Community Quality Report Card

TUCSON METRO CHAMBER

Growing Businesses. Building Communities.

November 2014

OVERVIEW

There is a chilling warning for communities across the country, including ours, in author Mark Lautman's book, *When the Boomers Bail*. Lautman is an accomplished economic development expert. The core message of his book is rooted in irrefutable demographic and economic data that send a clear warning about the issue communities and regions across the country will be dealing with very soon: **catastrophic full employment.**

Lautman points out that as the 78 million Baby Boomers continue to leave the workforce (currently at the pace of 10,000 per day), there are not enough people in the trailing generations to replace Boomer workers. So problem number one is quantity of workers. Problem number two is our failing education system. Not only will there be a problem with the quantity of workers, but Lautman demonstrates that there will be a severe lack of qualified workers. Cities will compete as never before for workers to keep their local economies alive. Without sufficient qualified workers, global economic dominance by the U.S. is in jeopardy. And without a strong economy, quality of life is certain to suffer.

According to Lautman, the result of the dearth of qualified workers will be bare knuckle competition between cities and regions for the ever-shrinking number of qualified employees. Lautman says, ***"Communities and companies will fight each other for jobs and qualified workers. Some communities will win and prosper. Others will fail. Those that fail will be a mess. There won't be enough qualified workers to fill demanding jobs. Businesses will not only not come to those communities, they will leave them. That will shrink tax bases and revenues that support many of the public institutions we all depend on."***

It is simple supply and demand. More demand than supply means scarcity. Scarcity in this instance spells economic prosperity for some communities and a slow, steady and certain death spiral for others who cannot attract and hold qualified workers.

The core premise of Lautman's book is that local economies (E) must grow faster than their populations (P). Therefore, E>P. He writes, ***"Community economies need to grow a little faster than their populations in order for families, companies, their tax-dependent institutions and the country to improve and prosper. When an economy grows slower than the population it has to serve, there will be more people every year and fewer and fewer resources to support them. It gets ugly. When the economy grows slower than the population for an extended period of time, it becomes a catastrophe."***

In addition to solid support for his premise, Lautman also describes two scenarios describing communities that will prosper and those that will decline and decay. He calls the two "Winnerville" and "Loserville". Here are some excerpts of the characteristics describing each of the two economic outcomes.

LOSERVILLE – THE COMMUNITY ECONOMIC DEATH SPIRAL

- Almost all qualified workers are fully employed.
- The community is heavy with workers nearing retirement and light on new ones to replace them.
- The community has been desensitized to bad news by years of reports documenting its poor economic and educational rankings.
- There is an aversion to hard data.
- Major employers in Loserville are put on the top of the list for corporate downsizing.
- Service sector businesses start reducing inventory and laying off workers as they sense the drop in commercial and retail activity.
- The community's most productive residents are exchanged for dependents and less productive (lower paid) residents.
- Home prices and the community's net worth drop.
- Fewer paychecks, less spending and stores going out of business cause the tax base to erode.
- The community's tax-dependent institutions use up their reserve funds and bond ratings fall. There is no discretionary investment.
- **Maintenance on roads, schools, landscaping and blight is reduced or eliminated.**
- **Eventually, there is not enough money for core services. Hiring freezes precede layoffs and downsizing.**
- With revenue shrinking and demand for services increasing, political leaders turn to tax increases and exacerbate the diminished appeal of the community.
- Weak political leadership becomes factionalized. No one with any political acumen runs for office. Major rifts develop. Radicals begin to rule the community.
- Loserville's government watchdog group, Citizens Against Virtually Everything (CAVE people) writes editorials decrying business and incentives used to attract and keep them.
- Blight takes root. The community is now past the point of return.
- Decline continues to spiral.

WINNERVILLE – WHERE PEOPLE WANT TO LIVE AND WORK

- Winnerville has a great reputation as a community where people want to live, work and raise families.
- Winnerville attracts and holds more qualified workers than it loses.
- The number of 24-44 year-olds is staying roughly at parity with the number of 64-84 year-olds.
- **There is predictive data, leadership consensus and a community plan that is being implemented.**
- **The public and private sectors are working together in harmony on workforce and business development.**
- The population, service sector businesses and local tax base are all growing.
- Home prices and the net worth of the community are rising.
- **The tax base is increasing not because of tax increases, but because of economic expansion.**
- Discretionary public spending is happening in the areas of technology, workforce training and preventive maintenance. Winnerville is becoming an even better place to live and work.
- Business and local school systems are working together to develop a strong pipeline of new qualified talent. The workforce is helping local businesses to expand and attract new companies.
- Schools are attracting and retaining a better class of teachers and administrators.
- Community appeal continues to spiral upward.

Five volunteers serving on the Tucson Metro Chamber's Economic Development Committee took on the assignment to do some research to quantify and describe how the Tucson Metropolitan Statistical Area (MSA) and Pima County are doing in some key economic performance areas identified by the author. Lautman calls this scorecard the "Community Quality Report Card". These metrics were identified by Mr. Lautman as predictive of a community's future economic outlook. The indicators shown below are not the only areas that need measuring, but they are a start. Lautman calls these major indices the "Pass/Fail Report Card" for a local economy's future.

The Community Quality Report Card looks at seven key areas of community performance in historic, present and predictive future contexts. The community scores one point for each "plus" with a possible total of 21. The report card looks like this:

CELab Community Quality Audit Short Form

There are seven factors that determine community quality and predict the likelihood of success or failure in the future.

1. **Economy** – The local economy is growing faster than the population and is becoming more diverse.
2. **Population** – Qualified workers and dependents too young to work are growing in proportion to unqualified workers and those too old to work.
3. **Ecosystem** – The environment is improving and the natural resource base is adequate and improving.
4. **Education** – The K-20 education system is improving and more aligned with the needs of local employers.
5. **Crime** – Is the community getting safer and more honest? Corruption, violent and property crime are low and declining.
6. **Housing** – Workers earning 1.5 times the poverty rate can afford to rent or own a home.
7. **Healthcare** – Access and quality of healthcare services are good and improving.

For each of the seven metrics you are asked to make three judgment calls: past, present and future.

- **Past** – Has the general quality direction of each metric improved or declined over the last seven years?
- **Present** – Do you consider the level of quality today to be a net advantage or disadvantage to the quality of life in the community?
- **Future** - Do you expect the level of quality to substantially improve in the next seven years or get worse?

In this Report Card exercise you must choose either better or worse for past and future and either satisfactory, or unsatisfactory for present condition. "Don't know" or "no change" is not an acceptable answer. Make the call and insert the plus or the minus for each category past, present and future. Then add up the scores.

Factor	Past	Present	Future	Cumulative
Population				
Economy				
Ecosystem				
Education				
Crime				
Housing				
Healthcare				
Total				

The maximum score for any single metric is +3. The maximum total score over all 7 metrics is +21. If you have a score of -2 or -3 for any row (factor), you have a serious problem. If you have a total score of less than +10, your community is at risk and you should seriously consider an expanded diagnostic.

CHAMBER DISCLAIMER

Data presented in this whitepaper was chosen as representative metrics of each of the seven performance areas. There is no way to accumulate and report every possible data set that could be used as an indicator in any of the areas of measurement. While the volunteers tried very hard to collect data that would paint an objective picture and serve as objective metrics of all seven indicators, there is still room for interpretation and subjectivity. The reader may want to explore additional data in any of the seven areas. The reader may also come to different conclusions than the volunteer group and the Chamber.

NOTE: Not all data sets were available in seven-year increments called for by the author, so adaptations were made based on data that are available and are cited as such. The actual scorecard for our area may be viewed near the end of this document.

Here is Lautman's broader body of possible community metrics:

COMMUNITY SELF EVALUATION FORM

CELab
Community Economics Laboratory

Below is a much more comprehensive list of metrics that can be used to identify the hotspots threatening the viability of your community.

Metrics	Winnerville		Loserville	
Population				
Total Population	Growing		Shrinking	
Source of Pop. Growth	Birthrate > Immigration		Birthrate < Immigration	
Dependency Ratio	Workforce ≥ Dependents		Workforce < Dependents	
Young/Old Dependency	Younger > Older		Older > Younger	
Pop. Sectors by Age	(24-44) > (64-84)		(24-44) < (64-84)	
Diversity	Increasing		Declining	
Net Worth				
Home Equity	Low & Rising		High & Falling	
Savings (per capita)	Growing deposits		Shrinking deposits	
Ability to Move (sell)	Increasing		Decreasing	
Poverty (transfer payments)	Decreasing		Increasing	
School Lunch %	Decreasing		Increasing	
Govt. Transfer Payments	Increasing		Decreasing	
Economy				
Local Economy	Economy growing faster than population		Economy growing slower than population	
Local Tax Base	Commercial > Residential		Commercial < Residential	
Per Capita Income	Stable or rising		Stagnant or falling	
Economic Base				
Economic Output	Increasing		Stagnant or decreasing	
E-Base Jobs	30% of total		< 30% of total	
Productivity/Wages	≥ than state avg.		< state avg.	
Sector Value	High salary jobs > low		High < low salary jobs	
E-Base Diversity	More diverse		Less diverse	
E-Base Security	High value resistant to comp		High value firms at risk	
Business Climate	Competitive & Improving		Uncompetitive & Declining	
Capacity Utilization	Excess real estate/utilities		No excess capacity	
Commute Burden	Avg. Commute < 18 min		Avg. Commute > 18 min	
Residents/Commuters	80/20%		45/55%	
Service Sector				
Service Sector Jobs	Growing faster than population		Growing slower than population	
Range and Spectrum	Complete needs/wide diversity		Narrow range/less diversity	
Leakage Factor	Attracting & Retaining		High Attrition	
Per Capita Gross Receipts	Rising		Stagnant or Falling	
Revenue/sf.	High & Rising		Low & Stagnant	
Reliance on Pop. Growth	Small & Declining		Dep. On Construction	
Labor Pool	Balanced w/ Sector Needs		Large Gaps	
Residents/Commuters	75/25%		90/10%	

Workforce

Workforce	Growing (target sectors)		Declining (e-base)	
Qualification	35% of pop		≥20% of pop	
Age Distribution	Balanced		Skewed	
Labor Pool Skills	Balanced		Major Gaps	
Labor Pool	Secure		At risk to comp	

Pre-employment Pipeline Mgt.

