

Comprehensive Economic Development Strategy 2005-10

Capital Area Economic Development District

Bastrop, Blanco, Burnet, Caldwell, Fayette, Hays, Lee, Llano,
Travis, and Williamson Counties

2512 IH 35 South, Suite 200
Austin, TX 78704
512.916.6000

©2005 by Capital Area Economic Development District, all rights reserved.

Capital Area Economic Development District
2512 IH 35 South Suite 200
Austin, TX 78704
512.916.6000

Table of Contents

I. Introduction	4
II. Organization and Planning Process.....	6
Capital Area Economic Development District (CAEDD).....	6
Roles and Responsibilities of the CAEDD.....	6
CEDS Planning Process.....	6
III. Data Analysis	9
Population.....	9
Employment.....	12
Income & Wages	16
Clusters	19
Innovation.....	22
Education & Workforce.....	25
Poverty	27
Housing.....	28
Transportation.....	30
Environment	32
IV. Strategic Plan.....	34

I. Introduction

Vision Statement:

Region-wide prosperity and economic equity achieved through diversified business development, balanced growth, and improved mobility.

The economic development planning that a council of governments can reasonably do for a region is somewhat limited since our organization is not on the front lines of marketing and actively working with businesses to locate here. While we are pleased to provide technical assistance, grant administration, economic impact studies, market data, and project development for communities when they need help, we think our primary focus is to take more of a policy and advocacy role in an effort to bring about a better understanding of the region's future.

In that regard, a regional economic development plan should do a few things: call attention to important issues, assess relevant trends related to the issues, and advocate actions that can appropriately address those issues at a regional level.

Our region is ideally positioned for continued growth. Regions that can sustain economic growth must have four ingredients: a well-educated workforce that supports innovation, ample capital to finance entrepreneurship, an appropriate mix of industry clusters that have growth potential, and buzz—today's quality of place. These are the ingredients that give Central Texas a competitive advantage.

Basic infrastructure is also important, but it is a prerequisite to the other factors. Regions without adequate transportation, healthcare, education, and telecommunications will have problems being competitive in the future. Lack of infrastructure is a barrier to economic development.

As a committee of public and private sector representatives began helping our organization outline the process for developing a regional economic development plan for 2005-10, they agreed that meetings should be held around the region and two questions should be asked: What are the barriers to economic development, and what are our competitive advantages that should be built on? The goals and strategies contained in Section IV of this report were the result of the input from those regional meetings and a survey of all economic developers across the ten-county Capital Area.

This report also represents our organization's efforts to begin measuring the economic competitiveness of the region. Some of the trends identified herein bear watching, and will be tracked as part of a larger research effort focused on competitiveness planned for later this year. We are seeing an intraregional disparity in wages, steady job growth but in low-paying industries, population decline in Travis County, and significant residential development in parts of the region that are not showing enough high-wage job creation to support it. If these trends continue, the region's ability to achieve a balance of good jobs with good housing becomes grim. Instead, people will continue depending on employment in the inner core while commuting to outer rings for housing. Once commuters get close to home, the market data suggest they want

retail, restaurants, and personal services (drycleaning, video rentals, hair/nail salons, etc.), hence the growth in lower wage jobs in outlying areas.

There are many favorable trends that we want to see continue. More people are able to afford homes, some of our dominant industry sectors are still performing well, and average salaries in several of our counties have been rising. Our labor force is highly skilled and data shows our region outpaces the state and nation in percentage of adults with at least a bachelor's degree.

Also, we must keep at the forefront our region's progress with regard to how we do economic development. All new jobs are not necessarily good jobs. Economic development should be about creating wealth; each project should represent a net gain in revenue to the community where it locates—either in wages and their multiplier effect, sales and property tax revenues that outweigh costs of new infrastructure and public services, or other quantifiable benefits. The financial gains accruing to a community should never be offset by the value of incentives given to an economic development project. Economic development efforts should concentrate on “incentivizing” projects that change the competitive advantage of a region.

This overview would not be complete without touching on the issue of manufacturing and its role in our economy. Like every other region, we saw manufacturing slow down as productivity increased. While the movement of manufacturing jobs out of the U.S. has attracted significant attention in the last three years, the economic development profession realizes this trend has existed for several decades. Businesses began right-sizing their operations for increased productivity—in turn that has meant outsourcing activities that are mass-performed or mass-produced and focusing on core strengths for value-added activities coupled with continuous innovation. The challenge for economic developers is to create an environment for businesses to perform those core strengths. Regions that depend on companies that mass-perform and mass-produce are decreasing the chances for sustainable economic growth.

The ultimate goal for the region must be a well-balanced economy that fosters innovation and produces a high quality of life for its citizens. With regard to employment goals, sound economic development planning recognizes the need for an appropriate mix of primary and secondary jobs to support traded and non-traded businesses, respectively. Keeping a regional perspective in mind, many economic development activities are, by nature, local initiatives. CAPCOG is happy to support local projects of all varieties with research, analysis, and planning assistance.

In summary, our organization is adopting this plan as the first step in expanding our capacity to identify existing and future trends that will shape economic and workforce development in the Capital Area. We hope it will encourage all elected officials, companies, and communities to consider the economic impacts of their future planning decisions and work together toward effective regional solutions.

II. Organization and Planning Process

Capital Area Economic Development District (CAEDD)

The Capital Area Council of Governments (CAPCOG) received its first planning grant in 1983 from the Economic Development Administration (EDA) leading to the submission of its first regional plan, the Overall Economic Development Plan or OEDP, in April 1984. In anticipation of designation by EDA as an Economic Development District, CAPCOG established the Capital Area Economic Development District. The EDD designation followed in April 1991.

The CAEDD membership in 2005 is composed of:

Polo Enriquez, Chairman
Linda Costley, Vice Chairman

Michael Aulick	David L. Hensley	Maurice Pitts
Clovia English	Fran Irwin	Rosa Rios Valdez
Ron Faulkenberry	Rosalinda Jalifi	Johnny Sanders
Evelyn Flowers-Cook	Sam Martin	Vicky Valdez
Patricia Gervan-Brown	Mary F. Martinez	Jeff Webb
Alice Glasco	John Nelson	Susan Weems Wendel

Betty Voights, Executive Director

Roles and Responsibilities of the CAEDD

The CAEDD provides guidance for development and implementation of the Comprehensive Economic Development Strategy (CEDS) in an effort to create a road map for regional growth as well as a capacity-building program for the ten-county district. The board and staff of CAPCOG, the host organization for the CAEDD, have endeavored to ensure that the socio-economic characteristics of the region are reflected in the EDD's membership including a good mix of public, private, civic, and non-profit representatives.

In October 2004, the CAEDD met to map out the process for developing a new five-year CEDS for the period of 2005-2010. While the CAEDD delegated the CEDS outreach and development process to a CEDS Strategy Committee, it is anticipated that the CAEDD will continue conducting capacity-building activities to support implementation of strategies and goals of the new CEDS. The CAEDD will oversee the evaluation process for the CEDS and for a new Regional Economic Competitiveness Indicators Project to monitor economic trends for the MSA and surrounding counties.

CEDS Planning Process

In December 2004, the CEDS Strategy Committee was formed composed of several CAEDD members, economic developers from within the region, and representatives of Envision Central Texas (ECT), a regional non-profit organization formed to address 20-year growth patterns related to land use, housing, economic development, transportation, and social equity.

The CEDS Strategy Committee conducted a six-month process that included a survey of all economic development organizations in the region; outreach meetings held in four different cities around the region; and numerous strategy sessions to evaluate barriers and competitive advantages that should be addressed in a regional plan. The outreach meetings were well-attended by representatives with expertise and interests in several areas. The agendas were developed to seek information in three categories:

- Infrastructure: transportation, housing, utilities
- Human Resources: education, workforce, healthcare, childcare
- Tools: financing, technical assistance, training, policy & regulations

The Committee used input from those meetings and survey responses along with a review of the 2000-2005 CEDS to select seven goals addressing workforce, business development, housing, transportation, natural resources, communications, and healthcare.

Membership of the CEDS Strategy Committee

Chair: Jeff Webb, Austin-San Antonio Corridor Council

CAEDD: Polo Enriquez, Hutto EDC
Linda Costley, City of San Marcos
Alice Glasco, City of Austin
Clovia English, City of Lockhart
Maurice Pitts, Lee County
David L. Hensley, Union State Bank
Evelyn Flowers-Cook, Rural Capital Area WDB
Fran Irwin, LCRA
John Nelson, City of Taylor
Johnny Sanders, Blue Bonnet Electric
Mary F. Martinez, Greater Austin Hispanic Chamber of Commerce
Michael Aulick, CAMPO
Patricia Gervan-Brown, Greater Plugerville Chamber of Commerce
Ron Faulkenberry, City of Burnet
Rosa Rios Valdez, Cen-Tex
Rosalinda Jalifi, City of Austin
Sam Martin, Llano County
Susan Weems Wendel, Bastrop Chamber of Commerce
Vicky Valdez, City of Austin

ECT: Rick Murphy, City of Plugerville
Ron Davis, Travis County
Jeff Jack, Austin Neighborhoods Council
Laraine Lasdon, Laraine Lasdon & Associates
Sally Campbell, ECT staff
Diane Miller, ECT staff

Regional: Amy Miller, City of Elgin

Belinda Powell, Travis County
Dave Porter, Greater Austin Chamber of Commerce
Gladys Clemons, City of Austin
Joe D. Newman, Bastrop EDC
Lynette Morrison, ERA Colonial Commercial Real Estate
Maria Patricia Caminos, CAMPO
Randy Worden, Guadalupe-Blanco River Authority
Warren Kettelman, Buda EDC

For several years CAPCOG has enthusiastically allocated more than the required EDA match for the district grant and has made economic development activities a priority within its Regional Planning Department. CAPCOG is one of only a handful of organizations at the regional level that can engage in sophisticated econometric modeling to provide employment projections at the county level, economic impact analysis for community projects, industry cluster growth analyses, and customized market studies. Staff support, with over fifty years of experience in economic development collectively, includes a full-time economic development coordinator and portions of the time of four other staff members who provide expertise in strategic planning, incentives policy and agreements, business finance, project development, GIS mapping, and grant administration.

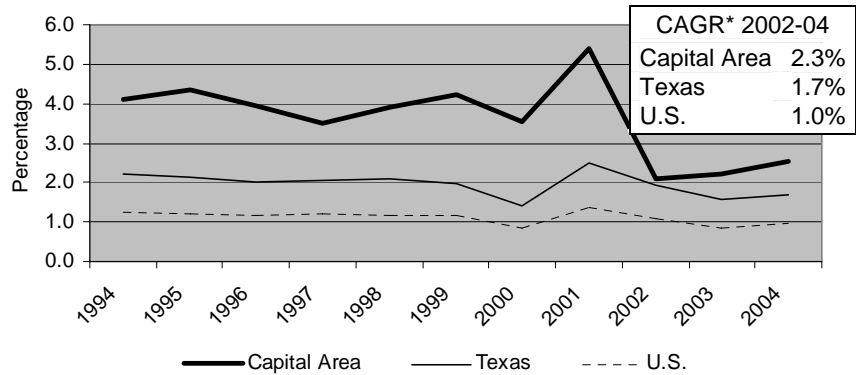
III. Data Analysis

Population

Why is this important?

Population change is a signal that is helpful for understanding economic trends in a region. It is important to understand both the level and causes of population growth. For example, increasing growth rates could signify that a region's economy is performing especially well relative to other regions, and people are migrating to the area for jobs.

**Annual Population Growth Rates in Capital Area, Texas, and U.S.
1994-2004**



Source: Texas Workforce Commission (TWC)
* CAGR = Compound Annual Growth Rate

Intra-regional changes in population growth, such as outlying counties growing faster than the metro area, could mean that people are moving away from the city to take advantage of cheaper land and housing prices in the less urban parts of the region.

