Another Tale of Two Cities

Andy Redman | May 2004

Ray Marshall Center for the Study of Human Resources

Lyndon B. Johnson School of Public Affairs | University of Texas at Austin

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What Two Capital City, University Towns Can Learn From Each Other

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Acknowledgements: The Story Behind This Tale

This work has really been a culmination of many things. I grew up in Baton Rouge and attended the LSU Laboratory School (UHS) for 13 years. I had many great influences at UHS – most notably **Coach Willis Stelly** and **Mr. Steve Delacroix** – and I learned a tremendous amount. More importantly though, my time at UHS instilled a spirit and pride for the state of Louisiana and, more specifically, for the city of Baton Rouge.

Despite my passion for Louisiana, I had yet to find my true "passion" for life and I left the great state of Louisiana in 1998 to pursue undergraduate studies at Auburn University. Again, I have many teachers to thank in my time there, including **Dr. Wayne Alderman, Dr. James McKelly, Dr. Chetan Sankar, Ms. Charmoin Tatum, and Ms. Linda Mowery**. Facing graduation in spring 2002 during a downturn in the economy, I decided to apply to graduate schools. Due in large part to my father (**Mr. Carl R. Redman**), a few others (**Mr. Andy Kopplin** in the Louisiana governor's office and **Dr. John Heilman** at Auburn), and the events surrounding 9/11, I chose public policy as my field of study.

Yet I was still in search of that true passion when I entered the Lyndon B. Johnson School of Public Affairs at the University of Texas in the fall of 2002. I began work immediately for **Dr. Christopher King** at the Ray Marshall Center for the Study of Human Resources, and to be honest had no clue what I was getting into. I merely wanted a job so that I could pay the bills, and somehow I was able to use my entrepreneurial abilities to land a post at the Center as a graduate research assistant.

My studies and research were going fine, but I was still bumbling along – like most graduate students tend to do – in search of an exciting research area. Not even realizing it at the time, I finally got the bait when my father, who is the managing editor at the Baton Rouge newspaper *The Advocate*, decided to run a year-long series entitled "Leaving Louisiana." The series was an in-depth exploration of a major problem that Louisiana faces: out-migration of the state's young, bright minds. But this "brain drain" was not the only problem. It is quite common for young people to move around the country, especially in today's world of easy mobility. Louisiana also has a major problem with in-migration, and the series painted this picture using quantitative and qualitative data.

The "Leaving Louisiana" series struck a chord with me. Although I have not held permanent employment, I was in effect the poster child for the series. Here I was in Austin – one of the fastest growing cities in the past decade – with plans to move anywhere but Baton Rouge after graduating. And the story did not stop there. Many of my friends and even my own sister had left the city and state to pursue careers elsewhere. Most oftentimes, the destination was Texas.

But in talking to these friends and family about why they were not returning to Louisiana – and even in thinking about my own personal opinion – it became clear that young people were not leaving Louisiana because they do not like living there. In fact, this was far from the truth: young people love living in Louisiana!

The truth – which *The Advocate* pointed out – is that young people leave Louisiana because the opportunities are so much better elsewhere.

And thus the seed was planted for a research interest that truly fascinated me. I thank **my father** for deciding to run the series and then discussing it in-depth with me, for it brought to light a policy issue that not only interests me but one that has become a true passion.

Shortly after the "Leaving Louisiana" series was published, I traveled to Ethiopia to serve as a summer intern for the U.S. Department of State. I was expecting a life-altering experience, but little did I know that it would bring me back to research regarding Louisiana.

Ethiopia is a very poor country. In fact, it is the fifth poorest by United Nations' standards. Similarly, Louisiana consistently ranks as one of the poorest states in the U.S. I noticed another similarity between Ethiopia and Louisiana though: in Ethiopia, natives seem to be quite content with their lives. Like Louisiana, it seemed to me that Ethiopia could be so much more. The people are friendly, hard working, and passionate. They thoroughly enjoy the company of friends and family. They love to eat their unique cuisine. The culture is amazing and enjoyed by all.

It became apparent to me that Ethiopia faces many of the same problems as Louisiana (although admittedly on a much larger scale). Economic development was hampered by poor infrastructure, a below-average education system, unhealthy living conditions, crime, political corruption, and more. What could Ethiopia – and Louisiana for that matter – do to improve in these areas and thus spur the economy? I returned to Austin with a two-pronged question: what is economic development and how does it happen?

Back at the LBJ School in fall 2003, I scrambled to enroll in **Dr. Robert Wilson**'s political economics course entitled "Economics of Urban and Regional Policy." It is in this course that I began to seek out the answers to the above question. In a class paper, I compared the economies of Baton Rouge and Austin. Interestingly, the cities were the same size – in population and in number of total jobs – in 1970. But by 2000, Austin was double the size of Baton Rouge! The decision was an easy one: I decided to scrap my original plans for the PR – a boring analytical project for the Commonwealth of Massachusetts – and study what factors led to slower growth in Baton Rouge (or what factors led to faster growth in Austin).

The above events all culminated into a topic that really appealed to me. It hit very close to home so I was quite passionate about it. I was also in the ideal situation in that I was living in Austin.

The "Leaving Louisiana" series also made economic development a major issue in the 2003 Louisiana gubernatorial race. In fact, late in the fall a group of 120 community, government, and business leaders converged on Austin to ask the same question that I planned on asking in my PR: what did Austin do that Baton Rouge did not? The visit was a timely one in that I got to speak to many of the movers and shakers of Baton Rouge. All seemed interested in the work that I was doing, and wanted to hear what I concluded.

The wheels began to turn in my head and I realized two things. First, my research was actually of great interest to decision-makers. Second, I worked at a nationally recognized research center that focused on topics like mine. Using my entrepreneurial instinct, I wasted no time in talking my boss, **Dr. King**, into letting me take on my PR as a Center project.

I am deeply grateful to **Chancellor Mark Emmert** of Louisiana State University and **Mr. David Bondy** of the Louisiana United Business Association for their generous support to this project. Without their financial backing, this project would never have succeeded at this level.

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There are many others to thank for their time and commitment to this project. I conducted countless interviews for this analysis. Some are cited as references throughout the piece, but all of the interviews helped in fleshing out my thoughts, ideas, and conclusions.

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Chapter 1. Another Tale of Two Cities

It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the season of Light, it was the season of Darkness, it was the spring of hope, it was the winter of despair, we had everything before us, we had nothing before us, we were all going direct to Heaven, we were all going direct the other way – in short, the period was so far like the present period, that some of its noisiest authorities insisted on its being received, for good or for evil, in the superlative degree of comparison only.

These nineteenth century words from Charles Dickens aptly describe the situation of Austin, Texas and Baton Rouge, Louisiana over the past thirty years.

This is the tale of these two cities.

It is the tale of a city that has struggled to keep its young and educated minds in the state. It is the tale of another city that has not only kept its own minds, but also rapidly increased the migration of minds into the city from all over the world.

It is also the tale of a university that plays host to a national championship college football team but is steeped in academic mediocrity. It is the tale of another university that has the second-largest university endowment in the world and countless degree programs ranked in the top ten – while still being rated as the best sports university in the country by *Sports Illustrated*.

It is the tale of a community that has seen such stagnant job growth that the local newspaper ran a year-long series on the vast number of people "leaving Louisiana." It is the tale of another community that has had such a boom in employment that the local newspaper ran a year-long series on the migration to the "city of ideas."

This tale begins in 1970 along the banks of the mighty Mississippi River and over four hundred miles down the highway nestled among the hill country of Texas. Majestic state capitol buildings highlight both quaint city skylines. Off in the near distance lie the flagship universities of each state. The citizens in both communities work in government and manufacturing, and the cities have nearly identical numbers of workers. Similarly, the population of the two temperate regions is almost the same size.

This is the tale of how these two college-town, state capitals diverged during the past thirty years so much that Austin now has twice as many jobs and people as Baton Rouge. What were the causes for such a dramatic growth in Austin? In spite of the initial similarities, why has Baton Rouge not kept up with the Texas capital?

Methodology

This paper explores these questions by trying to explain the factors that have led to slower growth in Baton Rouge compared to Austin. The comparison is an in-depth one. The paper begins with a review of academic literature related to the topic, including Michael Porter's

"cluster" theory and Richard Florida's "creative class" theory.

Why did growth in Austin far outweigh that in Baton Rouge? Was the leadership of the city a major reason? Next, the two cities are analyzed from a historical perspective. The major purpose of tracking the history is to highlight how the economies of each city developed. The discussion focuses on what economic development initiatives – or lack thereof – each city took, the actors and players involved, and the roles that they played. This inevitably leads to a discussion of the leadership in each city over the past three decades.

Have any characteristics of Austin's people contributed to the city's explosive growth? Next, the demographic characteristics of the cities are compared, including a review of the population over the past three decades. Also included in this chapter is a comparison of per capita income, as well as a breakdown of each city's minority populace. Additionally, the cities are evaluated by an education-level breakdown and the number of citizens that are native to the state. Finally, each city is matched up using the creativity index that was developed by Florida (2002).

What exactly has happened in each city in terms of job growth in specific sectors? Does either city have specializations in particular areas? The following section compares the economies of the capital cities. Using data from the Bureau of Economic Analysis, the labor markets of each metropolitan area are analyzed using two economic techniques. Location quotients are used to determine if each area had a relative specialization in a particular sector. Shift-share analysis decomposes economic growth in each city to find out if comparative advantages exist. This section also explores the market access of Baton Rouge and Austin, looking at factors like geographic proximity, cost of living, transportation availability, and various professional rankings of the cities. Additionally, the funding of infrastructure is analyzed with a special focus on each city's general obligation debt.

What factor has education played in developing each city's economy? Does the city provide sufficient avenues to properly prepare its workers for high-skilled jobs? The final section takes an in-depth look at education and training. This compares higher education – including four-year universities and community colleges – as well as elementary and secondary (K-12) education, and each city's workforce education system.

Based on comparisons in the four areas aforementioned, it is evident that the factors associated to faster growth can be associated with the leadership in Austin, a more talented and educated populace in Austin, Austin's increased specialization in manufacturing, and the significant role of higher education. On the other hand, slower growth in Baton Rouge can be attributed to a lack of economic development leadership, a negative migration of young and able-minded workers, a drastic decrease in the importance of the petrochemical industry to the national economy, and the minor role of higher education relative to Austin. The conclusion to this story uses the above analysis to present recommendations for development strategy in Baton Rouge.

Chapter 2. Theory: Pushing Towards a Knowledge Economy

In recent years, the most successful regional economies – San Francisco, Austin, San Jose to name a few – have relied less on strict adherence to traditional economic development approaches like business incentives and tax breaks in favor of a critical focus on the skills and assets of the workforce in the community. Economic development incentives are still a piece of the package, but many of the high-growth regions of the last ten years have found that the "cluster" and "creative class" approaches are more effective. This section describes the basic economic principles of traditional development and then explores "cluster" and "creative class" theories. Combined, these two theories are appropriate when analyzing the development strategy for Baton Rouge.

Traditional Theory = Business Incentives

Traditional economic development theory is grounded in the premise that employment, or an increase in labor demanded, is most effectively achieved through the export base of the region. Thus, one of the major goals for governments under this theory is to attract firms that are largely export-oriented (Bartik, 1990). The core of this theory rests on the multiplier effect of exports: an export worker spends a portion of his income on local goods. This increase in local sales continues infinitely, as the local worker then spends a portion of her income on exports and local goods (O'Sullivan, 2003).

Policymakers can use a variety of approaches to focus on attracting businesses. First, tax exemptions are often offered to new businesses for a short period of time. For example, a city might offer an automobile maker a ten-year exemption on property taxes if the company will locate there. Another method cities use to draw companies into the region is to issue tax-free industrial bonds for the purpose of development. The advantage to the businesses is that they are able to borrow capital at lower than the market rate, which lowers the barriers to entry for new businesses. Another policy is for cities to guarantee low rate loans from private sources. Both of these loan policies encourage investment in the area (Levy, 1985). A final area that policymakers focus on in order to spur development is the city's infrastructure. Rondinelli et al (1998) suggest that improving the infrastructure of a region could be the most important step policymakers can take to bring firms to a region and thus encourage economic growth. Developing a region's roads, utility system, education system, and more becomes quite important to attracting businesses to the area.

Glaeser (2001) concludes that economic incentives used to attract export-based firms are not proven to be effective, and Hissong (2003) finds that in general incentives play an unimportant role in economic development. Yet Bartik (1991) observes that state and local incentive policies will probably increase business activity. But at what level will business activity increase? A recent study by Greenstone and Moretti (2003) addresses this question. It finds that wages

increased by an average of 1.5 percent per year in counties that used incentives to attract new industries, and that property values increased by 1.1 percent annually. These increases seem fairly low and based on the previous literature cited, one can conclude that the verdict is still out on whether economic incentives are advantageous to a community's development.

Development based on Clusters

Although it is hard to determine whether traditional business incentives work, it is quite apparent that in recent years other techniques have been successful. Porter (1998) suggests that thriving economies are dominated by concentrated areas of different industries that "cluster" together. This concept is not a new one, as noted economist Alfred Marshall (1890) discussed specialized industries gathering in particular areas in his nineteenth century work *Principles of Economics.*

But it is Porter that has developed the "cluster" theory in recent years. Porter has this to say about clusters:

Clusters are geographic concentrations of interconnected companies and institutions in a particular field. Clusters encompass an array of linked industries and other entities important to competition. …many clusters include governmental and other institutions – such as universities, standards-setting agencies, think tanks, vocational training providers, and trade associations – that provide specialized training, education information, research, and technical support. (p.2)

Porter uses the wine industry in California as an example of a successful cluster. The area now has an abundance of wine producers, as well as label makers, barrel producers, agricultural equipment manufacturers, and advertising firms that specialize in promoting wine. The list of industries that has seen success because of the wine cluster in California could go on and on. Tourism – restaurants and even wine tours – has found a solid home in California because of the wine industry. Even the public sector has made steps forward because of the clustering of the wine sector, as the University of California at Davis has academic programs and research centers that focus on wine. Other examples of clusters include the information technology sector in places like Seattle, Austin, and Silicon Valley; the petrochemical industry in Houston; and financial services in cities like New York and Charlotte. Another successful cluster, the biotechnology sector in Boston, was initiated in the 1990s by newly elected Governor Weld. Serving as a key adviser to the Massachusetts governor was Porter (Cooke, 2002).

Porter asserts that clusters promote competition between businesses as well as cooperation, termed "co-opetition" by Brandenburger and Nalebuff (1997). Rivals continue to fight for lower prices and better products, yet cooperate in order to create a dominant cluster. According to Porter, the presence of co-opetition among clusters affects the industry in three ways.

1. *Clusters increase the productivity of firms based in the cluster region.* Businesses have greater access to labor and suppliers, as well as to the specialized knowledge, information, institutions, and technology that surround the industry. Additionally,

complementary companies, like the ones cited in the wine industry example, can coordinate better because of their close proximity. Finally, companies in a cluster are readily able to benchmark success compared to other companies in the cluster, which in turn leads to higher motivation to succeed.

2. *Clusters encourage innovation.* The characteristics addressed in the first example combine to create a positive impact on original and pioneering growth in the industry. Porter uses an example from Silicon Valley. Clustered industries often work with larger buyers, who are at the forefront of the IT sector. Thus, companies in Silicon Valley have an enhanced understanding of what other leading companies desire and, as Porter puts it, "can plug into customer needs and trends with a speed difficult to match by companies located elsewhere" (p. 2).

3. *Clusters encourage new startups which in turn serve as a multiplier for the cluster itself.* In a clustered region, the barriers to entry are lower because there is already a pool of assets, information, and labor located in the area. Additionally, financial institutions and other venture capitalists are more likely to provide capital for business investment because they are already familiar with the success of other companies in the cluster and entry is seen as less risky. Zhang (2003) found that nearly all of the job growth in the Silicon Valley cluster during 1990-2001 was due to firms founded after 1990. Most of these firms were founded by venture capital, which was attracted based on the past success of the cluster.

The cluster approach is highly popular among economic developers, so it becomes important to highlight the practicality of the theory. Cluster formation and development are challenges, as Porter points out that they often emerge out of mere chance. For example, Omaha is the home of a major telemarketing cluster that started in large part because the U.S. Air Force installed the first-ever fiber-optic network in the area. Once Omaha became known as a leader in telecommunications, a cycle that Porter terms as a "self-reinforcing" one emerged that stimulated growth. The result was a cluster of heavily competitive, local telecommunication businesses.

This does not solve the problem of how to encourage cluster formation, as all cities are not as lucky as Omaha at "being at the right place at the right time." Porter holds that cities can use policy – not just luck – in order to promote clusters. First, cities must guarantee that there are high quality inputs – namely an educated workforce and a solid infrastructure – available to businesses. Second, governments must set the rules for competition in the area, such as maintaining intellectual property rights and anti-trust laws. Finally, policymakers must reinforce the development of clusters. To do this, Porter says that government must be willing to invest and "upgrade" current clusters.