Dropout Rate	Low & Falling		High & Rising	
Bus./Comm. Collaboration	Involved & Investing		Uninvolved or low	
Gap Strategies	Strategic Steering / Recruiting		None	
Productivity/Wages	Improving		Declining	

Mid-career Change Candidate Mgt.

Gap Strategies	Strategic Marketing		Reactive	
CC Workforce Enrollment	Present & Growing		Absent or Declining	
Data-Based Curriculum Mgt	Yes		No	
Bus./comm. Collaboration	High		Low	

Immigration/Emigration

Brain Drain/Gain	Attracting/Retaining		High Net Loss/Turnover	
Balance	Labor gaps filling		Labor gaps increasing	
Talent Management (all sectors)	Retaining & Recruiting		Limited to Private Business	
Diversity	Increasing		Decreasing	

Housing

Own/Rent	60/40%		70/30%	
Housing	Supply/Price good for 70%		No supply/Priced out	
Home Equity	Low		High	
Property Taxes	Rising		Stable	
Housing Stock	Mix of apt/condos/houses		Primarily houses	
Site Built/Mobile or Mod.	80/20%		55/45%	
Balance	Focused on planning board		What happens, happens	
Insurance/Home & Auto	Stable or slowly rising		Falling or unavailable	

Community Management

Taxes

% of income	Stable or falling		Rising	
Sales Tax	< state average		> state average	
Property Taxes	< state average		> state average	
Planning	Strategic balanced zoning		Reactive/exploitive	

Financial Management

Bond Ratings	Improving		Falling	
Debt Capacity	Reliable		Questionable	
Reserve Funds	High		Low	
Surpluses	Used strategically		Used politically	
Bond Issue Success	High		Low	
Commercial > Residential	Balanced		Haphazard	

Planning

Projections	Realistic/Re-evaluated		Unrealistic/Haphazard	
EcD Planning	Realistic/Re-evaluated		Unrealistic/Haphazard	
EcD Program	Govt./Business schools collaborate		Govt./Business schools compete	

Enforcement

Codes	Consistent		Inconsistent	

Crime

Personal Violent Crime	Low & Falling		High & Rising	
Property Crime	Low & Falling		High & Rising	
Teen Delinquency	Low & Falling		High & Rising	
Uninsured Motorists	Low & Falling		High & Rising	
Political Corruption	Low & Falling		High & Rising	

Environment

Air	Quality good or improving		Poor quality	
Ground Water	Quality good or improving		Poor quality	
Sources of Pollution	Understood		Unknown/ignored	

Amenities

Recreation	Growing		Stable or declining	
Restaurants & Nightlife	Variety of price & quality		Little variety	
Tourism	Stable or growing		Non-existent	
Civic Events-Festivals	Growing, well planned		Haphazard	
Arts & Entertainment	Wide variety/growing		Non-existent	
Sports	Pro & amateur		Amateur or none	
Greenspace	Growing		Declining	

Tolerance & Openness

Leadership	Opportunity and tolerance		Protects status quo	
Civic Organizations	Varied/collaborative		Competitive	
Community Personality	Progressive and forward thinking		Regressive and stagnant	

Infrastructure

Water

Systems Maintenance	Systematic		Reactionary	
Conservation	Well implemented plan		No leadership	
Water Supply	Secure		Limited/threatened	
Water Quality	Good		Poor/at risk	
Surpluses	Used strategically		Used politically	
Sewer Maintenance	Systematic		Reactionary	

Roads

Maintenance	Systematic		Reactionary	
Congestion	Stable or declining		Rising	
Public Transportation	Well planned/growing		Haphazard/stagnant	
Grid Design	Well planned/growing		Haphazard/stagnant	
City Planning	Ongoing		Non-existent	
Avg. Workforce Commute	Stable or declining		Rising	

Power Grid

Long-Term Plans	Ongoing		Non-existent	
Maintenance	Systematic		Reactionary	
Conservation	Well implemented plan		No leadership	
Capacity & Efficiency	Adequate & improving		Inadequate & decaying	
Sustainability	Renewable sources/conservation		No renewable sources or conservation	
Cost	Stable		Increasing	

Connectivity				
Broadband	Fiber/cable		Dial-up	
Choice & Price	Competitive		Monopoly	

Health				
Hospitals	Draw from across region		Local only	
Emergency Room Visits	Declining		Increasing	
Elderly Health	Metrics tracked		Ignored	
Childhood Obesity	Low & Falling		High & Rising	
Diabetes	Low & Falling		High & Rising	
Asthma	Low & Falling		High & Rising	
Teen Pregnancy	Low & Falling		High & Rising	
Drug Abuse	Low & Falling		High & Rising	

Education

Early Childhood Programs	Available		Unavailable	
Preschool/Children at Risk	Available		Unavailable	

Public Schools				
Graduation Rate	High & Rising		Low & Declining	
Dropout Rate	Low & Declining		High & Rising	
Dropout Rate/Ethnicity	Tracked		Ignored	
Annual Turnover School Pop.	Low		High	
SAT Scores	High & Rising		Low & Declining	
Work Key Scores	High correlation w/ workforce needs		Low correlation	
% of School Pop. Above Standards	High		Low	

Higher Education				
Community Colleges	In town		Out of town	
Programs Offered	Growing		Unchanged	
Colleges Universities	In town		Out of town	
Enrollment	Growing		Shrinking	

Sum				

METRIC #1 – THE ECONOMY

SIGN OF AN ECONOMY GOING THE RIGHT DIRECTION

"The local economy is growing faster than the population and is becoming more diverse."

When the Boomers Bail, Mark Lautman

Lautman's most important metric measures whether the metro economy (E) is growing faster than the metro population (P). According to the U.S. Census Bureau, our local economic growth has outpaced our population growth between the last two census periods.

	2000	2010	% Change
Metro Population[1]	843,746	980,263	16.1%

	2001	2011	% Change
Gross Metro Product[2]	$22.6 billion	$33.4 billion	47.8%

[1] U.S. Census Bureau, 2010 report

[2] IHS Global Insight as reported in U.S. Metro Economics, U.S. Conference of Mayors 2012