Sustainable economic development requires a steady rate of population growth that can meet the need of local companies and markets. Ideally, that growth occurs at a healthy pace that does not exceed a region's ability to adapt to the increasing needs for public services and infrastructure. It is also desirable for growth to occur in a way that balances jobs and people. A significant mismatch between residential growth and job availability can create challenges such as highway congestion and intra-regional disparity in quality of life.

	<u>1990</u>	<u>2000</u>	<u>2004</u>
Bastrop	38,263	57,733	68,608
Blanco	5,972	8,418	9,101
Burnet	22,677	34,147	40,286
Caldwell	26,392	32,194	36,498
Fayette	20,095	21,804	22,513
Hays	65,614	97,589	119,359
Lee	12,854	15,657	16,536
Llano	11,631	17,044	18,143
Travis	576,407	812,280	869,868
Williamson	139,551	249,967	317,938
Capital Area	919,456	1,346,833	1,518,850

Sources: TWC, U.S. Census Bureau

How are we doing?

After growing twice as fast as the state and more than three times as fast as the nation for most of the 1990s, population growth in the Capital Area finally slowed in 2002, reflecting the impact of the 2001 recession on the regional economy. The manufacturing sector in the Capital Area lost more than 13,000 jobs during 2001-02, and the resulting decline in expectations about job prospects in Austin, particularly in the formerly high-growth technology sectors, limited the

number of people moving to the Capital Area. The Capital Area population as a whole grew at a compound annual growth rate (CAGR)¹ of 3.2% during 2000-04 to reach 1,518,850 in 2004.

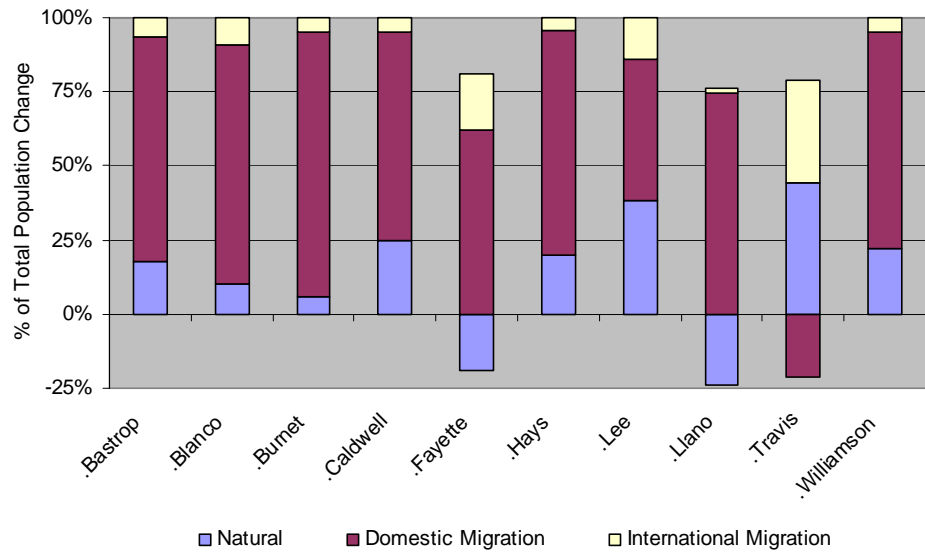
The primary driver of population growth in 2000-04 for most of the counties in the Capital Area was domestic migration, people moving to a

county from other areas of the region, state, or anywhere else within the U.S. Domestic migration accounted for at least 70% of population change in eight out of the ten counties in the region. In Texas, by contrast, domestic migration accounted for only 10% of the statewide increase in population during 2000-04, suggesting that a large portion of new residents to the Capital Area are coming from other parts of the state. Travis County was the notable exception within the region. The number of people leaving Travis County outnumbered the number of people moving in by more than 21,000 during 2000-04. Possible explanations for that trend include people leaving Austin for outlying counties with lower costs of living and dislocated workers moving to other parts of the U.S. where job prospects might be more favorable.

Where are we headed?

Despite the slowdown in 2002, the Capital Area is still growing at a faster rate than the state and the nation, and the pace is picking up again. The region's population growth rate has risen every year since 2002 to top 2.5% in 2004, and economic expansion will continue to put upward pressure on that figure if more jobs and people locate to the Capital Area. Another trend to look for is the geographical dispersion of population growth, particularly with respect to Austin versus the surrounding counties. Travis County was the only county in the Austin-Round Rock Metropolitan Statistical Area (MSA) that grew faster during 1990-2000 than 2000-04 (3.5% versus 1.7%). Bastrop, Caldwell, Hays, and Williamson Counties grew faster on an annual basis during 2000-04 than 1990-2000, with Hays at 5.2% and Williamson at 6.2% leading the way. Annual population growth either stagnated or decreased in all of the non-MSA counties

**Components of Population Change in Capital Area Counties
2000-04**



	<u>1990</u>	Percent of <u>Total Pop</u>	<u>2000</u>	Percent of <u>Total Pop</u>
White	633,154	69%	848,497	63%
Hispanic	183,708	20%	340,603	25%
Black	80,399	9%	105,005	8%
Total	919,456	N/A	1,346,833	N/A

Sources: Texas State Data Center, U.S. Census Bureau
 Note: Census categories used are Black or African American Alone, White Alone/Not Hispanic or Latino, and Hispanic or Latino.

¹ All percentages in this report are in CAGR unless otherwise noted.

comparing 1990-2000 to 2000-04. That data, coupled with Travis County’s net loss in domestic migration during 2000-04, suggests that the drivers of population growth in the region may be shifting from Austin to the surrounding areas as people decide to forego the central city for residences in outlying counties.

Two challenges to watch for during 2005-10 are the effects of uneven growth within the MSA and the ability of the region to accommodate the needs of the growing Hispanic population. With employment declining and population growth slowing relative to the surrounding counties since the recession in 2001, Travis County is quickly gaining competition in its status as the “urban” county within the Capital Area. Travis County still accounted for 57% of the total population in the Capital Area in 2004, but that figure was down from 63% in 1990. The share of the regional population residing in Hays and Williamson Counties, by contrast, increased from 22% to 29%. As local economies in Hays, Williamson, and the other MSA counties outside of Austin continue to grow, there will be shifts in demand on the region’s transportation system, natural resources, and housing stock which will make regional planning an imperative part of achieving sustainable economic development.

The other challenge in 2005-10 is the growing Hispanic population. International migration accounted for less than 10% of total growth in eight of the ten counties during 2000-04. Yet like most of Texas and many parts of the U.S., the Hispanic population is making up a larger percentage of total population in the Capital Area each year. Diversity is an asset for economic development. The challenge for the Capital Area in 2005-10 is to ensure that all residents, particularly those with special needs such as English language training, are equipped with the knowledge and skills necessary for obtaining jobs and succeeding in the Capital Area economy.

	<u>MSA</u>	<u>Capital Area</u>
2000	1,249,763	1,346,833
2010	1,777,580	1,910,712
2020	2,303,790	2,471,916
2030	2,794,400	2,988,280

Sources: U.S. Census Bureau, CAPCOG projections

Employment

Why is this important?

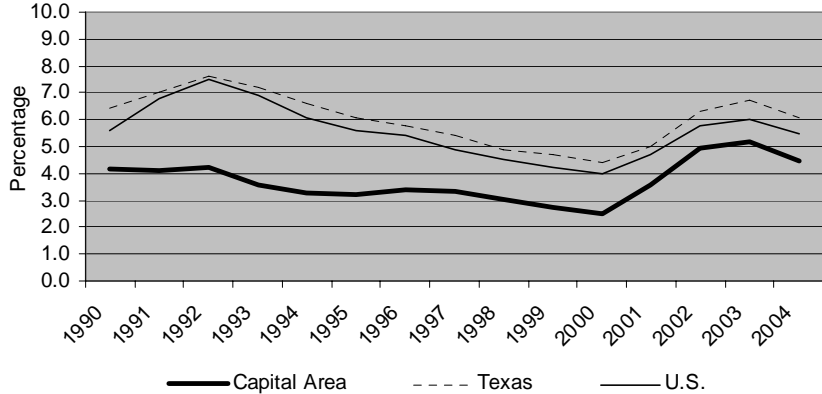
Job creation drives standard of living and serves as the measurement for evaluating most economic development efforts. Employment and sales growth at companies provide local governments with tax revenue to fund roads, law enforcement, parks, and the other services that contribute to a region's quality of life.

An expanding job base also gives people choices about where to work and what occupations best suit their interests and talents, which is important for retaining the thousands of students with diverse interests that graduate each year from local universities. It is also important to look at factors other than the absolute number of new jobs, such as the composition of job growth. For example, are jobs growing in high value-added industries that require specialized skills and pay high wages, or is job growth made up of low-skill, low-paying jobs in restaurants and retail establishments? The idea that "all new jobs are good jobs" may not be the best strategy for sustainable economic development. The most commonly used statistic to evaluate a region's employment picture is the growth or decline in private, non-farm jobs. Jobs in all sectors, including government, contribute to a region's assets. However, significant and sustainable gains in productivity and wealth are only possible through a growing private sector, particularly in high value-added industries that export goods and services outside the region.

How are we doing?

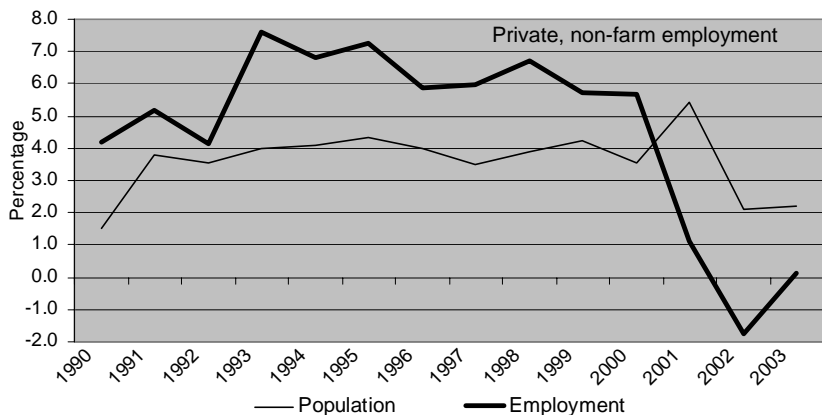
Job growth in the Capital Area soared during the 1990s. Annual growth rates in private, non-farm employment ranged from 4.2% to 7.6% from 1990 to 2000, and the growth rate for the decade as a whole was nearly 6%, well above the national (2%) and the state average (3%). The Capital Area's manufacturing sector grew 5.6% annually during the 1990s, almost doubling in size by 2000 to 92,000 jobs. Robust job growth kept the Capital Area's unemployment rate below the state and national averages in every year during the 1990s.

**Unemployment Rate in Capital Area, Texas, and U.S.
1990-2004**



Source: U.S. Bureau of Labor Statistics (BLS)

**Employment and Population Growth Rates in Capital Area
1990-2003**



Sources: U.S. Census Bureau, TWC

Note: Periods 1990-2000 and 2001-03 cannot be directly compared due to the transition from SIC to NAICS industry codes.

The precipitous downturn in the technology sector that fueled the national recession in 2001 hit the Capital Area hard. The region lost nearly 18,000 manufacturing jobs, with more than 80% of those losses concentrated in computers, electronics, and telecommunications. The downturn sent private, non-farm employment growth plummeting from 5.7% in 2000 to -1.7% in 2002, the most significant drop in annual job growth since the mid-1980s. Unemployment in Austin, for example, was 5.7% in 2002-03, a level not seen in the metro area since the 1980s.