Another useful function of the cluster approach is that planners are better able to analyze the strengths and weaknesses of a local economy. In recent years, many guides to cluster development have been released by governments and consultancies. The

guides include information on how to diagnose and develop clusters, and outline policy action that can be taken to support clusters.[1] These guides have in turn been used by governments to plan and develop regional workforce and education training efforts.[2]

It should be noted that there is literature that argues against the cluster approach as an economic development model. Martin and Sunley (2003) indicate that the cluster approach should provide a warning to policymakers because the term "cluster" is so generically defined by Porter that there is little room for practical application. For example, researchers have yet to establish a reliable and universal method for identifying and mapping clusters. Techniques use different definitions as well as procedures for establishing geographical or industrial boundaries of clusters. The hodge-podge of results by consultants, policymakers, and academics vary greatly, as maps of the clusters in the United States are quite unbalanced in analysis (Colgan and Baker, 2003). This analysis brings up an important point that follows from the Martin and Sunley findings. "Clusters" are often so generically defined that there is too much room for practical application, as anything can be called a cluster-based approach to development. Finally, Martin and Sunley note that there is little research on how an economy can encourage cluster formation – besides being lucky. Although the cluster concept can be of use to policymakers, until a sound methodology is established for this theory the authors argue that the approach does not live up to its hype and might actually lead to policy paralysis.

Despite the criticism, it is apparent that many cities have seen success using the cluster approach. The end result of the cluster approach is clear: it allows cities and regions to identify strengths and weaknesses of the local workforce community, and then adjust education and training efforts and economic development initiatives to match the needs of the cluster areas that have the greatest potential for growth.

Creative Class

Florida (2002) has developed a theory that goes contrary to conventional economic theory, arguing that the key to economic success does not lie in attracting large, export-based industries to an area. The key to growth lies in a solid presence of a "creative class." Florida defines this class of people as those who create economic growth simply through creativity. Whether in creating new ideas or new innovations, this group fills local market jobs as well as generates new companies and jobs through creative thinking. Included in this class is a vast array of occupations: scientists, engineers, artists, educators, writers, and architects. In short, Florida includes any job in which employers are able to create something new and inventive that will be of benefit to the economy.

Florida spells economic development the creative class way with his 3T's:

[1] For an example of one such guide, see the United Kingdom's Department of Trade and Industry report (2004) entitled "A Practical Guide to Cluster Development." Rosenfeld (2002) has also released a practical report that explores cluster formation and how they can be used for economic development.

[2] For an example, see the state of Washington's report released by the University of Washington (Sommers and Heg, 2002) entitled "Occupational Demand and Supply by Industry Cluster and Region."

technology, talent, and tolerance. To attract young, educated, and creative people, a city or region must have all three qualities. Additionally, Florida claims that the quality of life that the creative class seeks is no longer the "canned experiences" of a multimedia sports stadium or an SOB (symphony, opera, ballet) culture. This rising class is looking for a higher quality of life, and one that Florida describes as a "street-level" lifestyle. In expressing this concept, Florida says the following:

> *[It] allows you to modulate the experience to choose the mix, to turn the intensity level up or down as desired, and to have a hand in creating the experience rather than merely consuming it. The street buzz is right nearby if you want it, but you can also retreat to your home or other quiet place, or go into an urban park, or even set out for the country. (p. 232)*

Florida estimates that in the U.S. there are 38 million members of the creative class, or thirty percent of the entire workforce. In addition to christening the creative class, Florida takes his research one step further by producing a creativity index in which he ranks American cities based on the 3T's. Each of the T's – talent, technology, and tolerance – is equally weighted (one-third) in determining the overall creativity index of each city (Kevin Solarick, Carnegie Mellon University, personal communications, April 15, 2004). The criteria for each city's overall ranking and the factors affecting each are outlined below (Florida, 2004):

Talent

- Creative class. This factor is the percent of employees in the city that are part of Florida's defined creative class.

Technology

- High-tech. This criterion was originally developed by the Milken Institute and includes two factors. The first factor tallies the city's high-tech industrial output as a percent of total U.S. output. The second factor includes the percent of the city's total economic output that comes from high-tech as compared to the national average.

- Innovation. This factor is patent growth in the region from 1990 to 1999.

Tolerance

- Gay index. Based on research by Gary Gates, this index measures the ratio of gay people in the city relative to the entire U.S.

- Melting Pot index. This index measures the number of foreign-born people in the city.

- Bohemian index. This factor quantifies the number of artistically creative people.

- Integration index. This assesses how well the various races/ethnicities of the city "mix" (Kevin Solarick, Carnegie Mellon University, personal communications, April 15, 2004).

The rankings support Florida's hypothesis: better performing cities of recent years like Austin and San Francisco are at the top of the creativity index (ranked numbers one and two, respectively), while lower economic performers like Baton Rouge rank closer to the bottom

(ranked number 195). The implications of this are profound for policymakers. The factors that compose the creativity index seem to have a significant impact on a city's economy, so one needs only figure out to improve in areas like diversity, innovation, high-tech, and creativity to see an improved economy.

The conclusion from Florida's work is clear: recruitment based on pro-business incentives is no longer the only tool that cities can use to attract firms. More and more, businesses are locating in areas where talented and educated workers are concentrated. Thus, a region should not be granting financial backing to bring in local businesses; rather, a region should do what it takes to support the quality of life for its people. As Florida puts it, "the key to success today [in economic development] is in developing a world-class *people climate"* (293).

Florida's theory is not without criticism. Malanga (2004) asserts that the economics behind the theory do not work: many of the creative class winners have actually underperformed the U.S. economy. Malanga finds that the ten most creative cities have seen the number of jobs grow by 17 percent since 1993, while the ten least creative have grown by 19 percent.

Yet Malanga uses the creative index rankings from 2002 in his analysis. Table 2.1 below includes the top ten and bottom ten cities based on the 2004 creative index. The 2004 index is calculated differently than the one in 2002, and the data indicates that Malanga's critique is no longer valid. From 1990 to 2000, the top ten most creative cities averaged job growth[3] of 34.35 percent while the bottom ten averaged 18.9 percent. Additionally, the top ten cities' populations grew by an average of 25.11 percent during the same time period. The bottom ten averaged population growth of 5.66 percent. Further, Florida (2004a) finds similar results when comparing job growth.[4] Florida also finds that wages in the top cities grew almost twice as fast as the bottom cities from 1999-2002 (5.1 percent versus 2.8 percent). Based on the above analysis as well as Florida's breakdown, there is clearly a correlation between the 2004 creative index and a city's economic growth.

[3] Jobs include total full-time and part-time employment.

[4] Florida's analysis, performed by Kevin Solarick, includes the top and bottom eleven cities of the regions with more than one million people. Eleven cities are used because there was a tie between the two lowest ranked cities.

Table 2.1: Top Ten and Bottom Ten Cities, 2004 Creativity Index

City	Creative Index Rank	Creative Index Score	Pop. Growth 1990-2000	Job Growth 1990-2000
Austin	1	0.963	47.70%	66.03%
San Francisco	2	0.958	12.60%	15.19%
Seattle	3	0.955	19.70%	24.73%
Burlington, VT	4	0.942	11.80%	20.93%
Boston	5	0.934	6.70%	13.86%
Raleigh-Durham	6	0.932	38.90%	44.85%
Portland	7	0.926	26.30%	34.02%
Madison	8	0.918	16.20%	27.24%
Boise City	9	0.914	46.10%	62.24%
Average		**0.938**	**25.11%**	**34.35%**
Mansfield, OH	267	0.147	1.00%	6.55%
Victoria, TX	268	0.145	13.10%	25.13%
Sheboygan, WI	269	0.144	8.40%	22.40%
Danville, VA	270	0.138	1.30%	8.57%
Houma, LA	271	0.135	6.40%	32.41%
Youngstown, OH	272	0.13	-1.00%	8.52%
Lima, OH	273	0.128	0.50%	13.17%
Sumter, SC	274	0.116	2.00%	16.16%
Joplin, MO	275	0.095	16.60%	29.38%
Gadsden, AL	276	0.058	3.60%	14.39%
Average		**0.121**	**5.66%**	**18.90%**

Source: Florida (2004), Table B.1; U.S Census Bureau (2001), Table 2; Bureau of Economic Analysis (2003), Table CA25

Conclusion: Combining the Two Theories

Former University of Texas professor Robert Cushing recently remarked, "The more that I look at the national scene, the more I think there's not much a town can do: a town just gets lucky" (personal communication, November 13, 2003). Austin is the prime example of this: Michael Dell started Dell in his University of Texas dorm room. Cushing's remarks bring up an important point: very few cities

experience the “luck” factor and have economic boom times fall in their lap. In fact, most cities and regions – if not all – are continually looking for new ways to push their economies forward. Economic developers all across the world spend careers hanging on to the hope that policy can make a difference in regional economic growth.

The three theories presented in this review offer a possible means to regional development. Of the three, traditional economic theory provides the most coherent strategy for attempting to improve an economy: increase the number of export-based jobs. Policies aimed at attracting businesses to the area – namely business incentives – are what developers depend on most. Although regions have seen success using this traditional method, the cluster and creative class approaches have gained in popularity in recent years.

The cluster and creative class theories couple nicely to form an economic development ideology that could be of great use to cities like Baton Rouge that are looking to grow. Business incentives are not enough to create a successful industry sector. A city must focus on clustering its people, and more importantly on the drivers of the economy: the young and educated creative class. Kotkin (2000) summarizes this idea nicely: “where intelligence clusters, in small town or big city, that is where wealth will accumulate” (5). A successful economy will be built upon several clustered industries, and those industries will in turn be driven by a cluster of people well educated in that field.

Austin is the perfect example: the technology sector of Austin is highly dependent upon scientists and engineers, many of which graduate from the University of Texas. This new type of economy is driven by knowledge, and not surprisingly has been termed a “knowledge economy” by Cooke (2002). The cluster and creative class theories suggest that the most booming markets will depend on ideas, information, and inventive people. In short, cities that focus on developing knowledge will be well positioned to progress at the most rapid pace in the coming decades.

Chapter 3. Historical Analysis: Leadership as the Key to Development

The comparison between Austin and Baton Rouge[5] begins with an account of each city's history. It is important to highlight how the economies of these two capitals developed over the past several hundred years. Of particular interest are the economic development efforts made on behalf of community leaders. Were these efforts different in the two cities? Was the leadership in Austin a major reason that the city developed at such a rapid pace? These questions are answered in this chapter by first tracing the history of Baton Rouge followed by the history of Austin. The final section of this chapter evaluates the impact of the leadership in Austin.

Baton Rouge: Black Gold, Huey Long, and the Bayou Bengals

The tale of Baton Rouge begins quite literally with a tail – a fox tail. Concentrated along the northern Mississippi River, one of the dominant industries in North America during the seventeenth century was fur trading. In 1698, the French sent an expedition south from Canada in hope of finding other dense populations of wild animals along the Mississippi. A year later Pierre le Moyne, also known as Sieur d'Iberville, explored what would become present-day Baton Rouge (Meyers, 1976).

In search of animals like foxes, deer, and raccoons, Iberville and his men trekked up and down the Mississippi and its tiny outlet streams. At one point in the journey, the men came upon a 30-foot tall wooden pole, dyed red from the blood of an animal. In his journal, Iberville made note of the pole, which likely separated the territories of the Bayagoulas and Houmas Indians. Over the next few decades, the pole was used as a reference point by local traders and settlers. By 1723, the location was being referred to as "Baton Rouge," which means "red stick" in French (Meyers, 1976).

A fort was erected in Baton Rouge in 1718, and settlers began moving to the area the same year (Miles, 2002). Although the British and Spanish would later own the territory, the city was officially annexed in 1810 as part of the Louisiana territory. Baton Rouge became the state capital in 1849. Although founded for the purpose of fur trading, the economy of Baton Rouge quickly became that of a port town. The port in the city has always maintained a dominant position as it has a strategic location as one of the first ports north of the Gulf of Mexico. This served the early economy well, as harvests of sugarcane and cotton could easily be

[5] Unless otherwise noted, "Austin" and "Baton Rouge" refer to the metropolitan statistical area (MSA) determined by the Office of Management and Budget (1999, June) for census year 2000. Austin-San Marcos MSA includes Bastrop, Caldwell, Hays, Travis, and Williamson counties. Baton Rouge MSA includes Ascension, East Baton Rouge, Livingston, and West Baton Rouge parishes. Counties and parishes are the same thing: each state's term for regional geographic and political districts. When data is analyzed for years other than 2000, the same counties/parishes are used for the MSA region. This is done to keep data consistent, and is important to note because Austin-San Marcos MSA has expanded from a three-county area (Travis, Williamson, and Hays) to the present five-county area.

floated up and down the Mississippi River (City of Baton Rouge, n.d.).

As more and more goods came in and out of the city, the economy began to industrialize. But with a population of about 7,000 in 1882, the economy of Baton Rouge grew slowly until oil was discovered nearby in 1901 (City of Baton Rouge, n.d.). Since that time, growth in the region has been driven by three pillars: higher education, government, and the petrochemical industry.

In 1860, Louisiana State University (LSU) was founded as a land-grant institution. By 1925, the university had more than 1,000 students and today the university has an enrollment of over 30,000. LSU has become the state's flagship university and Baton Rouge citizens are proud to be the home of the Tigers, also known as the "Bayou Bengals." The large presence of the university in Baton Rouge has led to many jobs in research and teaching, as well as provided a constant flow of graduates to spur economic growth (Louisiana State University, n.d.). Baton Rouge is also home to Southern University, the largest predominately African American university in the nation (Pennington, 1999).

Louisiana's most famed politician, Huey P. Long, served as the state's governor from 1928 until 1932 and U.S. senator from 1932 through 1935, when he was assassinated in the State Capitol building. This 34-story structure, the tallest state capitol building, symbolizes the importance of a second pillar of the Baton Rouge economy: the government sector. Long, who was nicknamed the "Kingfish," imposed high taxes on Louisiana businesses and used the revenue to promote his populist policies. He followed through on his "Every Man a King" platform for governor, as he launched a statewide public works program that put many back in the workforce. Long's work made national headlines, and some speculate that if he had not been killed that he would have gone on to become U.S. president (Pennington, 1999).

Long's legacy stands to this day: as the state capital, Baton Rouge has provided a consistent number of jobs in state and local public administration. There has been a lot of spin-off in the government sector as well, as many non-profit organizations, private research centers, and government service organizations have started in Baton Rouge (Pennington, 1999). One negative aspect to the strong government sector of Baton Rouge is that the citizens of Louisiana have sometimes depended on government too much. This is not only the case in regards to jobs, but especially true in leadership for the state. In good times and bad, citizens seem to stand by and wait for government to grab the reins and take the lead in developing the economy. This seems to trace back to the leadership days of Long. According to Legislative Fiscal Officer John Rombach (personal communications, April 29, 2004), the state's heavily centralized government structure has led to much inefficiency and ultimately a dependency upon state government for leadership. As the Austin analysis will show, relying only on government leaders to be in front of economic development does not lead to success.

As the United States became more dependent on petroleum as an energy source, Baton Rouge began to develop a third pillar of the economy. The close proximity to the booming oil reserves in southern Louisiana and in

the Gulf of Mexico contributed to the establishment of Baton Rouge as an industrial center. Oil was found in Louisiana in 1901, and gas was struck in 1916. In 1909 Standard Oil built a refinery just north of the city, and over the next few years the economic base quickly shifted from agriculture to petrochemical manufacturing (Pennington, 1999). Besides the natural resources of oil and gas, many other factors contributed to the ensuing growth. Baton Rouge had a deep-water port, room to expand, and easy access to rail lines. The oil refineries in the city quickly led to further industry growth, as chemical and plastic byproducts were developed from oil. This boom began around the time of the Great Depression, and continued on throughout the late twentieth century. The petrochemical industry became the major pillar of the Baton Rouge economy (Miles, 2002a).

In a sense, the oil and gas industry has been Baton Rouge's blessing and curse. Most citizens growing up during the last few decades have expected to go and work for an oil company such as Esso, which later became Exxon (Jim Brewer, Mayor's office, personal communication, March 5, 2004). As Baton Rouge attorney Charles Landry said, "Louisiana kept all its eggs in one basket. …We've been very lazy when it comes to economic development" (personal communications, March 8, 2004). During the 1960s and 1970s, Louisianans seemed quite satisfied to ride the wave of oil and gas. Leadership did not focus on developing or diversifying the economy so when the oil crash of 1984 hit, Baton Rouge felt the pains. The mid-1980s are an important turning point in the city's history. With a declining industry, how would city leadership respond? Where would job growth come from?

The response from the city in terms of economic development initiatives was nonexistent. The only notable step taken was when the Chamber of Commerce hired Bill Little in 1984. Little appointed an economic developer to work at the Chamber, and this seems to be one of the few proactive events that took place during this critical time period. He also tripled Chamber dues and hired a consultant to identify the community's best business assets. After Little's departure in 1993, there would be little economic development leadership from the Chamber, the city, or the business community (Jim Clinton, Southern Growth Policies Board, personal communications, March 23, 2004). Time would prove that this lack of visionary leadership would cost Baton Rouge dearly.

