.8	4,328.6	95.8
Service Producing	Retail/wholesale trade	5,099.1	5,259.8	160.7
	F.I.R.E.	1,258.3	1,313.2	54.9
	Government	3,583.3	3,665.1	81.8
	Transportation/Public Util.	1,125.5	1,163.5	38.0
	Other Services	6,644.5	6,930.9	286.4
	Total Service Producing	17,710.7	18,332.5	621.8

Influence of the League of Cities

There is a myriad of challenges facing the economic development community of today. Many of these challenges are caused by large scale corporate restructuring that occurred through the 1980's, budget and trade deficits, multinational operations, and shifting markets (Swager, 1991). As Dr. Jeffrey S. Arpan (1981, p. 378), Professor of International Businesses at the University of South Carolina has stated, "Whether or not by choice, all economic developers now operate within the global economy."

One of the ways in which a municipality learns to compete in a global market place is through interaction with other public administrators. Local and national issues are provided a forum for discussion through the National League of Cities (NLC). According to their home page (<http://www.nlc.org>), the NLC is the country's largest organization and most representative serving municipal governments. NLC has membership that represents more than 18,000 municipalities. Member cities participate through their elected officials to address issues that are common to all municipal governments. One of these common issues is economic development. To address the economic development issues on a global scale, The Global Connections Partnership (GLOBECON) has been formed. A variety of successful international economic development programs are provided to the membership for possible local implementation. Donald J. Borut, NLC executive director stated that "The ability of our cities and towns to expand their economic horizons to engage in commerce ...around the world is good business...it enables us to develop markets.... and create new opportunities for our local businesses and workforce."

In addition to GLOBECON, the NLC together with the National Association of Counties (NAC) and the International City/County Management Association (ICMA) has created a technology organization know as Public Technology Inc, (PTI). There is a separate home page on the world wide web for PTI, <http://pti.nw.dc.us>. The goal of PTI is to advance the wise use of technology by city, county and state governments, and provides links to government with industry sources that can best meet their specific needs. Once at the home page for PTI, hyperlinks to ICMA, NAC and NLC are all available.

In 1994, the International City/County Management Association (ICMA) in conjunction with the NLC, conducted a survey of over 10,000 cities and counties in the United States. The survey covered a vast array of topics about telecommunications issues--from economic development to regulatory issues. However, the focus of the survey was on the issue of regulating a National Information Infrastructure. The survey generated a nine percent (9%) response rate with just about 1,100 responses. Seventy percent (70%) of the respondents felt that the information superhighway had a positive impact on the economic development of their communities (Huffman, 1995). The overall conclusion of the ICMA survey was that the information superhighway was here to stay and that it provided communities with increased opportunities for jobs and economic development.

Changes in Economic Development

Over the years, the face of economic development has changed. Where it was once focused only on industrial development, the profession has expanded to include commercial development and the development of office/business projects. As an economic developer, I perceive that as employment patterns change from industrial to service providing, there is a need to utilize economic development skills to create jobs

within the service sector. This service sector, as defined previously by the Bureau of Labor Statistics, also includes wholesale and retail sales, banking, insurance real estate, transportation, public utilities, computer and data processing, and government. In other words, all the services that residents in a community need and desire. The further the progression into an information processing society, the more the focus will change to high-technology, high level of education jobs that do not fit the traditional definitions of industrial or commercial development.

While the definitions may change, the need for economic development remains. According to Bovaird (1994, p.576), "economic development has become firmly established as a top priority for city governments." One of the keys to remaining competitive in this new global economy is the development of industry clusters (EDA, 1997). Industry clusters draw together the main industry and all the suppliers and buyers of its product into a regional cluster. The example used in the Economic Development Administration (EDA) Report on Cluster Based Economic Development is an electronics industry cluster. Clustering might include the electronics assembly, the hardware assembly, tool, die and machinery, office and production supply and specialized component supply companies (EDA, 1997). Grouping these industries together can be a Herculean task, as other states or cities are competing for the same industries. The economic developer must then be able to attract the site selectors for the whole cluster.

Site Selection Process

It is necessary to look at why one community grows faster than others. Knowing what stimulates a company to move to another area is at the heart of attracting site selectors. U. S. Sites and Development states that "The facility churn rate--the number

of employees moved annually as compared to total employees--among U. S. and Canadian corporations has increased to 44 percent from 41 percent three years ago" (Carrier, 1998, p. 105). Some of the reasons listed for moving are reorganizations and efforts to improve organizational effectiveness, normal growth and even downsizing can stimulate a move. The predominate reason for moving is growth.

Growth in the western United States has been stimulated by several factors including an abundance of available land. The allure of wide open spaces with lots of room to grow is still strong. There are incentives, both natural and financial, which make one community more attractive than another. For example, Nevada has no state income tax, no corporate tax, and a sales and use tax abatement for the purchase of new manufacturing equipment for qualifying businesses. However, incentives are not the only thing at which site selectors look.

There are five major categories of concern in the site selection process. Listed in random order they are labor, transportation, finance, quality of life, and a category called other (Bergeron, 1995). The labor category specifically deals with the availability and skill level of the work force, what training programs are available, what the labor costs or average wages are and whether an area is union dominated or a right-to-work state.

The transportation category is concerned with access to major transportation networks such as highways, rail service, air service and waterways if applicable. The aforementioned incentives come under the finance category as does availability of long-term financing and tax exemptions. Quality of life factors have recently come to the forefront of the site selection process. More and more companies are looking at factors such as climate, housing costs and availability, health facilities, public school and college

ratings, as well as cultural and recreational opportunities. On more than one occasion, the decision to locate in a particular area was made because it was a place in which the Chief Executive Officer wanted to live.

The final category is a catchall for all the other areas of concern for those involved in the site selection process. Included in this category is proximity to major markets as well as suppliers, availability and cost of land, construction or occupancy costs, energy costs, environmental regulations, necessary infrastructure and availability of technical training and vocational schools.

For many years the site selection process was an intensive research project. The first step was, and still is, establishing priorities and objectives for the relocation project (Orr, 1996). Letters requesting information on possible locations were sent out, responses culled through and then site visits were made. This often involved three or four trips to one or a variety of possible sites. The costs were extensive. If a municipality had no marketing materials, or materials of a poor quality, its location was not considered.

The advent of new technology is dramatically changing the process of site selection. This new technology is also changing the way marketing is done for municipalities.

Marketing for Municipal Government

Marketing is essential to economic development and the two are tied together inextricably. According to Ronan Paddison in his article entitled *City Marketing, Image Reconstruction and Regeneration*(1993), city marketing in the United States has been linked primarily to economic development and the promotion of place to stimulate growth.

He further states that, "Economic development runs as a common denominator throughout virtually all attempts at marketing cities" (Paddison, 1993, p.340).

However, marketing for cities involves much more than just the promotion of a place (Paddison, 1993). According to Paddison marketing can be used to rebuild and redefine an image. This rebuilding or redefining of image is particularly important to those areas which may be experiencing economic downturns.

That is not the only use of marketing. Additionally, city marketing can be used to target specific types of businesses or industries to facilitate this rebuilding and redefining. Growing cities need to continue to attract high-quality industrial and commercial enterprises to create strong economic development and provide jobs for an expanding population. In order to do this both effectively and efficiently, a marketing strategy needs to be devised. Marketing can be defined as "the analysis, planning, implementation and control of carefully formulated programs designed to bring about voluntary exchanges of values with target markets for the purposes of achieving organizational objectives" (Kotler, 1983, p. 6).

The marketing plan involves certain basic marketing concepts such as product development, market research and segmentation, strategic planning and servicing (Boone and Kurtz, 1995). To develop an economic development marketing plan one must translate the marketing concepts into economic development terms. Product development becomes community development. Market research and segmentation becomes targeting, or conducting a target market study to define what businesses a particular municipality needs to attract. Strategic planning means taking the results of the target market study and implementing the ideas to achieve attraction of the ideal businesses. Finally, servicing

in economic development means business retention. Taking care of existing businesses, servicing the customer, ensures that when those businesses are ready to expand the community will be able to retain them. The concept of servicing existing businesses will be central to the future of economic development (Dodd, 1999). If the economic developer does his job well, the businesses in the community will not be lured away by competing municipalities, jobs will be retained and increased.