The recession clearly had an adverse effect on overall employment and quality of life in the Capital Area. Nevertheless, the region has retained many of the characteristics of its high performance in the 1990s. For example, the Capital Area fared much better than other regions specializing in technology industries, such as Silicon Valley where unemployment reached nearly 9%. Moreover, employment growth in other industries mitigated some of the adverse effects of the technology downturn in the Capital Area. Annual job growth in finance and insurance, educational services, and real estate ranged from 3.1% to 4.8% during 2001-03. Finally, despite Austin's susceptibility to the decline in technology industries, the Capital Area as a whole is still performing well relative to the state and nation. The unemployment rate for the region averaged around a full point lower than the U.S. and 1.5 points lower than the state during 2001-04. Annual job growth, while slightly worse than the nation and state at -0.8% during 2001-03, did not decline at the rates experienced in many of the tech-heavy regions around the U.S.—a testament to the Capital Area's economic diversity and other strengths, such as an educated and skilled workforce.

Employment by Major Sector in Capital Area 2001-03				
	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>CAGR</u>
<i>Growing Sectors</i>				
Management of companies and enterprises	4,767	5,689	5,679	9.2%
Finance and insurance	41,514	43,296	45,552	4.8%
Educational services	11,661	12,183	12,543	3.7%
Real estate and rental and leasing	38,086	39,620	40,511	3.1%
Arts, entertainment, and recreation	18,294	19,028	19,339	2.8%
Accommodation and food services	60,509	61,424	63,245	2.2%
Health care and social assistance	62,571	65,066	65,009	1.9%
<i>Declining Sectors</i>				
Manufacturing	81,828	68,647	64,040	-11.5%
Information	27,278	26,613	24,723	-4.8%
Construction	63,468	60,031	59,338	-3.3%
Wholesale trade	40,716	38,727	38,568	-2.7%
Transportation and warehousing	14,996	15,159	14,427	-1.9%
Administrative and waste services	53,465	51,852	51,532	-1.8%
Professional and technical services	76,348	74,833	75,274	-0.7%
Retail trade	92,505	92,045	92,045	-0.3%
Source: U.S. Bureau of Economic Analysis (BEA)				

Where are we headed?

The Capital Area's key growth industries during the 1990s—semiconductors and computer manufacturing—have declined significantly since 2001, but they still provide a strong foundation for the regional economy. Despite the huge losses, computer and semiconductor manufacturing still accounted for more than 45% of the Austin area's manufacturing sector in 2004. In addition, recent data suggests that the job losses stabilized in 2004, and growth is slowly returning. The computer/electronic and semiconductor manufacturing industries have added 500 jobs since the end of 2004. Five hundred jobs are not much compared to the robust growth during the 1990s. However, it does show that the computer and semiconductor industries in the Capital Area were strong enough to weather the worst of the downturn, and are now well-positioned to take advantage of future growth in the overall economy. The resiliency of the Capital Area's growth industries of the 1990s is ample evidence of why they will continue to be critical assets for the Capital Area's economic competitiveness in 2005-10.

Employment in Key Technology & Manufacturing Industries in Austin-Round Rock MSA, 2003-05			
	<u>2003</u>	<u>2004</u>	<u>2005</u>
Manufacturing	57,700	57,100	+500
Semiconductor and electronic components	15,000	14,900	+200
Computer and peripheral equipment	10,900	10,900	+200

Source: TWC
Notes: Data for 2003 and 2004 are annual averages. Data for 2005 shows changes from December 2004 to April 2005.

Another trend to watch for is continued diversification of the regional economy. Economic diversification provides many benefits to a region. For example, an economy with several prominent industry sectors is protected from the crippling effects of a sharp downturn in one particular sector. A well-balanced economy also provides a wide range of employment opportunities for graduating students and workers desiring career changes with upward mobility in mind. Diversification played a large role in maintaining the Capital Area's economic vitality during the past few years. Of the large employment sectors in the region, finance/insurance, real estate, health care, and accommodation/food service combined for more than 11,600 new jobs during 2001-03. Notably, more than 1,000 jobs were created in the arts and entertainment industry as well, suggesting that Austin's live music scene and the tourism draw of the Hill Country are alive and well.

A third trend to watch for is the relationship between population growth and job growth, and its effects on regional development. Annual population growth in the Capital Area dropped sharply one year after the recession became evident in Austin, which makes sense for a few reasons: people who lost jobs may have moved away after exhausting other options, or people may have decided not to move here at all because of lower expectations for finding a job. However, annual population growth in the Capital Area never dipped below 2% and started increasing again after 2002 while the state and national averages continued to decline. Since employment in Bastrop, Caldwell, Hays, and Williamson Counties all grew annually more than 2% during 2001-03, and Travis County had a net loss in domestic migration and felt the worst effects of the technology downturn, it is reasonable to assume that the recession caused some existing (and new) residents

to shift from Austin to other counties in the MSA. One possible example is a highly-paid technology worker in Austin getting laid off and moving to a less expensive neighborhood in Williamson County. If the recession did in fact shift residential growth away from Austin to the less expensive surrounding counties, then commuting patterns and other development issues could be impacted if hiring in growth industries picks up again in Travis County during 2005-10.

The technology downturn and recession in 2001 illustrated why economic diversity is crucial for sustainable economic development. The Capital Area was fortunate to have several industries that could cushion the blow of mass layoffs in the technology sector. The challenge in 2005-10 is to stay focused on economic and workforce development initiatives that will result in a more diversified regional economy that is characterized by thriving entrepreneurship in local companies and broadly based job growth overall.

Income & Wages

Why is this important?

Income and wage data provide information on standards of living in a region. Indicators such as per capita income (PCI) and average wage are useful for tracking changes in the amount of wealth that a region is generating, as well as what standard of living that wealth is providing to citizens. Wage and income data are also useful for identifying other trends, such as changes in unemployment, job composition, or age. For example, a region experiencing growth in high-paying jobs will likely show increasing per capita income. By contrast, a community with growing per capita income but no noticeable changes in employment, or even a decline in the number of jobs, may be evidence of a burgeoning retirement destination. Income and wage data should be analyzed at the regional level as well as the intraregional level. Growing per capita income and average wages at the regional level are usually signs of increasing standards of living. However, large gaps in income and wages between urban and rural areas or among racial or ethnic groups can undermine sustainable economic development.

Real Per Capita Income in Capital Area Counties

(Constant 2003 Dollars)

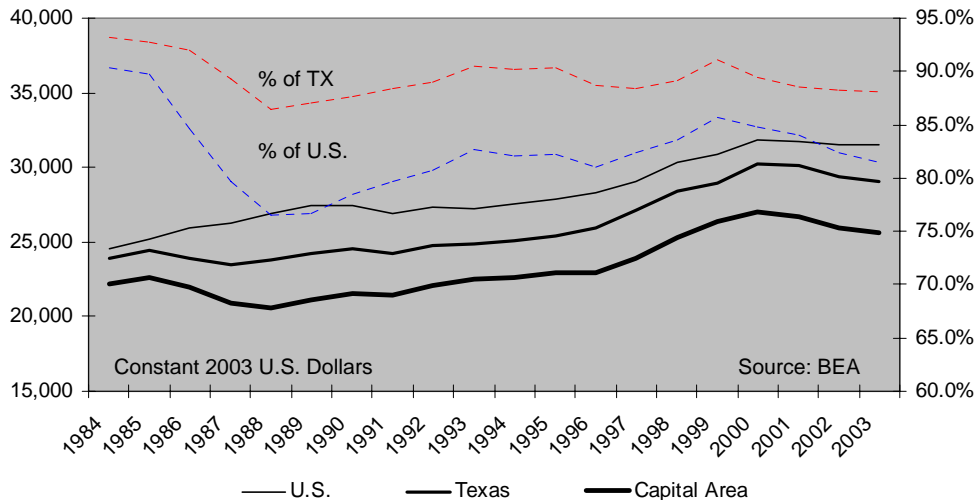
	<u>2000</u>	<u>2003</u>	<u>CAGR</u>
Bastrop	23,951	21,692	-3.3%
Blanco	27,036	27,473	0.5%
Burnet	25,985	26,099	0.2%
Caldwell	21,133	20,175	-1.5%
Fayette	27,458	28,200	0.9%
Hays	25,070	23,341	-2.4%
Lee	23,752	23,017	-1.0%
Llano	24,748	23,622	-1.5%
Travis	37,627	34,439	-2.9%
Williamson	33,604	28,178	-5.7%
Capital Area	27,036	25,624	-1.8%

Source: BEA

How are we doing?

Despite the offsetting job growth in non-tech sectors, per capita income in the Capital Area fell every year during 2001-03. Counties with a large share of technology manufacturing, or within short commuting distances away, fared the worst: PCI dropped 3.2% annually in MSA counties

Real Per Capita Income in Capital Area, Texas, and U.S.
1984-2003



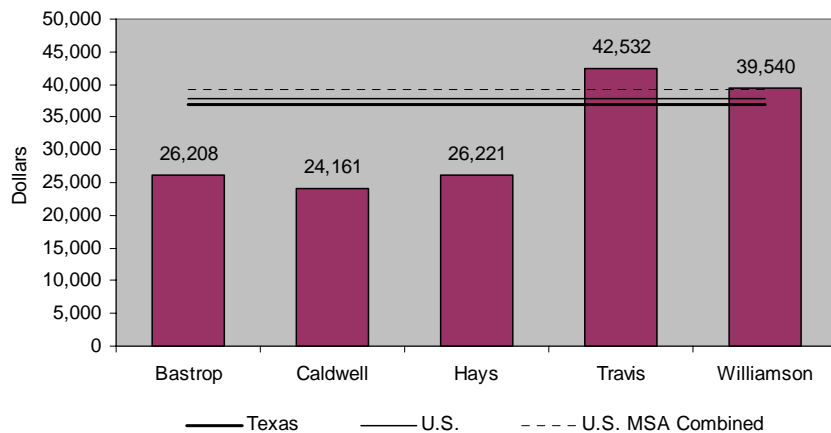
compared to 0.2% in non-MSA counties. A more concerning trend for the region is that PCI in the Capital Area has trailed the nation and state for the past 20 years, and the gap has grown every year since 1999. PCI in the Capital Area peaked at 86% of U.S. and 91% of Texas in 1999, but dropped to 81% of U.S. and 88% of Texas by 2003. Certainly, the higher concentration of technology industries in the Capital Area than the U.S. and state contributed to that decline. However, the Capital Area has consistently performed worse than the state and nation over the long-run. PCI growth in the Capital Area even stagnated during some of the 1990s, when employment growth in the region was significantly outperforming the state and nation.

Part of the problem is the significant intraregional disparity in wages in the Capital Area. Travis and Williamson, the two counties with the highest average annual pay in the region in 2003, were above the national and state averages, as well as above the average of all the MSA counties in the U.S. Bastrop, Caldwell, and Hays Counties, despite being part of the MSA, trailed the U.S. MSA average by 50%, 62%, and 50% respectively. Since most of the Capital Area’s high-wage jobs are located in the urban core, it makes sense that urban counties would have higher average salaries. However, it is surprising that Bastrop, Caldwell, and Hays Counties would be so far below the state and nation averages. In fact, in 2003 average salaries in those counties were well below the U.S. non-metropolitan average of \$29,566, which represents rural areas.

Where are we headed?