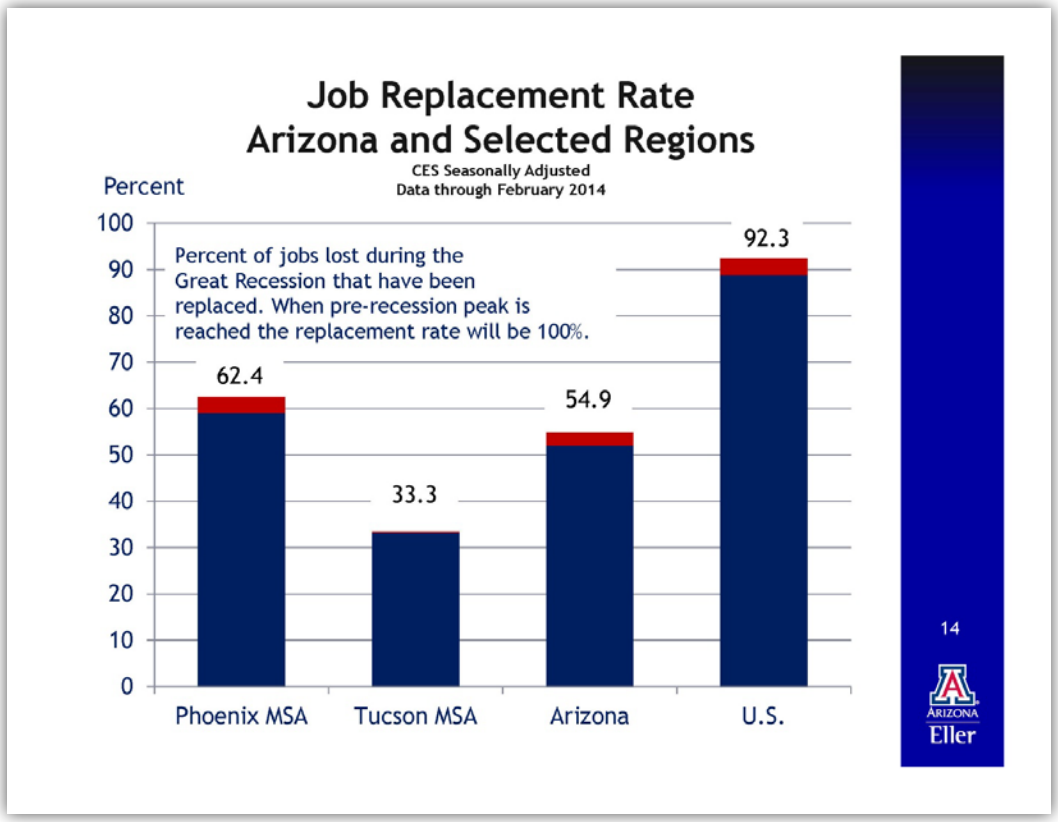
OTHER ECONOMIC METRICS

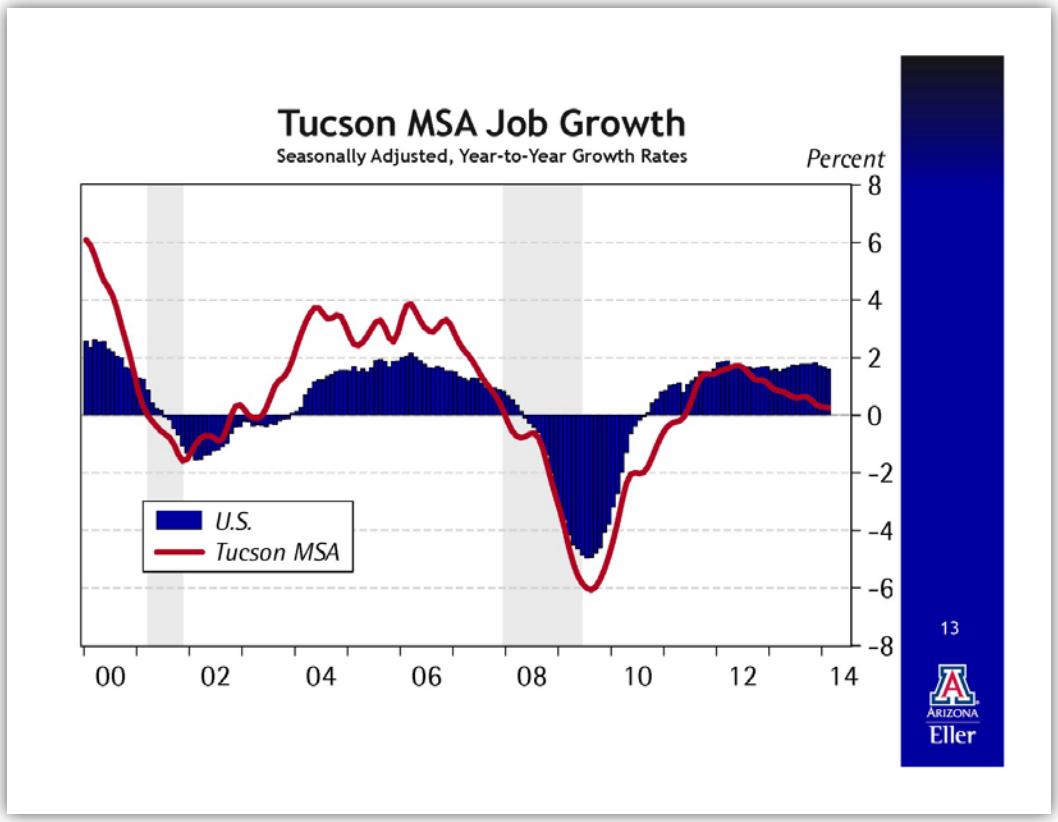
Current Growth Rates*

U.S. Gross National Product: 2.5%

Tucson Gross Metro Product: 2.2%

*IHS Global Insight, United States Conference of Mayors, "U.S. Metro Economies" 2014


Job Replacement Rate
Arizona and Selected Regions
CES Seasonally Adjusted
Data through February 2014
Percent
Percent of jobs lost during the Great Recession that have been replaced. When pre-recession peak is reached the replacement rate will be 100%.
100
90
80
70
60
50
40
30
20
10
0
62.4
33.3
54.9
92.3
Phoenix MSA
Tucson MSA
Arizona
U.S.
14
ARIZONA
Eller


Tucson MSA Job Growth
Seasonally Adjusted, Year-to-Year Growth Rates
Percent
8
6
4
2
0
-2
-4
-6
-8
U.S.
Tucson MSA
00
02
04
06
08
10
12
14
13
ARIZONA
Eller

CONCLUSION:

According to U.S. Census Bureau and Global Insight statistics, the Tucson Metropolitan Statistical (MSA) economy has grown faster than population growth. At the same time, one may also conclude that the days of Tucson's economy outpacing other MSAs and the growth of the national economy may be behind us. Tucson GMP growth is currently slower than U.S. GNP growth, which is a negative.

Much has been said about the rather undiversified economy of the Tucson MSA. Ours is an economy dominated by government and government spending. The largest private employer is Raytheon Missile Systems, a federal contractor. The University of Arizona reportedly employs about 50,000 workers. Many manufacturers sell their products to the defense and aerospace industry which is in great part driven by federal spending. Davis-Monthan AFB and the 162nd Air National Guard facility at Tucson International Airport are also major economic drivers. Tucson and Southern Arizona simply need more businesses that create primary jobs (ones that export products and services and import spending from other parts of the world).

Comparing the Tucson MSA with peer MSAs demonstrates that Tucson creates far less GMP than peer MSAs. The Tucson MSA underperforms the average MSA in the 11 peer markets above by 34%. That translates to 34% less wealth being created in the Tucson MSA and (by loose extension), 34% less wealth shared by citizens in the Tucson MSA. Pima County depends largely on property taxes for its revenue. The City of Tucson depends largely on sales taxes for its revenue. If the Tucson MSA were performing at the average for the peer group of MSAs, it is almost certain that both property tax collection and sales tax collection would rise proportionately without the need for tax rate increases. There would simply be

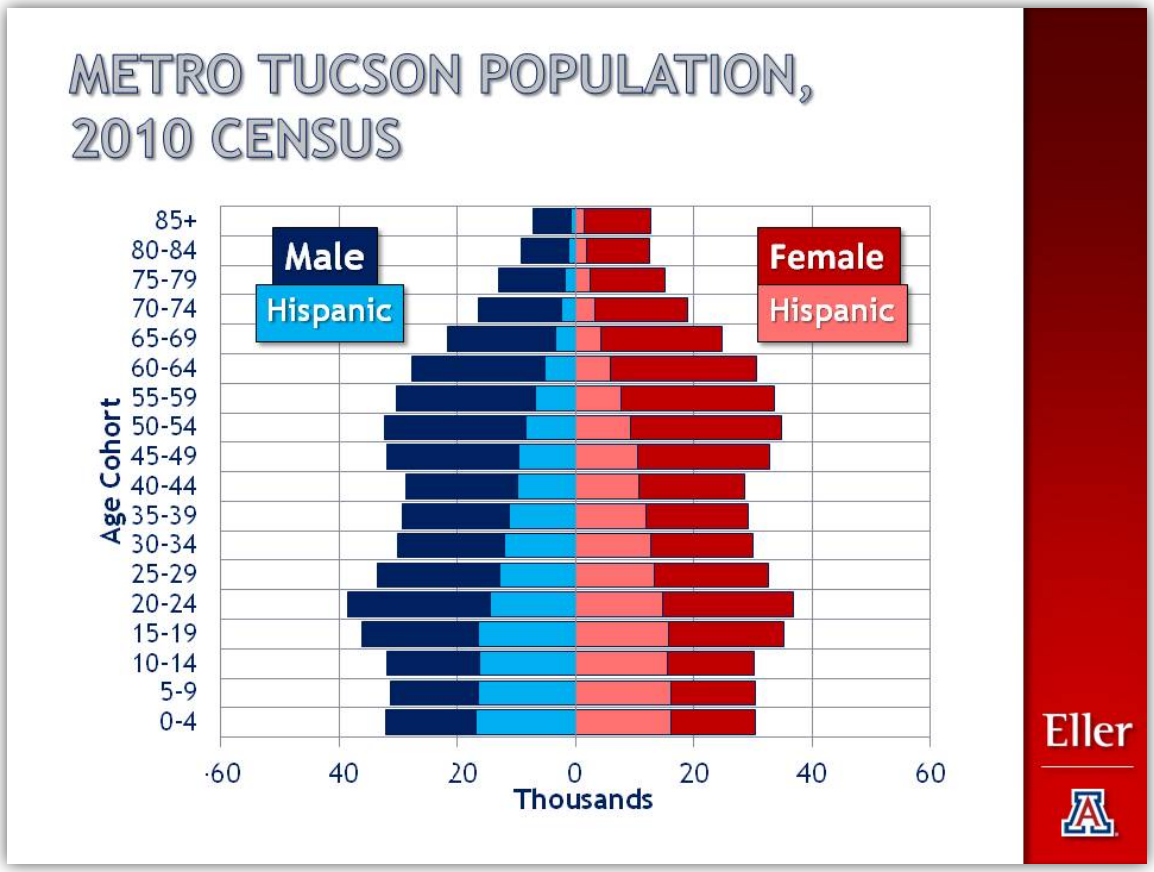
more taxpayers earning more money. In the opinion of the Tucson Metro Chamber, there is no greater priority than increasing economic vitality and the output of goods and services in the Tucson MSA and Pima County!

METRIC #2 – POPULATION

SIGN OF POPULATION GROWTH GOING THE RIGHT DIRECTION

"Qualified workers and dependents too young to work are growing in proportion to unqualified workers and those too old to work."