This comprehensive marketing approach is designed to influence site selectors to make an investment in a city and to retain the businesses already there. When that investment is made, new jobs are created, other jobs are retained, salaries are increased and wealth is added to the community (Swager, 1991).

It is a well-known rule-of-thumb in economic development that most new jobs created in a community are through businesses retention and expansion. It is interesting to note however, that the greatest money and time expenditures are focused on attracting new businesses instead. Economic developers go all out to attract new, different and better companies into their area.

Traditional marketing methods

Knowing how to go about finding businesses that are looking for a place to locate, and attracting them to a community is critical for the economic development professional. Advertising and the dissemination of effective marketing materials are the traditional methods for economic developers to market their city. There are a variety of trade magazines that focus on the site selection process. Placing advertisements in these publications is a quick and direct way to get a message out. However, the cost, especially for the smaller municipalities, can be prohibitive. Even an advertisement approximately

one-eighth of a page can run into the thousands of dollars for placement in just one issue. Advertisements in general periodicals or specialized publications found on airlines are another avenue. Unfortunately, there is not much evidence to support that advertisements placed in these magazines will reach a target audience. Site selectors looking for new locations, while they may certainly be exposed to general and travel periodicals, are more likely to focus their search in specific trade publications.

Therefore, the dissemination of marketing materials may have a much greater benefit at considerably less expense. What constitutes effective marketing materials and the methods of dissemination are areas for discussion. Until recently, effective marketing materials translated to a variety of hard copy publications. These centered around a basic marketing folder which contained anything from straight text to glossy photos accompanying the text. Some or all of the site selection factors were specifically addressed in the text, pointing out the advantages and strong points for the particular locale. A variety of collateral materials were also developed, including new resident handbooks, tri- or bi-fold flyers with detailed information about the specifics of a community, and one page handouts for quick reference. Other collateral materials include display boards for use at conferences and conventions. All of these options are very useful, but they can also be expensive to produce and beyond the means of smaller cities.

Even when a municipality has the appropriate budget to produce the required marketing materials, decisions still must be made on how these materials will be disseminated. An area can be either reactive or pro-active. For those areas not interested in soliciting a great deal of new growth, the reactive approach is suitable. This consists of little or no advertising and responding to direct inquiries by sending out the hard copy

materials. However, for most western municipalities, there is still tremendous growth potential. A pro-active approach can make the difference between attracting the types of companies that will enhance the existing business community or just allowing any company to come in and develop. One possible pro-active avenue to develop clients is the use of a target market study. This study focuses on the businesses already within the community, the types of land available for development and the goals of the city leaders. After target industries are selected the search should be narrowed down to specific businesses to approach. A direct marketing approach is taken where materials are sent with the initial interest letter and follow up phone calls are made to assure the materials have been received and reviewed. Direct marketing establishes a one-on-one relationship with the potential client. This process allows a city to target a specific audience with a message produced just for that audience (MarketPlace, 1996).

Additionally, cities may wish to use trade shows as a method of disseminating their marketing materials. These are especially useful if the city has decided upon a very specific industry to attract and then establishes a presence at one or more trade shows featuring that industry. Contacts made at these events can turn into business development within the city. The cost for attending trade shows and producing display materials can be very high. It is difficult for low budget cities to compete in this arena. However, the advent of high-technology has made a lasting change on what materials were distributed and how they were distributed.

Technology and the internet

"As we approach the next century, technology is driving the key economic development challenges" (Celeste, 1996, p.4). New technology brings new opportunities

and governments have started to take advantage of these opportunities. The new technology may take the form of informational compact discs (CD's), inter-active CD's, videos, computer-generated presentations, GIS (Geographic Information Systems) and fax-on-demand capabilities. GIS is a technology tool that produces visual mapping of specific data (Scanlon, 1997). Maps of available sites with geographic constraints such as flood plain and soils information overlaid on the map are readily available. The surrounding areas of the available site can be expanded to show where the highways, railways or other modes of transportation are in reference to the proposed site.

CD Rom (compact disc read only memory) technology was originally used for encyclopedias, dictionaries and software libraries. This technology is also used for multimedia applications which involve the integration of video, sound and images on a computer screen. One CD Rom holds considerably more data than even multiple floppy disks (Hedgcoth, 1998). There are several CD ROM's with extensive marketing database information that a city may choose from. Dun & Bradstreet's Market Place Database is one that provides a list of thousands of retail businesses with the appropriate contact names, addresses and phone numbers for intense marketing on a more personal level. The database breaks the data down by types of industry, sub-types, gross income, number of employees, and location. Using Standard Industrial Classification (SIC) codes, the economic developer may sort from the database only those types of businesses that are targeted (MarketPlace, 1996). Then the sort is continued with ever increasing specific fields till the search has been narrowed down to a workable number. Introductory letters can be prepared and sent with accompany marketing materials to begin the process.

Fax-on-demand is another new tool in the economic developer's toolbox. This is a system set up to respond to direct telephone inquiries. A series of options is presented to the caller and based on the responses, specific faxes are sent to fulfill the information request. This dissemination tool is possibly the easiest to update and allows for the distribution of great amounts of information in a timely manner.

Videos have become almost standard as marketing materials in the recent past. Due to the cost of producing these videos, they are generally only sent to the most serious of prospects to help cement the site selectors decision. Videos are dramatic marketing materials. To be effective they must be kept current. As with other expensive technological tools, videos also may be outside the realm of possibility for smaller communities.

A giant step into the future, is the use of the internet as a marketing tool. Every state now has a presence on the internet (DuBrow, 1996). A quick "surf" on the internet revealed that an unprecedented number of local government entities have home pages up and running also. Perhaps these agencies decided that traditional marketing materials were not sufficient to meet the challenges of competing in a global economy. One of the requirements for global competition would be the capacity for global communication. The internet is an inexpensive and easy way to send, receive and share information. Or it could be just a case of not wanting to be left out in this new wave of technology. There appears to be a widespread belief that these avenues onto the information highway have an impact on economic development.

A close look at the internet is required to determine what if any impact there may be. According to Randall Putz in the Nevada Business Journal, "The internet has become

the most rapidly accepted technology ever. We have adopted the internet faster than we adopted the television, faster than we adopted the telephone, even faster than we adopted electricity. In fact, the internet gains a new user every 20 seconds" (1996, p. 9). A recent report by the U. S. Department of Commerce entitled The Emerging Digital Economy says that by the end of 1997 more than 100 million people were using the internet a net growth of 60 million people in just one year. Additionally, the same report states that every 100 days the traffic on the internet has been doubling. These impressive figures are too hard to ignore when considering marketing possibilities for economic development. At this point, how this phenomenon we call the internet got its start should be examined.

Origin and evolution of the internet

The internet today is "a vast, decentralized network of computers used for educational purposes as well as for commerce, political organizing and communication" (Stowers, 1996, p. 5). However, this was not always the case. Just over thirty years ago, the National Physical Laboratories in the United Kingdom began experimenting with a new computer technology. The Defense Department's Advanced Research Projects Agency (ARPA), the same agency that put a satellite in orbit (Parkhill, 1996) took this technology and focused its attention on computer networking. The government was mandated with designing a communications system that would withstand a nuclear attack. Out of this mandate, ARPANET was born—but it was strictly a military project. Other technological advances helped ARPANET to evolve and change. Perhaps the best description of the evolution of the internet is given below:

The Internet was a Cold War military communication in a United States devastated by a Soviet nuclear strike. Originally, the Internet was a post-apocalypse command grid.

And look at it now. No one really planned it this way. Its users made the internet that way, because they had the courage to use the network to support their own values, to bend the technology to their own purposes. To serve their own liberty. Their own convenience, their own amusement, even their own idle pleasure. When I look at the internet—that paragon of cyberspace today—I see something astounding and delightful. It's as if some grim fallout shelter had burst open and a full-scale Mardi Gras parade had come out.

(Sterling, 1993)

Marketing and the internet

Competition for new business is keen among economic development agencies.