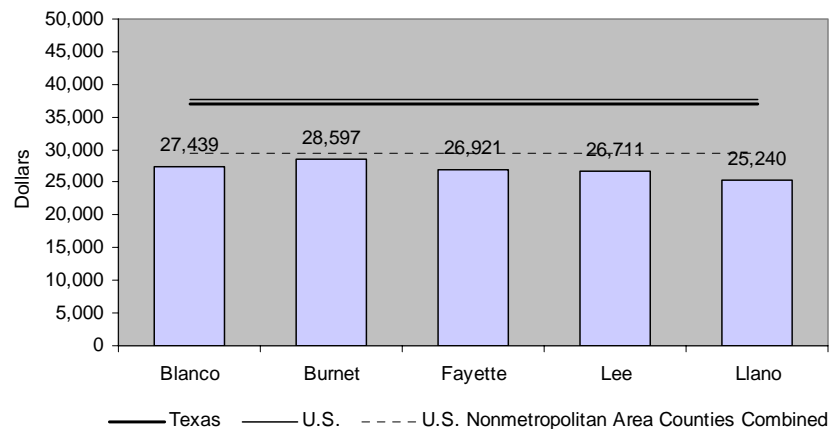
The bright spot in the income and wage data is that average salaries have been rising in most of the region during the past few years of lean economic growth. Average salaries increased annually during 2001-03 between 2.4% 5.0% outside of the urban core, and Travis County even managed a slight gain of 1.0% despite the

Average Annual Pay Per Employee in Austin-Round Rock MSA Counties, Texas, and U.S., 2003



Source: TWC
 Note: Data represents full-time and part-time employment in all industries.

Average Annual Pay Per Employee in Capital Area Non-MSA Counties, Texas, and U.S., 2003



Source: TWC
 Note: Data represents full-time and part-time employment in all industries.

sharp decline in employment. In addition, the urban-rural gap in average annual pay appears to be slowly closing. Excluding Williamson County, which experienced an anomalous -7.1% annual decline, the average salary in the non-MSA counties of the Capital Area increased 3.6% annually compared to only 2.3% in the MSA counties during 2001-03. One trend to watch for during 2005-10 is further closing of that gap. Wage data is collected at the place of employment, as opposed to income data at the place of residence, which raises several possible explanations for the gains made by the rural counties. Companies located in the rural areas of the region could be raising salaries. Or the composition of employment in non-MSA counties could be changing to include job growth in industries that pay higher salaries. Further study of that trend will be needed in 2005-10 in order to identify any discernible changes in the rural counties of the Capital Area, and what that could mean for broader economic development in the region.

The disparity in per capita income and average annual wage in the region illustrates one of the most critical challenges for the Capital Area in 2005-10: ensuring that the gap between rural and urban economic development continues to close. Uneven development between the urban core and the surrounding areas has a variety of negative consequences, including the traffic that has consistently ranked Austin among the most congested mid-size cities in the nation. The growth of well-paying jobs in non-urban parts of the Capital Area will create opportunities for residents to live and work in the same county, which would reduce commutes, minimize pressure on local housing markets, and improve quality of life for all residents in the region.

Average Annual Pay Growth Rates in Capital Area, 2001-03	
	<u>CAGR</u>
<u>MSA Counties</u>	
Bastrop	2.4%
Caldwell	3.2%
Hays	2.5%
Travis	1.0%
Williamson	-7.1%
<u>Non-MSA Counties</u>	
Blanco	3.3%
Burnet	5.0%
Fayette	3.6%
Lee	2.4%
Llano	3.5%
Source: TWC	
Note: Data represents full-time and part-time employment in all industries.	

Clusters

Why is this important?

A cluster is a group of inter-connected companies, suppliers, and other associated institutions that are inherently linked in a defined geographic location. The concept was developed by Prof. Michael Porter at the Institute for Strategy and Competitiveness at Harvard Business School to provide a standard method for measuring and tracking competitiveness of regional economies.² Examples of well-known clusters include information technology in the San Jose, CA area (Silicon Valley), wine in Napa and Sonoma, CA, aerospace in Seattle, WA and Los Angeles, CA, and semiconductors in Austin, TX. Porter classifies clusters as either local or traded, depending on the magnitude of concentration in a region. Local clusters are evenly spread across the country according to population and primarily serve local residents. Examples of local clusters include most retail, hospitals, and restaurants. Traded clusters, by contrast, vary significantly across regions and have no clear relationship to population. Traded industries locate where production is most favorable due to competitive advantages, such as skilled workforce, or favorable climate in the case of grape growing. Traded industries export goods and services outside the region, which brings new revenue and income into the region.

*How are we doing?*³

Despite the losses in manufacturing employment resulting from the technology downturn and the 2001 recession, the cluster data shows that the Austin-Round Rock MSA retained its competitive advantage in most of the industries that drove growth in the 1990s. Business Services, which includes computer services and programming, management consulting, and engineering, was the region's largest traded cluster in 2002 with more than 39,000 employees. Information Technology (IT) was the Austin-Round Rock MSA's second largest traded cluster with more than 23,000 employees. Key subclusters within IT were electronic components and assemblies (semiconductors) with 8,754 jobs, computers with 7,856 jobs, and software with 6,194 jobs in 2002. The Austin-Round Rock MSA also ranked highly

<u>Cluster Name</u>	<u>Employment</u>	<u>Average Wage</u>	<u>National Rank</u>
Business Services	39,297	\$53,475	25
Information Technology	23,318	\$65,873	8
Financial Services	18,632	\$54,934	40
Distribution Services	12,931	\$71,129	27
Hospitality and Tourism	9,912	\$21,018	49
Heavy Construction Services	9,313	\$36,647	41
Analytical Instruments	9,073	\$47,489	15
Education and Knowledge Creation	8,899	\$40,418	54
Communications Equipment	5,253	\$48,435	14
Transportation and Logistics	4,799	\$23,792	59

Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School
 Note: Bold indicates greater specialization compared to other metro areas.

² For more information, visit the Cluster Mapping Project website at http://data.isc.hbs.edu/isc/cmp_overview.jsp.

³ Cluster data is available at two geographic levels: Economic Area and MSA. The Economic Area for this region almost matches the ten-county Capital Area, but excludes Fayette and includes Milam. This analysis uses the MSA data for the purpose of consistency with other MSA indicators. Using the Economic Area is a viable alternative, but would not likely alter the findings enough to change the ranking of traded clusters in the Capital Area.

among U.S. regions in Distribution Services, Analytical Instruments (which captures much of biotech manufacturing), and Communications Equipment. The national rank is important because it shows the degree of specialization in the Austin-Round Rock MSA's traded clusters relative to other metro areas. Among the 361 MSAs in the U.S., the Austin-Round Rock MSA's overall rank in traded cluster employment in 2002 was 39, so any cluster with a rank better than 39 indicates greater regional specialization. Specialization in traded clusters is especially important because it creates the foundation for exporting goods and services to other regions. With 11 subclusters ranked in the top 25 nationally, the Austin-Round Rock MSA's export capacity is a strong asset for driving innovation, wealth creation, and prosperity in the region.

Another useful way to look at specialization is to analyze regional cluster performance against a benchmark. For example, Computer Services led all traded subclusters in the Austin-Round Rock MSA in job creation during 2000-02 with 4,008 new employees. The expected level of job creation in the MSA based on the

performance of that subcluster nationally was only 203 new employees, suggesting that the Computer Services industry in the Capital Area may be especially competitive. By contrast, declining traded subclusters revealed some inherent weaknesses in several of the Austin-Round Rock MSA's traditional growth industries. Semiconductors, Process Instruments, Electronic

Key Traded Subclusters by National Rank in Austin-Round Rock MSA, 2002

<u>Subcluster Name</u>	<u>Employment</u>	<u>Average Wage</u>	<u>National Rank</u>
Computers	7,856	\$29,876	2
Electronic Components & Assemblies	8,754	\$57,644	7
Elect. Components (Analytical Instr.)	5,039	\$46,980	8
Jewelry & Precious Metal Products	1,929	\$39,545	8
Communications Equipment	4,630	\$46,672	11
Facilities Support Services	1,780	\$23,842	13
Process Instruments	3,066	\$48,317	14
Biopharmaceutical Products	1,868	*	15
Catalog and Mail-order	3,374	\$45,381	16
Computer Services	6,322	\$30,683	19
Computer Programming	10,883	\$69,518	22

Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School
 Notes: List includes subclusters with minimum of 1,000 employees and in the Top 25 nationally. * indicates data that cannot be released due to insufficient number of employers located in the region to satisfy confidentiality agreement.

Traded Subcluster Performance by Job Creation in Austin-Round Rock MSA, 2000-02

<u>Subcluster Name</u>	<u>Job Creation</u>	<u>Expected</u>
<i>Top Five Growing</i>		
Computer Services	4,008	203
Communications Equipment	2,757	-367
Transport. Arrangement & Warehousing	1,447	-98
Depository Institutions	791	353
Educational Institutions	521	202
<i>Top Five Declining</i>		
Electronic Components & Assemblies	-9,022	-3,730
Process Instruments	-6,077	-1,765
Electronic Components (Analytical Instr.)	-2,975	-1,500
Catalog and Mail-order	-2,824	-598
Computers	-1,394	-1,540

Source: Prof. Michael E. Porter Cluster Mapping Project Institute for Strategy and Competitiveness, Harvard Business School

Components, and Catalog and Mail-order industries in the MSA all experienced much greater employment declines in 2000-02 than expected based on benchmark performances.

Where are we headed?

Cluster analysis is hampered by the delay in the federal release schedule for new data and the lengthy time required for the statistical analysis by the Cluster Mapping Project team at Harvard. But the 2002 data does reveal a few trends that should be watched during 2005-10. For example, regional economic development efforts would be greatly aided by a better understanding of why semiconductors and the other declining traded subclusters showed larger than expected losses in 2000-02. Gaining insight into those industries would help the region decide what, if anything, can be done to prevent such large declines in the future. Conversely, it would also benefit the region to have a better understanding of why emerging subclusters, such as Computer Services and Communications Equipment, performed so well during 2000-02 and what can be done to support that growth.

The cluster data also presents research challenges in 2005-10. Definitions for clusters can vary significantly, and organizations in a region may not agree on what should constitute a “targeted” cluster or even a growing cluster. Also, since cluster data is not standardized by any federal agency, no consensus exists on what specific industries (i.e. NAICS codes) should be counted as part of a cluster. In the Capital Area, at least three separate entities—State of Texas, Greater Austin Chamber of Commerce (Opportunity Austin), and Texas Workforce Commission—define clusters using different methodologies, which makes it difficult to track regional performance and conduct regional planning and service delivery. This study uses Porter’s data because it is readily accessible for every MSA in the U.S., making it easy to analyze how the Capital Area is performing relative to competitor regions and against national benchmarks. However, it certainly has flaws of its own, including the time lag. Other methods could be designed to more effectively measure and track cluster trends in the Capital Area. Enhancing a basic cluster framework like Porter’s data with local knowledge and expertise would significantly benefit regional planning and economic development work in the Capital Area.

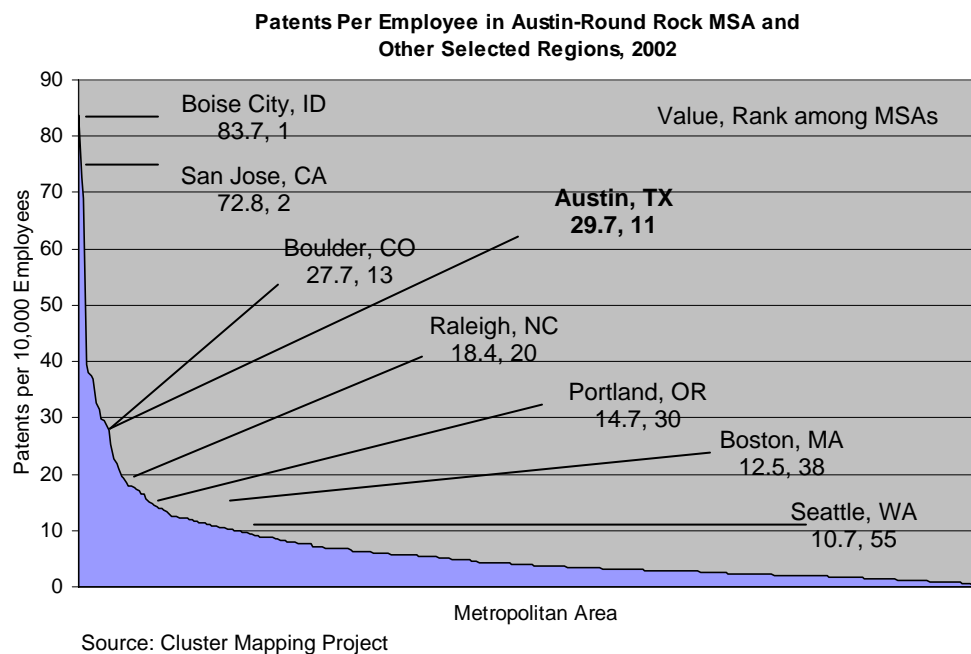
Innovation

Why is this important?