When the Boomers Bail, Mark Lautman



Tucson MSA	2012	2013	2014	2015	2016	2017
Population (000s)	990.38	996.046	1,004.012	1,015.779	1,030.831	1,046.571
% Chg from Year Ago	0.44%	0.57%	0.8%	1.17%	1.48%	1.53%

Source: University of Arizona Eller School Business and Economic Research Center, April 2014

Pima County	2012	2013	2014	2015	2016	2017	2018	2019	2020
Population (000s)	990	998	1,008	1,022	1,037	1,054	1,070	1,085	1,100
% Chg from Year Ago	---	0.8%	1.0%	1.4%	1.5%	1.6%	1.6%	1.4%	1.4%

Source: Arizona Dept. of Administration, Office of Employment & Population Statistics, 12-7-2012

Community Self Evaluation (primary fields):

Population

Metrics	Winnerville		Loserville	
Total Population	Growing	Yes [1]	Shrinking	
Source of Pop. Growth	Birthrate>Immigration	Yes [2]	Birthrate<Immigration	
Dependency Ratio	Workforce≥Dependents	Yes [2]	Workforce<Dependents	
Young/Old Dependency	Younger>Older	Yes, but trend is declining [3]	Older>Younger	
Pop. Sectors by Age	(22-44) >(64-84)	Yes	(22-44)< (64-84)	
Diversity	Increasing	Yes [4]	Declining	

Support/Sources:

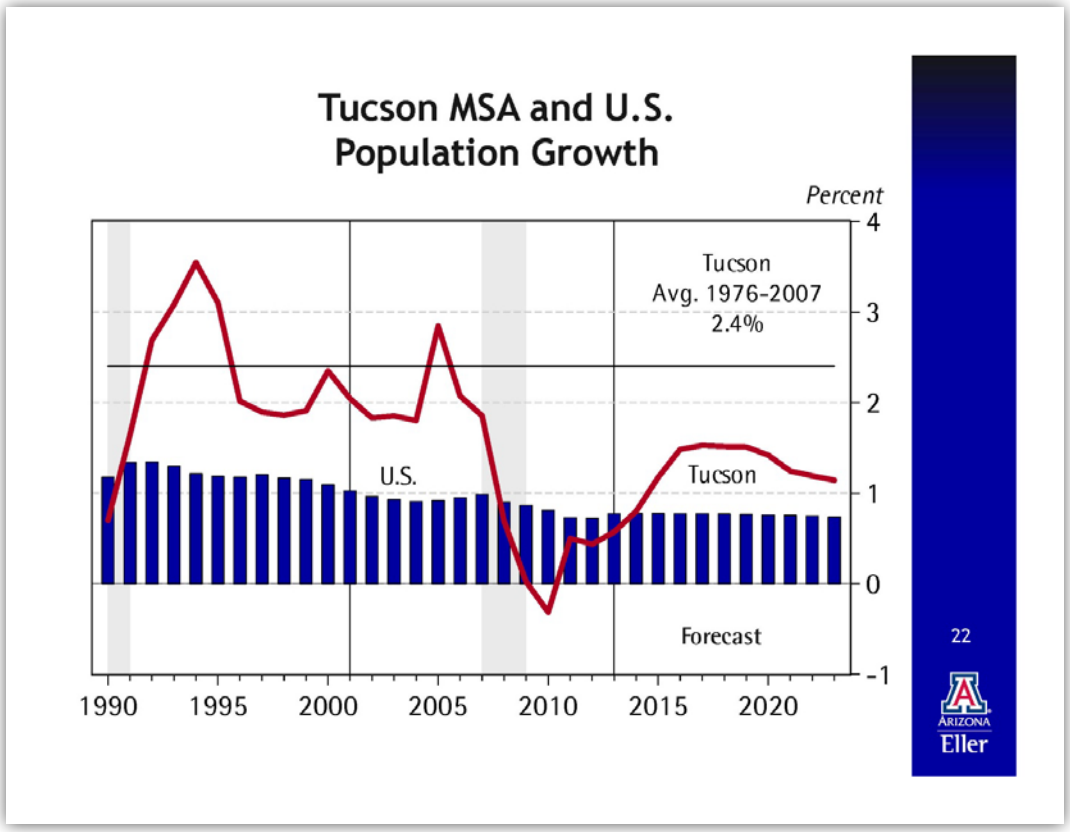
1. Pima County/Tucson Metro Area's Population is Growing:
   a. *Past through 2009: According to Pima Association of Governments:* *"Between 1950 and 2000, Arizona grew by 584 percent. Its July 1, 2009, population was estimated at just over 6.3 million. During this same period, the population in Pima County increased by 497 percent to a July 1, 2005, population estimate of approximately 958,000. In comparison, the entire United States grew approximately 86 percent during this same period. Despite this phenomenal rate of growth, Pima County's share of the state population has actually been steadily decreasing from 16.45 percent in 2000 to approximately 15.3 percent in 2008. From 1990 to 2000, Marana and Oro Valley experienced the highest (519%) and second highest (345%) growth rate of any Arizona city or town, respectively. Sahuarita has grown over 30 percent each year since 2003. Of all the incorporated jurisdictions in Pima County, only South Tucson has experienced an overall decline in population over the past 25 years. Between 1980 and 2000, the population decreased by 16 percent."*
   (http://www.pagnet.org/regionaldata/demographics/populationgrowthbydecade/tabid/123/default.aspx)

   b. Present (2009-2012): Tucson Metro area has been experiencing a stagnation in population, with economy-related decreases in migration to the region contributing the majority of the results according to the Economic and Business Research Center at the U of A. (http://ebr.eller.arizona.edu/indicators/population.asp#tucson)

Tucson MSA

Population - Tucson MSA	2006	2007	2008	2009	2010	2011	2012
Arizona Office of Employment and Population Statistics							
Tucson MSA (Pima County)	959,474	977,258	984,032	984,274	981,168	986,081	990,380
%Chg from Prior	2.07%	1.85%	0.69%	0.02%	-0.32%	0.5%	0.44%
Marana	30,775	32,686	34,226	34,737	35,051	35,858	36,957
Oro Valley	38,809	40,821	41,220	41,263	40,984	41,153	41,275
Sahuarita	17,705	20,658	22,621	24,280	25,347	25,645	26,121
South Tucson	5,854	5,858	5,862	5,884	5,672	5,653	5,675
Tucson	521,728	525,837	526,373	523,860	520,795	522,815	523,471
Unincorporated Pima	344,603	351,397	353,731	354,250	353,319	354,957	356,881

Published by Economic and Business Research Center, The University of Arizona.



2. Pima County birthrates are projected to continue outpacing net migrations and the potential workforce will remain greater than the projected number of dependents, according to the Arizona Department of Administration's Pima County Population (Medium) Stats. (http://www.workforce.az.gov/population-projections.aspx)

PIMA COUNTY POPULATION PROJECTIONS: 2012 TO 2050, MEDIUM SERIES

TABLE 1: TOTAL POPULATION & COMPONENTS OF POPULATION CHANGE

Year	Population	Population Change	Population % Change	Births	Deaths	Natural Change *	Net Domestic Migration	Net Foreign Migration	Total Net Migration **
2012	990,380	-----	-----	12,132	8,379	3,753	-3,113	1,543	-1,570
2013	998,325	7,945	0.8%	12,395	8,456	3,938	2,388	1,618	4,006
2014	1,008,442	10,117	1.0%	12,698	8,591	4,108	4,314	1,696	6,010
2015	1,022,079	13,637	1.4%	13,043	8,754	4,289	7,574	1,774	9,348
2016	1,037,232	15,153	1.5%	13,417	8,947	4,470	8,829	1,855	10,684
2017	1,053,578	16,346	1.6%	13,814	9,154	4,660	9,748	1,937	11,685
2018	1,069,924	16,346	1.6%	14,032	9,371	4,661	9,664	2,021	11,685
2019	1,085,277	15,353	1.4%	14,246	9,576	4,670	8,577	2,107	10,684
2020	1,100,021	14,744	1.4%	14,454	9,787	4,666	7,883	2,194	10,078
2021	1,114,656	14,635	1.3%	14,659	10,001	4,658	7,694	2,283	9,977
2022	1,129,233	14,578	1.3%	14,862	10,218	4,644	7,560	2,374	9,934
2023	1,143,733	14,500	1.3%	15,034	10,444	4,591	7,443	2,466	9,909
2024	1,158,161	14,428	1.3%	15,201	10,676	4,525	7,342	2,561	9,903
2025	1,172,515	14,353	1.2%	15,355	10,916	4,438	7,259	2,657	9,915
2026	1,186,792	14,277	1.2%	15,495	11,163	4,331	7,192	2,754	9,946
2027	1,200,985	14,193	1.2%	15,625	11,427	4,198	7,142	2,853	9,995
2028	1,215,082	14,097	1.2%	15,749	11,715	4,035	7,108	2,954	10,063
2029	1,229,113	14,031	1.2%	15,870	11,988	3,882	7,092	3,057	10,149
2030	1,243,099	13,986	1.1%	15,991	12,259	3,732	7,092	3,162	10,253
2031	1,257,074	13,975	1.1%	16,114	12,509	3,605	7,165	3,206	10,370
2032	1,270,943	13,869	1.1%	16,243	12,849	3,395	7,225	3,250	10,475
2033	1,284,724	13,780	1.1%	16,381	13,161	3,220	7,267	3,294	10,561
2034	1,298,443	13,720	1.1%	16,528	13,436	3,091	7,290	3,338	10,628
2035	1,312,101	13,657	1.1%	16,684	13,705	2,980	7,296	3,382	10,678
2036	1,325,707	13,606	1.0%	16,852	13,954	2,898	7,282	3,426	10,708
2037	1,339,260	13,553	1.0%	17,030	14,197	2,833	7,250	3,470	10,721
2038	1,352,759	13,499	1.0%	17,217	14,433	2,784	7,200	3,514	10,714
2039	1,366,210	13,452	1.0%	17,413	14,651	2,762	7,132	3,558	10,690
2040	1,379,622	13,412	1.0%	17,616	14,851	2,765	7,044	3,602	10,647
2041	1,393,047	13,425	1.0%	17,826	15,021	2,806	6,973	3,647	10,619
2042	1,406,516	13,469	1.0%	18,041	15,191	2,850	6,929	3,691	10,619
2043	1,420,047	13,532	1.0%	18,257	15,344	2,913	6,884	3,735	10,619
2044	1,433,676	13,628	1.0%	18,475	15,466	3,009	6,840	3,779	10,619
2045	1,447,403	13,727	1.0%	18,690	15,582	3,108	6,796	3,823	10,619
2046	1,461,245	13,842	1.0%	18,899	15,677	3,223	6,752	3,867	10,619
2047	1,475,233	13,988	1.0%	19,108	15,739	3,369	6,708	3,911	10,619