Any avenue that can provide one area with an edge over another is of interest. The advent of new technology in the form of access to the internet offers exciting possibilities for economic developers. David Trietsch, author of Regional Web Wars: Global Competition for Economic Growth on the World Wide Web, writes of the internet, "Never before have corporate leaders had all the options they have today. In a global market place, business leaders have access to resources all over the world" (Richardson, 1996, p. 1). These advances in communications technology have been described as adding a valuable new arrow to a businesses marketing quiver (Small, 1995). The relatively small cost of establishing a home page on the internet makes this an attractive tool to add to the repertoire already in use. If it can be shown that this tool has a positive impact on development, this would auger well for the future of those agencies with the foresight to be among the first to make use of this new technology.

What exactly can the internet do for economic developers? First of all, it allows a business or entity to build a relationship with potential customers. Brian Russell, operations manager for RBR Armor, relayed that his company did eighty percent (80%) of

the site selection search on the internet. He stated they found a whole range of information available on the net, thereby cutting out layers of bureaucracy and saving researching reams of paperwork (Hedgcoth, 1998). By linking the e-mail address to the home page, an interactive medium is created which facilitates an easy exchange of information. This information may include data on the work force, real estate available, incentives offered and the business climate of the site being proposed. The internet also allows the City to distribute information in a timely manner. Instead of spending hundreds of dollars reprinting the traditional marketing materials each time there is a relevant update, a few keystrokes updates the information on the home page. Frequent updates invite potential prospects to look at the home page several times during the selection process. The more current the information is that is included in the website, the less time will be spent on the telephone answering questions or sending out costly printed materials.

Improved customer service is another added benefit of the internet. The way the internet is constructed, the home page on the web site contains several levels of information. Hyperlink icons or text allow the user to just point and click to gain further information (Sprint, 1996). Eye catching graphics help guide the customer through the home page to find the information needed.

At this point, the needs of site selectors should be examined. The site selection process is very data-intensive (Connell, 1996). When a site selector is considering communities, information on the labor force availability is crucial. How the labor force is distributed, whether high-tech or manual labor, tells the site selector if an appropriate work force is available in the area. The next consideration would be existing facilities that are available. The decision to build new or buy or lease existing properties may be

influenced by the types of industrial parks available and the raw land that is available. Site selectors need continuous access to information that will help them decide on where to place a new facility. With users numbering more than 100 million to-date, the internet may be an ideal avenue for obtaining this information. After all, providing information is what the internet is all about. The network of sites that are hyperlinked throughout the internet is enormous and growing explosively. Daily, more and more communities are also adding their "home page." Economic development organizations both public and private are establishing their presence on the "net."

One of the most important aspects that a site selector looks at is the infrastructure. Urban growth has been closely linked to the development of traditional public infrastructure such as highways and airports for many years (Tagledin, 1995). When a business chooses to locate in an area it must have the infrastructure necessary to support it. This applies equally to manufacturing processes, distribution facilities or commercial retail enterprises. If the manufacturing process is water intensive, there must be the promise of enough water to support it. If the business is a distribution facility access to interstate freeways, rail, air and/or sea are a high priority. Commercial retail enterprises are particularly interested in the local highways. The business needs to know that their customers will be able to access the facility easily. In addition to this traditional infrastructure, it is now important to build the telecommunications infrastructure that will allow the movement of information to and from sites and site selectors (Tagledin, 1995).

The regulatory climate of the area is another important factor. Whether an area is pro-development or in a controlled growth mode is reflected in the type and number of regulatory ordinances in effect. California, for example, has become so over-burdened

with ordinances, from the city level up to the state level, that for many years now businesses have been fleeing from there to other states, including Nevada.

Last, but not least, the question of quality of life may be more important than all the others. This is particularly true of high-end industries and commercial enterprises. The range of housing facilities available is an important consideration. Knowing what amenities the location has to offer is being looked at much more closely than in the past. The internet is an ideal repository for this type of information (Connell, 1996). It provides a pipeline effect for distributing information to site selectors.

The internet is being used by an ever increasing number of government and economic development agencies. The U. S. Census Bureau site will provide profiles on all fifty states. This can then be narrowed down to the county level where statistics on population, educational levels and labor are all available (Hedgcoth, 1998). Sites such as *citynet* and *selectown* and *acn* (American Community Network) provide information on cultures and languages as well as information about specific communities in the United States (Hedgcoth, 1998). Housing costs can be located through the National Association of Home Builder's site. There is information available on moving costs, construction activity, taxes, utilities, government programs, and world exports. The lists grow on a daily basis.

Advantages and disadvantages of the internet

One of the strengths of the internet is its adaptability. It is the ideal medium for "marketing, information dissemination and research" (Doron, 1997, p. 9). Marketing campaigns are enhanced through the use of the internet and in many cases stand alone on the internet. Marketing on the internet is one of the most cost-effective ways to reach a

large audience, as massive amounts of information can be made available and disseminated through the internet, also at little or no cost. Lastly, site selectors can research a variety of locations quickly without ever leaving their offices.

Keith Watkins of the Greater Phoenix Economic Council (GPEC) in Arizona stated that the GPEC had no real expectations when they first put up a web page, but they have received significant e-mail and telephone response as a result of that page (Scanlon, 1997). He goes on to say, "The internet is so efficient, we don't have to trade three and four phone calls or wait for Federal Express. People now have information right at their fingertips" (Scanlon, 1997, p 47). Economic development agencies are realizing that they need to have definitive information on their home page. The internet helps you to stay abreast of the most recent developments. Marketing through the internet is smart marketing. Because it is relatively inexpensive, it helps to level the playing field for economic developers (Nelson, 1997). It has been said that the internet is quick, timely, portable and best of all free (Skowronski, 1998).

While the internet is certainly a new tool for economic developers, it is only one tool within the toolbox. It is important to use the right combination of tools for the job. The internet should be used in conjunction with a variety of other marketing efforts.

Economic development home pages must not only be attractive and useful they must kept current. Out-of-date information on the website may cause the site selector to disregard that entity in further searches. Home pages must be a combination of high technology graphics and solid textual content (Beck, 1996). It must be set up to be user friendly and easily accessible. Hyperlinks to sub-sets of information within the home page are vital. Once the attention of the site selector has been attracted to the home page, it is

necessary for them to be able to easily navigate through the hyperlinks and explore the wealth of information presented. One should not overlook the necessity of hyperlinks to other entities and other home pages. Associations such as International City and County Manager's Association (ICMA) and American Economic Development Council (AEDC) all have lists of cities, counties and states that have established home pages on the internet. Hyperlinks to these and others such as county home pages, local chambers of commerce, state home pages and pages of local development authorities make it much easier for a prospective business to locate a specific website.

Impact of the internet on economic development

In order to ascertain any impact it is necessary to reiterate definitions of certain concepts. Economic development is defined as a process utilizing human, financial, capital, physical and natural resources to generate marketable goods and services for wealth creation (Swager, 1991). The next concept to be identified is marketing.

"Marketing identifies current unfulfilled needs and wants, defines and measures their magnitude, determines which target markets the organization can best serve, and decides on appropriate products, services and programs to serve these markets"(Kotler, 1984, p. 6). This needs to be distinguished from advertising which Webster defines as the promotion of a product or service publicly for sale.

It is apparent that the rules for success in economic development are changing. While traditional factors such as size, location, transportation and access to capital are still in place, additional factors such as knowledge, networks and communications are now also keys to successful economic development (Whittaker, 1995). Economic developers must now take a global approach to their marketing strategies. This new technology

opens doors to the global market place that were previously closed. The global market place is very competitive and to gain a competitive advantage good quality information must be presented well (Bring, 1995).

A strong presence on the internet may make a big difference in where a company chooses to locate (Richardson, 1996). Economic development agencies and local government entities spend literally millions of dollars each year to produce brochures and marketing materials that are soon out of date. While the internet may never replace hard-copy marketing materials, using the information highway to disseminate up-to-date, relevant information is faster, cheaper and easier to do.

However, it is necessary to examine the type of interest being generated. In the first few months of a city's home page being up on the "net" the number of hits generated may increase at a phenomenal rate. One should not be misled by this statement, as these hits can be likened to a sight-seeing tour, or the shopper who is "just looking."