Traditional economic development strategies are failing in the modern global economy. States and regions competing for jobs, especially in industries that rely on low-cost labor, may produce short-term wins with tax incentives and similar tools. However, those wins are usually short-lived and will not ensure long-term competitiveness. International competition will continue to challenge domestic production, and there will always be cheaper places for locating industries that rely on low-cost labor. Regions must now compete on their assets that support innovation. Building innovation capacity is the best long-run strategy for driving productivity, wealth creation, and standard of living in a region. Every region has assets that can foster innovation. The key for regional economic development is to identify the assets that form the basis of competitive advantage, and build effective strategies around them. Research at the national level, such as the *Clusters of Innovation* project in 2001, has identified ways to measure a region's innovation assets.⁴ Readily available data is limited, but indicators such as patents, Research and Development (R&D) spending, venture capital (VC) investment, and Initial Public Offerings (IPOs) can help evaluate the Capital Area's innovation environment.

How are we doing?

Patents are official documents issued by the U.S. Government granting inventors exclusive rights to make, use, or sell an invention for a given number of years. A large ratio of patents per employee in a region indicates a high degree of innovation, and the exclusive rights to sell a new product or service can give companies great advantages in new markets, which can drive exports and thus wealth creation in a region. In 2002 the Austin Round Rock MSA ranked 11th out of



⁴ For more information, visit the Council on Competitiveness website at www.compete.org/nri/clusters_innovation.asp.

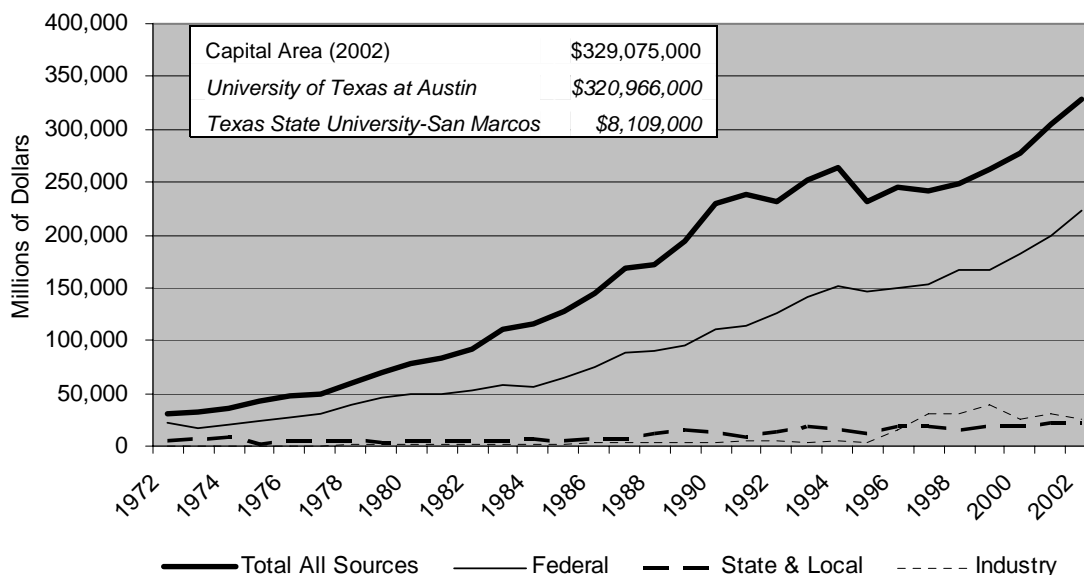
360 MSAs in the U.S. with nearly 30 patents registered per 10,000 employees. The MSA's patenting rate, fueled by highly innovative companies such as IBM and AMD, outpaced many competitor regions, including Boulder, CO, Boston, MA Raleigh-Durham, NC and Seattle, WA.

Equally important to patents are the resources needed to develop them. Innovation requires investment, which makes access to capital critical for generating the new ideas that lead to wealth creation and increased standards of living. Two key indicators for the availability of innovation capital in a region are R&D spending and VC investment. R&D spending data for the private sector is difficult to collect because it must be culled from websites and annual reports of publicly-traded companies, and it is rarely available for privately-held companies because it is usually considered a trade secret. Data is, however, available for public sector institutions, such as universities. R&D spending at universities can be a significant asset if it leads to inventions that are moved out to the private sector and developed into marketable products and services, a process that is sometimes referred to as technology transfer. More than \$36 billion was spent on R&D projects at universities in the U.S. in 2002. Universities in Texas accounted for \$2.5 billion (7% of national total), and the Capital Area's share of the state total was 13%, or around \$329 million.

<u>Rank</u>	<u>Organization</u>	<u>Patents</u>
1	International Business Machines Corporation	2,146
2	Advanced Micro Devices, Inc.	1,952
3	Motorola, Inc.	745
4	Dell Products, L.P.	505
5	Cirrus Logic, Inc.	156
6	National Instruments Corporation	125
7	3M Innovative Properties Company	95
8	University of Texas	74
9	Huntsman Petrochemical Corporation	68
10	Cypress Semiconductor Corp.	58

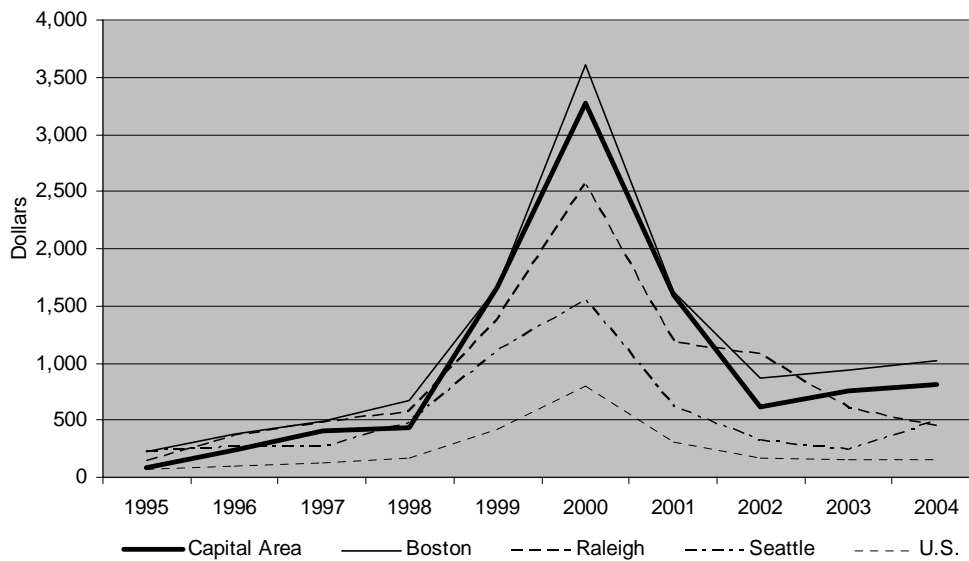
Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

**R&D Spending at Capital Area Universities by Funding Source
1972-2002**



Source: National Science Foundation, WebCASPAR
Notes: Includes University of Texas at Austin and Texas State University-San Marcos.

**Venture Capital Investment per Employee in Capital Area MSA
and Selected Other Regions, 1995-2004**



Source: 2005 PWC/Venture Economics/NVCA MoneyTree Survey

Similar to R&D spending in the public sector, VC investment is the lifeblood of innovation for entrepreneurs and small businesses in the private sector. The Capital Area has performed well in VC investment per employee during the past 10 years compared to several competitor regions and the national average. Not counting the anomalous years of 1999-2001, when the tech boom distorted the long-term trend, the Austin-Round Rock MSA is averaging about \$477 of VC investment per employee, or \$300 million, per year. VC investment in the MSA has totaled more than \$174 million so far in 2005, with companies in IT Services (19%), Software (17%), and Computers & Peripherals (17%) receiving the largest shares of funding. IPO activity picked up in 2004 in the U.S. across all sectors to show the strongest gains since the recession ended in late 2001. VC backed IPOs in Austin performed as expected in 2004 according to the long-term trend of one to two IPOs occurring each year.

**Venture Capital Backed IPOs in Austin-Round Rock MSA
1995-2004**

<u>Year</u>	<u>Companies</u>	<u>Amount Raised by IPO Millions</u>	<u>Total Valuation Placed on Company by IPO Millions</u>
1995	2	\$60	\$255
1996	1	\$39	\$110
1997	2	\$64	\$227
1999	4	\$241	\$1,339
2000	4	\$555	\$2,232
2003	1	\$150	\$502
2004	1	\$50	\$252

Source: 2005 PWC/Venture Economics/NVCA MoneyTree Survey
Note: No data released for 1998, 2001-02.

Where are we headed?

The trend to watch for in 2005-10 is the relationship between the Capital Area's traded clusters and innovation assets. Recent patent activity and VC investment suggest that the Capital Area's traditional growth subclusters are continuing to drive innovation in the region, despite the losses in 2000-02. The ability of the Capital Area's emerging subclusters to perform as well or better will largely determine the success of the region's innovation environment in 2005-10.

Education & Workforce

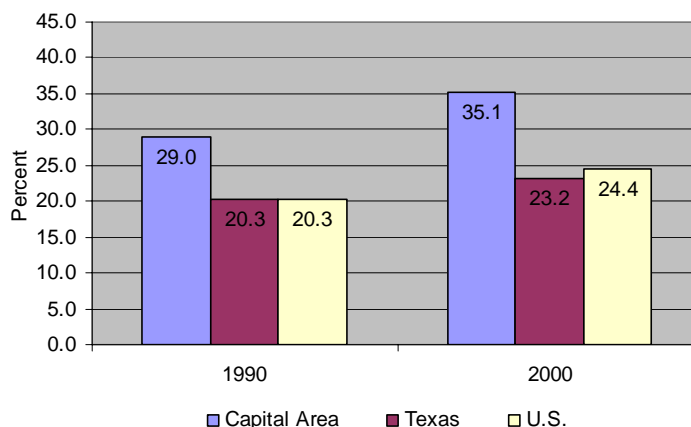
Why is this important?

Education and workforce training are crucial components of a regional economic development strategy, and skilled workforce is among the Capital Area's most important assets. The importance of higher education in preparing students for high-paying jobs cannot be overstated. However, while traditional four-year and advanced degrees offer students the greatest range of post-graduation options, universities are not the only routes for obtaining skills that are in demand. A region's education and workforce development system should encompass a wide range of options for people to obtain the tools necessary for succeeding in today's labor market, including four-year university degrees, two-year degrees at community and junior colleges, specialized certificate programs, and short-term training programs.

How are we doing?