Austin: Born as a Government Center

Austin's unofficial motto is "Keep Austin Weird." Not surprisingly, it is a difficult place to categorize. The city is in some ways the most Texan city and in other ways the least. A *New York Times* journalist recently had this to say about Hill Country life:

> *With a burgeoning high-tech industry, a university population of close to 50,000, the endless carnival of Texas statehouse politics and a music and restaurant scene that would be envied by a city twice its size, Austin is a mecca for writers, scholars, Hollywood stars and others. …But it is also the main Texas city where you are most likely to spot someone walking the streets in faded jeans, scraggly beard and worn cowboy hat. (Lyman, 1999)*

Yet Austin has not always had this hip lifestyle. In fact, settlers did not arrive in present-day Austin until the 1830s, naming the small village Waterloo. By 1839, the settlement had been chosen as the new capital for the Republic of Texas and it was named after one of the Texas founding fathers, Stephen F. Austin. In January 1840, the town population stood at 856. The majority of the population was made up of government officials, so in that respect Austin's economy focused on government and its enterprises from the very beginning. In 1888, the present Capitol building was erected in downtown Austin, where it still stands today as a constant reminder of one of the city's most consistent and important sectors (Kearle, n.d.).

In the late nineteenth century, several important milestones occurred that would have a profound effect on the future economic and population growth of Austin. In 1883, the University of Texas was founded in Austin, where it still stands today on the original "40 acres" (University of Texas at Austin, 2002). A decade later the Great Granite Dam was constructed on the Colorado River, resulting in hydroelectric energy source that attracted many manufacturers (Kearle, 2002).

Austin was still a relatively small city by the mid-twentieth century. But it was during this period that the city began to lay the foundation that would lead to the tremendous expansion in the latter part of the century. Research laboratories associated with UT and other private research centers and think tanks started popping up in Austin during this time (Kearle, 2002). In 1955, Tracor spun off of UT's Applied Research Labs and quickly became the city's first *Fortune 500* company (Smilor et al, 1988). In the next decade, other technology companies would arrive – including Xerox in 1962, Texas Instruments in 1966, and IBM in 1967 – laying a solid foundation for the technology sector (Gibson et al, 2004).

Similar to what happened in Louisiana in the mid-1980s, the drop in oil prices caused a general decline in the Texas economy. The situation that Baton Rouge leaders faced was similar in Austin: what could the city do to adapt and push the economy forward? The question was not an easy one to answer. In general, the city was against uncontrolled growth. UT was the state's flagship university and yet it was not intentionally involved in economic development. Despite the foundation for technology, only a small number of tech-oriented companies were located in Austin. Although the Austin economy did not depend on oil and gas, the general mindset in Texas – like that in Louisiana – was that of traditional economic sectors like petrochemical (Henton et al, 1997).

But Austin's response to the challenge was quite different from Baton Rouge's. This is the key moment in the comparison of the two cities: unlike Baton Rouge, Austin pushed forward.

As the Chamber head in the early 1980s, Lee Cooke[6] saw a huge opportunity in the technology sector and decided to take a risk. Cooke began to mobilize leaders in Austin. His first ally came with Austin attorney Pike Powers. The goal was to recruit technology companies to the area as a means for wealth creation. The group of leaders slowly expanded, and the first official task became to attract the Microelectronics Computer

[6] Cooke would later serve as mayor of Austin from 1988-1991.

Technology Consortium (MCC), which was the first for-profit research and development consortium in the U.S. Landing MCC in Austin meant a major increase in research opportunities, laboratories, and a highly skilled labor force. Additionally, MCC served as a draw for attracting other technology companies. In short, as Admiral Bobby Inman, who was influential in bringing MCC to Austin, points out, "It focused national attention on Austin as a burgeoning center for technology development and application" (personal communications, March 1, 2004). Inman, Powers, and other civic leaders met every morning at 7:30 for months to go over the proposal and used a massive recruiting effort. The results were a success: MCC came to Austin in 1982 (Henton et al, 1997).

Success built upon success. The next big arrival to Austin was SEMATECH, a consortium of fourteen U.S. semiconductor companies that focuses on new manufacturing techniques and technologies. Also happening was the Dell Corporation, which was started in 1984 by Michael Dell out of his dorm room at UT with $1000. By 1988 the company had gone public and four years later Dell made the *Fortune 500* list (Gibson et al, 2004). More companies located in Austin, including 3M, AMD, and Apple (Henton et al, 1997). Over three hundred other companies located offices in Austin between in 1989 and 1999, in part because of the massive recruiting efforts by Austin community leaders. The "Advantage Austin" plan was to raise $1.8 million over a three-year period to recruit these companies. The response from the Austin business community was overwhelming: they raised over $2.4 million in less than four months (Glenn West, personal communications, March 9, 2004).

All the while, this success was pushed forward by the actions of community leaders. Some came from the government and university, while others came from the private sector. The policy key that Austin followed was simple: a model of cooperation between leaders in government, industry, and university (Cooke, 2002).

It is important to note the university's role during this boom. William Cunningham, president of UT, was one of the leaders of this effort. As aforementioned, university leaders – including Cunningham – were very open in working with business and government leaders in promoting economic development in Austin. For example, when Austin decided to recruit semiconductor manufacturer AMD to the city, Cunningham refused to take "no" from AMD executives. The UT president spent hours on the phone with AMD representatives and he was finally able to convince AMD to come to Austin (Glenn West, personal communications, March 9, 2004). Another university leader, George Kozmetsky, was influential in bringing MCC to Austin. Kozmetsky, who was recruited to UT to serve as dean at the business school and later founded the IC^2 Institute, was involved in many of the early morning planning meetings related to MCC, and ultimately helped convince then UT president Peter Flawn that the university could play an important role in attracting for-profit enterprises to Austin (Gibson and Rogers, 1994).

But UT began to play a much larger role, as many companies began to spin off from research centers. In 1986, 53 of 103 companies surveyed indicated a direct or indirect tie to UT. The foundation for UT's influence on the economy had been laid from 1977 through 1986, when total research

contract and grants went from $55 million to $120 million. But these research dollars paled in comparison to UT's major revenue source: the Texas system's permanent university fund (PUF). Valued at $2.6 billion in the 1980s, this endowment has been critical in developing research and teaching excellence (Smilor et al, 1988). For example, during Austin's major recruiting efforts during the 1980s, UT developed an advanced research park and endowed 32 one million dollar faculty chairs in engineering and science (Henton et al, 1997). Of the 32 endowed chairs, Dallas businessman Peter O'Donnell funded 16. This single donation was very symbolic in that it showed how much people were willing to give in order to see UT and Austin succeed (Sandy Dochen, IBM, personal communications, March 4, 2004).

Another important factor in the wealth creation from UT research was the Austin Technology Incubator (ATI). Founded in 1989 by Kozmetsky, ATI was intended to bring together talent, technology, capital, and business. By 1993, ATI had helped start 13 firms, created 550 local jobs, and attracted more than $200 million in capital investment (Gibson and Rogers, 1994). In the past ten years, these numbers have increased drastically as the total ATI company graduates have soared to 65, four of which have gone public. These companies have created 2,850 jobs and over $1.2 billion in revenue for the local economy (Austin Technology Incubator, 2003).

Another unique feature of Austin's leadership was its Congressional delegation. The sheer number of Congressman was enough to create power and influence for Texas. During the late 1980s, when Austin leaders were working to attract technology companies to the city, Texas had 29 Congressman working as a team ala the old days of Sam Rayburn and Lyndon B. Johnson. This delegation did not just dominate in numbers though. Many of the members had influential positions including: Jim Wright (D-Fort Worth) as Speaker of the House, Senator Lloyd Bensten as chairman of the Senate Finance Committee, Senator Phil Gramm, J.J. Pickle (D-Austin) as chairman of the Ways and Means Committee, and Jack Brooks (D-Beaumont) as chair of the Government Operations Committee. Additionally, George Bush was serving as vice president during this time (Gibson and Rogers, 1994).

The momentum that the Austin entrepreneurs led slowly built up to a surging economy. By the dotcom boom of the 1990s, Austin had become one of the hottest cities in the U.S. with one of the fastest growth rates and a consistent top five ranking by various publications. Government leaders from the U.S., Europe, Asia, and Latin America visited Austin to learn how to use the "Austin Model" to accelerate science and technology-based growth (Gibson et al, 2004).

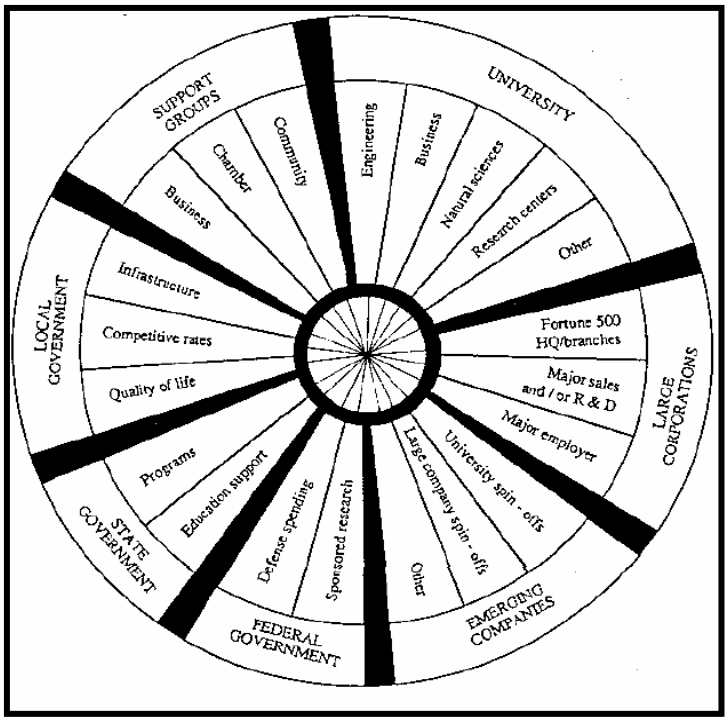
The growth in the technology sector led to a rise in Austin's population, especially the young and educated population. This in turn resulted in a hip, "Keep Austin Weird" culture. Austin became a haven for live music, as artists like Willie Nelson and Janis Joplin helped bring Austin its most well known nickname: Live Music Capital of the World. The high quality of life in Austin also served to attract young minds to the city. In recent years even the motion picture industry has picked up in Austin (Kearle, 2002). In short, Austin has gradually become the type of city that young people want to move to. Thus, Austin

is the model city for Florida's creative class concept.

Capital City Leadership

Some of Austin's success at the turn of the twentieth century can certainly be attributed to luck. After all, some student whiz similar to Michael Dell could have easily happened at any number of college campuses. But it is clear that a major factor in the success of Austin was the cooperation of its leaders. The leadership in Austin is best summarized by the technopolis wheel in Figure 3.1 below (Smilor et al, 1988). The wheel breaks down a city – in this case a technology-based city or "technopolis" – into seven major sectors: the university, large technology companies, small technology companies, state government, local government, federal government, and support groups. But the most important aspect of the wheel is not even shown: key individuals, or "first-level influencers" (p. 50), link the seven sectors of the city's leadership.

Figure 3.1 – The Technopolis Wheel



Source: Smilor, Gibson, Kozmetsky (1988), p. 51

Thus, the wheel highlights the role of each section in developing the economy. But more importantly, it stresses the value of communications, cooperation, and networking among the seven segments. In other words, it is very important to link the public and private sectors in order to affect change in the economy. First-level influencers make these links and Cooke (2002) indicates that these people are not likely to be traditional

politicians, rather, business and civic leaders with ties among all areas of the community. This was certainly the case in Austin, as leaders like Powers, Cunningham, Kozmetsky, and West were not typical politicians. Susan Engelking, the president of Engelking Kozmetsky Communications, sums this idea up fittingly:

> *You cannot look to government or the political system alone to provide the leadership or the continuity. If you do, it is not going to happen. It happens because people step up. Civic entrepreneurship is more effective than politics. (Henton, 1997, p. 33)*

But why did these civic leaders step up in Austin and not in Baton Rouge? Leaders in Austin had many motivating factors. First, the business community understood that the success of the city's infrastructure, the university, and the overall quality of life had a major impact on their business. Second, leaders simply wanted to give back to the community (Henton et al, 1997). Gibson and Rogers (1994) suggest that pride dating back to the 1800s when Texas was an independent republic made leaders want to give back. They describe this pride: "Texans still express a special pride in the Lone Star State. There is a feeling of 'us versus the rest.' The 'rest' includes the rest of the United States as well as Japan and other nations" (p. 470).

But these are not characteristics exclusive to Austin. There are many strong, smart leaders in Baton Rouge that care deeply about the community. The major difference between the leadership in Austin and Baton Rouge is that the Texas influencers felt that if they did not take the initiative then no one else would. As the former head of the Chamber of Commerce, Glenn West said, "People were just tired of things being bad and were looking for a spark to make things better" (personal communications, March 9, 2004).

There is hope for Baton Rouge. There has been recent momentum to change the status quo and push for economic development. Several recent groups have outlined plans for the city's development. Through grants from the State and the U.S. Department of Commerce, a consulting firm was hired to analyze and break down Baton Rouge's eight industry clusters (CapStrategy, 2004). The goal of this Porter-style model called CapStrategy was not necessarily to implement the clusters, but to identify the clusters for the business community and have them follow through with it (Don Powers, CapStrategy, personal communications, March 17, 2004). According to Rolfe McCollister, who is the publisher of the *Greater Baton Rouge Business Report*, this is the fifth study of its kind for Baton Rouge. The problem with the previous reports was that there was little follow through on the party of business leaders (personal communications, April 25, 2004). CapStrategy was only finished a year ago, so business leaders must push the idea forward if it is to carry any momentum for economic development.

Another initiative called Plan Baton Rouge is working to develop downtown Baton Rouge. The document was crafted after a week of public meetings in 1998 in which hundreds of citizens participated (PlanBR, 2000). One of the group's most recent activities has been acquiring implementation assistance from the Smart Growth Leadership Institute (SGLI). Through a grant funded by the Environmental

Protection Agency, SGLI's experts are designing standards that Baton Rouge can use to achieve "smart growth"[7] (Smart Growth Leadership Institute, 2003). Playing a large part in the development of downtown is the Downtown Development District, which is a city government agency that is charged with the task of setting the overall policy for the development of downtown Baton Rouge (City of Baton Rouge, 2004). The Baton Rouge Area Foundation, a non-profit organization with nearly $200 million in assets, also plays a critical role in the development of the city. In 2002 the Foundation awarded $13.5 million in grants, including funds to Plan Baton Rouge (Baton Rouge Area Foundation, 2004).

In addition to these formal groups, there has been somewhat of a grassroots movement among the community. Forum 35 was founded in 1994 as a place for young leaders to meet and voice their opinions. The group of over 400 members is a gathering place for young Baton Rouge citizens that want to give back to the community. In that sense, Forum 35 has provided leadership for the young creative class, and an outlet for people to get involved through volunteer work, city development projects, and social networking (Forum 35, n.d.). Another recent movement in October 2003 involved a group of 120 Baton Rouge business and community leaders. The group, which included the mayor, the LSU chancellor, the Chamber of Commerce president, and many more leaders, visited Austin to meet with Texas leaders. This group and trip became informally known as the Austin120, and the leaders plan to do a similar visit to Nashville in the fall of 2004.

As a result of the trip, a new grassroots group known as Austin 6 has been formed. The group was founded by six of the youngest participants of the Austin120 trip when they decided to go back to Baton Rouge and step up to fulfill some of the leadership that has been absent in the city. The unique feature of Austin 6 is that the leadership is derived from the entire community. Over 100 project leaders use the group's virtual community Web site to get help from the 1000+ members on community-based projects. As one of the co-founders, Mike Trufant, said, "We're not one big moving target; we're many foot soldiers" (personal communications, March 17, 2004).

These plans and movements could be keys for the future success of Baton Rouge. It is clear that there has been a lot more dialogue in recent months related to important economic development issues. As Mark Thornton, the superintendent of the Baton Rouge Recreation and Park Commission (BREC) pointed out, "A momentum of change seems to be growing in the community" (personal communications, March 15, 2004). Yet it is not evident whether the key leaders – or first-level influencers – have emerged to unite the public and private sector and lead development in the city. Several key leadership positions will be decided in the coming months, including the Baton Rouge mayor, the chancellor of LSU, the president of the Chamber of Commerce, and the superintendent of the East Baton Rouge Parish school

[7] Smart growth is defined by SGLI as growth "achieved without many of the growing pains associated with sprawl—crushing traffic congestion, car-dominated neighborhoods, the loss of farmland and open space, crowded schools, and rising taxes to pay for services and ever expanding rings of new infrastructure" (2003).

system. But as noted previously, leadership cannot just come from government. It is not apparent whether strong and visionary leadership will come from the business community, but it is clear from the Austin example that if Baton Rouge is going to succeed, it must.

Chapter 4. Demographic Analysis: Mixed Results of In-Migration

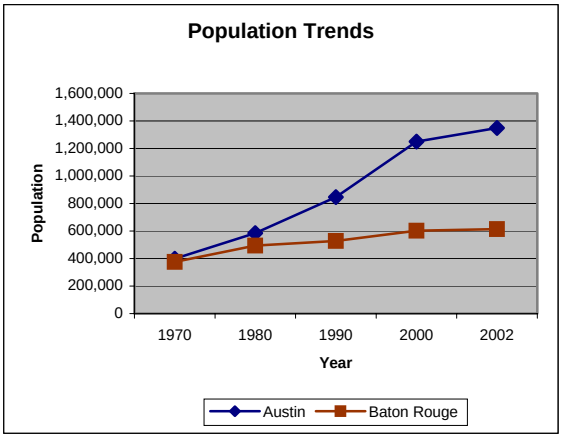
Individual leaders made an enormous impact in the development of Austin over the past few decades. But what about the general population? Do the citizens of Austin possess particular characteristics that have helped the city succeed at a greater degree than Baton Rouge? To answer this question, this chapter analyzes and compares each city's population in great detail.