With so much attention being paid to the internet and other new technological advances, it is interesting to see what, if any, impact these advances might actually have on economic development. A recent survey was conducted among fifty (50) economic development web sites. Surprisingly, eighty-five percent (85%) of the web sites surveyed received fair to poor ratings for information content and yet very high ratings for design (DuBrow, 1996). One of the major findings of this survey was that it is not enough to just dump the old tried and true marketing material on the internet. It must be well-designed, informative, interactive and constantly updated. There is tremendous variety in the government-based web-sites found on the internet. There are highly interactive sites such as the state of Virginia offers. They offer hot-links to several counties, the city of

Richmond, a local real estate file offering pictures of available properties, with detailed descriptions of the buildings including the types of sprinkler system it has, when it was built and the number of loading docks (Thuermer, 1997). On the other hand, the state of Utah offers no interaction, nor does it offer an e-mail form to fill out for further information. Instead, the site is laid out rather like the yellow pages of a phone book (Thuermer, 1997).

David Freeman in his article *Creating a Savvy Site* suggests that having a professionally designed site is the best way to ensure the information presented is correct and will attract the types of business desired. The design of the website should be as individual as the entity. The effectiveness of the site must be measured also. Not only should there be a counter for number of "hits" there should also be a registration form, or an interactive e-mail address so the client can make contact with the municipality and obtain further information (Freeman, 1998).

The world has evolved into an information processing society. How successful an economic development agency is now or becomes in the future will be determined by their ability to process information. The internet used as a tool for economic development allows the process of information to be quicker, more accurate, less expensive and available to the widest audience possible. However, as Doron (1997, p. 10) points out, "Perhaps the most persuasive argument for Internet Economic Development is that competitors use it." As economic developers, it is necessary to learn to use the internet or take the chance of being left behind.

Chapter 3

MethodologyConcepts and variables

This study examines the relationship between the internet and economic development in municipal governments. The null hypothesis developed states as yet the internet has had no discernible impact upon economic development in municipal governments. A cross-sectional analysis of the impact of the internet on economic development in municipal governments, specifically those located within the western United States was performed. While there are some generalized informational surveys available on the topics of economic development and the internet, there has not been an in-depth exploration of the specific topic of impact of the internet on economic development within the parameters of local governments in the western United States.

The methodology consists of a self-designed survey, with a combination of rank-ordered and categorized questions. A survey was chosen as the means of collecting information because this enables the researcher to generalize information from a sample population to a much larger population. Additionally, this form of research allows the researcher to obtain a rapid response to informational requests.

As a part of the study, certain variables were measured. The first variable is the dependent variable economic development. The second variable is marketing which is the independent variable. The use of the internet as a marketing tool then becomes an intervening variable. Both the independent and intervening variables have an impact on the dependent variable. Additionally there are four other intervening variables describing the demographics of the population. These variables were then applied to the research

question--what is the impact of the internet on economic development in the western United States. Several related questions were addressed to assist in the analysis of the information (See Table 2).

Table 2

Research Question: What is the impact of the internet as a marketing tool on economic development in the Western United States?		
Variable	Related Questions	Survey Item
Dependent Variable #1 Growth in Economic Development	Question #1	5,6,7,14
	Is there growth and how is it tracked?	
	Question #2 How does use of the internet impact growth?	9,13,15
Independent Variable #1 Marketing methods	Question #3	1,4
	What traditional marketing materials are being used and how important are they?	
	Question #4 What percentage of municipalities are incorporating new technology into their marketing techniques?	2,3
Intervening variable #1 The internet as a marketing tool	Question #5	8,11,12
	How is internet use tracked?	
	Question #6 What is the importance of web-site design?	10,16
Intervening variable #2 Demographics	Question #7 Are there similarities based on municipality demographics	17,18,19,20

Collection of data

The total population for this survey was specified as economic development professionals operating at the municipal level within the western United States. This region was defined as including the states of Washington, Oregon, Idaho, Utah, Arizona, Nevada, and California. The decision to limit the study to these western states was based

on the belief that these states have a great deal in common when addressing economic development. The western United States is characterized by large amounts of available land. There is also a pro-development atmosphere in many western areas that is no longer prevalent elsewhere. In 1997, all of the states listed showed increases in population and income and declines in unemployment rates (Hasman, 1999). Additionally, these areas faced many of the same issues which affect economic development, including infrastructure needs, congestion, home prices, and the nature of growth (Mitchell, 1999).

A single stage sampling was used. Organizations were selected from a broad base of economic development organizations obtained from American Economic Development Council membership lists and listings obtained from OfficialCitySites.org and Selectown.com on the internet itself. The various entities and organizations were selected by placing all available possibilities on a list and then selecting every fourth entry.

The survey instrument solicited information in three categories of questions. There were twenty numbered questions with two dependent sub-questions. Of these twenty-two questions, four were demographic questions, seven were attitudinal questions and eleven were factual questions. The demographic questions were designed to establish similarities in internet usage of like populations. Statistics reflective of the economic standing of each community prior to and after the use of the internet were requested as part of the factual questions. A series of forecasting or attitudinal questions was asked to evaluate the perception of success in the use of this new technology. It will be necessary to know if this new tool is an addition to the economic development tool-box or a replacement.

The survey instrument was sent to economic development agencies using both the internet and hard copy mailing. The distribution included city, county, state and regional

economic development agencies and chambers of commerce. The internet was used as a vehicle to send the survey out as a beta test and to receive responses. The beta test was sent to over 100 e-mail addresses of economic development agencies all over the United States. The response rate was about one percent. Three main obstacles were encountered. E-mail addresses are often person-specific and therefore subject to frequent change. In other instances the e-mail addresses did not allow for attachments of files and the survey could not be sent. Other respondents could not download the file and therefore could not respond.

A two-step collection process was then begun. The first step was to send 150 surveys with cover letters to economic development organizations from the seven selected western states through regular mail channels. Two weeks after the first mailing a follow up post-card was sent to agencies that had not responded. Of those 150, two were returned for bad addresses, two sent e-mails declining to fill out the survey and seventy-six sent back completed surveys. This provided a fifty-three percent (53%) response rate. The response rate for this survey is considered adequate for analysis and reporting (Babbie, 1998).

Treatment of data

A quantitative analysis was conducted on the descriptive statistics obtained from the survey. Survey responses were maintained in a *Survey Database* on the computer software program for statistical analysis, SPSS Base 8.0 Graduate Package for Windows. The results of the beta test were analyzed separately from the results of the full survey. A series of frequencies and cross tabulations were run summarizing the results. Lambda and gamma measures of association were looked at to determine statistical significance.

Chapter 4

Findings of the Study

As stated in the methodology, there were a total of seventy-eight responses including two that declined to comment. Those declining to comment and questions not answered on various surveys are deemed to be missing information. Totals of all the tables may not add up to the total of survey respondents due to this missing information.

Analysis of Data

The survey included five intervening variables, four of which were used to determine the demographic make-up of

the respondents. The first variable is Figure 2

form of government. Figure 2

summarizes the results of that variable.

As you can see the respondents were overwhelmingly from Council/Manager

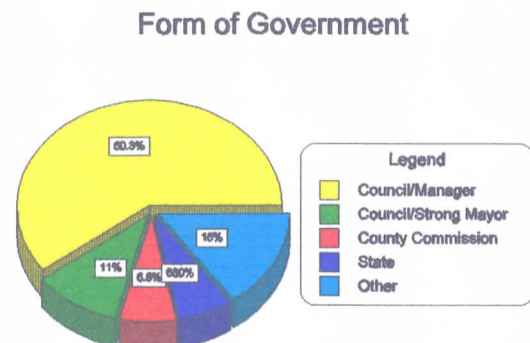
forms of government. This is not

surprising in that the majority of

surveys were sent to city governments, and the

Council/Manager form of government is predominant in western municipalities.

The next intervening variable was population size. As shown in Table 3 below, the greatest majority of respondents had populations of over 100,000. It has been my professional experience that smaller entities rarely have the funds for economic development offices. However, that trend may be changing. Note that the second highest percentage of respondents were from the smallest communities. This may indicate that



smaller communities are finding it difficult to compete for industrial sector jobs without the benefit of an economic development office.