2048	1,489,377	14,144	1.0%	19,315	15,790	3,525	6,664	3,955	10,619
2049	1,503,681	14,304	1.0%	19,516	15,830	3,685	6,620	3,999	10,619
2050	1,518,154	14,472	1.0%	19,708	15,855	3,853	6,576	4,043	10,619

* Natural Change = Births - Deaths

** Total Net Migration = Net Domestic Migration + Net Foreign Migration

Arizona Department of Administration, Office of Employment & Population Statistics, 12/07/2012

Telephone: 602-771-2222

Fax: 602-771-1207

CONCLUSION:

Lautman says communities should be on guard if their populations are aging without younger people to fill in workplace vacancies created by Baby Boomers leaving the workforce. The University of Arizona Eller School's "Population Pyramid" graphic on page 14 above demonstrates that the Tucson Metro Area is in good shape relative to this metric. In other words, the Tucson MSA has a young population that could replace older workers as they leave the workforce.

Important younger demographics are plentiful compared to those on the upper reaches of the University of Arizona Eller School population pyramid. Quantity of potential workers historically has not been an issue for the Tucson Metro Area thanks in great part to the growth of the Hispanic population. Projections indicate that population will continue to grow as will diversity.

METRIC #3 – ECOSYSTEM

SIGN OF THE LOCAL ECOSYSTEM GOING THE RIGHT DIRECTION

"The environment is improving and the natural resource base is adequate and improving."

When the Boomers Bail, Mark Lautman

Important in Lautman's evaluation of communities is the relationship between the local population and its environment. In his view, citizens and governmental bodies that respect and enhance the components of a healthy environment have a positive future. In this area, Tucson and Southern Arizona score well.

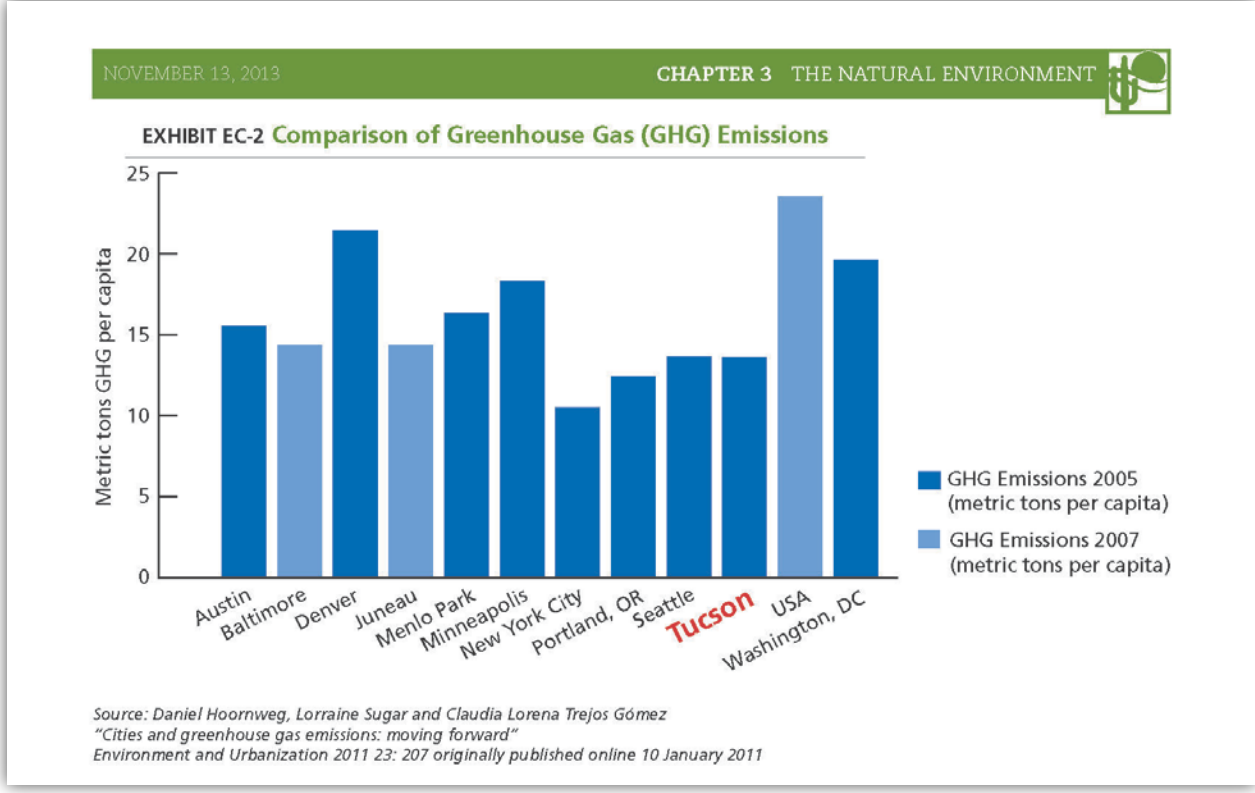
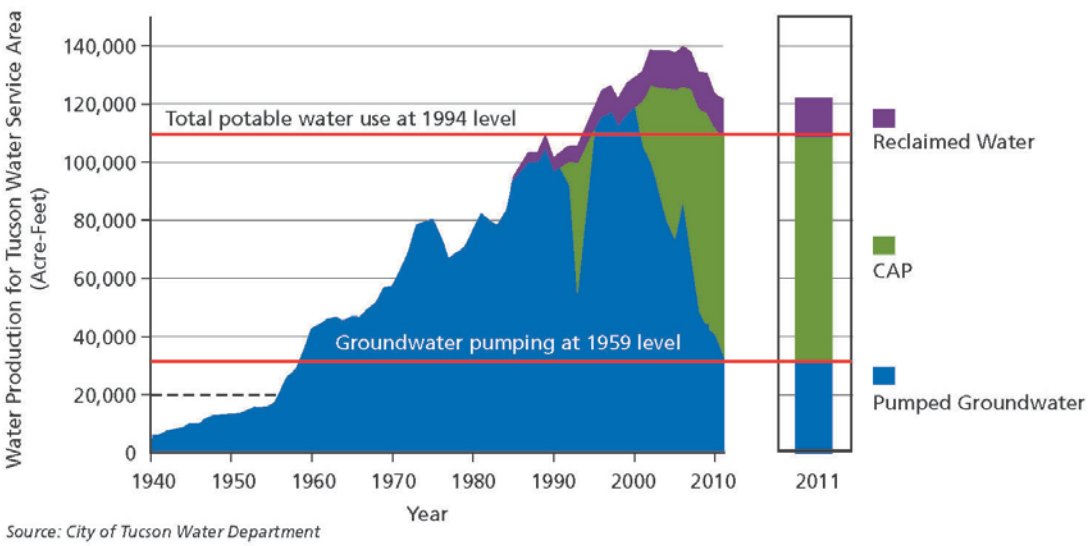
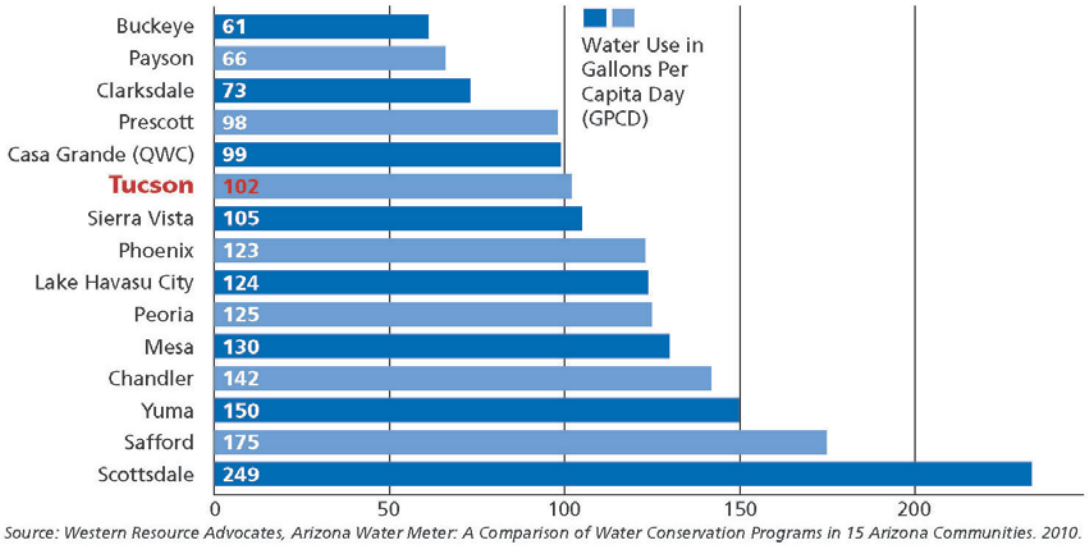