First, the overall population numbers for the past thirty years are presented. Per capita income is then compared, followed by a breakdown of the minority population of each city. Next, the educational level of the citizenry is analyzed. An in-depth study of each city's migration patterns is then addressed, including a comparison of the percent of the population that is native to the state. Finally, the cities are matched up using the creativity index.

Population

The populations of Austin and Baton Rouge were nearly identical in 1970 at 398,938 and 375,628, respectively. But by 2000 the populations of the two cities had become quite different, as Austin's population exploded to reach 1,249,763 and Baton Rouge's paled in comparison at 602,894. Figure 4.1 shows the population patterns of the two cities from 1970 to 2002. Based on this data, it becomes clear that there was a somewhat sudden shift in population growth in Austin. As discussed in Chapter III, this was due in large part to the technology boom that Austin had in the 1980s and 1990s. See Table A.1 in Appendix A for the actual population figures for each city dating back to 1900.

Figure 4.1: Population Trends in Austin and Baton Rouge



Source: U.S. Census Bureau (n.d. and 2000, November)

Despite Baton Rouge's apparent poor performance in population growth over the past three decades, two things should be noted. First, Austin has consistently been one of the fastest growing cities in the U.S. in recent years. From 1990 to 2000, Austin ranked as the fifth fastest growing city in the U.S. with a growth rate of 47.7 percent. Baton Rouge ranked 114 during the same period (out of 280) with an increase of 14.1 percent (U.S. Census, 2001). This is actually better than the overall growth rate of the U.S., which was 13.1 percent from 1990 to 2000 (U.S. Census, 1993 and n.d.).

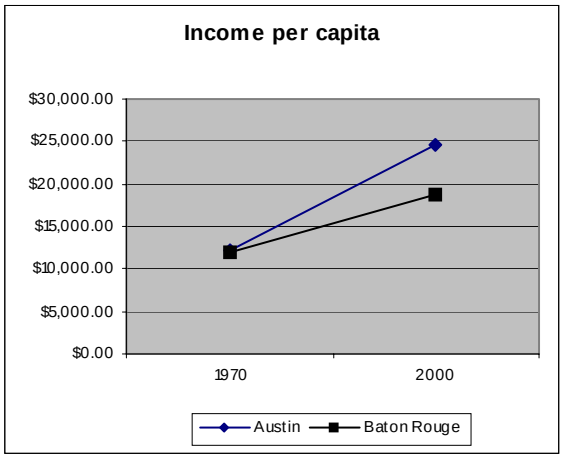
Second, Baton Rouge has actually performed well when compared to the state of Louisiana. Due in large part to out-migration from the state (Baughman, 2002), Louisiana grew by only six percent from 1990 to 2000. During this same period, Texas grew by nearly 23 percent (U.S. Census, n.d. and 1993). But Baton Rouge has been one of the few cities to push up the growth rate for Louisiana. From 1990 to 2000, Baton Rouge accounted for 30 percent of Louisiana's growth. During the same time period, Austin only accounted for ten percent of the growth in Texas (U.S. Census, n.d. and 1993). This positive trend has continued for Baton Rouge: between 2000 and 2002 Baton Rouge accounted for 42 percent of the state's growth (U.S. Census Bureau, 2003).

Income

The per capita income for each city was vastly different in 2000. Austin citizens made almost 30 percent more than Baton Rougeans ($24,516 versus $18,866) (U.S. Census, n.d.). Yet the statistical comparison for 1970 is quite similar, as Austin had a per capita income of $12,240 and Baton Rouge was just below at $11,844 (U.S. Census, 1973, Table 124).[8] This drastic shift in per capita income is highlighted in Figure 4.2 below.

[8] Per capita income is reported in real values for the year 2000 and was calculated for 1970 using a Price Index of 0.225.

Figure 4.2: Income per capita in Austin and Baton Rouge



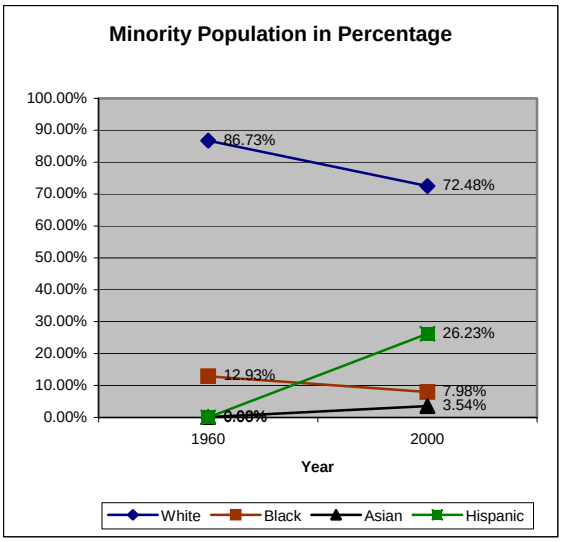
Source: U.S. Census Bureau (1973, Table 124 and n.d.)

Minority Breakdown

Comparing the minority breakdown of each city's population highlights a major difference: the minority population in Austin is heavily Hispanic while the minority population in Baton Rouge is heavily African Americans.[9] Unlike Austin, Baton Rouge's racial composition has remained largely the same over the past forty years. But the percentage of whites has decreased by nearly 15 percentage points in Austin. Additionally, it should be noted that data for the percentage of Hispanics are not available for 1960, as the Census Bureau did not calculate this category until later years. Figures 4.3 and 4.4 below show the minority breakdown of each city for the years 1960 and 2000. See Table A.2 in Appendix A for the actual population figures.

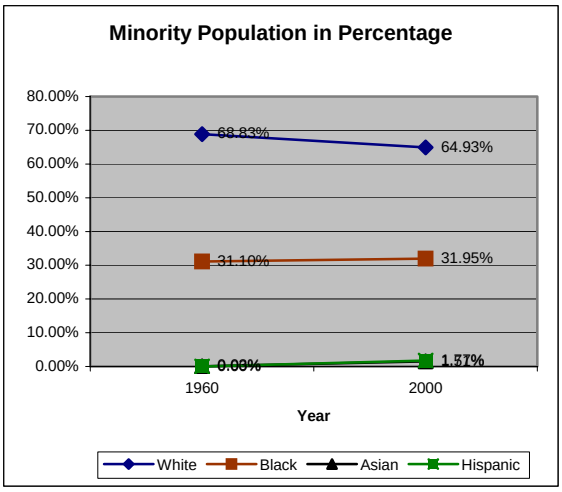
[9] The federal government considers race and Hispanic origin to be different.

Figure 4.3: Minority population – Austin



Source: University of Virginia Geospatial and Statistical Data Center (1998) and U.S. Census Bureau (n.d.)

Figure 4.4: Minority population – Baton Rouge



Source: University of Virginia Geospatial and Statistical Data Center (1998) and U.S. Census Bureau (n.d.)

Education

Based on 2000 Census data, it is clear that the Austin population is more educated than the Baton Rouge population. In Austin, more than 52 percent of the population has a high school education or more, while the

percent in Baton Rouge is slightly lower at 49 percent. The major educational attainment difference is among those that hold a bachelor's degree or higher. Nearly 23 percent of the Austin populous holds a bachelor's degree, compared to 15 percent in Baton Rouge (U.S. Census Bureau, n.d.). Yet the figures were nearly identical in 1970.[10] In Austin, roughly 26 percent and 8 percent of the population had a high school education or more and a bachelor's degree or more, respectively. Similarly in Baton Rouge, roughly 26 percent and 7 percent of the population had a high school education or more and a bachelor's degree or more, respectively (U.S. Census Bureau, 1973, Table 120).

Baton Rouge does have a slight edge in one factor. The bayou city has a greater percent of the population enrolled in any form of school. In Austin 365,233 people over 3 years old were enrolled in any form of school in 2000, or 29 percent of the total population. In Baton Rouge 187,934 people were enrolled in any form of school, or 31 percent of the total population (U.S. Census, n.d.). These numbers were nearly identical in 1970, as each city had approximately 32 percent of the populous enrolled in any form of school (U.S. Census, 1973, Table 120).[11]

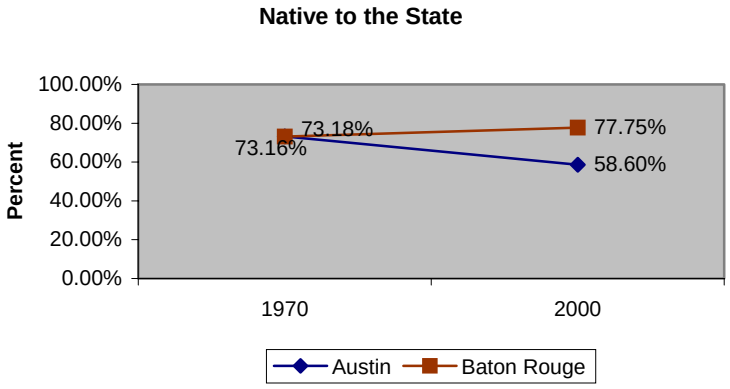
Native to the State

There is a clear difference between the two cities in terms of the percent of the city's population that is a native to the state. The percentages were exactly the same in 1970 with both cities at 73.2 percent. But by 2000 the percent had drastically dropped for Austin to 59 percent while actually increasing for Baton Rouge to 78 percent. In fact, the state of Louisiana has the country's highest percentage of native-born residents (U.S. Census, 2003, September). Figure 4.5 illustrates this shift for Austin.

[10] Due to the way data was collected in 1970, students that completed four years of high school were considered to have a high school education or more. Similarly, students that completed four years of college were considered to have a bachelor's degree or more.

[11] Unlike the 2000 data, this data only includes people aged 3 to 34. It is likely that the number of people aged 35 and older and enrolled in school is negligible.

Figure 4.5: Native to the State, Austin and Baton Rouge

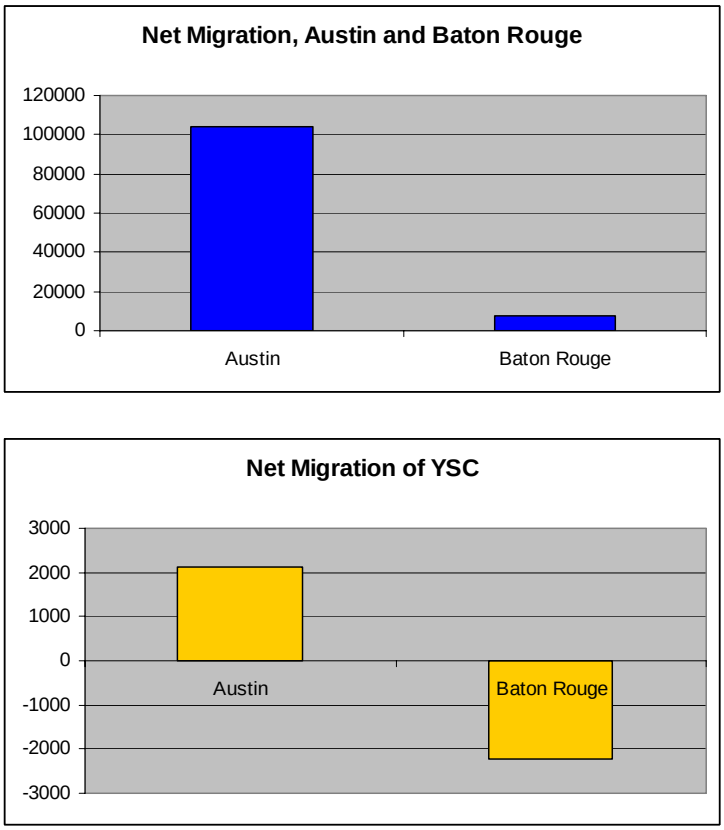


Source for 1970 data: U.S. Census Bureau (1973), Table 119; Source for 2000 data: U.S. Census Bureau (n.d.)

A very important point can be drawn from this data. From 1970 to 2000, Austin has experienced a far greater number of non-Texas natives moving to the city. The percent in Baton Rouge has remained roughly the same, which indicates that there have not been many non-natives moving to the city – or if there have been then there has been just as many non-natives moving away. A positive twist to this statistic is that many Baton Rougeans enjoy living in the city and want to stay. But the negative angle is that – even if people do like residing in Baton Rouge – there has not been enough job growth to bolster immigration to the city. This fact is backed up by statistics: from 1995 to 2000, Austin had the fifth highest net migration out of 349 cities with a total migration of 104,340 people. On the other hand, Baton Rouge ranked 99th in net migration with 7,316 more people moving to the city than moving out (U.S. Census, 2003, August). Additionally, Baton Rouge had a net migration of –2,241 young, single, and college-educated (YSC)[12] from 1995 to 2000, ranking the city 234th out of 276 cities analyzed. In the same category and time period, Austin had a net in-migration of 2,122 and a ranking of 26th (U.S. Census, 2004). These numbers are summarized in Figure 4.6 below.

[12] The Census Bureau characterizes "young, single, and college-educated" as those people aged 25 to 39 that are not married and have earned at least a bachelor's degree.

Figure 4.6: Migration Patterns in Austin and Baton Rouge



Source: U.S. Census (2003, August), U.S. Census (2004)

Creative Class Index

One possible explanation for Austin's explosive growth compared to Baton Rouge's can be found in Florida's work. With its "Keep Austin Weird" mentality and booming tech sector, Austin finished first in the overall creativity index rankings for 2004. On the other hand, Baton Rouge ranked 195 out of 276 regions. The weight that each specific rank carried towards the overall rank was one-third (Kevin Solarick, Carnegie Mellon University, personal communications, April 15, 2004).[13]

The results for the two cities are summarized in Table 4.1 below.

[13] A city like Austin can have an overall rank of one without being ranked that high in other categories. The overall rank is calculated by weighting each factor by one-third (Kevin Solarick, Carnegie Mellon University, personal communications, April 15, 2004).

Table 4.1: Creative Class Summary – Austin and Baton Rouge

Category	Austin	Baton Rouge
Overall creativity index	0.963	0.350
Overall rank	1	195
Previous (2002) overall rank	2	72
Technology rank	2	239
Talent rank	9	94
Tolerance rank	22	209

Source: Florida (2004)

Comparative Demography: What Can Be Learned

Based on the above analysis, the following points presented in Table 4.2 can be made. The comparison of the Austin and Baton Rouge demographics highlights several important trends over the past thirty years. First, the population of the two cities has completely diverged, as Austin has grown at a much higher rate. Similar results have occurred regarding the cities' per capita incomes, as Austin residents now earn considerably more than their counterparts in Baton Rouge. But what has been the cause of these two shifts?

The demographics indicate that several factors can be associated with this varied growth. First, Austin has a much more educated populace than Baton Rouge. The result of this is that the workforce is better prepared to fill high-skilled jobs that pay superior salaries. Another factor related to the better growth in Austin is the fact that Austin had a much higher migration of young, single, and college educated people. Baton Rouge actually lost citizenry in this category. Again, this allowed Austin to have a more talented workforce that could feed the demand of existing and new firms alike. A final factor that bridges the two previously mentioned is that Austin had a much higher creativity index ranking. This means that the Texas city had a larger presence of the creative class. These three things – education, migration, and creative class – seem to have had a major impact on the development of Austin.

Table 4.2: Conclusions from Demographic Comparison

The populations of Baton Rouge and Austin were nearly the same in 1970, but presently Austin is more than double the size of Baton Rouge. But compared to the nation, Baton Rouge has grown at a respectable level. Additionally, Baton Rouge has accounted for much more of the overall growth in Louisiana.
From 1970 to 2000, the per capita income increased at a far more rapid pace in Austin than Baton Rouge. Although per capita income in the cities was nearly the same in 1970, Austin residents now make 30 percent more than citizens of Baton Rouge do.
Hispanics make up the largest percent of minorities in Austin, while African Americans do in Baton Rouge.
Austin and Baton Rouge have roughly the same percentage of people with a high school education or higher, but Austin has a clear edge in the percentage of people with a bachelor's degree or higher. Both of these figures were similar in 1970.
Over the past forty years, Austin has seen a huge decline in the percent of citizens that are native Texans, while Baton Rouge has stayed at a very high level. This is due to much larger net migration in Austin compared to Baton Rouge.
Austin finished first in the creative class index rankings, while Baton Rouge finished at 195.

Chapter 5. Economic Analysis: Separate Paths of Growth

Although the individual leaders and several characteristics of the population in Austin have attributed to rapid growth, further insight can be gained by examining the economies of Austin and Baton Rouge. Was Austin better positioned in the 1970s and thus able to outpace the Louisiana capital city? Did the economies grow at different rates because their costs of doing business differed?

In this chapter, these questions are answered by analyzing the current economies of Baton Rouge and Austin in four ways. The location quotient technique was used to determine specialization sectors in the Baton Rouge and Austin economies. The shift-share analysis was used to show how fast the economies grew in Baton Rouge and Austin versus the growth rate in the United States, and to gauge the competitive position of the cities' economies as related to the overall U.S. economy. The cities were compared in terms of the cost of doing business. A final section is included related to the funding of infrastructure in each city.