Table 3

Population size	Frequency	Valid Percent	Cumulative Percent
Under 49,999	23	31.1%	31.1%
50,000 - 74,999	10	13.5%	44.6%
75,000-99,999	2	2.7%	47.3%
100,000 and over	39	52.7%	100.0%
Total	74	100.0%	100.0%

The final two intervening demographic variables deal with the issues of job type and job growth. Because economic development has traditionally been grounded in industrial job growth, this was the job type researched. As you can see in Table 4 below, the majority of respondents show a thirty percent (30%) or more job base in the industrial sector. This is very similar to North Las Vegas, where even though the service sector is growing rapidly, the city is firmly supported by an industrial job base.

Table 4

Industrial/Commercial	Frequency	Valid Percent	Cumulative Percent
Under 10%	5	7.2%	7.2%
10%-20%	22	31.9%	39.1%
21%-30%	18	26.1%	65.2%
More than 30%	24	34.8%	100.0%
Totals	69	100.0%	100.0%

It is interesting to note that in Table 5 below, sixty percent (60%) of the respondents stated their area was experiencing moderate (4% to 9%) annual growth. This

is to be expected as all of the states selected for the survey were in the Western United States which continues to experience moderate to high growth in most areas.

Table 5

Job creation	Frequency	Valid Percent	Cumulative Percent
High growth	12	16.4%	16.4%
Moderate growth	44	60.3%	76.7%
Low or no growth	15	20.5%	97.3%
Declining growth	2	2.7%	100.0%
Totals	73	100.0%	100.0%

Statistical analysis of related questions

As stated in the methodology section, the survey was designed to answer six basic questions related to the research question. Questions one and two deal with the dependent variable, growth in economic development. The results of question number one are summarized in Table 6 below.

Table 6

Question #1 - Is there growth in economic development and how is it tracked?	
Is there a tracking mechanism used?	88% Yes 12% No
If so, what type?	63% Electronic 27% Manual
Are clients asked which marketing method attracted them?	33% Yes 67% No
If so, which did?	Most common was ads in periodicals
How do you define success	49% Start of business 15% Follow up to initial contact 18% Building permit issued
Has there been an increase in industrial jobs, and if so how much?	25% Increase (6-10% increase) 75 % Stayed the same

The question that asks economic developers if they inquire of their clients what marketing method caught their attention returned an interesting sixty-seven percent (67%) that do not ask this question. Without a response to this question, it is impossible to evaluate the effectiveness of any of their marketing materials, including the internet. If budget decisions are a consideration, it would seem prudent to track which marketing methods are having the greatest impact.

Question two also deals with the dependent variable growth in economic development. The question addresses the issue of how the economic developer believes the use of the internet impacts growth in economic development. While the results of opinion questions are always very subjective, it is important to understand the perception of the end-user in economic development. It should be noted that the results of the survey do not agree with the anecdotal results of the literature review. Throughout the literature review, there was the strong suggestion that the internet was having a tremendous impact on economic development and was directly responsible for an increase in jobs in many communities.

The results summarized below in Table 7 below show that economic developers do not believe that to be true. While more than seventy-three percent (73%) of the survey respondents related that they felt the internet was important or very important to their economic development efforts, they did not agree with the assumption that there was a significant impact on the creation of jobs, a key indicator for economic development. The hypothesis assumes that the greatest majority of respondents would believe there had been a significant impact on job growth through the use of the internet. However, a chi-square test weighting the responses to reflect the hypothesis, reveals an asymptotic significant of

.00, thereby not disproving the null hypothesis. Many respondents felt it was simply too soon to tell. Overwhelmingly, the opinions are that the internet could not replace traditional marketing materials now or in the near future. However, there is a substantial shift in that direction when examining the question for the year 2005. While the majority of respondents are still negative, there is a growing indication that perhaps at some point in the future, the transition may be possible.

Table 7

Question Two: How does use of the internet impact growth?	
What is the importance of the web-site to local economic development efforts?	27% Very Important
	47% Important
	13% Unimportant
	10% Didn't know
Can the internet replace traditional marketing materials?	85% No
	15% Yes
In the year 2005?	60% No
	40% Yes
What impact has the internet had on any increase in industrial/commercial jobs?	14% Significant or very significant
	45% Neutral
	20% Insignificant or very insignificant
	22% Too soon to tell

The next two questions address the independent variable. The independent variable asks information about the types of marketing materials being used and their perceived importance. The two related questions seek specific information, one dealing strictly with traditional marketing materials and their ranking. The second question goes on to ask about current technological marketing methods and future technological methods to be incorporated in the marketing mix. The responses to the traditional marketing materials were very much as expected. Every economic development agency

depends on a variety of marketing tools. The percentages shown in Table 8 below reflect that the respondents checked multiple responses. The use of printed brochures to send to prospective clients proved to be the most popular methods. The brochures can be expensive high-gloss folders with full-color photos, such as those the City of North Las Vegas has just had redone. They may be a collection of tri-fold one page brochures that provide the same information. The variety is endless, but the use is consistent.

Table 8

Question #3: What traditional marketing materials are being used and how important are they to the economic development effort?

Methods used	75% Trade show participation 95% Printed brochures 68% Trade publications 47% Non-trade publication 57% Direct mail flyers
Ranking	#1 Printed brochures #2 Direct mail flyers and trade publications #3 Trade show participation #4 Non trade publication

Trade show participation is another tried and true method for economic developers. While seventy-five percent (75%) of the respondents stated they participated in trade shows, they ranked it only third in importance. This could well be due to the expense of participating. Most trade shows require travel and the use of expensive entity-owned or rented display booths to set up. For many cities the expense here is beyond their means. One example would be the International Council of Shopping Centers. This is held every year in May in Las Vegas, Nevada. While, there is no travel involved for North Las Vegas economic developers, the rental of a 400 square foot booth space and all

the accoutrements will run approximately \$5,000. This does not include the city-owned display boards and photographs which cost another \$7,000. An expensive way to do business, but results-oriented.

The responses for the technological tools was also very much as expected. Once again, the respondents were able to mark multiple selections for this question. The majority of respondents either now use or plan to use the internet as a marketing tool in future. The results of the question on future use may be somewhat misleading. It was unclear from the surveys whether those who already were using these new methods marked them again for continued future use or left them unmarked assuming that since they were already using them it would be redundant to mark it again.

The most interesting aspect of this question had to do with fax-on-demand. This is probably the least expensive new technology method listed and the easiest to maintain, yet the percentage of users was not reflective of that. One further question was asked that is not summarized in the tables below. Economic developers were asked how frequently they updated their materials. The intent was to determine if the frequency of updating the materials, particularly the internet, had a relationship to the opinions of importance of the internet. No significant association was found. Most respondents do not update their home-sites frequently enough to try and make a correlation. Many are updating their web page and all their other materials on a quarterly or yearly basis. The literature review reveals that this is not sufficient for a effective web-page.

The next two related questions address the last of the intervening variables, the internet as a marketing tool. Throughout the literature review, the theme of timely and accurate information on the web-site was repeated. An entity takes the chance of a site

selector, not returning to their site if he just once finds out-of-date and therefore unusable information. The best, award winning web-sites were those that were updated daily or weekly at most. It was even suggested that it is better not to have a web-site at all than to have one with bad information.

There is a clear indication given that economic development agencies are not tracking internet usage in a consistent manner. In an almost two-to-one ratio, the respondents indicated they did not ask their clients if the web-site was important to the site selection efforts. While the majority are counting hits, they are not finding out if those hits are becoming customers. Table 9 below summarizes how the internet usage is tracked.

Table 9

Question #5: How is internet usage tracked?

Client indication of importance	36% Yes 64% No
Counting hits	62% Yes 38% No
E-mail follow up	84% Yes 16% No

Another point of interest is found by referencing the literature review again.

Anecdotal evidence supports the theory that if an agency wants to attract new businesses a large portion of the internet should be dedicated to economic development. The majority of the respondents to the survey disagreed with this using less than ten percent (10%) of their web-site for economic development. However, the second largest portion of respondents indicated that more than seventy-five percent (75%) of their web site is used for economic development.

Additionally, the respondents were asked to rank the various options available on a web page. Even though most respondents use only 10% or less of their web-site for economic development, the majority agree that business attraction and business retention are the two most important parts functions for the web page. See Table 10 below.