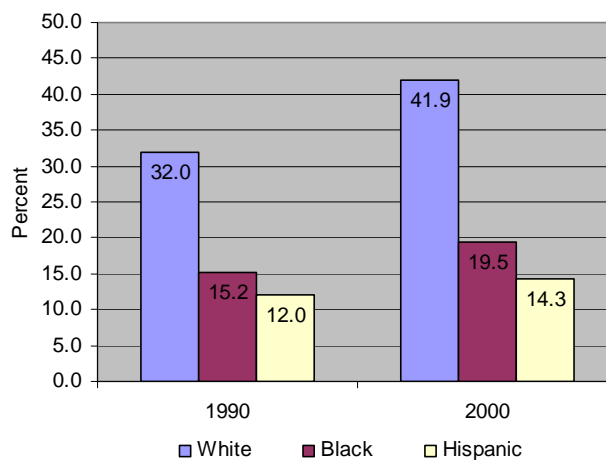
The Capital Area's workforce is its most valuable asset for achieving sustainable economic development, but the advantages of higher education in today's job market are not spreading to all citizens of the region equally. For example, 29% of the Capital Area's population age 25 and older possessed a bachelor's degree or higher in 1990, and that figure grew to more than 35% in 2000, significantly outpacing the state (20% to 23%) and national (20% to 24%) averages. But a breakdown of higher education attainment by race shows a large gap between the gains made by whites and the gains made by blacks and Hispanics.⁵ In 1990, 32 out of 100 whites age 25 and older held a bachelor's degree or higher, compared to 15 blacks and 12 Hispanics. All three groups made gains between 1990 and 2000, but the gap in higher education attainment by race

Percent of Population Age 25 and Older with Bachelor's Degree or Higher in Capital Area, Texas, and U.S. 1990 and 2000



Source: U.S. Census Bureau

Percent of Population by Race Age 25 and Older with Bachelor's Degree or Higher in Capital Area 1990 and 2000

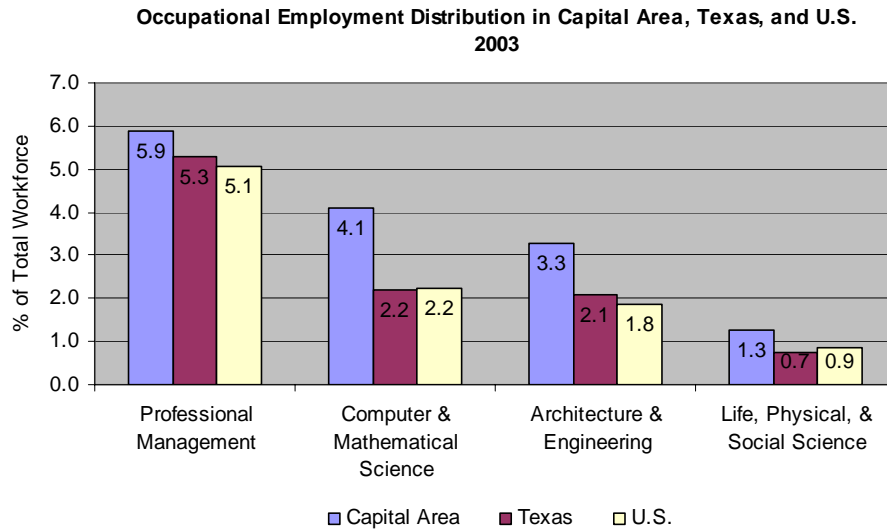


Source: U.S. Census Bureau

Note: Census categories used are Black or African American Alone, White Alone/Not Hispanic or Latino, and Hispanic or Latino.

⁵ The prevailing viewpoint among demographers and sociologists is that "Hispanic" should not be used as a race category. It is used here only to stay consistent with the U.S. Census Bureau's terminology and usage.

widened to 42 out of 100 whites, 20 blacks, and 14 Hispanics. There is also a significant gap in higher educational attainment according to geography in the Capital Area. In 2000 almost 37% of people age 25 and older living in the MSA held a bachelor’s degree or higher. That figure was only 17% in the non-MSA part of the Capital Area.



Source: BLS

Note: Data is from the fourth quarterly survey in 2003 and does not include self-employed workers.

The transition from a manufacturing-based to a service-based, or “knowledge-based”, economy in the U.S. has put a premium on education and skills that allow for adaptable, life-long learning. Highly innovative companies require employees who are skilled in technical fields, such as math and science, but also have strong command of writing, business principles, and the capacity for creativity that drives innovation. The talent pool in the Capital Area is deep with skilled workers in fields that support innovation, such as computer and mathematical science, architecture and engineering, and social sciences. For example, the percentage of employees in computer and mathematical science occupations relative to the overall workforce in the Capital Area is almost twice the national and state averages. The Capital Area also has a greater percentage of managers in its workforce than the state and nation, which provides a solid base of business experience for guiding firm creation and development in the region.

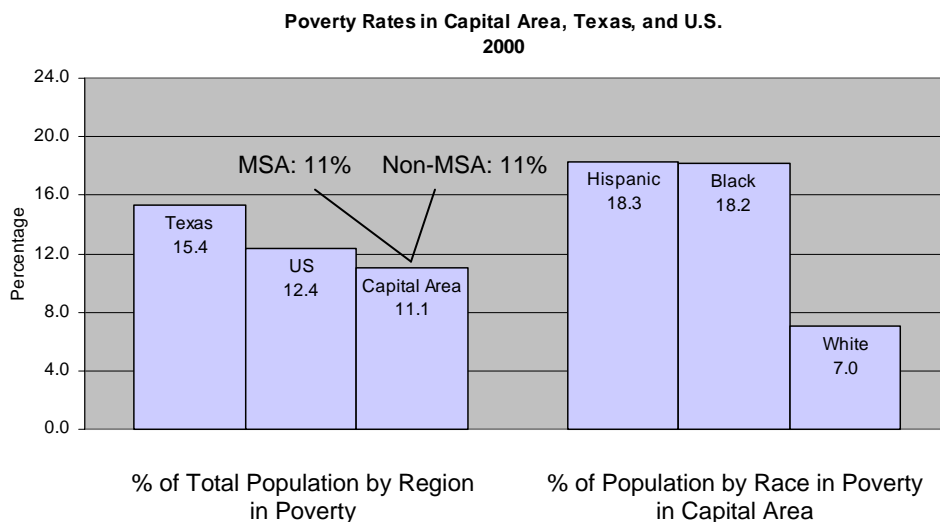
Where are we headed?

Skilled workforce is such a strong asset in the Capital Area that entire economic development strategies have been built around it. The Greater Austin Chamber of Commerce, for example, touts the Austin region as “The Human Capital” in its regional marketing program. However, for the Capital Area to stay competitive with other regions in 2005-10, it must continue to emphasize life-long learning and skill development to all segments of the workforce. As the technology downturn in 2001 showed, workers must have the ability to transfer knowledge and skills to other industries in order to avoid unemployment or underemployment when an industry declines. In addition, a regional strategy in 2005-10 to address the large gaps in higher education attainment would be beneficial in terms of social equity and sustainable economic development. Diversity is an asset, and building human capital among all groups benefits the entire region.

Poverty

Why is this important?

Poverty is an issue that virtually all communities must address to some degree. In areas with a high incidence of poverty, residents do not have access to quality jobs, educational opportunities, or reliable infrastructure. As a result, in addition to the everyday problems it creates for people struggling to succeed in those communities, poverty detracts from the overall quality of life in a region because it severely undermines sustainable economic development efforts in places where it exists. Governments and social assistance organizations play an important role in working to eliminate poverty before meaningful changes can happen in terms of building capacity for innovation-based regional economic development.



Source: U.S. Census Bureau

Note: Poverty status in 2000 is determined by income earned in 1999. Census categories used are Black or African American Alone, White Alone/Not Hispanic or Latino, and Hispanic or Latino.

How are we doing?

The Capital Area's overall poverty rate of 11.1% was lower than the state (15.4%) and the nation (12.4%) in 2000.⁶ However, similar to higher education attainment, poverty disproportionately affects Hispanics and blacks in the Capital Area. The poverty rate among Hispanics and blacks in the ten-county region was more than twice the rate of whites in 2000. No significant difference in poverty rates existed between the MSA and non-MSA parts of the region in 2000.

Where are we headed?

Although the Capital Area is doing fairly well in limiting the incidence of poverty compared to the state and nation, more work can be done in 2005-10. A comprehensive, regional strategy for economic development will ensure that people living in all parts of the Capital Area—urban and rural—have access to the education and training programs that can lead to employment in well-paying jobs and reduce the poverty rate in the region.

⁶ The poverty threshold for a family of four in 1999 was \$17,029. Poverty thresholds can be found on the U.S. Census Bureau website at <http://www.census.gov/hhes/poverty/threshld.html>.

Housing

Why is this important?

Achieving a sustainable balance between employment growth, residential growth, and availability of affordable housing is one of the greatest challenges facing many regions in the U.S., including the Capital Area. Many regions that experienced dynamic growth in the booming years of the 1990s struggled to strike that balance, and the steep decline in affordability and resulting out-migration of people in California and parts of the Northeast, for example, serve as a reminder about what can happen when regional planning is not accomplished effectively.

Residential Building Permits Issued in Austin-Round Rock MSA, 2000-04

<u>Year</u>	<u>Number of New Units</u>	<u>Construction Cost</u>
2000	21,889	\$2,038,644,823
2001	17,873	\$1,484,101,104
2002	17,232	\$1,712,209,326
2003	15,317	\$1,607,369,854
2004	18,015	\$2,040,735,951
Total	90,326	\$8,883,061,058

Source: U.S. Census Bureau

Sustainable economic development is not possible if jobs are concentrated in areas where most workers cannot afford to live. There are myriad factors that affect housing affordability, such as supply and demand, per capita income, zoning, and more, but the relationship between housing and economic development must be addressed if regions are to avoid the problems associated with rapid suburbanization resulting from lack of housing affordability in growing metro areas.

How are we doing?

After a sharp decline in 1999-2000, housing affordability has been increasing in the Austin-Round Rock MSA for the past few years. According to the Texas Housing Affordability Index (THAI), developed by the Real Estate Center at Texas A&M University, housing affordability in the Austin-Round Rock MSA has increased by about 18% since 2000, meaning that households at the median

Percentage of Households That Can Afford Median-Priced Home in Austin-Round Rock MSA and Selected Other Texas Regions, 2003

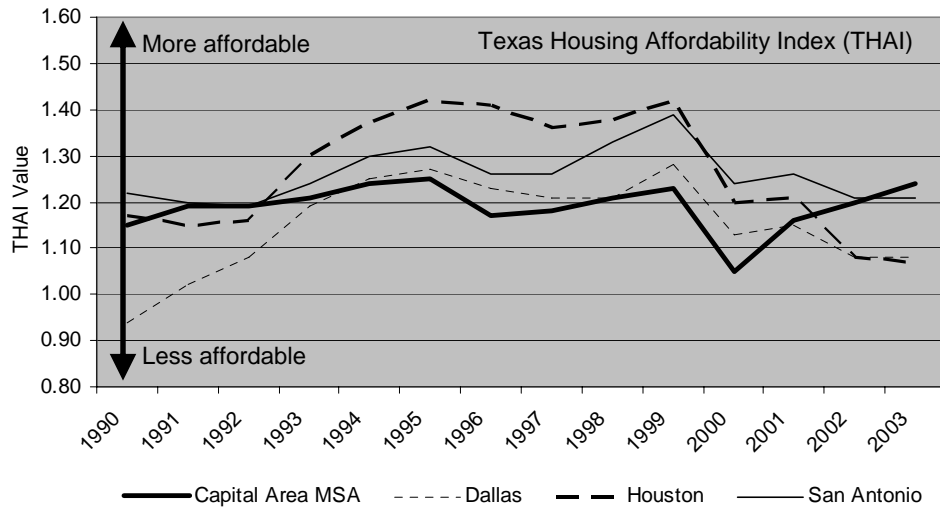
<u>Region</u>	<u>Percentage of Households</u>	<u>Median Price</u>
Capital Area	62.2	\$154,800
San Antonio	60.1	\$113,800
Dallas	54.2	\$148,500
Houston	53.9	\$133,100

Source: Real Estate Center at Texas A&M University

Note: The data is an estimate of the percentage of households with sufficient income to purchase the median priced home, assuming adequate credit history and ability to make a 20% down payment.

income level are finding it easier to purchase the median priced home in the region. Housing affordability in the Austin-Round Rock MSA trailed Dallas, Houston, and San Antonio throughout the 1990s, but the recent increase in affordability in Austin has allowed the region to surpass those other metro areas. The percentage of households in the Austin-Round Rock MSA able to afford the median priced home stood at 62% in 2003, up from 52% in 2000. The average during the 1990s was 58%. The median housing price increased from \$142,800 in 2000 to \$156,700 in 2003, or about 10% not accounting for inflation. The median housing price in the Austin-Round Rock MSA was higher than Dallas, Houston, and San Antonio in 2003, but the affordability index suggests that incomes in Austin are growing fast enough to stay competitive with the other metro areas in Texas in terms of overall housing affordability.