The calculations for these techniques were performed using Microsoft Excel. Base data (see Appendix B, Table B.1) were obtained from the Bureau of Economic Analysis, and included total employment numbers for Austin and Baton Rouge for the years 1970 and 2000. These numbers were then disaggregated into nine industry sectors: construction; manufacturing; transportation; wholesale trade; retail trade; agriculture; finance, investment, and real estate (FIRE); services; and government.

Location Quotients

The calculated location quotients for Baton Rouge and Austin appear below in Table 5.1. The location quotients were calculated for each sector in each city by dividing the percentage by sector in the region by the U.S. percentage by sector (see Appendix B, Table B.2 for the matrix that includes the percentage of employment in each sector for Baton Rouge, Austin, and the United States).

Table 5.1: Location Quotients, Austin and Baton Rouge

	Baton Rouge MSA		Austin MSA	
Sector	**1970**	**2000**	**1970**	**2000**
Construction	2.16	1.99	1.21	1.15
Manufacturing	0.66	0.59	0.38	0.91
Trans. & public utilities	0.94	0.91	0.52	0.64
Wholesale Trade	0.91	1.03	0.71	1.06
Retail Trade	1.03	1.06	1.03	0.95
Services	1.02	0.91	1.16	1.01
FIRE	0.86	0.89	1.03	1.06
Agriculture	0.38	0.24	0.91	0.54
Government	1.29	1.27	1.73	1.20

Source: Bureau of Economic Analysis (2003)

The location quotients can be used to determine whether a region – in this case Baton Rouge and Austin – has a specialization in a particular sector (O'Sullivan, 2003). The following rules can be adapted to the location quotients:

- Location Quotient > 1

Relative specialization in Sector/Region

- Location Quotient < 1

Production deficit in Sector/Region

- Location Quotient = 1

Average production in Sector/Region

Using the aforementioned rules, the relative specializations can be determined for each city. Both cities have a significant specialization in 1970 and 2000 in construction and government. Other specializations are negligible, as the location quotient values are only slightly higher than 1.0. The specialization in construction is a reflection of the fact that both cities were growing at high rates. This is certainly the case for Austin, as the population has boomed during the past thirty years. The specialization in government in both cities is not surprising, as both cities are state capitals, and thus the center of government for their respective states.

Most of the other sectors are near average production levels with location quotients near 1.0. Agriculture and manufacturing are two sectors that have values significantly below 1.0, indicating that there are major production deficits in these two sectors relative to the U.S. as a whole. Additionally, it is surprising that the cities do not have specializations in the FIRE and service sectors. These are sectors that are traditionally located in big cities. Austin does have a slight specialization, which might be explained by the fact that its economy is much larger than that of Baton Rouge's. One reason that Austin and Baton Rouge might not have a concentration of these two sectors is because of the close proximity to other large cities. Austin is close to Dallas (200 miles), Houston (160 miles), and San Antonio (80 miles), and Baton Rouge is near New Orleans (80 miles). These larger cities and economies likely fulfill the region's demand for finance, real estate, and business and professional services.

An in-depth look at the location quotient for manufacturing is in order though. Baton Rouge decreased in specialization as values went from 0.66 to 0.59 from 1970 to 2000. Austin saw a dramatic increase, shifting from 0.38 to 0.91. The reasons for this are clear when taking the overall economy into mind. The petrochemical industry, which forms the bulk of manufacturing in Louisiana, stagnated throughout the latter part of the twentieth century. On the other hand, the computer and electronic industry, which found a solid home in Austin, grew at a high rate during the same time. The actual numbers confirm this.[14] The number of chemical manufacturing jobs (including chemicals, allied products, petroleum, and coal products) in Baton Rouge declined from 15,118 in 1977 to 10,829 in 2000. In Austin, the number of computer, electronics, and

[14] The data was estimated using County Business Patterns. Some county-level data is withheld to avoid disclosure and are represented by a range. In these cases, the mid-point of the range was used to determine the total number of employees. Thus, the data points are rough estimates.

machinery manufacturing jobs rose from 9,911 in 1977 to 50,237 in 2000. During that same period, the number of manufacturing jobs in Baton Rouge went from 23,448 to 21,792, while in Austin from 22,995 to 75,788 (2003). These figures begin to explain how Baton Rouge lost specialization in the area, while Austin increased its specialization by over two hundred percent.

Shift-Share Analysis

Several steps were involved in calculating the shift-share of jobs for each MSA. First, calculations were made for each sector on employment change from 1970 to 2000. Ratios were then calculated for each sector by dividing the number of employees in 1970 by the number of employees in 2000. Thus, a value greater than 1.0 indicates a growth in that sector. These calculations were performed for Baton Rouge, Austin, and the United States (see Appendix B, Tables B.3 and B.4). The shift in jobs based on national share was calculated next, and shows the number of jobs that the city and sector would had grown by if the number of jobs grown at the national rate. To determine this, the number of jobs in the sector was multiplied by the national growth rate in employment. The shift in jobs based on sector was calculated next by multiplying the number of jobs in the sector by the difference of the national sector growth rate in employment and the national growth rate in employment. Finally, each city's competitive position was calculated by multiplying the number of jobs in the sector by the difference between the city sector growth rate and the national sector growth rate. The results of these calculations appear below in Tables 5.2 and 5.3.

The shift-share analysis approach breaks down the overall job growth into three different shares. The national share effect measures the growth of jobs in the region based on the national growth rate. The industrial mix tallies the growth of a region based on the national growth in the industry minus the national growth. The competitive position measures the actual change in employment minus the expected change had the growth in each industry occurred at the national rate. The three shares add up to the total job growth during the time period (Barff and Knight, n.d.). Thus, summing the three total changes for each city results in the total growth in employment for each city. From 1970 to 2000, Baton Rouge employment grew by 224,566 while Austin grew by 662,559. The growth in Austin was far higher than growth in Baton Rouge, and much of the growth can be attributed to the greatly enhanced competitive position of Austin. Nearly 500,000 new jobs were created in Austin from 1970 to 2000 due to competitive position alone, while Baton Rouge did not even see 100,000 additional jobs due to competitive position during the same period. In short, Austin was able to use its competitive position to add a lot more jobs than Baton Rouge. But compared to the national growth rate, Baton Rouge did not do too badly. The national economy grew by 83 percent from 1970 to 2000, while Baton Rouge experienced growth of 254 percent. This number pales in comparison to Austin though, as the Texas capital grew by 464 percent. Table 5 below summarizes the job growth in Austin and Baton Rouge.

Table 5.2: Shift-share analysis, Austin

SHIFT-SHARE ANALYSIS-Austin MSA compared to the United States				
Sector	**National Share**	**Industrial Mix**	**Competitive Position**	**Total**
Construction	8,924	3,663	32,834	45,420
Manufacturing	12,612	-13,061	74,227	73,777
Trans. & public utilities	4,223	-654	18,477	22,047
Wholesale Trade	4,975	-54	30,399	35,320
Retail Trade	23,521	4,934	76,997	105,453
Services	33,149	52,658	150,908	236,715
FIRE	10,594	4,234	44,091	58,919
Agriculture	6,036	-7,606	2,862	1,292
Government	46,442	-23,119	60,293	83,616
Total Change	150,476	20,995	491,088	662,559

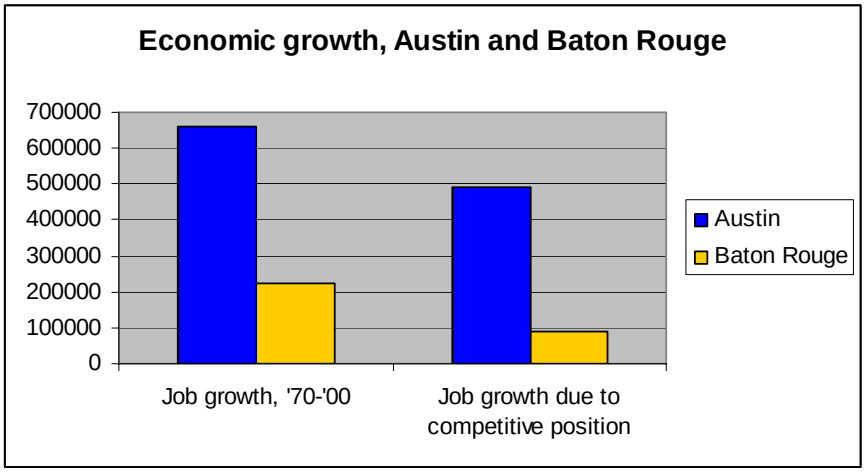
Source: Bureau of Economic Analysis (2003)

Table 5.3: Shift-share analysis, Baton Rouge

SHIFT-SHARE ANALYSIS-Baton Rouge MSA compared to the United States				
Sector	**National Share**	**Industrial Mix**	**Competitive Position**	**Total**
Construction	12,698	5,211	9,321	27,230
Manufacturing	17,463	-18,085	4,755	4,133
Trans. & public utilities	6,113	-946	4,409	9,576
Wholesale Trade	5,067	-55	6,474	11,487
Retail Trade	18,800	3,944	19,808	42,552
Services	23,240	36,917	20,820	80,977
FIRE	7,060	2,821	8,164	18,045
Agriculture	2,033	-2,561	-229	-758
Government	27,810	-13,844	17,358	31,324
Total Change	120,283	13,403	90,881	224,566

Source: Bureau of Economic Analysis (2003)

Table 5.4: Economic growth, Austin and Baton Rouge



Source: Bureau of Economic Analysis (2003)

Business Comparison

The purpose of this section is to compare the costs of operating a business in Austin and Baton Rouge.[15] Did firms locate in Austin because the city provided a better place to conduct business? There are four key factors:

- Market Access
- Cost of Living
- Venture Capital
- Studies and Rankings

Market Access

In this comparison, market access refers to a city's proximity to major U.S. markets, convenience of air travel, costs of air travel, hotel options, and hotel costs. This is a significant factor in the cost of doing business, and thus warrants evaluation to determine whether Austin has an advantage in this area.

Travel Distance

Travel distance was calculated between Austin/Baton Rouge and the twenty largest U.S. cities (U.S. Census Bureau, 2001) and is shown in Table 5.5 below.

[15] Much of this comparison is modeled off of a report by the KPMG State and Local Tax Group entitled "Business Costs Comparison and Demographic Report."

Table 5.5: Travel distance from twenty largest U.S. cities

City	Austin, TX	Baton Rouge, LA
New York	1767	1360.2
Los Angeles	1419.7	1819
Chicago	1162	912.5
Washington/Baltimore	1523.9	1140.6
San Francisco	1798.7	2174.5
Philadelphia	1661	1277.7
Boston	2010.7	1584.1
Detroit	1412.7	1163.2
Dallas	196.4	442.8
Houston	162	269.3
Atlanta	967.3	543.7
Miami	1350.1	921.5
Seattle	2384.6	2642.3
Phoenix	1047.6	1446.9
Minneapolis/St. Paul	1173.4	1289.4
Cleveland	1377.7	1105.7
San Diego	1341.9	1741.2
St. Louis	884.2	665.3
Denver	1062.2	1319.9
Tampa	1142.5	714
Average	**1292.3**	**1226.7**

Source: MapQuest\Driving Directions (2004)

This data indicate that Austin and Baton Rouge are similarly situated in relation to major U.S. markets.

Air Transportation

The Baton Rouge Metropolitan airport is located six miles north of downtown Baton Rouge. The airport has ten gates (five in use) and three intersecting runways measuring 7,002, 6,900, and 3,799 feet in length. There are four major airlines (American, Delta, Continental, and Northwest) offering four nonstop flights and 26 departing daily flights. The average fare from the Baton Rouge airport to all destinations in March 2003 was $155. The airport terminal is 150,000 square feet and the entire airport is 1,300 acres with

1,333 parking spaces available. The total number of passengers during 2002 was 670,000 (Marino, 2003).

The Austin-Bergstrom International airport is located eight miles east of downtown Austin. The airport has 25 gates (23 in use) and two parallel runways measuring 9,000 and 12,250 feet. There are nine airlines (American, America West, Continental, Delta, Frontier, Northwest, Southwest, and United) offering 28 nonstop flights and 240 daily departing flights (Austin-Bergstrom International Airport, 2004). The average fare from the Austin airport to all destinations in March 2003 was $148. The airport terminal is 600,000 square feet and the entire airport is 4,200 acres with 10,152 parking spaces available. The total number of passengers during 2002 was 1,124,988 (Marino, 2003).

When compared to the Baton Rouge airport, it is clear that the airport in Austin creates a competitive advantage in terms of market access. The Austin facility is larger and offers more flights at lower fares. One of the long-term goals in Baton Rouge is to attract a low-cost airline (Marino, 2003). The presence of Southwest, the leading low cost carrier in the country, has had a profound impact on travel to and from Austin.

Cost of Living

The ACCRA Cost of Living Index (2003) calculates the cost of living in various categories for 307 urban areas. The national average for each index is 100, and the indices for each city are calculated based on the relationship to that average. Table 5.6 below summarizes the comparison of Austin and Baton Rouge.[16]

[16] Cost of living indices are also available from the Bureau of Labor Statistics, but data is not available for Austin and Baton Rouge.

Table 5.6: Cost of living indices in 2003

Category	Austin, TX	Baton Rouge, LA	Percent Difference (Austin to BR)
Grocery Items	92.9	106.0	-12.4%
Housing	91.6	96.3	-4.9%
Utilities	126.4	114.3	+10.6%
Transportation	90.2	96.4	-6.4%
Health Care	108.7	104.9	+3.6%
Misc. Goods/Services	98.6	103.8	+5.3%
Total	**99.8**	**100.6**	**-0.8%**
Avg. Rent	$734	$623	+17.8%
Avg. Home Price	$224,100	$248,110	-9.7%

Source: ACCRA Cost of Living (2003)

The data indicate that the overall costs of living in Austin and Baton Rouge are roughly equal at 99.8 and 100.6, respectively. This is very near the national average and thus neither city can be seen as having a cost of living advantage.

Venture Capital

Table 5.7 below summarizes the amount of venture capital in the states of Texas and Louisiana.

Table 5.7: Venture capital in Louisiana and Texas

Year	Texas	Louisiana
1995	$455M	$31M
2000	$6,137M	$127M
2003	$960M	$33M

Source: PricewaterhouseCoopers (2003)

Although data are not readily available at the city level, it can be assumed that Austin has better access to a far greater amount of money than Baton Rouge in venture capital.

Studies and Rankings

Best Place for Business

Forbes.com (2003) used a variety of factors – including cost of doing business, job growth, and other quality of life features – to rank 150 cities on

the best places for business and careers. In the survey, Austin ranked first, while Baton Rouge ranked seventieth. A summary of the results is presented in Table 5.8 below.

Table 5.8: Forbes.com "Best Place for Business"

City	Overall	Cost of Doing Business	Job Growth	Educational Attainment	Advanced Degrees	Housing	Crime Rate
Austin	**1**	48	11	9	9	64	74
Baton Rouge	**70**	25	62	68	20	61	128

Source: Forbes.com (2003)

This survey clearly indicates that Austin is a better city for business than Baton Rouge. Despite Baton Rouge's lower cost of doing business, Austin has a clear edge in several other categories including job growth, educational attainment, and lower crime rates.

State Business Climate

Site Selection magazine (Starner, 2003) ranks the top 25 state business climates. The rankings are determined 50 percent by new plant performance and 50 percent by an annual survey of business executives. Texas finished with an overall ranking of 6 while Louisiana ranked at 17. These rankings suggest that Austin has a better business climate than Baton Rouge.

Legislative Quotient

Expansion Management magazine's legislative quotient (LQ) tries to assess each state's business climate established by their respective state legislature (King, 2003). The LQ includes the following factors:

- How reliant a state is on certain business taxes;
- The overall impact of a state's tax burden on workers;
- How much of a state's budget goes to important infrastructure (i.e., highways) and education;
- How much of a state's budget goes to simply paying the state's government administration
- The percentage of the current budget that goes toward servicing the existing debt; and
- Whether the state has improved in the above areas during the past five years.

The overall ranking for Texas is first, while Louisiana only ranked 19th.

High-Value Labor Market Quotient

Another ranking by *Expansion Management* attempts to identify cities that have talented and highly skilled workers (2003). In order to determine the rankings of 311 U.S. metropolitan

areas, the survey examines the region's:

- Science and engineering workers as a percent of the MSA workforce;
- The number of patents issued; and
- The level of research and development (R&D) spending.

The results for Austin and Baton Rouge appear in Table 5.9 below.

Table 5.9: High-value labor market quotient

City	Final Rank	Patents	Colleges	Science and Engineering	R&D Spending
Austin	**17**	22	88	21	79
Baton Rouge	**67**	103	106	33	311

Source: Expansion Management (2003)

Austin ranks considerably better than Baton Rouge at 17, although Baton Rouge does rank fairly well at 67 out of 311. Two major differences stand out between the cities: the number of patents and the amount of R&D spending. In fact, Baton Rouge ranks dead last in R&D spending. Because of the location of LSU and Southern University in Baton Rouge, this is an area in which the city has a lot of potential to improve.

Funding City Infrastructure

As discussed previously, the infrastructure of a city is an important factor in many businesses' location decisions. Quality roads and utilities, as well as a sound public school system are factors that business managers look for when deciding to locate in a region. Thus, it is appropriate to compare infrastructure funding in Austin and Baton Rouge.