EXHIBIT WR-1 Transition to Renewable Supplies



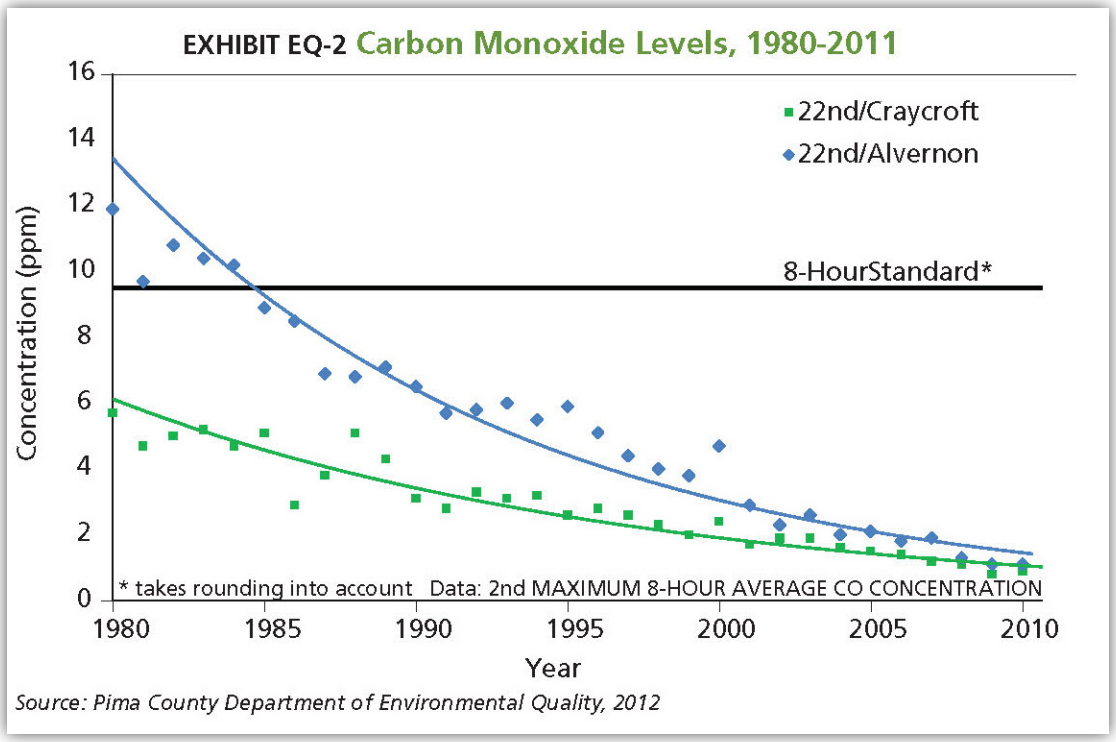
Source: City of Tucson Water Department

EXHIBIT WR-3 Single-Family Residential Water Use (GPCD), 2008



Source: Western Resource Advocates, Arizona Water Meter: A Comparison of Water Conservation Programs in 15 Arizona Communities. 2010.

[5]City of Tucson and Pima County. "Integrating Land Use Planning with Water Resources and Infrastructure." Technical Paper, July 2009.



- For air quality, the Tucson area earns a "C" for ozone, which means that the air can be unhealthy for sensitive populations, an "A" for 24-hour Particle Pollution, and a "Pass" for Annual Particle Pollution, from the American Lung Association. The number of High Ozone days dropped since 2007 and remained relatively constant through 2011 (available data).
- Tucson was ranked one of the least polluted cities in the US by the SOTA 2012 report in terms of air pollution.
- Tucson's Air Quality Index (AQI) was primarily rated "good" for 2012 as reported by the PDEQ's *Air Quality Report for Pima County Arizona.*
- Tucson participates in water quality monitoring and reporting which shows that Tucson's water is safe as per regulations set out by the United States Environmental Protection Agency (USEPA).
- Tucson's overall water quality is 48 on a scale of 1-100. The EPA has a complex method of measuring watershed quality using 15 indicators, as noted by *Sperling's Best Places*.
- While Tucson is susceptible to drought conditions, the City of Tucson has detailed plans on how to react to such conditions, ensuring the availability of water in the county.
- Tucson has a Superfund Ranking of 91 (where 100 is the best) compared to a national average of 71.

CONCLUSION:

Tucson and Pima County are regarded as doing a good job of protecting clean air and water for their citizens. Although anecdotal, it would also seem safe to assume the local citizens also embrace the value of a clean and safe environment and do their part to participate in passing forward a legacy of respect for the environment. This kind of culture bodes well for our area's future.

METRIC #4 – EDUCATION

SIGN OF LOCAL EDUCATION GOING THE RIGHT DIRECTION

"The K-20 education system is improving and more aligned with the needs of local employers."

When the Boomers Bail, Mark Lautman

Metro areas that will succeed in the coming economy will have ample qualified workers. In this regard, statistics from the U.S. Census Bureau and Southern Arizona Indicators raise a big red flag for the Tucson MSA.

- TUSD high school graduation rates are falling and currently stand at 77.9% (TUSD, graduation rates 2013), which is below the national average of 78.2% (U.S Dept. of Education graduation rates 2013).
- In 2009, Native American and Hispanic high school students graduated at levels far below the general population at 40% and 66% respectively.
- In 2009, only 44% of students with limited English proficiency graduated on time. More than 26% of Tucson Metro families speak only Spanish at home, while 11% of the population speaks English "less than very well".

Community Self Evaluation (primary fields):

Education

Metrics	Winnerville		Loserville	
Early Childhood Programs	Available		Unavailable	Not widely adopted
Preschool/Children at Risk	Available		Unavailable	High poverty rate is a key factor

Support/Sources:

"Two out of three Arizona children don't attend preschool, 27 percent live in poverty and three-quarters of fourth-graders aren't proficient in reading, according to a new national survey of child well-being. Arizona ranks 47th overall in the annual Annie E. Casey Foundation's Kids Count Data Book, moving down a notch from last year. And, for the second straight year, the state scored second-to-last in the percentage of three and four-year-olds who attend preschool, which research shows leads to success later in life. Research on low-income children who attend quality early-education programs shows that, compared with their peers, they are more likely to graduate from high school, attend college and be employed. The research also shows that they are less likely to be on welfare or get into trouble with the law. The economic payoff, according to some studies, is as high as $7 for every $1 invested in quality preschool." (http://www.azcentral.com/news/politics/articles/20130621arizona-child-welfare-lags.html)

"One in three kids under the age of 18 inside our city limits lives in poverty. Statewide, the rate is one in four. Nationwide, it's one in five. More than half of the babies born in Pima County have mothers who qualify for Medicaid, the government health-care program for the poorest Arizonans. The percentage of children who qualify for free or reduced-price lunch in the Tucson Unified School District jumped from 57 percent in 2006 to the current 71 percent, well above the state average of 59 percent. In some low-income schools, 60 percent of the student body is transient, either leaving or enrolling after the first day of the academic year." (http://azstarnet.com/news/local/tucson-kids-pay-poverty-s-high-price/article_b79c3c72-bd69-5898-8876-d60bf8045746.html)

Public Schools

Metrics	Winnerville		Loserville	
Graduation Rate	High & Rising		Low & Declining	Declined last 4 years
Dropout Rate	Low & Declining	4 of last 5 years have shown improvement	High & Rising	
Dropout Rate/Ethnicity	Tracked	Yes	Ignored	
Annual Turnover School Pop	Low	Data not avail.	High	Data not avail.
SAT Scores	High & Rising	Middle of the road vs. country	Low & Declining	
ACT Work Key Scores	High & Rising	Middle of the road vs. country	Low & Declining	
% of School Population Above Standards	High		Low	Low, except for select public magnet schools or charter schools

Support/Sources:

Charter Schools: There are more than 100 registered public, tuition-free Charter Schools in Pima County. *"With one of the highest percentages of students attending a public charter school, Arizona continues to lead the nation in charter school growth. Arizona has 602 charter schools that enroll about 184,400 students this school year. Fully, about 30 percent of the state's public schools are charter schools, and about 17 percent of our public students attend a charter. In 2013,* ***21 of the top 30 public schools are charter schools****, yet charter students are funded, on average, $1,335 less than the average district student due to Arizona's antiquated system of school finance. While total enrollment in Arizona public schools grew 3.4 percent, from 1,043,298 students in FY2005 to 1,078,939 students in FY2011, enrollment in charter schools grew 44.2 percent during the same period, from 85,683 to 123,633. In FY2012, charter students increased by over 10,000. Charter schools receive state funds based on student attendance (same as traditional public schools); however, they do not receive funds from local tax revenue. On average, charter students receive about $1,765 less than their district peers."* (https://azcharters.org/about-charter-schools)

Public Schools: Key background information from the May 2013 release of the U.S. Department of Commerce Report: "Public Education Finances: 2011": (http://census.gov)