Housing Affordability in Capital Area MSA and Selected Other Texas Regions, 1990-2003



Source: Real Estate Center at Texas A&M University

Notes: THAI value is the ratio of median household income to the income required to buy the median-priced home using currently available mortgage financing. Standard financing is a 30-year loan covering 80% of the cost. A THAI of 1.00 indicates that the median household income is just enough to qualify for a loan for the median-priced home.

Where are we headed?

Strong population and employment growth, combined with development patterns that result in increased suburbanization and commute times, have presented difficult challenges to maintaining the Capital Area’s well-regarded quality of life. Rising housing prices and other costs of living in the urban core in the late 1990s encouraged residential demand to shift to the counties outside of Austin. However, as of 2000, the majority of employed people in Bastrop, Caldwell, and Williamson Counties were still commuting to jobs in Travis County, resulting in higher demand on the regional highway system, more traffic, longer commutes, degraded air quality, and other challenges. If the majority of high-paying jobs in the Capital Area remain concentrated in the urban core, and local job creation does not keep up with the high rates of residential development in the surrounding counties, then those challenges will only increase as this region continues to grow in the 2005-10.

Affordable housing, despite how the term is often used, is not exclusively about building low-cost, in-fill development homes for low-income residents in urban parts of a region. Maintaining affordable housing requires a comprehensive approach to residential development that allows for a range of housing options, costs, and locations. The challenge in 2005-10 for the Capital Area is to address housing as part of a regional planning strategy that includes transportation, air quality, and economic development programs.

Transportation

Why is this important?

Transportation is part of the infrastructure that makes sustainable regional economic development possible. Companies shipping products to customers must have access to reliable transportation options, including highways, rail, and air service. Transportation is also important for getting employees to and from work, as well as people in and out of the region for meetings and sales calls. Sound regional transportation planning provides companies, employees, and citizens alike with a range of reliable, multi-mode choices of transportation, including highways, local streets, and rail, air, and bus services. Regional economic development efforts benefit when communities work collectively to ensure that a region offers that full range to its companies and citizens.

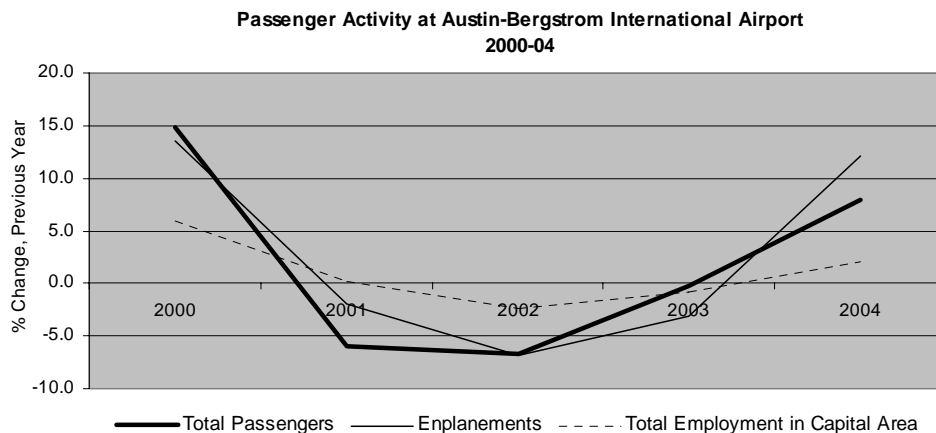
How are we doing?

The Capital Area is a region of commuters. Mean travel time to work in 2000 ranged from 23 minutes in Fayette and Travis Counties to 37 minutes in Bastrop County. According to rankings compiled by the Texas Transportation Institute (TTI), Austin ranks annually at or near the top of the list for the most congested mid-size cities in the U.S. which includes places such as Charlotte and Raleigh-Durham, NC, Louisville, KY, Nashville, TN, and Tucson, AZ. In 2003, annual delay per peak hour traveler in Austin was 51 hours, worst in the nation for mid-size cities and almost 19% higher than the second-place city on the list (Charlotte).⁷ In TTI's Travel Time Index, Austin ranks 23rd overall in cities with the most congestion delay, a decline from 27th on that list in 2000. The cost of congestion in 2003 was \$391 million, a 27% increase since 2000.

Mean Travel Time to Work in Capital Area Counties, 2000

	Number of Minutes
Bastrop	37.1
Blanco	31.4
Burnet	28.8
Caldwell	31.4
Fayette	23.3
Hays	28.0
Lee	30.0
Llano	27.8
Travis	23.6
Williamson	28.0
Capital Area	28.9

Source: U.S. Census Bureau



Sources: Austin-Bergstrom International Airport, TWC

Note: Enplanements is the term used by airports to refer to the number of boarding passengers.

⁷ For complete rankings and more data, see the 2005 Urban Mobility Report at <http://mobility.tamu.edu/ums/report>.

After a sharp decline in air travel resulting from the recession and concerns over terrorism in 2001-02, passenger activity at Austin-Bergstrom International Airport has picked up again to pre-9/11 levels. The total number of passengers using the airport surpassed 7.2 million in 2004, the highest amount of traffic since 2000.

Where are we headed?

The pace of growth and development has worked against the Capital Area's transportation infrastructure in the past 20 years. However, a range of regional efforts are currently underway to start to alleviate some of the pressure on the region's highways. Organizations such as Capital Area Metropolitan Planning Organization (CAMPO), Capital Area Regional Transportation Planning Organization (CARTPO), Capital Metro, Capital Area Rural Transportation System (CARTS), and Central Texas Regional Mobility Authority (CTRMA) are working with the Texas Department of Transportation on long-range strategies to address the region's needs for reliable, multi-mode transportation solutions. Building that infrastructure in a collaborative and comprehensive way that takes into account housing, environment, and other factors will have important benefits for sustainable regional economic development in the Capital Area.

Environment

Why is this important?

Preservation of the environment is an important economic development objective. In addition to providing critical resources to businesses, a clean and attractive natural environment is an asset for attracting and retaining a skilled workforce, promoting tourism, and ensuring that the Capital Area maintains its national reputation as one of the best places to live and do business in the U.S.

How are we doing?

Water use and air quality, of course, do not encompass the entire spectrum of environmental factors, but they are two indicators with readily accessible data that can be easily tracked with currently available sources. According to the Texas Water Development Board's (TWDB) Annual Water Use Survey, the ten-county Capital Area used 296,166 acre-feet of water in 2002, which represented approximately 2% of the state total. Municipalities are the largest consumers of water by type in the Capital Area, accounting for 79% of total water use in 2002. Manufacturing accounted for 5% of total water use in the Capital Area in 2002, which, notably, was well under the statewide average of 8%. Water demand in the Capital Area is projected to grow 2.6% annually between 2000-10, with steam electric and manufacturing as the fastest growing uses.

Air quality is a pressing concern in the Capital Area. The U.S. Environmental Protection Agency (EPA) has established air quality standards for all metro regions in the U.S. Ambient air quality is measured in terms of the amount of smog and particulate matter found in the air for a given time period. Specifically, EPA compliance is determined by the fourth highest eight-hour daily maximum at any single monitoring site in an area, averaged over a three-year period. The current eight-hour standard is 0.08 parts per million, which means that a region must exceed 85 parts per billion to be in non-compliance with EPA standards for air quality.⁸ The Austin-Round Rock MSA has flirted with non-compliance since 2000, where it would join four other regions in Texas, including Dallas, Houston, Beaumont, and El Paso. The three-year average in the Austin-Round Rock MSA has changed from 86 ppb to 84 ppb to 85 ppb since 2000.

Annual Water Use Per Capita in Capital Area Counties, 2002

	Number of Acre-feet	Acre-feet Per Capita
Bastrop	14,328	0.23
Blanco	2,389	0.27
Burnet	8,989	0.25
Caldwell	7,084	0.21
Fayette	20,834	0.92
Hays	15,073	0.14
Lee	5,803	0.36
Llano	6,533	0.36
Travis	178,578	0.21
Williamson	36,555	0.13
Capital Area	296,166	0.21

Source: Texas Water Development Board

Projected Water Demand by Type of Use In Capital Area, 2000-10

	2000	2010	CAGR
Municipal	253,103	317,641	2.3%
Steam Electric	37,917	78,608	7.6%
Mining	25,285	16,247	-4.3%
Manufacturing	19,017	26,785	3.5%
Livestock	10,961	10,961	0.0%
Irrigation	7,238	7,052	-0.3%
Total	353,521	457,294	2.6%

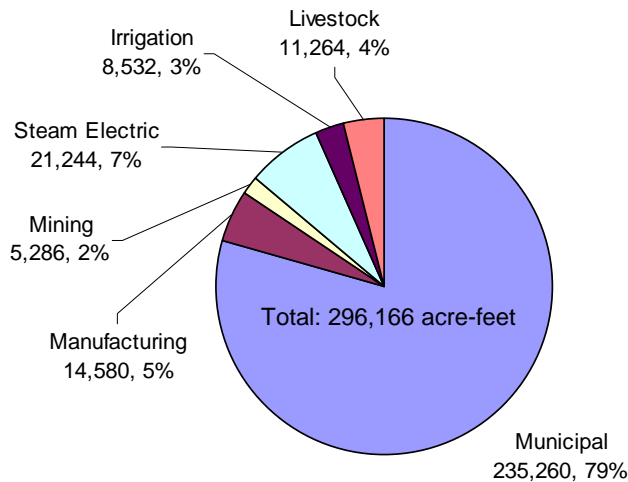
Source: Texas Water Development Board

⁸ For more information, visit <http://www.capcog.org/CAPCOairquality/airquality.htm#Ozone%20Standards>.

Where are we headed?

In addition to serious health risks, deteriorating air quality can exact significant costs on people and businesses alike, including increased health care costs, decreased property values if the areas become undesirable, and a decline in quality of life which affects economic competitiveness.