A study by the City of Baton Rouge (Greater Baton Rouge Chamber of Commerce, 2003)[17] found that households in Baton Rouge paid an average of $206 less in local taxes than those in Austin. If each Baton Rougean paid for this difference then the additional tax revenue for the city per year would be over $46 million.[18] This difference is accounted for in local property taxes and sales tax. Although Texas does not have a state income tax, the combination of state income tax, sales tax, and local property tax in Baton Rouge is far less than that the combination of property and sales tax in Austin.

[17] This study compares East Baton Rouge Parish with Travis County and not Baton Rouge MSA and Austin MSA.

[18] This figure would certainly be higher if the Baton Rouge MSA/Austin MSA were to be used, as it can be assumed that citizens in the other parishes in Baton Rouge MSA pay less in taxes than citizens in other counties in Austin MSA.

Thus, it becomes clear that citizens in Austin have generally paid more for city improvements than those in Baton Rouge have. One of the major factors in this is highlighted by the amount of general obligation bonds that each city has issued in the past few decades. While Baton Rouge has not issued a single general obligation bond since 1967 (Vicki Harris, City of Baton Rouge, personal communication, April 7, 2004), Austin has issued over $1.65 billion in such bonds since 1988 (Jeff Steadman, City of Austin, personal communication, April 9, 2004). General obligation debt in each city is paid for in special property taxes, and must be passed in a taxpayer election.

Another issue that factors into Baton Rouge's lower tax revenue is Louisiana's property tax system. This system has been criticized for many years, as local tax assessors have often underestimated property values. Citizens have not brought this issue to the front, likely because a more efficient system would mean higher taxes for most (Redman, 2004). The issue is an important one in Baton Rouge, as properties are due to be reassessed in East Baton Rouge Parish in late 2004. It is conservatively estimated that property values in Baton Rouge are underestimated by 15-20 percent, costing the city and school system $25 million each per year in property tax revenues (Mike Trufant, Austin 6, personal communications, March 17, 2004). But Brian Wilson, the parish tax assessor, recently commented that the revenue being lost is not due to underestimated property values. He stated that if property values go up, then the legislative auditors decreases the millage to keep peoples' tax dollars the same. Thus, the burden rests on local taxing authorities like BREC, the school board, and the Metro council to pass measures to maintain the same millage (Cohen, 2004). Thus, the ultimate burden for tax revenues falls on the city's leadership, as they must be able to sell citizens on the long-term benefits of investment in infrastructure.

It is difficult to directly compare the infrastructure of each city, including roads, schools, parks, public utilities, and more. But based on the above information, it is evident that Austin has higher tax revenue per household than Baton Rouge does. Although quality is not evaluated, this has allowed the city to invest more money into the city's infrastructure.

The Economies Compared: Lessons for Baton Rouge

Based on the above analysis, the following points presented in Table 5.10 can be made. The analysis provides several implications for Baton Rouge leaders. First, the petrochemical industry is clearly in the midst of a decline. This is apparent based on the drastic shift in Baton Rouge's specialization in manufacturing. Second, in general terms Austin appears to be a better place to conduct business than Baton Rouge. This has implications for Louisiana Governor Kathleen Blanco's most recent plans to use legislation to make the state more pro-business. As one of the top items on her agenda, the Austin example seems to indicate that these factors have an effect on regional development. Finally, Austin has much higher tax revenue – as a whole and on a per capita basis – than that of Baton Rouge. This allows more money to be invested into infrastructure. As was pointed out in Chapter 2, this can have a major impact on a business' decision to locate to an area.

Table 5.10: Conclusions from Economic Comparison

As centers for state government and major universities, Austin and Baton Rouge have many similarities in their economies. In fact, the breakdown of jobs by sector in 1970 was quite close. But by 2000, the number of jobs in Austin grew at an enormous rate, making the still large growth rate in Baton Rouge seem small.
Although both cities maintained specialization in construction and government, it became apparent in the location quotient analysis that Austin's manufacturing industry was seeing continued growth towards specialization while Baton Rouge's was falling back. This can be explained by the huge expansion in the computer and electronics manufacturing in Austin and the shrinking of the chemical industry in Baton Rouge.
Based on the shift-share analysis, Austin was able to use its competitive position to add a lot more jobs than Baton Rouge. From 1970 to 2000, Baton Rouge employment grew by 224,566 while Austin grew by 662,559. Nearly 500,000 of these jobs were created in Austin due to competitive position, while Baton Rouge did not even get 100,000.
Compared to the national growth rate, Baton Rouge did not do that badly. The national economy grew by 83 percent from 1970 to 2000, while Baton Rouge saw growth of 254 percent. Austin grew by 464 percent.
In several reputable surveys and rankings, Austin finishes well ahead of Baton Rouge. The rankings indicate that in general Austin is a better city to conduct business, has a better state business climate, has legislation that reinforces a good business environment, and has a more talented and educated workforce.
Austin and Baton Rouge are at similar distances from the twenty largest U.S. cities. But Austin's airport facilities are superior to Baton Rouge's, and thus market access is better in Austin.
The cost of living indices for Austin and Baton Rouge are nearly the same, and roughly equal to the national average.
Austin has a lot higher tax revenue per household than Baton Rouge does. This has allowed the city to invest a great deal of money into the city's infrastructure.

Chapter 6. Education and Training: K-12 Education and Beyond

Based on information presented in Chapter 4, it is evident that the Austin population is more educated than Baton Rouge's. What factors have led to this? Is the education and training system in Austin far superior to the Baton Rouge system? In order to answer this question, Chapter 6 depends on an investigation of the entire school system in each city, including K-12 public education, higher education, and workforce education.

K-12 education

As aforementioned, Rondinelli et al (1998) find that one of the most important things a community can do to attract businesses is to have a solid infrastructure. Included in this is an area's elementary and secondary public school system. Unfortunately for Baton Rouge, the public schools have often been seen as a deterrent for business locations. Loren Scott, an economist at LSU, said that over the years many firms have started to look to locate in Baton Rouge only to respond negatively because of the city's public schools (personal communications, March 8, 2004).

Table 6.1 below highlights data that can be used to compare the major school system of Austin and Baton Rouge. In Austin, the school district is the Austin Independent School District (AISD), while the district in Baton Rouge is the East Baton Rouge Parish School District (EBR). Perhaps the most evident difference is the racial breakdown in each district. EBR schools are largely attended by African American students (75.8%), while AISD schools are largely composed of Hispanic students (52%). This is not surprising for EBR, as many white students have moved to schools in surrounding parishes. Additionally, 30 percent of students attend private school in EBR, and the majority of these students are white (Roger Moser, East Baton Rouge Parish School Board, personal communications, March 18, 2004).

Table 6.1: Public school comparison, Austin and Baton Rouge

Category	AISD	EBR Schools
Number of students	78,689[1]	52,000[2]
Number of campuses	107[1]	101[2]
Number of high schools	12[1]	19[2]
% of students – Hispanic	52%[1]	1.3%
% of students – White	31%[1]	20.6%
% of students – African American	14%[1]	75.8%
% of students – Asian	3%[1]	2.3%[3]
% of students – Poverty	18.4%[5]	20.9%[5]

Limited English Learners	20%[1]	1.9%[3]
4-yr graduation rate (2002)	75.7%[1]	68%[4]
Dropout rate	1.1%[1]	7.8%[3]
Average ACT score (2002)	21.2[6]	19.5[3]
Overall budget	$737.4 million (2003-2004)[1]	$292.2 million (2002-2003)[2]
Expenditures per student (2002)	$6,383[5]	$6,314[5]
Student-teacher ratio (2002)	14.6[5]	14.7[5]
Average teacher salary (no benefits)	$39,346[1]	$37,002[3]
Source of funds	96% local property taxes, 3% state, 1% federal[1]	49% state, 27% local property taxes, 22% sales tax, 1% federal, 1% other[2]
Overall passing rate for state indicator system	78.8% (TAAS – 2002)[1]	74.75% (LEAP – 2002*) [2]

Sources: [1]Forgione, 2004; [2]East Baton Rouge Parish School System, n.d.; [3]Louisiana Department of Education, 2004; [4]Forum 35, 2002; [5]National Center for Education Statistics, n.d.; [6]Austin 2003 Canvas Workshop, 2003; *Average of passing rates for English, Math, Science, and Social Studies for grades 4, 8, 10, and 11 was calculated by the author

But despite EBR's bad reputation in K-12 public education, there does not seem to be much difference between AISD and EBR public schools. Although AISD is generally viewed to be a good school system at present, Glenn West notes that during his tenure at the Austin Chamber, the schools were average. West also said that the school system during the 1980s and 1990s was not a major problem in recruiting companies to Austin (personal communications, March 9, 2004). This is not the case in Baton Rouge though. For example, George Friedman, the CEO of a highly reputable private intelligence agency called StratFor, left Baton Rouge for Austin because the poor quality of public schools did not allow him to attract talented workers to the firm (Bongiorni, 2002).

Higher Education

As discussed in chapter III, the economies of Austin and Baton Rouge both depend on higher education for many jobs. Although both cities host their state's respective flagship university, overall postsecondary enrollment in each city is boosted by a

number of other educational institutions. These figures are broken down in Table 6.2 below. Austin has over twice as many students in higher education at 110,206, compared to Baton Rouge's 46,131 (Austin 2003 Canvas Workshop, 2003). The ramifications of this are clear. With more students, Austin is better prepared to serve companies that are seeking highly skilled and educated workers. In short, Austin is likely to have – and does have – a more talented and educated workforce, which has major impacts on the local economy.

Table 6.2: Educational Institutions and Student Enrollment

Institution	Enrollment
University of Texas at Austin	52,261
Texas State University[19]	25,025
St. Edwards University	4,267
Concordia University	1,076
Austin Community College	27,577
Huston-Tillotson College	618
Total enrollment – Austin	**110,824**
Louisiana State University	31,582
Southern University	8,957
Baton Rouge Community College	4,842
University of Phoenix	750
Total enrollment – Baton Rouge	**46,131**

Source: Austin 2003 Canvas Workshop, 2003

Of particular interest is the difference in enrollment in the two cities' community colleges. Baton Rouge Community College (BRCC) was founded just five years ago and enrollment still sits below 5,000 (BRCC, 2004). On the other hand, Austin Community College (ACC) was founded over 30 years ago in December 1972. Five years after its founding in 1977, ACC had nearly the same enrollment as BRCC. But currently the two-year college is nearly the size of Louisiana State University (LSU). The key to ACC's growth came in 1982 when the governance of ACC went from AISD to an independent board. The effects of this were that the college could now have its own tax base (Howard, 1997). Prior to 1982, ACC depended on loans and donations for campus facilities, but the creation of a local tax base allowed ACC to build new facilities and expand at a rapid rate (President Stephen Kinslow, ACC, personal communications, March 9, 2004). By the end of 1983, enrollment was up to 16,000, and in 1987 the number of students topped 27,000 (Howard,

[19] Texas State University is located in San Marcos, which is included in the Austin MSA.

1997). On the other hand, BRCC gets its funding from two major sources: state appropriations and tuition/fees. Unlike ACC, BRCC does not have any taxing authority.

The hallmarks of community colleges are that they are responsive to the business community needs, working with local companies to ensure that workforce training and education is being met and "re-met" as technology changes. Additionally, community colleges serve as an important feeder mechanism into four-year colleges and universities (Interim President Stephen Kinslow, ACC, personal communications, March 9, 2004). ACC has done a great job of fulfilling these two roles, especially in partnering with various industries – including healthcare, semiconductor manufacturing, and construction – in Austin to provide individualized training programs. BRCC is beginning to do the same, but must push forward like ACC did in the 1980s if the school is to have the same impact on the local workforce.

Flagship Universities

By comparing Austin and Baton Rouge's flagship universities, it is evident that UT creates a competitive advantage for Austin. Although LSU is the state's premier university, it is considerably behind UT in terms of research and the quality of education. UT was ranked the 53rd best national university by *U.S. News,* while LSU was not even in the top 125 universities and finished in the third tier group (America's Best Colleges, 2004). Table 6.3 below summarizes data associated with the two universities. According to LSU President William Jenkins, the thing that holds LSU back – especially related to becoming a second-tier school like UT – is the amount of state appropriations per full-time student (personal communications, March 15, 2004). But it is no small task to bump LSU funding to UT levels, as the amount of money LSU would need to annually match UT's unrestricted budget is $184.2 million. Another note can be made from the data. UT has over twice as many licenses that generate income (29 vs. 13), which indicates that UT has had far greater success at using the university as an economic development tool. As discussed in Chapter III, this has certainly been the case.

Table 6.3: Comparison of UT and LSU

Category	UT	LSU
State appropriations per full-time student, '01-'02	$9,286	$4,946
Tuition and fee revenue per full-time student	$5,328	$3,679
Total funding	$14,614	$8,625
Number of tenure-track instructional faculty	1,791	994
Student-faculty ratio	19:1	21:1
Endowment, 2002	$8.6 billion	$209.7 million
Endowment per student	$171	$7
Science and Engineering R&D Expenditures, '00	$272.8 million	$87.2 million
S&E R&D Expenditures by source	65% federal, 7% state, 9% industry, 18.3% other	35% federal, 27% state, 6% industry, 31% other
Licenses generating income	29	13
Degrees awarded, '01-'02	11,117	5,622
-Bachelor's	7,866	4,401
-Master's	2,612	999
-Doctoral	639	222
ACT 25th/75th quartile range (entering students)	24-30	22-26
Percent of freshman in top 10% of class	53%	26%
Graduation rate	71%	58%
Freshmen National Merit Scholars, 2002-2003	266	37
Freshmen Retention Rate, 2001-2002	92%	83%

Source: Louisiana State University, 2003

Based on a study done by UT, the rate of return for four years of education at UT is 15 percent. The study also found that the joint rate of return for the University's research and education is 20-25 percent on the local economy. Additionally, it was estimated that $15.5 billion of gross business activity is generated annually throughout Texas because of UT (McDonald et al, 1994). Although figures like these are not available for LSU,[20] it can be assumed that LSU has a positive impact on the local economy.

Workforce education

A successful workforce development system provides two important functions in local economic development. First, it allows workers to gain skills and knowledge that lead to opportunities for high paying jobs. Second, it connects these workers with employers that are seeking employees (Austin Equity Commission, 2001). Thus, a superior local workforce investment board (WIB) is crucial to the development of a local economy. In fact, King et al (2003) find that in the state of Texas, the five-year and ten-year net return on investments for workforce education are 600 percent and 800 percent, respectively.

In 1998, Congress passed the Workforce Investment Act (WIA), replacing the nation's longtime job training system mandated by the Wagner-Peyser Act of 1933 and the Job Training Partnership Act of 1982. The key to WIA is that workforce services are provided through one-stop centers located and operated in local workforce investment areas (O'Shea and King, 2001).

The Louisiana Workforce Commission (LWC) was established by the state legislature in 1997 (Louisiana Workforce Commission, n.d.). LWC divides the state into eight workforce investment areas and each is required to have a local WIB. These WIBs replaced the former setup of Private Industry Councils. Baton Rouge is located in workforce area 2[21] (Louisiana Workforce Commission, 1999). This area is made of two WIBs, Districts 20 and 21. The Baton Rouge Workforce Investment Board is located in District 21 and covers East Baton Rouge Parish. The remaining region of the Baton Rouge MSA is covered by District 20 (Karen Zoeller, LWC, personal communications, March 8, 2004).

The BR WIB had a total budget of $2.74 million during 2003-2004 (Rhonda Pinsonat, City of Baton Rouge, personal communications, April 23, 2004). The WIB offers two one-stop career centers to local workers (City of Baton Rouge, 2004). Besides the local WIB and the Baton Rouge Community College (previously discussed), there is little other workforce training in Baton Rouge. Thus it becomes quite important for the Baton Rouge WIB to be well-funded and take a prominent role in training the community's workforce. Currently, the BR WIB primarily serves as a "networker" between local businesses and prospective employees (Sidney Longwell, BR

[20] Dek Terrell recently finished a similar input-output model measuring the impact of LSU on the Baton Rouge economy, but the report was unavailable.

[21] District 2 is comprised of the following parishes: West Feliciana, East Feliciana, St. Helena, Tangipahoa, Washington, Pointe Coupee, West Baton Rouge, East Baton Rouge, Livingston, Ascension, and Iberville (Louisiana Workforce Commission, 1999).

WIB, personal communications, May 3, 2004).

The Greater Austin Workforce Board, WorkSource, is considered to be one of the most outstanding in the country (Austin Equity Commission, 2001). The board covers Travis County and is one of 28 WIBs in Texas established in 1995 by state legislation. WorkSource had a 2003-2004 budget of more than $27 million, which allowed for three one-stop career centers, one re-employment center, and a child care contractor (Frank Almaraz, WorkSource, personal communications, April 23, 2004). The services provided by the WIB have been quite effective, as the return-on-investment was estimated to be 483 percent over five years and 565 percent over ten years (King et al, 2003a).

But the workforce system in Austin is not just comprised of the local WIB. There are also several non-profit intermediaries involved in education and training. The Capital Area Training Foundation (CATF) offers two major services: liaison activities between prospective workers and employers, and training for adults (Austin Equity Commission, 2001). CATF was founded with a $100,000 grant from the City of Austin with the mission of improving school-to-career transitions. CATF offers such services as free evening computer classes, an annual college career fair, an annual workforce summit, and a job training program called Gateway. CATF has served over 3,000 adults in the Austin area (CATF, 2004). Capital IDEA is another non-profit organization that plays an important in workforce training efforts. The goal of Capital IDEA is to train and place low-income residents into jobs that offer at least $12 per hour, benefits, and opportunity for career growth. The organization offers customized training programs and pays for all fees. With a budget of over $2.4 million in 2002-2003, over 400 Capital IDEA participants were able to more than double their previous earnings (Capital IDEA, 2002).