Table 10

Question #6: What is the importance of web-site design?	
Economic development portion	33% use less than 10% 14% use 11-25 % 15% use 26-50% 11% use 51-75% 26% use more than 75%
Ranking web-site options	#1 Business attraction #2 Business retention #3 Constituent services #4 Links to other sites

A cross tabulation was then performed comparing the percent of the web-page used for economic development against the increase in industrial/commercial jobs. If the results had shown that the larger the economic development portion the greater the job creation, it would be a clear indication that the internet was indeed having an impact. However, just the opposite was true. Of those who had an increase in jobs since they started using the internet, the portion of the web-site used for economic development was almost evenly split across all five categories of percentages, with just a slight lead for those using ten percent (10%) or less of their website for economic development.

After the frequencies were calculated, several cross-tabulations were run to determine if certain elements could be shown to have an impact on internet usage. The question was asked what the economic developer believed the impact of the internet had

on any increase in job creation. Cross tabulations were run on this against population served, percentage of the web-site used for economic development, e-mail usage for follow up information, and the frequency of updated the web-site. In all of these cross-tabulations there was no significant connection between them and the increase of jobs. The greatest number of respondents all indicated that the impact of the internet on the increase in job creation was neutral or too soon to tell. This did not vary by percentage of web-site used, by whether they used an e-mail address as follow up or by how frequently they updated their home pages. This result indicates that the null hypothesis cannot be disproved. That as yet, the internet has had no significant impact on economic development.

Another series of cross-tabulations was then run, this time comparing the importance of the web-site for economic development activities against e-mail usage as a follow up tool, against what type of client tracking device was used, against what percentage of the web-site was used for economic development and against the frequency of updating the web-site. In the cross-tabulation comparing percentage of web-site to importance of web-site, ninety-five percent (95%) of the respondents who devoted more than half of their web-site to economic development felt that the internet was important or very important. In contrast only seventy-six percent (76%) who devoted less than half of their web-site to economic development believed it was important or very important. These results may be somewhat deceptive. Actual numbers of responses break down into thirty-seven (37) respondents devote less than half their web-site to economic development and only twenty-three (23) devote more than half. As the percentage of the web-site devoted to economic development increases, the total number of respondents

believing it to be important or very important, decreases. Therefore, the Gamma measure of association is a negative .531. This would be considered a very strong negative association.

It appears that there is a definite association between the percentage of the web-site dedicated to economic development and the belief in the importance of the internet as a marketing tool. Those who used an electronic data base as a tracking system for client contact expressed a strong belief in the importance of the internet. Ninety-one percent (91%) of those who used an electronic database believed the internet to be important, as opposed to only sixty-seven percent (67%) of those who used a manual data base for tracking. The Lambda measure of association was .313 showing a moderate predictive relationship between the two variables. This indicates there may be a link between the perceived importance of the internet and users of higher technology. This was shown even more distinctly when those who used e-mail for follow up to client tracking were asked about the importance of the internet. Eighty-four percent (84%) of e-mail users believed the internet was important as opposed to fourteen percent (14%) who thought it was unimportant. As shown in Table 11 below.

Table 11 Importance of Web-site	E-mail usage		Total
	Yes	No	
Important	9	42	51
Unimportant	4	6	10
Total	13	48	61

While there were clear connections shown for technology users, technology updaters did not have the same connection. There appeared to be no correlation between

how frequently the site was updated and the importance of the internet. Similarly, there was no connection between the frequency of updates and the impact of the internet on job creation.

The final related question addresses the intervening (demographic) variables. The question asks what similarities there are based on municipal demographics, as previously discussed. One additional cross-tabulation was performed to look at growth rate in relationship to the impact of the internet on growth. There was no correlation shown between the communities that were experiencing moderate to high-growth, and their opinion of the impact the internet was having on this job growth. Most respondents felt the impact of the internet was neutral. This again validating that the null hypothesis could not be disproved.

As stated in the methodology, the results of the Beta test were analyzed separately. The cross-tabulations performed on both sets of results were almost identical, with few exceptions. The most outstanding exception was when the Beta respondents addressed the question of whether the internet could replace traditional marketing materials now or in the future, the majority of the communities that had experienced an increase in job growth believed that the internet could indeed replace the other materials by the year 2005. The same opinion held true for those who stated they planned to use the internet in the future. Another exception was in contrasting the frequency of updating a web site to the impact of the internet on job growth, all of the Beta respondents who updated their web-site daily believed that the internet had a very significant impact on the increase in job creation.

Chapter 5

DiscussionConclusions

The present data are consistent with the null hypothesis. As hypothesized, the internet has had no impact on economic development for municipal governments in the western United States. Enthusiasm for new technology, apparent in the literature review, might have been expected to influence respondents perceptions. However, it appears the majority of growth taking place is no different than would be seen with traditional marketing materials. This does not mean, however, that use of the internet should be discounted. As Mitchell Bring (1995, p.50) stated, "economic development offices now or in the near future will either be powerful because they are part of the information society or outside of the system and operating in ignorance."

In contrast to the anecdotal evidence submitted in the literature review, the statistical analysis reveals no increase in job creation, a key indicator for economic development, as a result of the use of the internet as a marketing tool. The analysis reveals some significant points of interest. Economic developers firmly believe that the internet is important to their work, yet they do not see the internet as having a direct relationship to job growth. Two of the respondents made additional comments on the survey forms returned and those comments help to explain this paradox. The internet is a good additional tool, but real economic development is done at a personal level. Even though a web-site, an ad or a brochure may catch the attention of the site selector, no marketing material will ever replace the human element of personal service, assistance and perseverance. The internet will become the preferred advertising communication tool, but,

it is only one tool within the toolbox. It will not now and should not be expected to "boost economic development sales" or be a direct link in job creation.

As revealed in the statistical analysis, those economic development agencies that used multiple new technological marketing tools were much more likely to perceive a greater importance of the internet, than those agencies using more traditional tools. Internet web sites are like complex umbrellas. They bring together a vast array of information and disseminate it in a variety of ways. Each new technological tool from CD's, videos, fax-on-demand and web-sites gives the community an additional means of attracting new development. Technology is a great productivity enhancer. Information on each web-site will be different depending on each community's priorities.

There are additional questions that could have been asked on the survey. One might have been to find out what the attitude is toward growth in each community. A contrast of that information to the percentage of the web-site dedicated to economic development may have given a clearer indication of the importance of the internet. Additionally, follow-up questions as to why the economic developers believed that the internet was important may have yielded more definitive results. The research could also be approached from another direction. Businesses today want to be internet enabled. In other words, to have the infrastructure in place to access high-tech tools. Questions should be asked of the various communities about their ability to provide this infrastructure and then contrast that to the impact on job creation and/or importance of the internet. Perhaps, the internet is not so much a marketing tool as a necessary part of the infrastructure. However, these imperfections just lead to an opportunity for further research.

Recommendations

There is certainly opportunity for further research on this topic. Municipal government economic developers should be re-surveyed in no more than two years time with an updated research instrument. This can then be contrasted with the findings of this research project to identify possible changes and trends in electronic economic development. Additionally, quantitative research should be conducted from the other side of the equation--from the site selectors point of view. As revealed in the literature review, there is a wealth of anecdotal information available about electronic economic development. A survey similar to the one just completed should be sent to private enterprise site selectors. A contrast of the new survey with this research project may disprove the null hypothesis.

Change is constant and occurring with an ever-increasing rapidity. Continued research must be done to keep abreast of the change and how it impacts economic development. As the process of economic development continues to change, new methods must be devised. With new growth restrictive legislation pending in many of the western United States, it behooves the economic development professional to remain competitive. Businesses unable to adapt to the use of electronic commerce, and by extension electronic economic development, will find themselves falling behind their competitors. In conclusion, clearly, the internet is of great importance to economic development efforts now and in the future. Whether or not a direct link between the internet and job creation can be established, the need for communities to avail themselves of this new technology is conclusively indicated.

Appendix - Survey and Letter to Participants

1. Which of the following traditional marketing tools does your organization use for Economic Development?

- ☐ Trade show participation
☐ Printed brochures
☐ Trade publication ads
☐ Non-trade publication ads
☐ Direct mail flyers
☐ Other (State what) _____

Of the traditional marketing tools that your organization uses, rank them in order of importance with 1 being most important.