- Tucson Unified School District ranks number 80 in size among the top 100 Largest Public Elementary-Secondary School Systems in the United States.
- In 2011, enrollment data shows more than 53,000 students served with an annual revenue of over $522 million.
    - 16.5% federal funds
    - 36% state sources of funds
    - 47.5% local sources of funding

"District enrollment has declined over the last 10 years and TUSD lost 1,700 to 2,000 students per year for the two or three years prior to 2012. There are many reasons for the change, including the population in general becoming more suburban and changes in school choice including increasing availability of Charter Schools and the approved ability to cross districts for school selection."
(http://en.wikipedia.org/wiki/Tucson_Unified_School_District)

TUSD's graduation rate has experienced a decline for each of the last four years. (http://tusdstats.tusd.k12.az.us/paweb/aggD/graduation/gradrate.aspx) Across the state of Arizona, the trend is even worse: *"Using numbers from 2010, a report called "Diplomas Count" ranks Arizona's graduation rate 43rd on a list of 50 states and the District of Columbia. The report, compiled by Editorial Projects in Education Research Center, of Bethesda, Md., says Arizona's graduation rate in 2010 was 67.2 percent — about seven percentage points lower than the national average of 74.7 percent."*
(http://www.azcentral.com/community/mesa/articles/20130611arizona-graduation-rate-low-rank.html)

TUSD dropout rates have fluctuated between about 1.5% and 2.5% between 2006 and 2013. Four of the past five years have seen a decrease in the percentage of dropouts and Native Americans remain the most likely to drop out of all tracked populations. (http://tusdstats.tusd.k12.az.us/paweb/aggD/graduation/DropOut.aspx) When it comes to **standardized test scores**, Arizona has ranked in the middle of the pack nationally. (http://tusd1.org/contents/events_blueribbon.html)

- ACT Composite: State average is 19.6; National average is 20.9
- SAT Scores
    - Reading: State: 521; National: 496
    - Math: State: 528; National: 514
    - Writing: State: 502; National: 488

Higher Education

Metrics	Winnerville		Loserville	
Community Colleges	In town	Several	Out of town	
Programs Offered	Growing	Large Variety	Unchanged	
Colleges/Universities	In town	Several	Out of town	
Enrollment	Growing	Rising, but still ranked 27th in nation	Shrinking	

Support/Sources:

According to Wikipedia (http://en.wikipedia.org/wiki/Tucson,_Arizona#Education), the following colleges and universities have a presence in Tucson.

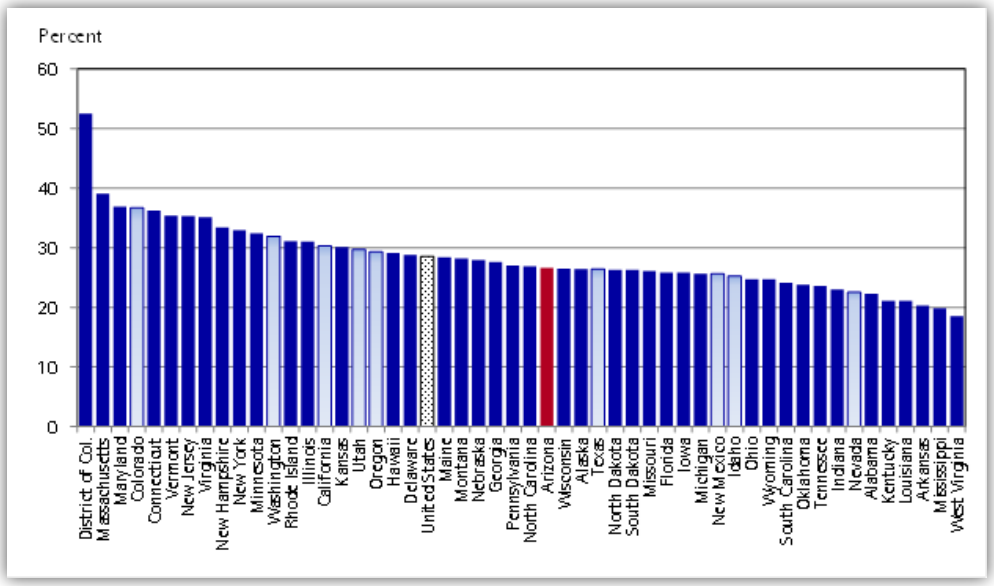
- University of Arizona: established in 1885; the second largest university in the state in terms of enrollment with over 36,000 students.
- Pima Community College has ten campuses.
- Arizona State University, College of Public Programs, School of Social Work, Tucson Component has for over 30 years conferred Bachelor's of Social Work (BSW) and Master's of Social Work (MSW) degrees to those who have earned them at their Tucson Campus.
- Tucson College has one Tucson campus.
- Brown Mackie College has one Tucson campus.
- Brookline College has one Tucson campus.
- University of Phoenix has four Tucson campuses.
- The Art Institute of Tucson has one campus.
- Prescott College has a Tucson branch campus.
- Northern Arizona University has a Tucson branch campus.
- Arizona School of Acupuncture & Oriental Medicine.
- The Art Center Design College has two Tucson campuses.

College Attainment:

"The U.S. Census Bureau estimated that there were 1,119,198 Arizona residents age 25 and older with a bachelor's degree or better in 2011. That translated into a college attainment rate of 26.6%, which was 1.9 percentage points below the national average of 28.5%, and ranked the state 27th in the nation. As ***Exhibit 1*** *shows, Arizona's college attainment rate was well below that of several western states, including Colorado, Washington, California, Utah, and Oregon. Nevada, Idaho, New Mexico, and Texas posted lower college attainment rates than Arizona in 2011."*

Exhibit 1: U.S. State College Attainment Rates in 2011

Percent of the Population Age 25 and Older with a Bachelor's Degree or More



"Education is a crucial determinant of long-run income growth. This assertion seems obviously true for individuals, where increases in education lead to higher salaries over time. However, something similar is also true for nations, states, counties, metropolitan areas, and nonmetropolitan areas[i]. High concentrations of highly educated residents in a region, particularly those with a Bachelor's degree or better, leads to stronger income growth in the region in the long run. Further, it is not just highly educated workers that benefit. Less educated workers also earn more in cities with high concentrations of the highly educated. Thus, the college attainment rate is one critical determinant of Arizona's economic success. Unfortunately, while the state rate has risen rapidly during the past 70 years, its growth has not kept pace with the nation. In fact, Arizona's college attainment rate was below the national level in 2011." (http://azeconomy.eller.arizona.edu/AZE13Q4/college_attainment_rates_in_Arizona.asp)

CONCLUSION:

Southern Arizona is vulnerable to a qualified worker problem unless education outcomes improve. Education must improve the most and the fastest in the Hispanic and Native American communities due to the fact that they comprise more than one-third of the total population base and have some of the poorest education outcomes.

Other observations important in characterizing the local education situation:

- Open enrollment in TUSD continues to offer parents the option of placing their students in the school of their choice.
- Charter schools increase school choice and often increase the quality of education.
- TUSD Superintendent H.T. Sanchez has enacted a bold five-point plan to bring badly needed improvements to the district and should be supported.
- Chancellor Lee Lambert brings real world success in community college education to Pima Community College and the Chamber also urges strong support for Chancellor Lambert's agenda.
- The business community, education community and many civic leaders are considering a coordinated program called STRIVE to bring greater community resources to bear in helping the cause of better "cradle to career" education outcomes.
- Common Core Standards (called Arizona College and Career Readiness Standards) are the surest way to ensure our K-12 students are able to compete in a 21st century global economy. We urge the State of Arizona to continue its support of this program.
- Funding for education remains very low in our state. No teacher should have to pay for his/her own teaching materials. Entry level compensation that is not much above the poverty line will not attract the best and brightest to educate our young people. We call on the 2015 Arizona State Legislature to come up with aggressive measures to fund education, increase accountability and produce a more competitive workforce.
- The Joint Technology Education District (JTED) program has a lengthy track record of success in preparing high school students for a career. It also has a near-perfect rate of high school graduation. For these reasons and others, JTED must receive the funding support it needs from the state of Arizona.
- Funding for the University of Arizona must also remain strong. The U of A is one of very few tier one research facilities. The future certainly belongs to creative problem solving, innovation and the commercialization of intellectual developments that are many times born in a university setting.

METRIC #5 – CRIME

SIGN OF LOCAL CRIME RATES GOING THE RIGHT DIRECTION

"The community is getting safer and more honest. Corruption, violent and property crime are low and declining."

When the Boomers Bail, Mark Lautman

High on the list of contributors for quality of life in any community is the safety of its citizens. In this area Tucson and Pima County have their work cut out for them.

CITY OF TUCSON

- Population: 525,000
- Tucson Police Department (TPD) annual budget: $130.0 million
- Supports 1,250 officers and staff

According to data provided from City of Tucson Police 2011 annual report:

- Crime in the City of Tucson has been on the decline since 2004-2005.
- In 2005 there were just over 5,000 violent crimes (homicide, sexual assault, robbery and aggressive assault, while 2010-2011 showed less than 3,500.
- Property Crime in the city was on the decline from 2004-2009 (48,000 – 27,000) but 2010 and 2011 saw a slight (12%) uptick to about 29,000.