Summary of Education and Training: Quality of Labor Force becomes an Issue

Conclusions of the above analysis are presented in Table 6.4 below. The significance is unmistakable: Austin's K-12 public education, higher education, and workforce education are superior to the same services in Baton Rouge. This is likely an important factor in explaining what has led to faster growth in Austin. Better education and training results in higher education and workforce training in Austin create a highly different talent pool than that of Baton Rouge. The workforce in Austin is more highly skilled and better prepared to fill positions in higher paid jobs, and this is in large part due to the overall education and training system in the city.

Table 6.4: Conclusions from Education and Training Comparison

Although the K-12 public schools in Austin have not performed that much better than those in Baton Rouge, it is clear that the current state of public schools is holding the Louisiana capital back. Many businesses and individuals are unwilling to locate to the city due to a below average public school system.
The overall enrollment in higher education in Austin is more than double the enrollment in Baton Rouge.
ACC has a tremendous impact on workforce training and education in Austin. A key to ACC's development and growth came in 1982 when the college gained a governing board that could levy local taxes. BRCC is still young and does not have taxing authority like ACC.
UT is clearly a superior university to LSU. The Texas flagship does over three times as much R&D in science and engineering as LSU, and has an endowment that is over forty times that of LSU. A major difference between the two universities is the amount of funding per full time student. UT charges a much higher tuition and receives nearly twice as much funding per student from state appropriations.
Workforce education through the local WIB is far better in Austin than it is in Baton Rouge. The Austin WIB has nearly ten times the funding as the Baton Rouge WIB. Additionally, in Austin non-profit intermediaries play an important role in developing the population's skills and talents.

Chapter 7. Recommendations: A Crucial Point in Baton Rouge's Tale

This paper has explored the factors that have led to slower growth in Baton Rouge compared to Austin. The cities of Baton Rouge and Austin have been compared in four different areas: historical development, demographics, economics, and workforce education and training. [22] This analysis brings to light many differences between the two cities and begins to explain what factors have led to faster growth in Austin. The recommendations are made using the above findings, as well as from qualitative analysis conducted in the form of dozens of interviews with Austin and Baton Rouge leaders.

It is evident that to some extent, Austin has been a lucky city. The Texas capital was in the perfect competitive position for the tech boom of the 1980s and 1990s. But close study reveals that it was not just luck in Austin. Luck can certainly help any city, but it is not absolutely necessary. The Austin example indicates that there are particular factors that cities cannot live without. Specifically, the Austin example shows that there are definite features that Baton Rouge must have in order to grow at a rapid pace.

The recommendations for development in Baton Rouge can be broken down into seven general categories:

- **Image.** The community needs to decide what Baton Rouge is going to be, and then work towards establishing this image and representing it to the world.
- **Leadership.** Similar to what Austin leaders did in the 1980s, Baton Rouge leaders in the public and private sectors must unite to form a vision for the city. They then have to be willing to take risks in order to see that vision come true.
- **Encourage the creative class.** Baton Rouge must focus on its quality of life in order to attract members of the creative class to the community.
- **Fourth pillar of the economy.** Baton Rouge must seek and establish a fourth pillar of the economy.
- **Entrepreneurship.** Coupling entrepreneurship with research is one of the keys to wealth creation and will play an important role if Baton Rouge is to develop at a rapid pace.
- **Education.** Education is essential to creating a talented workforce. Leaders must work to improve the K-12 public school system, further develop Baton Rouge Community College, and drastically increase state appropriations to LSU.
- **Funding.** Baton Rougeans must be willing to pay for infrastructure improvements.

[22] For a summary of this data, see Appendix C.

The above areas are explored in detail below. But it is important to note the recommendations that are most urgent for Baton Rouge leaders to consider. These points are highlighted in Table 7.1 below.

Table 7.1: The Three Most Important Recommendations for Baton Rouge

Education and training must be improved. The public school system serves as a deterrent to attracting businesses and this must change. BRCC must gain tax authority in order to expand at a rapid pace. LSU must be treated as the state's flagship university and receive the level of funding that UT does.
Leaders from throughout the community – business, government, university, media, and more – must work together to develop a visionary strategy for the long-term.
The quality of life in Baton Rouge must improve in order to encourage members of the young and educated class to move to the city. Citizens must be willing to pay for these quality of life improvements, and similarly, local officials must show leadership in passing these measures.

Image

A major key in Austin's development has been its high quality of life that attracts young people to the area. Early on, the city worked on developing this image to the rest of the world. One major factor in Austin's national brand awareness was the hiring of a public relations firm in the late 1980s. The Chamber hired an agency to handle advertising and media relations, and also paid for local Austin businessmen to travel to big cities to tout Austin. For example, during the early 1990s Austin sent Michael Dell on several trips to New York. His task was simple: talk about Austin as much as possible (Glenn West, personal communications, March 9, 2004). A PR firm has an advantage in that they can communicate a city's message internally and externally. Fortunately, Baton Rouge has made a step in the right direction and funds are currently being raised to hire an agency (Don Powers, personal communications, March 17, 2004). City leaders should ensure that this happens in the coming months, as Baton Rouge has many great stories to tell to the world.

One of the major issues surrounding Baton Rouge's image is deciding what the city is going to be. In discussing this issue with various interviewees, it became apparent that the community is quite divided on this issue. Many in north Baton Rouge are satisfied with the city remaining a medium-sized town with little activity downtown. The older population in Baton Rouge likely feels the same way. But younger citizens and those living in south Baton Rouge tend to push for growth and expansion (Rolfe McCollister, personal communications, March 15, 2004). The community must come together and decide the direction that development should go.

Along these same lines, there has been a lot of talk among Baton Rouge

leaders about developing a brand for the city. This was a popular topic for discussion during the Austin 120 trip, as on the surface level it appeared that Austin had depended on its brands – "Live Music Capital of the World" and "Keep Austin Weird" – to attract the young and vibrant creative class members. People might have located to Austin because of these labels but once they got to Austin, they soon realized that the catchphrases were representative of the city life. If Baton Rouge is going to develop an image, it cannot just be an image: it must match with the reality of what the city is. As John Davies, the president of the Baton Rouge Area Foundation, said, "The problem [in regards to branding your city] is you can't 'need to be' – you have got to be 'what you is'" (personal communications, March 18, 2004). In other words, Baton Rouge cannot just decide to be the next "Live Music Capital of the World." The difficult challenge then becomes capturing the essence of the city and region and then telling it to the world.

Part of the challenge in developing and identifying this brand is that Louisiana typically has a negative image. Much of the state seems to have the reputation of a good place to visit, but a bad place to live. For example, New Orleans' "let the good times roll" attitude gives it an appearance as a place that is fun to go and drink all night on Bourbon Street. This is fine for the tourist industry, but does it make people really want to move to the city? Fortunately for Baton Rouge, the city is so much more than a place to party. In developing a brand, leaders need to ensure that it includes all of the great features of the community and not just the characteristics that give Louisiana a negative, "party" reputation. One of the most notable features of the city that should be included is the pool of talented young workers that the city has to offer. With an up-and-coming community college, the state's flagship university, and the nation's largest predominantly African American university, Baton Rouge has many young and educated graduates that can move into high-level positions.

Leadership

Based on the analysis of Austin, it is clear that much of the city's success was due to a core group of strong leaders. Their "can do" attitude and cooperation truly made a huge difference in the development of the city. For example, during the early 1980s when Austin was trying to recruit MCC and others to the city, civic leaders met every morning for breakfast in order to establish a sound plan and later to implement the plan. Although Baton Rouge has had many hard working individuals during the past, the city has not had the same degree of leadership as Austin. During the 1970s and '80s when the oil industry was a dominant economic force, there seemed to be complacency on the part of the public and private sectors. There was very little effort to diversify the economy, and literally no apparent major economic development initiatives.

Ultimately, leadership is the reason that the two cities have had such different outcomes over the past thirty years despite similar demographics in 1970. Whereas Austin instituted a plan that was inclusive to the entire community and then followed through on the plan, Baton Rouge had no plan at all. Leaders in Baton Rouge have finally started to come together, which is evident in recent movements and projects in the city including Austin 6, Forum 35, Plan Baton Rouge, and the

Baton Rouge Area Foundation. Additionally, even the "status quo" that has run the city for so many years have showed signs that they are ready to see the city go in a different direction. This is evident in the Austin120 trip in the fall of 2003.

But the fact is that Baton Rouge has just started asking the important questions surrounding economic development. Austin has been growing at a rapid pace for many years, yet community leaders in Baton Rouge only recently began to ask Austin leaders what their keys to success have been. Baton Rouge has reached another crucial point in its long history. If the city is to flourish and grow, then there must be a long-term plan for economic development. Leaders cannot just come from government; rather, leaders in business, government, the Chamber, the press, and more must come together to develop a sound economic plan – and then follow through with it. In the early 1980s, the city was reactionary to the decline of the petrochemical. This tendency has continued. The leadership of the city must be proactive and willing to take risks. Dramatic change will not happen overnight; leadership must show a commitment to the future and stand by the plan for development.

Finally, several key leadership positions will be decided in the coming months. LSU should work to hire a visionary chancellor to replace the departing Mark Emmert. Similarly, the East Baton Rouge Parish School District should not underestimate the importance of a strong leader in working to improve the school system. The departing superintendent should be replaced by a superstar. The Chamber must select a new president in the coming months, and they should focus on attracting a practical leader that can tie the business and government communities together. The final leadership post is up to the citizenry of Baton Rouge, as a mayoral election looms in the fall.

Nurture the Creative Class

Austin's population has grown at a much faster clip than Baton Rouge's has. Much of this growth can be attributed to Florida's creative class theory. The hip "Keep Austin Weird" mentality makes Austin a place where young people want to live. This is evident in the data: Austin gained several thousand young, college educated, and single people in the late 1990s, while Baton Rouge lost several thousand. Baton Rouge should take note of this. The city must focus on keeping its young and bright minds, and also on attracting the young and bright minds of other states. This is a tough task to accomplish, but Austin Mayor Will Wynn made comments to the Austin 120 group on how to do it: "Figure out what would make your town more attractive to a young, 25-year-old graduate – someone that might want to start his own company in five years" (Ball, 2003).

As Florida points out, the creative class is highly concerned with the quality of life factors in an area. Baton Rouge has much to offer in this area, including great food and culture, and many outdoor activities in close vicinity to the city. Additionally, LSU creates a unique sub-culture in the city with many events that cater to young people.

But in Baton Rouge, the quality of life agent is the Baton Rouge Recreation and Parks Commission. The city should do whatever it takes to follow the upcoming release of the park system master plan, which was a

community-based plan with over 125 public meetings. In April, citizens took a step in the right direction by renewing two property taxes that generate $13.5M annually for BREC (NaaNes, 2004).

Another major quality of life factor that the city must continue to develop is the downtown area. Austin's downtown is busy throughout the night and day, while Baton Rouge's seems to shut down at the close of business. The root of success for downtown Austin is the young people, mostly UT students that flock to the bars, restaurants, and music halls. Baton Rouge must figure out a way to connect LSU with downtown and create a bustling nightlife that will appeal to young people.

Aside from quality of life issues, it is important that the young citizens of Baton Rouge feel like they are part of the community. There must be a focus on the young people. Interestingly, the Austin 120 group was dominated by middle-aged, white men. The group included only ten percent women and ten percent minorities and there were none in the group younger than thirty. (Rolfe McCollister, Greater Baton Rouge Business Report, personal communications, March 15, 2004). This group was supposed to be representative of the Baton Rouge community leadership: what do the numbers say about the city's leadership? Even the dynamic and momentum-gaining Austin 6 group is run by all white males over the age of 35. The youth of the community must be involved in the decision-making process. As Peter Couhig, the former president of Forum 35 said, "One thing that I think would help make Baton Rouge a better place: infuse motivated young people into the leadership of every organization in town" (Ball, 2003). In order to encourage the growth of the creative class in the city, leaders must begin to ask young people what they want the region to look like. There must be a balance of training the future leaders of the city with seeking guidance and input from them.

Another question leaders might ask should be addressed to those young and successful minds that have left the area. Community members should seek out top Louisiana high school and college graduates, and recruit them to come back to Baton Rouge. This program would be an active effort of figuring out what it would take to get top talent back to the state. For example, Ravi Arimilli, who was IBM's top inventor in 2002 with 78 patents (Quan, 2003), graduated from Baton Rouge High School and LSU. Arimilli is 39 years old and now lives in Austin, but still "loves" Baton Rouge (personal communications, March 2, 2004). What can Baton Rouge do to get Arimilli and others back? It is a question worth pursuing, as talent like his would surely have a positive impact on the community.

Fourth Pillar of the Economy

The Baton Rouge community must face the reality that the petrochemical industry is no longer what it used to be. In fact, the number of chemical manufacturing jobs has decreased by nearly a third since 1977, going from 15,118 in 1977 to 10,829 in 2000. Like government and education, petrochemical remains a strong pillar to the economy. Yet the "bread and butter" of the city is running out, and leaders should look to find a fourth major cluster for the city's economy.

Like cities all over world, many in Baton Rouge are looking towards the

biotechnology industry as a fourth pillar. Some in Baton Rouge believe that it is too late for the city to push towards this sector. But the region already plays host to many assets that a dominant biotech industry could build upon, including Pennington Biomedical Research Center, CAMD and the Agriculture Center at LSU, and a recent partnership between LSU and Mary Bird Perkins cancer research. It is clear that these world-class research centers are at least the beginnings of a foundation in biotechnology.

Thus, Baton Rouge leaders face a similar situation that Austin leaders faced in the early 1980s: where should they push the economy to grow? Austin had a foundation in technology in the early 1980s, and leaders drafted a bold plan that sought to bring tech companies into Austin. If biotechnology is to be a success in Baton Rouge then leaders must decide whether to take the risks involved. "Talk" must become "action." Many point out that it will be difficult for Baton Rouge to attract biotech firms when the city is competing with cities like Boston. Does Baton Rouge currently have a strong enough cluster to attract firms? CapStrategy must play a role in answering this crucial question. A follow-up question that city leaders must address is whether the current foundation in biotechnology can be used to focus on a specific area. For instance, some have suggested that cutting-edge research at Pennington and LSU might fit in with a specialty cluster related to obesity and healthy living (McCollister, personal communications, March 15, 2004).

Entrepreneurship

The city must begin to celebrate entrepreneurship. This has been a major factor in the success of Austin, as UT and the Austin Technology Incubator have been able to spin off a tremendous amount of research into business activity and wealth creation. Rarely have people in Baton Rouge seen jobs grow out of research. In fact, people have seen the opposite: more R&D money in the 1960s and 1970s meant less jobs in the petrochemical industry because of technological improvements (Jim Clinton, personal communications, March 23, 2004).

But this is not the case anymore. The city already has a solid base of research with the existence of LSU and Southern University. This education and research must be coupled with entrepreneurship to create spin off. The city must shift to a mindset in which new ideas and innovation are seen as assets to the community.

This idea is summed up nicely in the "Memphis Manifesto," which was a document crafted by a creative class members from all over the U.S. and meant to act as a mission statement for those cities that want to see economic growth. It states: "Cultivate and reward creativity. Everyone is part of the value chain of creativity. Creativity can happen at anytime, anywhere, and it's happening in your community right now. Pay attention" (Creative 100, 2003).

Public relations and awareness are major factors in spreading this mindset. A PR firm would contribute a great deal to creating an awareness of the positive impact on the economy of such centers like Pennington and CAMD. Another example that the city should publicize is its only *Fortune 500* company, the homegrown Shaw Group. Additionally, the local media plays a large role in this. In Austin,

the publisher at the local paper, Roger Kintzel, made a major difference in spreading a positive image of the city (Glenn West, personal communications, March 9, 2004). There must be cooperation between the business community and the press: it cannot be an "us versus them" attitude. Leaders should work with *The Advocate* to highlight Louisiana success stories. "Tech Monday," which appears in the *Austin American-Statesman*, is an effective feature of the city's entrepreneurial assets and should be considered at *The Advocate.* Another idea for the Baton Rouge paper would be to have guest columnists from knowledge-driven regions like Austin, Boston, Raleigh-Durham, and Silicon Valley.

Education

My advice [to Baton Rouge] would be to make LSU as strong as possible. The most important thing is that LSU is a magnet for talent. There's great talent in every state and the university has a central role in collecting that talent. If the right things are done with it then it becomes something great. – Larry Faulkner, President of the University of Texas at Austin (Ball, 2003)

Faulkner's comments are echoed by many in Austin and Baton Rouge. It is obvious to any first-time observer of Baton Rouge that LSU s one of the key factors in the degree of success to the local economy. Governor Kathleen Blanco and outgoing Chancellor Mark Emmert have committed to this idea, as both have worked to truly establish LSU as a premier education and research university by putting forth a "flagship agenda" for LSU. But closer comparison of the UT and LSU highlights a major difference between the two flagship universities: UT receives a far greater amount of funding per full time student.