Trade show participation _____
 Printed brochures _____
 Trade publication ads _____
 Non-trade publication ads _____
 Direct mail flyers _____
 Other (State what) _____

2. Which of the following technological marketing tools does your organization *currently* use for Economic Development?

- ☐ Compact Disc
☐ Video
☐ Web-site home page
☐ E-mail
☐ Fax on Demand
☐ Other (Describe) _____

3. Which of the following technological marketing tools does your organization *plan to use in the future* for Economic Development?

- ☐ Compact Disc
☐ Video
☐ Web-site home page
☐ E-mail
☐ Fax on Demand
☐ Other (Describe) _____

4. How often are the following marketing materials updated (circle only those that apply)?

- | | | | | | | |
|----|--------------------|-------|--------|---------|--------|-------|
| a. | Printed brochures | Daily | Weekly | Monthly | Yearly | Other |
| b. | Direct mail flyers | Daily | Weekly | Monthly | Yearly | Other |
| c. | CD's | Daily | Weekly | Monthly | Yearly | Other |
| d. | Videos | Daily | Weekly | Monthly | Yearly | Other |
| e. | Fax on demand | Daily | Weekly | Monthly | Yearly | Other |
| e. | Web-site | Daily | Weekly | Monthly | Yearly | Other |

5. Does your organization use a mechanism for tracking client contacts?
☐ Yes
☐ No
If you answered yes, select the method of client tracking your organization uses?
☐ Simple (manual) data base
☐ Electronic data base
☐ Tickler file
☐ Other (Describe) _____
6. Does your organization's client tracking method include an inquiry that asks the client which, if any, of the marketing methods caught their attention (i.e. a trade publication ad, trade show, web-site, etc)?
☐ Yes
☐ No
If yes, which method was indicated most frequently? _____
7. When tracking a client, how does your organization define success?
☐ Follow up to initial contact
☐ Plan submittal
☐ Building permits given
☐ Start of business
☐ Business running for more than 6 months
☐ Other (describe) _____
8. Have clients indicated the importance of your web-site to their site selection efforts?
☐ Yes
☐ No
9. How important do you believe the web-site is to your organization's economic development activities?
☐ Very important
☐ Important
☐ Unimportant
☐ Very Unimportant
☐ Don't know
10. What percentage of the web-site is dedicated solely to economic development?
☐ Less than 10%
☐ 11-25%
☐ 26-50%
☐ 51-75%
☐ More than 75%
11. Does your organization count the number of "hits" to your web-site?
☐ Yes
☐ No

12. Does your organization use an e-mail address for follow-up inquiries on the internet web-site?
☐ Yes
☐ No
13. In your opinion, could a comprehensive web site replace traditional marketing materials:
Today? ☐ Yes
☐ No
By the year 2005? ☐ Yes
☐ No
14. Has there been an increase in industrial/commercial jobs since your organization began using the internet?
☐ Increase
☐ Stayed about the same
☐ Decrease

If there was an increase, what percentage was that increase?
☐ Under 5%
☐ 6-10%
☐ 11-15%
☐ 16-20%
☐ More than 20%
15. What impact do you believe the internet has had on any increase in industrial/commercial jobs?
☐ Very significant
☐ Significant
☐ Neutral
☐ Insignificant
☐ Very insignificant
☐ Too soon to tell
16. Rank the following options in the order of importance to your web site, with 1 being most important.
____ Business attraction
____ Business services for existing businesses
____ Constituent services
____ Guide to City Services
____ Links to other sites
____ E-mail
____ Access to City Hall
____ Other (Describe) _____
17. Which form of government does your entity work within?
☐ Council/Manager
☐ Council/Strong Mayor
☐ Other (describe)

18. What is the population of the area that is served by your agency?
- ☐ Under 49,999
 - ☐ 50,000 - 74,999
 - ☐ 75,000 - 99,999
 - ☐ 100,000 and Over
19. What is the percentage of jobs in industrial/commercial?
- ☐ Under 10%
 - ☐ 10-20%
 - ☐ 21-30%
 - ☐ More than 30%
20. Which of the following best describes your community regarding job creation?
- ☐ High growth (10% or more annually)
 - ☐ Moderate growth (4% to 9% annually)
 - ☐ Low or no growth (less than 3% annually)
 - ☐ Declining (outflow of jobs greater than inflow)

DATE

FIELD(Name)
FIELD(Organization)
FIELD(Address)
FIELD(City/St/Zip)

Dear FIELD(Name)

I am a Master of Public Administration student at the University of Nevada, Las Vegas. For my professional paper I am researching the impact of the internet as a marketing tool for economic development in municipal governments. As a part of this research, I have designed a survey. I would ask that you take a few minutes and fill out the survey. I will be happy to share the results of the project when all the survey responses are tabulated.

Your assistance with this is greatly appreciated.

Please return the completed form to:

Jacquelin Risner
8089 Simone Avenue
Las Vegas, NV 89117

or e-mail at:

jwrisner@aol.com

Once again, thank you for your time and your willingness to participate.

Sincerely,

Jacquelin Risner

References

Ahr, James. (1995, Winter). AEDCNet: Your on-ramp to the economic development information superhighway. Economic Development Review, 13-1, 108-109.

Arpan, Jeffrey S. (1981) International accounting and multinational enterprises. Boston: Warren, Gorham & Lamont

Auerwick, Steve. (1996, December). Breaking down the internet mysteries reveals bounty of pleasant surprises. Baltimore Sun.

American Revolutionary War, (1998), Compton's Encyclopedia On-line, (on-line), The Learning Company Available: <http://www.comptons.com>.

Babbie, Earl (1998) The practice of social research (8th ed.) Belmont: Wadsworth Publishing

Baker, Dennis. (1996, March 11). Phoenix at your fingertips. Nations Cities Weekly. 12

Barker, Janet A. (1996, Oct. 10) Creating Effective Website Advertising Approved master's thesis, Governor's State University, Illinois

Beck, Bill. (1996, March). World wide web transports companies to new sites. Area Development 31-3, 50-56.

Bergeron, Tom. (1995, December). Manufacturing executives evaluate the key factors of site selection. Area Development, 30-12, 36-59.

Bessire, Howard D. (1981) A handbook for the eighties: Industrial development. El Paso: Hill Printing Co.

Boone, Louis E and Kurtz, David L. (1995) Contemporary Marketing Plus. Fort Worth: Dryden Press.

Boston provides electronic key to the city (1995, Feb. 12) Nation's Cities Weekly

Bovaird, Tony. (1994) Managing urban economic development: Learning to change or the marketing of failure? Urban Studies 31,4/5, 573-603

Brandt, R., Cortese, A., Mitchell, R., Verity, J. (1995, Feb.) Cyberspace - a special report. Business Week

Bring, Mitchell. (1995, Winter). Advanced multimedia economic development systems. Economic Development Review 13-1, 50-52.

Bruce, Jim and Edwards, Shannon. (1997, Aug.). High tech site search. Area Development, 28-33.

Brudney, Jeffrey L. and Meier, Kenneth J. (1993). Applied statistics for public administration (3rd ed.) Belmont: Wadsworth

Cahill, Anthony S. and Overman, E. Sam. (1995) Telecommunications in local government: Preparing for an uncertain future ICMA Municipal Year Book

Calkins, Allison. (1996, June 6). Internet is just the start. Las Vegas Sun, 8D.

Carrier, Val. (1998, August). A site selector's work is never done. U. S. Sites and Development 105-106.

Celeste, Richard F. (1996, Winter). Strategic alliances for innovation. Economic Development Review 14-1, 4-8.

Cohen, Barbralu. (1996, May/June). Telecom solutions increasingly available. Expansion Management, 15-16.

Connell, Regina. (1996, March). Navigating the internet for site selection. Area Development 31-3, 57-60.

Conte, Christopher. (1995, June). Teledemocracy for better or worse. Governing, 33-41.

Cortese, Amy. (1997, Feb. 24). Webcasting - a way out of the maze. Business Week, 95-106

Creswell, John W. (1994). Research design: Qualitative and quantitative approaches. Thousand Oaks: Sage Publications.

Cruz, Sherri. (1996, Dec 23). The internet. Las Vegas Business Press, 24

Davis, Mark S. (1996, Winter). Using Compuserve for practical economic development. Economic Development Review 14-1, 51-52.

Diamond, David. (1996, Feb 23-25). This town is wired. USA Weekend, 4-6.