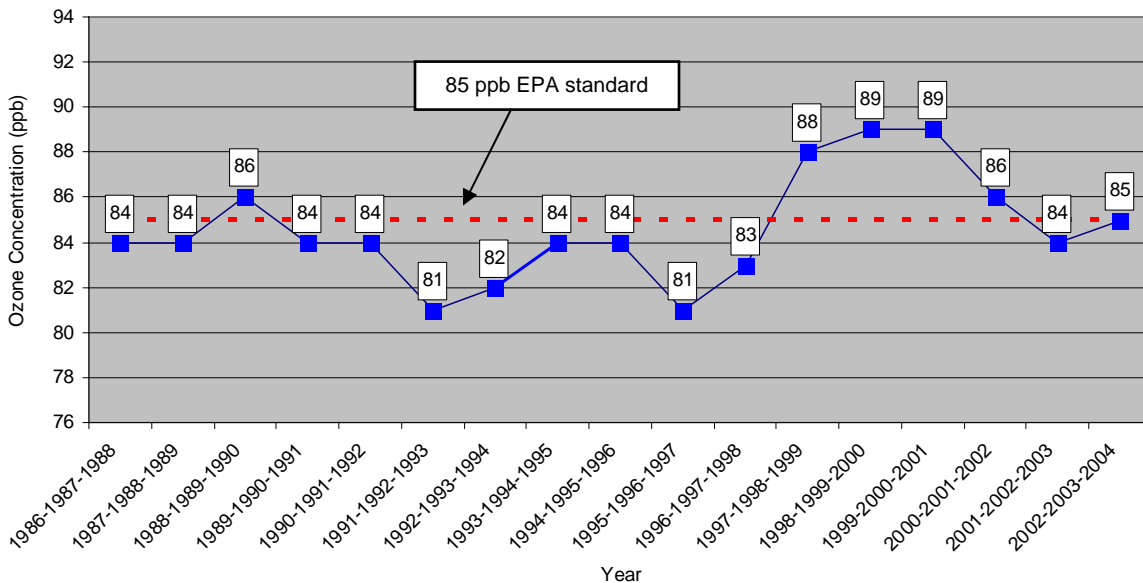
**Water Consumption by Type of Use in Capital Area, 2002
(Number of Acre-Feet)**



Source: Texas Water Development Board

Note: An acre foot is an amount of water sufficient to cover one acre with one foot of water and equals 325,851 gallons.

**Eight-Hour Ozone Design Value Trend for Austin-Round Rock MSA
1986-2004**



Source: CAPCOG

IV. Strategic Plan

Workforce Development

Goal: *Promote a comprehensive approach to workforce development*

Strategies:

1. Expand information sharing and planning for all workforce activities in the region
2. Advocate the development of certificate programs, trade schools, and apprenticeships to meet employer needs and provide life-long learning opportunities for workers
3. Educate employers on the benefits of participating in workforce development initiatives
4. Emphasize technology training in K-16 education system to ensure a competitive workforce
5. Increase access to higher education opportunities in non-metro areas

Implementation Activities:

- Create a centralized source for ten-county workforce data to enhance regional collaboration among service providers and increase awareness and participation among employers and workers
- Create an inventory of internship programs to more effectively market the benefits of internships to students and employers
- Create annual employment projections to identify workforce opportunities in fast-growing industries, as a way to complement the Texas Workforce Commission's existing ten-year employment projections for the Capital Area and better align workforce and economic development initiatives
- Conduct a regional survey of employers and workforce training providers to assess occupational trends and employer needs
- Study the availability of higher education opportunities in non-metro areas and create an inventory of existing/planned programs and potential funding solutions
- Hold a regional workshop or conference to increase awareness about workforce trends, programs, and future opportunities, as well as promote greater alignment with regional economic development strategies

Potential Partners: *WorkSource*, Rural Capital Area Workforce Development Board, Skillpoint Alliance, Capital IDEA

Measurements:

- A ten-county workforce analysis will be completed by fall 2006, with recommendations for collaborative implementation projects.
- A workshop on higher education availability in rural areas will be held in 2006-07.
- A workshop on regional workforce/econ dev strategies will be held in 2006-07.

Business Development

Goal: *Broaden and diversity the regional economy through business development*

Strategies:

1. Facilitate information exchange among regional stakeholders to enhance coordination of economic development activities
2. Encourage countywide economic development planning
3. Explore partnerships and resource pooling
4. Promote business attraction and expansion in targeted industry clusters
5. Support entrepreneurship
6. Promote tourism assets within the region

Implementation Activities:

- Create an online economic development portal to increase the availability of information and more effectively market the Capital Area's assets to existing and future employers as well as governments and residents
- Provide research and technical assistance to local governments in the Capital Area to promote efficient and effective regional planning that reduces duplicative efforts on economic development projects
- Create an inventory of capital providers for all levels of funding to facilitate access to capital and promote information sharing among entrepreneurs in the region
- Publicize entrepreneurial success stories in a region-wide publication to increase awareness about innovative companies, especially those located outside of metro area
- Publicize tourism destinations, attractions, festivals, etc. in an online resource to increase awareness about the Capital Area's regional assets and boost tourism spending
- Advocate for designating Highway 281 as part of the I-37 Corridor to increase funding availability for improvements which will better accommodate traffic generated by tourists and part-time residents of the region in the winter months of the year
- Hold a workshop or conference on regional planning and development strategies to promote information sharing and collaboration

Potential Partners:

Chambers of Commerce, Economic Development Corporations, Counties, Cities, IC² Institute at UT-Austin, Industry Associations, Community Development Corporations, Venture Capital Firms, Angel Investing Groups

Measurements:

- A regional map of tourism destinations will be created by the end of 2005.

- An initial design and development plan for the regional economic development portal will be completed by the end of 2005.
- A prototype portal will be created and online by the end of spring 2006. Additional functions and improvements will be added during 2006-10 based on stakeholder feedback, industry participation, and available resources.
- A workshop on entrepreneurship will be held in 2006-07.
- A conference on regional economic and workforce planning will be held in 2006-07

Housing

Goal: *Explore options for a variety of housing in the region*

Strategies:

1. Identify tools and programs to decrease infrastructure costs for development of affordable housing
2. Explore options for rehab and new construction
3. Support development of affordable starter homes
4. Increase county land use authority
5. Explore link between housing and economic development

Implementation Activities:

- Research and publicize information on federal, state, and local housing assistance programs and funding options
- Identify and organize information on demand by county for affordable starter homes
- Explore legislative options for increasing county land use authority
- Explore the feasibility of expanding Hill Country EDC's housing model to other counties

Potential Partners:

Texas Department of Housing and Community Affairs, Capital Area Housing Finance Corporation (HFC), Austin HFC, Travis County HFC, Community Action Network, Austin Habitat for Humanity (HFH), Georgetown HFH, Round Rock HFH, HFH of Greater Caldwell, Envision Central Texas

Measurement:

- A workshop on housing will be held in 2006-07 to disseminate information about assistance programs and explore feasibility of expanding Hill Country EDC's affordable housing model to other parts of the Capital Area.

Transportation

Goal: *Encourage and facilitate the regional transportation system to support efficient movement of citizens and freight*

Strategies:

1. Promote more general aviation facilities
2. Support expansion of the regional rail system to accommodate freight and passengers, including commuter rail options for Union-Pacific and Missouri-Kansas lines
3. Work with counties on planning and funding sustainable roadway networks
4. Promote the integration of land use, transportation, and economic development planning in the region

Implementation Activities:

- Work with TxDOT, CAMPO, CARTS, Capital Metro, and other stakeholder groups on a ten-county, regional plan for public transportation as required under HB 3588 passed in the 2003 Texas Legislative Session
- Explore and promote comprehensive planning solutions for data collection and analysis to ensure that the Capital Area transportation infrastructure meets the needs of employers and citizens.
- Advocate for regional rail initiatives that address passenger and freight needs, as part of a comprehensive, multi-mode plan for transportation development in the Capital Area.
- Create an inventory of local aviation initiatives in the region to promote resource sharing and identify future needs

Potential Partners:

Capital Area Regional Transportation Planning Organization (CARTPO), Texas Department of Transportation (TxDOT) Aviation Department, Austin-San Antonio Corridor Council, Capital Area Metropolitan Planning Organization (CAMPO), Capital Metro, Capital Area Rural Transportation System (CARTS), Envision Central Texas

Measurements:

- An inventory of local aviation initiatives in the region will be created and disseminated to interested parties in 2006-07.
- A pilot project, involving at least two transportation stakeholder groups in the ten-county region, will be planned by the end of 2005. The project will focus on improving regional coordination of modeling the population and employment projections that are used for efficient transportation system planning.
- The modeling pilot project will be completed by summer 2006, and recommendations for future collaborative projects will be developed.

Environment

Goal: *Facilitate collaboration among stakeholders to preserve natural resources*

Strategies:

1. Encourage maintenance of green space to preserve regional quality of life
2. Explore options for effectively addressing short-term and long-term water demand and availability
3. Encourage strict enforcement of air quality regulations
4. Continue to publish education on sustaining air quality and natural resources

Implementation Activities:

- Explore legislative options for increased enforcement of air quality regulations to work toward staying in compliance with EPA guidelines and protect quality of life in the Capital Area
- Support regional initiatives of Clean Air Coalition and Clean Air Force to enhance collaboration and avoid duplication of efforts on air quality planning
- Create an inventory of the various federal, state, and local sources of water data to increase awareness about the benefits of coordinating natural resource and economic development planning in the region
- Identify and report on best practices in business resource conservation to promote cost-effective strategies that save money and help protect the environment

Potential Partners:

Envision Central Texas, Lower Colorado River Authority, Austin-San Antonio Corridor Council, Texas Commission on Environmental Quality, Clean Air Coalition, Clean Air Force

Measurements:

- An inventory of regional water data will be created and reported on to interested parties in 2006-07.
- A workshop on environmental best practices will be held in 2006-07.

Communications

Goal: *Increase awareness of available telecom services and need for expansion into underserved areas*

Strategies:

1. Identify existing high-speed communications infrastructure and increase awareness of availability and benefits
2. Determine a formula for attracting providers and regional data centers to underserved areas of the region

Implementation Activities:

- Explore the creation of a regional map of high-speed communications infrastructure and service availability to improve understanding of availability in rural areas of the region
- Develop a feasibility or market study that would explore the business case for region-wide expansion of high-speed access

Potential Partners:

Cities, Counties, Telecommunications Providers, Wi-Fi Alliance, Austin Wireless Alliance, Wireless Networking and Communications Group at UT-Austin

Measurement:

- A workshop to explore the demand for and benefits of increasing high-speed Internet access region-wide will be held in 2006-07.

Health Care

Goal: *Strengthen availability and affordability of health care*

Strategies:

1. Identify innovative tools to expand and upgrade health care facilities
2. Attract services to underserved areas of the region
3. Advocate for affordable health care through collaboration

Implementation Activities:

- Study the availability of affordable health care services to improve understanding of access to care in all areas of the region
- Identify best practices in health care collaboration to help address the need for affordable solutions among large and small employers, as well as self-employed people

Potential Partners:

Chambers, Small Business and Self-Employment Associations, Health Care Providers, Insurance Companies

Measurements:

- A workshop on best practices in health care collaboration will be held in 2006-07.

Preliminary Timeline

The preliminary timeline found below provides a general outline of the expected completion dates for implementation activities. This schedule is subject to change based on stakeholder interest, as well as funding and other resource availability. Updates to this timeline, if needed, will be provided in annual progress reports to EDA.

	<u>Activity</u>	<u>Completion Date</u>
Workforce	Ten-county workforce study with recommendations	Fall 2006
Workforce	Workshop on higher education opportunities in rural areas	Spring 2006
Bus Dev	Planning and initial development of regional econ dev portal	Spring 2006
Bus Dev	Modifications and continued development of econ dev portal	Ongoing 2006-10
Bus Dev	Workshop on entrepreneurship	Fall 2006
Work/Bus Dev	Conference on regional econ dev and workforce planning	Fall 2007
Housing	Workshop on affordable housing	Spring 2007
Transport	Inventory of aviation initiatives	Summer 2006
Transport	Modeling pilot project planning and development	Spring 2006
Environ	Inventory of regional water data	Summer 2006
Environ	Workshop on environmental best practices	Fall 2007
Comm	Workshop on availability of high-speed infrastructure and access	Spring 2008
Comm	Feasibility study of creating high-speed infrastructure map	Spring 2009
Health	Workshop on best practices in health care collaboration	Fall 2008