If LSU is to succeed and have a great impact on the Baton Rouge economy, state leaders must show a dedication to funding the university. UT receives nearly double the amount of dollars per student in state appropriations, and tuition is also considerably higher. Both of these revenue sources must increase.

This will not be an easy task for state politicians. The state of Louisiana has a tiered higher education system. The first tier is made of LSU, while the second tier consists of the state's three other major universities: Louisiana Tech, the University of New Orleans, and the University of Louisiana at Lafayette. The third tier is made up of regional universities, and community and technical colleges round out the bottom tier (Cleve Brooks, LSU, personal communications, March 16, 2004). This tiered system is similar to the way that many states organize their respective higher education structure. But a key difference in Louisiana is that the third tier schools that used to be regional colleges were changed to regional universities. These schools now have two missions: teaching and research. The result is that third tier schools now drain state funding for their own research (John Butler, personal communications, March 9, 2004). This has profound consequences for LSU. The pool of research funds is more limited in this scenario. But if LSU is to be a true flagship university, then state leaders must overcome political consequences of regional universities and fund LSU. Leaders must recognize the importance that a premier center of learning plays on not only the Baton Rouge economy, but also the entire state economy. In

short, LSU must become the true flagship university of the state.

The comparison to Austin also draws attention to another educational area that Baton Rouge must work to improve. Workforce education and training efforts have clearly had a larger impact in Austin than they have in Baton Rouge. ACC has a far greater enrollment than BRCC and thus plays a much greater role in developing the skills of the local workforce. ACC has a much longer history than BRCC, and in examining that history it is clear that the key to enrollment increasing, and thus the impact on the local economy, was when the community college was allowed to have its own tax base. ACC grew at a rapid pace after this happened. Leaders in Baton Rouge should work to ensure that BRCC is properly funded, which might mean passing a tax that goes directly towards the community college.

Perhaps the greatest attention is needed in developing the K-12 public school system. Although the education system was not the key factor in Austin's boom during the late part of the century, it is clear that most companies are now using this as a critical feature in making location decisions. Employers are looking for cities with sound education systems because employees are now demanding this for their children. Former Austin mayor Bruce Todd holds that an outstanding school system is the most important thing a city can do to spur the local economy. Todd cites the example of Samsung, who was deciding between Austin and another city as a location. Austin city leaders thought that they were going to have to use a major incentive package to lure the semiconductor manufacturer to the city. But Austin's public school system "sealed the deal" (personal communications, March 2, 2004).

The public school system in Baton Rouge is in a poor state of affairs. The solution to the problem is not a simple one. This paper does not do justice to offering a possible answer, as entire reports should be focused on this issue. But several things are clear. First, it is evident that the system must be fixed. Second, the system needs top-notch leadership to instill a dramatic change. Baton Rouge should go the extra mile to recruit and secure an outstanding manager to fill the role of the departing superintendent. This hire could be the most important thing that Baton Rouge can do to change the future economy of the city.

Funding

An apparent difference between Austin and Baton Rouge is the level of spending that has gone towards infrastructure. If the citizens and leaders in Baton Rouge truly want to see substantial improvements then they have to be willing to put fund improvements. It is easier to create a plan for action than it is to find the funds necessary to implement the plan. Are people in the city willing to bear the financial burden that it will take?

Baton Rouge has not issued a general obligation bond in over 30 years, while Austin has had over $1.65 billion issued during the past 15 years. Baton Rouge has traditionally paid for infrastructure improvements with revenues generated from sales tax. This is sufficient for making street repairs but does not allow for the quality of life things that people are looking for, including parks, schools, public transit, and more. In order to fund the necessary improvements,

citizens must be willing to pass a general obligation bond issue which would be paid for in property taxes. People in Austin have been willing to do this, as their local property taxes are considerably higher than those in Baton Rouge. Another feature of this subject is that property values are grossly underestimated in Baton Rouge, which results in much lower property tax revenues. The city tax assessor must show the leadership and guts and assess property at the actual value.

Another financial area that city business leaders should focus on is raising private capital to spend on economic development in Baton Rouge. During the 1980s, leaders in Austin went on a fundraising campaign and raised over $2.4 million in a matter of months. The money was quite important in recruiting hundreds of firms to Austin. The fund was organized and controlled by the Chamber; a similar plan would work well in Baton Rouge. Businessmen should follow the example set by Austin and contribute willingly to the fund. The first use of the account could be one previously mentioned: hiring a PR firm to market the city. A secondary goal could be to use the money towards establishing ties – through personal visits, phone calls, mailouts, and more – with biotechnology firms that would help bolster the city's growing cluster area.

But devoting a few million dollars in public relations is not the only investment that leaders should strive to commit. There should also be a focus of spending towards a key to economic growth: entrepreneurship. As aforementioned, research in science and engineering is a key to creating jobs, and this must become the mindset of the people in Baton Rouge. There is considerable wealth in the city, and these people should establish a commitment to venture capital. John Butler, the director of the IC^2 Institute in Austin, says that venture capital serves as a fish net to bring young talent to a region (personal communications, March 9, 2004). Austin is a prime example of this, as much of the research – and thus job growth – has been driven by local investment dollars.

Conclusions: Planning for the Long-term Future of the City

The analysis of Austin and Baton Rouge provide quantitative data that can be used to compare the two capital cities. Many conclusions can be made from these data. Yet perhaps the most telling comparison between the two cities can be made using qualitative data. In interviewing countless people in Austin and Baton Rouge, and gauging my own personal experiences, it becomes clear that both cities provide places where people want to live. Every interviewee was asked why he or she likes living in his or her respective city. The answers were remarkably the same: the food, weather, people, culture, university environment, and other intangibles that make it a great place to raise a family.

Despite this key similarity though, Austin has had much higher population and job growth rates over the past three decades. Yet Mary Feduccia, the head of Career Services at LSU, says that "more LSU graduates would stay in-state if they could find competitive jobs" (personal communications, March 15, 2004). Young people like living in Baton Rouge and want to stay there. The problem is thus an economic development one in that the city and its leaders must figure out how to encourage job growth so that the

young and educated people of Louisiana will not only want to stay, but also the young and educated people of other regions will want to come.

It is important to note a key to all of these points. As William Jenkins, the current president of the LSU system and interim chancellor for the main LSU campus, recently remarked, "As a society, we like quick fixes" (personal communications, March 15, 2004). His comment has clear implications for economic development in Baton Rouge. Things will not change overnight. Baton Rouge will not become "the next Austin" because of this report or any of the number of initiatives that have occurred in recent months. For Baton Rouge to succeed business and community leaders must come together in cooperation to form a visionary plan. Then they have to follow through and execute the plan with dedication and patience over the long-term.

This study of Baton Rouge and Austin began with a comparison from Dickens' *A Tale of Two Cities.* This tale has provided many useful insights that Baton Rouge leaders can use to push the economy forward. But this is not the only tale that can be told. Certainly Austin has done well in recent years, but so have other southern cities like Atlanta, Raleigh-Durham, and Nashville. There are plenty of successful cities in the world, and thus many more lessons that Baton Rouge leaders can take from other communities. Baton Rouge leaders must be proactive in looking at what other cities and regions are doing to promote growth. The attitude must be openness to new ideas, an acceptance that things will change, and an eager search for honest criticism. Thus, perhaps the most important conclusion from this study is that it cannot just be a tale of two cities; rather, it must be a tale of *many* cities.

Appendix A

Table A.1: Population of Austin and Baton Rouge, 1900-2002

	Austin	Baton Rouge
Population		
1900	148,210	73,680
1920	168,279	89,403
1940	214,603	138,683
1960	301,261	299,755
1970	398,938	375,628
1980	585,051	494,151
1990	846,227	528,264
2000	1,249,763	602,894
2002*	1,349,291	614,491

Source: U.S. Census Bureau (n.d.) and U.S. Census Bureau (2000, November)

Table A.2: Minority Breakdown of Austin and Baton Rouge: 1960 and 2000

1960	Austin	Baton Rouge
White	86.73%	68.83%
Black	12.93%	31.10%
Asian	0.08%	0.03%
Hispanic	0.00%	0.00%
2000	Austin	Baton Rouge
White	72.48%	64.93%
Black	7.98%	31.95%
Asian	3.54%	1.51%
Hispanic	26.23%	1.77%

Source for 1960 data: University of Virginia Geospatial and Statistical Data Center (1998); Source for 2000 data: U.S. Census Bureau (n.d.)

Appendix B

Table B.1: Base Data

BASE DATA						
	Baton Rouge MSA		Austin MSA		United States	
Sector	**1970**	**2000**	**1970**	**2000**	**1970**	**2000**
Construction	15,373	42,603	10,804	56,224	4,398,800	9,523,300
Manufacturing	21,142	25,275	15,269	89,046	19,687,400	19,107,800
Trans. & public utilities	7,401	16,977	5,113	27,160	4,865,500	8,262,400
Wholesale Trade	6,135	17,622	6,023	41,343	4,172,700	7,582,100
Retail Trade	22,761	65,313	28,477	133,930	13,698,800	27,387,300
Services	28,136	109,113	40,133	276,848	17,029,800	53,440,800
FIRE	8,547	26,592	12,826	71,745	6,125,400	13,206,800
Agriculture	2,461	1,703	7,308	8,600	3,961,000	3,110,000
Government	33,669	64,993	56,227	139,843	16,073,000	22,740,000
Total	145,625	370,191	182,180	844,739	90,012,400	164,360,500
From: Bureau of Economic Analysis, Regional Economic Accounts						

Table B.2: Location Quotient, Shares of Employment by Sector

LOCATION QUOTIENT						
A. Shares						
Matrix=employment by sector in region/total employment in region						
	Baton Rouge MSA		Austin MSA		United States	
Sector	**1970**	**2000**	**1970**	**2000**	**1970**	**2000**
Construction	10.6%	11.5%	5.9%	6.7%	4.9%	5.8%
Manufacturing	14.5%	6.8%	8.4%	10.5%	21.9%	11.6%
Trans. & public utilities	5.1%	4.6%	2.8%	3.2%	5.4%	5.0%
Wholesale Trade	4.2%	4.8%	3.3%	4.9%	4.6%	4.6%
Retail Trade	15.6%	17.6%	15.6%	15.9%	15.2%	16.7%
Services	19.3%	29.5%	22.0%	32.8%	18.9%	32.5%
FIRE	5.9%	7.2%	7.0%	8.5%	6.8%	8.0%
Agriculture	1.7%	0.5%	4.0%	1.0%	4.4%	1.9%
Government	23.1%	17.6%	30.9%	16.6%	17.9%	13.8%
Region's Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table B.3: Total Employment in 2000/Total Employment in 1970, Austin

TOTAL EMPLOYMENT IN 2000/TOTAL EMPLOYMENT IN 1970			
Sector	**Employment Change 2000-1970**	**Austin MSA**	**United States**
Construction	45,420	5.20	2.16
Manufacturing	73,777	5.83	0.97
Trans. & public utilities	22,047	5.31	1.70
Wholesale Trade	35,320	6.86	1.82
Retail Trade	105,453	4.70	2.00
Services	236,715	6.90	3.14
FIRE	58,919	5.59	2.16
Agriculture	1,292	1.18	0.79
Government	83,616	2.49	1.41
Total Employment	662,559	4.64	1.83

Table B.4: Total Employment in 2000/Total Employment in 1970, Baton Rouge

TOTAL EMPLOYMENT IN 2000/TOTAL EMPLOYMENT IN 1970			
Sector	**Employment Change 2000-1970**	**Baton Rouge MSA**	**United States**
Construction	27,230	2.77	2.16
Manufacturing	4,133	1.20	0.97
Trans. & public utilities	9,576	2.29	1.70
Wholesale Trade	11,487	2.87	1.82
Retail Trade	42,552	2.87	2.00
Services	80,977	3.88	3.14
FIRE	18,045	3.11	2.16
Agriculture	-758	0.69	0.79
Government	31,324	1.93	1.41
Total Employment	224,566	2.54	1.83

Appendix C

Table C.1: Summary of Data Collected

Category	Austin	Baton Rouge
Demographics		
Population – 1970	398,938	375,628
Population – 2000	1,249,763	602,894
Per capita income – 1970	$2,754	$2,665
Per capita income – 2000	$24,516	$18,866
Race/ethnicity – 1960	86.73% White, 12.93% African American, 0.08% Asian, *Hispanic NA*	68.83% White, 31.10% African American, 0.03% Asian, *Hispanic NA*
Race/ethnicity – 2000	72.48% White, 26.23% Hispanic, 7.98% African American, 3.54% Asian	64.93% White, 31.95% African American, 1.51% Asian, 1.77% Hispanic
High School education or more – 1970	26.03%	25.75%
High School education or more – 2000	52.12%	49.11%
Bachelors degree or more – 1970	7.95%	6.56%
Bachelors degree or more – 2000	22.55%	14.95%
Enrolled in any school – 1970	32.39%	32.19%
Enrolled in any school – 2000	29.22%	31.17%
Native of state – 1970	73.18%	73.16%
Native of state – 2000	58.60%	77.75%
Net migration – 1995-2000	104,340	7,316
Net migration of young, educated, and single –	2,122	-2,241

1995-2000		
Creative class ranking	1	195
Economics		
Total jobs – 1970	182,180	145,625
Total jobs – 2000	844,739	370,191
Job growth – 1970-2000	464%	254%
Average distance from 20 largest U.S. cities	1292.3 miles	1226.7 miles
Airport		
-Number of gates	25	10
-Number of airlines	9	4
-Number of daily flights	240	26
Cost of Living Index	99.8	100.6
Forbes “Best Place for Doing Business” Rank	1	70
High-Value Labor Market Rank	17	67
Average total paid in local taxes per household	$2,493	$2,287
General obligation debt since 1988	$1.65 billion	$0
Education		
Number of K12 students	78,689	52,000
Number of K12 campuses	107	101
Number of high schools	12	19
% of K12 students – Hispanic	52%	1.3%
% of K12 students – White	31%	20.6%
% of K12 students – African American	14%	75.8%
% of K12 students – Asian	3%	2.3%
% of K12 students – Poverty	18.4%	20.9%

Limited English Learners	20%	1.9%
4-yr high school graduation rate (2002)	75.7%	68%
High school dropout rate	1.1%	7.8%
Average ACT score (2002)	21.2	19.5
K12 Achievement Index	3.3	6.4
Overall K12 budget	$737.4 million (2003-2004)	$292.2 million (2002-2003)
K12 Expenditures per student (2002)	$6,383	$6,314
K12 Student-teacher ratio (2002)	14.6	14.7
K12 Average teacher salary (no benefits)	$39,346	$37,002
K12 source of funds	96% local property taxes, 3% state, 1% federal	49% state, 27% local property taxes, 22% sales tax, 1% federal, 1% other
Overall passing rate for state indicator system	78.8% (TAAS – 2002)	74.75% (LEAP – 2002)
Total enrollment in higher education	110,206	46,131
Flagship Universities	University of Texas-Austin	Louisiana State University
State appropriations per full-time student, 2001-2002	$9,286	$4,946
Tuition and fee revenue per full-time student	$5,328	$3,679
Total funding per full-time student	$14,614	$8,625
Number of tenure-track instructional faculty	1,791	994
Student-faculty ratio	19:1	21:1

Endowment, 2002	$8.6 billion	$209.7 million
Endowment per student	$171	$7
Total Science and Engineering (S&E) R&D Expenditures, FY2000	$272.8 million	$87.2 million
S&E R&D Expenditures by source	65% federal, 7% state, 9% industry, 18.3% other	35% federal, 27% state, 6% industry, 31% other
Licenses generating income	29	13
Degrees awarded, 2001-2002	11,117	5,622
-Bachelor's	7,866	4,401
-Master's	2,612	999
-Doctoral	639	222
ACT 25th/75th quartile range for entering students	24-30	22-26
Percent of freshman in top 10% of class	53%	26%
Graduation rate	71%	58%
Freshmen National Merit Scholars, 2002-2003	266	37
Freshmen Retention Rate, 2001-2002	92%	83%

Source: All data is previously cited in this report.

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Vita

Carl “Andy” Redman was born in New Orleans, Louisiana on December 6, 1979, the son of Carl and Judy Redman. After graduating from University High School in Baton Rouge as Valedictorian in 1998, he attended Auburn University on various scholarships, including a freshman academic scholarship. Andy graduated with honors with a Bachelor of Science degree in Business Administration in 2002, majoring in Management Information Systems. Upon graduation, he began studying public policy at the Lyndon B. Johnson School of Public Affairs at the University of Texas at Austin. During that time, he worked as a graduate research assistant for the Ray Marshall Center, a labor economic research center at the University. Andy has served as an intern in several organizations, including the Baton Rouge district attorney’s office and most recently for the U.S. Department of State in Addis Ababa, Ethiopia in 2003. In fall 2003, Andy was named as one of two U.S. fellows by the United Nations’ International Telecommunications Union (ITU) and attended several UN summits in Geneva, Switzerland. Upon graduating from UT in May with a Masters degree in Public Affairs, Andy will take part in a summer graduate program with the U.S. National Security Agency. Recently, Andy was awarded a Rotary Ambassadorial scholarship from the Baton Rouge Rotary Club, which will allow him to continue policy studies at the University of Cambridge in the United Kingdom during 2004-2005. At Cambridge, Andy will study for a Masters degree in Technology Policy as part of the Cambridge-MIT Institute.

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