Dodd, David A. and Morrison, Edward F. (1999) Economic Development in the New Millennium. Rosemont: American Economic Development Council

Donovan, Todd and Hoover, Kenneth. (1995) The elements of social scientific thinking (6th ed.) New York: St Martin's Press

Doron, Scott J. and Hoke, Linda. (1997, June). The southern states and the internet. Doorways to Electronic Development

DuBrow, M. L. (1996, March). Surveying the web. Area Development 31-3, 34-38.

Dykhouse, Christine (1997, July). On-line and sleepless in Seattle. Government Technology 28-43.

Economic Development Administration (1997, October). Cluster-Based Economic Development, 1-4.

Felix, Steve. (1997, Oct.). Our industry's landscape is changing again. Shopping Center Business 94-96.

Fell, Daniel and Shepherd, C. David (1995, Winter). Marketing on the internet. Journal of Health Care Marketing 15-4, 12-15.

Five ways to make on-line marketing pay. (1996, Spring). Sound Advice, 4-2 1,4.

Flanagan, Tanya. (1996, Feb. 19). County powering up on the internet. Las Vegas Review-Journal, 1B, 4B.

Freeman, David. (1998, Oct.) Creating a savvy site. U.S. Sites & Development 32-36

Gates, Bill (1996, Aug/Sept). Supporting freedom of speech on the internet. Microsoft Magazine, 54.

Gates, Bill (1995) The road ahead Hammondsworth, Middlesex, England: Penguin Books

Goodsell, Charles T. (1994). The case for democracy. New Jersey: Chatham House Publishers.

Green, Gary P. and Fleischmann, Arnold (1991, Sept.). Promoting economic development - a comparison of central cities, suburbs and non-metropolitan communities. Urban Affairs Quarterly 27-1, 145-154.

Hambleton, R. (1990). Urban government in the 1980's, lessons from the USA. Occasional Paper 19, School of Advanced Urban Studies, Bristol.

Hardy, Henry E. (1993, September) A History of the Net Unpublished Master's Thesis (online) Available: <http://umcc.umich.edu/pub/users/seraphim/doc/nethis8.txt>

Harris, Blake (1997, June). Technology and the future of government. Technology Trends. 8-

9

Harris, Blake (1997, September). Government technology interview with Thomas Jefferson. Government Technology, Special Edition 9-15.

Harris, Blake (1997, Dec). Economic development: the race for bandwidth. Government Technology 10-13. 124.

Hasman, Cori. (1999, Feb). Western states making USA growth a reality. Outlook 46-52.

Hedgcoth, Rachael (1998, November/December). Netting the right site. Expansion Management. 30-46.

Hedgcoth, Rachael (1998, Atlas & Guide). Internet slashes red tape of site selection. Expansion Management. 10-13.

Holbrook, Dr. Don A. (1997, June). Revolution. Business Facilities 12-13.

Holohan, Meghan and Meier, Beth. (1998, June) 1998 directory of economic development authorities. Office and Industrial Properties 70-78.

Huffman, Lisa and Talcove, Woody (1995, May). Information infrastructure: Challenge and opportunity. Public Management, 9-14.

Hughes, Kent. (1998) The emerging digital economy (online) Available: <http://www.ecommerce.gov>

Internet communities (1997, May) Business Week (Special report) 64-85.

Ivey, Dennis, Haley, Brian, & Taylor, Bev. (1995, Winter). Northern California regional computer network. E. D. Review, 13-1, 106-108

Kingsfield, Bryan (1996, Winter). On-line upcountry. Economic Development Review 14-1, 9-13.

Kotler, P. (1983) Marketing for Nonprofit Organizations. Englewood Cliffs: Prentice Hall.

Lang, Laura. (1998, May/June). Las Vegas goes virtual. Government West. 7.

Leonard, Andrew. (19985, July 27.) A hundred pages bloom. Far Eastern Economic Review 71-72.

Levine, Andrew T. (1997, Fall). Winning the economic development marketing game. Economic Development Review 15-3. 6-10

Lipsey, Michael. (1997, Summer). Staying in business, staying on-line. Development 24-25.

Lynch, Stephen. (1995, July 14). Number of internet surfers overestimated. Las Vegas Review Journal, 8D-9D.

Making sense of the internet. (1996, Jan/Feb). Microsoft Magazine, 18-27.

Marketing in the new millennium.(1995) Small Business Success, VIII, 38-39

Marketplace (1996), Introducing Desktop Marketing. Marketplace 3.0 User Guide 26

McGee, Kimberly. (1996, Jan 8). North Las Vegas, the valley's first cyber-city. Las Vegas Business Press. 1, 5

McGurn, William. (1995, July 27). Net Assets. Far Eastern Economic Review, 68-70.

McQueen, Tanja. (1996, Winter). Using on-line technology for community information exchange: City of Nanaimo's experience. Economic Development Review 14-1, 16-18.

Mitchell, John W (1999) A regional economic review and forecast. U. S. Territory 1999 Western Region. 6.

Morrison, Murdoch A. (1995, Winter). Computers, so many choices, so little time. Economic Development Review 13-1, 8-10.

National League of Cities Home Page (online) Available: <http://www.nlc.org/press-icm.htm>

Navigating the information superhighway. Small Business Success, VII, 18-20.

Nelson, Mike. (1997, April). Going high-tech to level the economic development playing field. League of California Cities. 6-7

Newcombe, Tod. (1997, July). Clark County's winning gamble on imaging. Government Technology 16.

Orr Jr., Edward A. (1996, March). Strategic site selection: A formula for success. Area Development 31-3, 30-33.

Paddison, Ronan. (1993). City marketing, image reconstruction and urban regeneration. Urban Studies, 30-2, 339-349

Parkhill, L. Jason (1996-1997). The Historian and the internet, Unpublished thesis. (online) Available: <http://pages.wooster.edu/parkhillj/chapter1.html>

Putz, Randall. (1996, Sept). Meet your newest associate: The internet. Nevada Business Journal, 29.

Richardson, Angela Hunter. (1998, Oct.). Internet asphalt. U. S. Sites & Development 12-30.

Richardson, Kari. (1996, 1 Sept.) Using the 'net' to lure business. PA Times, 19-9, 1,24.

Savageau, David. (1996, Nov/Dec). Tacoma the truthful. Expansion Management, 8-20.

Scanlon, Cynthia (1997, August). New technology augments the site search. Area Development, 47-48

Skowronski, John (1998, Nov/Dec) Internet revs up incentive search. Expansion Management, 6

Sterling, Bruce and Gibson, William. (1993). Literary Freeware—Not for Commercial Use. Speeches to National Academy of Sciences Convocation on Technology and Education, May 10, 1993, Washington, DC: Computer Underground Digest 5.54

Stowers, Genie H. L. (1996, Oct.). Learning the ABC's of the internet. P. A. Times supplement. 5-6.

Swager, Ronald J.(Ed.) (1991, July). Economic Development Tomorrow: A Report From the Profession, Rosemont, IL: American Economic Development Council

Syracuse offers 24-hour access via web-site. (1996, April 8). Nation's Cities Weekly 2

Tageldin, Shaden. (1995, May). Local government roles and choices on the information superhighway. Public Management, 4-8.

Tetzeli, Rick. (1994, March 17). The internet and your business. Fortune, 86-96

Thuermer, Karen E., (1997, Nov/Dec.) Finding the perfect site without ever getting your shoes muddy. Expansion Management 18-40

Treichler, David H. (1993). Creating world class economies New York, Lord Byron Press.

Verity, John W. & Hof, Robert D. (1995, April 3). Planet internet: How the center of the computing universe has shifted. Business Week 118-124

Warf, Barney (1995). Telecommunications and the Changing geographies of knowledge transmission in the late 20th century. Urban Studies, 32-2, 361-377

Weissman, David. (1998, Dec.). Online benefits. Office and Industrial Properties 16-17.

Wells, Rob. (1997, March 2). Internet companies fear tax bite. Las Vegas Review Journal.

Whittaker, Dean F. (1995, Winter). Economic development in the new information economy. Economic Development Review, 13-1, 91-92.

Williams, Steve. (1995, Winter). The internet-exploring its uses for economic development. Economic Development Review, 13-1, 64-69.