Other important statistics:

- While crime in the City of Tucson has decreased, according to the U.S. Department of Justice, Tucson Police Department and the Pima County Sheriff's Department, in the past decade violent and property crimes have been well above both state and national averages.
- While surrounding areas of Tucson are low-to-average, the Cities of Tucson and South Tucson have "High or "Very High" crime rates in comparison with U.S. averages according to City-Data.com.
- Tucson is ranked as more dangerous than 94% of other U.S. cities in terms of neighborhood crime, according to Neighborhood Scout.
- According to *Sperling's Best Places*, Tucson is ranked a 7 out of 10 (on a scale of 1-10, with one being low) in both violent and property crimes, compared to other U.S. cities which have an average ranking of 4.

Several factors affect these outcomes but it is hard to pin it on any one thing. Economy, police budgets and better practices, increased border security and fencing, population increases and effect on mathematical models and perhaps even SB 1070.

Effects of the Economy: The violent crime numbers began to drop (according to the City Police Annual Report) in 2006. This was a period of economic expansion immediately before the beginning of the Great Recession. Crime continued to drop through 2010. The 2011 statistics show a slight increase in violent crime and 2012 data indicate Tucson still has a high violent crime rate compared to Phoenix and the U.S. (FBI data from Pima County report).

Property crime in the city decreased radically from 2004 to 2005 and beyond even though those years are a mix of top of the boom (2005-06-07) and bottom of the economic barrel (2008-2009). In 2010 a spike occurred in property crime back near the '05 levels but was followed by a 5% drop back into the trend in 2011.

Budget and staffing reductions in the City of Tucson force may also have an impact on crime statistics but as public safety budgets have dropped, so has crime and significantly so. This direct correlation is unexpected but encouraging.

Data provided in another Pima County Sheriff's 2012 overview report shows the City of Tucson as the *highest violent crime city in all of Arizona* (FBI data) with over 620 incidents per 100,000 population (FBI data).

Violent Crime Comparisons:

- City of Tucson = **620** per 100,000
- Phoenix = 520
- Maricopa County = 350
- Pima County = 180
- Arizona = 400
- USA = 400

Property Crimes per 100,000

For property crimes, the City of Tucson does a little better.

- Tucson ranks #3 in Arizona with 1,500 per 100,000
- That is lower than the 1,750 per 100,000 in Phoenix
- That is lower than the 1,700 per 100,000 in Glendale

City of Tucson Summary

While crime rates have declined in recent years, it is important to note that on a relative scale local crime rates remain high compared to other cities.

- The City of Tucson has a high crime factor (violent crime in particular).
- The number has declined in recent years but still remains high in comparison to other areas.
- A higher than average level of poverty is a likely contributor to the crime rate.
- Interestingly as City law enforcement budgets have been cut crime and calls for help have gone down.

UNINCORPORATED PIMA COUNTY

- Population approximately 465,000
- Sheriff's department budget:
  - 2007-2008 $*111.0 million*
  - 2012-2013 = *$135.0 million*
- Currently about 1,000 officers and staff

Another 400 or so corrections officers for the jail operation are not included in staffing or the budget number above.

Pima County is one of the largest counties in size in the USA with 9,187 sq miles.

The crime rate in Pima County is below Arizona and national levels. Calls for service have also been declining since 2006 and that trend looks to be continuing.

Violent Crime Comparisons:
FBI data show Pima County violent crime statistics per 100,000 populations.

- Pima County = 180
- City of Tucson = 620
- Phoenix = 520
- Maricopa County = 350
- Arizona = 400
- USA = 400

Property Crimes per 100,000

- Phoenix 1,750
- City of Tucson 1,500
- Pima County 1,020
  Source: FBI

Calls for service to the sheriff's department have dropped significantly since 2006. The number reached a recent low in 2011 and is trending at or below that number in 2013.

Pima County calls for service for **all crime**.

- 2006: 154,000
- 2009: 148,000
- 2011: 129,000
- 2012: 131,000
- 2013: 128,000 (estimate based on ten months of actuals)

"Type 1" crime in Pima County such as murder, assaults, homicides, sexual assaults, burglary and auto theft, etc. has dropped since 2006 and has flattened over the last few years. That trend looks to be continuing on in 2013. The slowed activity must have a relationship with the slower economy, reduction in border activity, SB 1070 and more focused law enforcement methods as a result of reduced budgets.

"Type 1" crimes for Pima County

- 2006: 14,787
- 2009: 12,609
- 2011: 12,434
- 2012: 12,507

"Type 2" crimes in Pima County such as forgery, criminal damage, stolen property, DUI, fraud, etc. also dropped from over 22,000 in 2006 to a flat line of just less than 17,000 over last the four years.

"Type 2" crimes trend in Pima County

- 2006: 22,400
- 2009: 19,700
- 2011: 16,800
- 2012: 16,871
- 2013: 16,707 *(estimate based on annual trends and ten months actual)*

Again all crime has come down since the go-go years in the mid 2000s. The Pima County Sheriff's Department has been growing in the last few years and this should help maintain the trend.

Unincorporated Pima County Summary:
Data indicate that crime rates seem to be on the decline in unincorporated Pima County. Whether this is due to increased funding or other factors, the trend is viewed as a positive.

CONCLUSION:

Crime rates in the City of Tucson and Pima County are a tale of contrasts. According to available data, crime rates in the City of Tucson, while declining, remain higher than national averages as well as the averages of regional MSAs Tucson is likely to compete with. On the other hand, unincorporated Pima County's crime rates are low in both absolute and relative terms.

As the center and most heavily populated area of the Tucson MSA, the City of Tucson simply must fight crime with every available measure. Crime and the causes of crime need to be dealt with very seriously if Tucson and Pima County are to offer the kind of quality of life its citizens and future citizens expect.

In the view of the Tucson Metro Chamber, local and national economic conditions are likely contributors to some crime statistics. **We believe that job creation and improvement of local economic prosperity will have a positive effect on reducing crime.**

METRIC #6 – HOUSING

SIGN OF LOCAL HOUSING GOING THE RIGHT DIRECTION

"Workers earning 1.5 times the poverty rate can afford to rent or own a home."

When the Boomers Bail, Mark Lautman

Author Mark Lautman places a high value on available and affordable housing choices as an indicator of a community's ability to attract and hold a qualified workforce. Housing choices that respond to preferences of all demographic groups are necessary to compete for these workers.

Conclusions of the recently-completed *Imagine Greater Tucson* project point to both a community-wide preference for future housing development while leaving open options that offer choice.

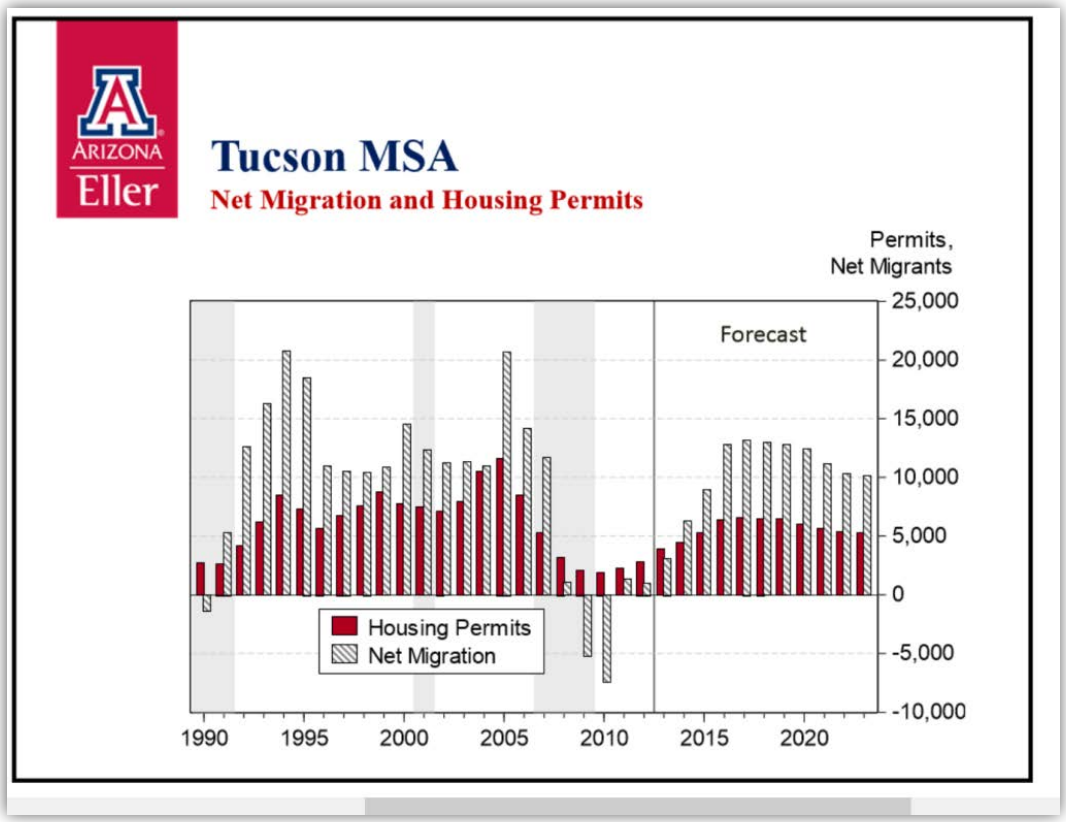
While many sectors of the mature population seem to prefer suburban, single family dwellings, younger citizens, especially the 20 and 30-something "Millennials" often seem to lean toward more densely-populated urban settings. Tucson and Pima County must respond to these shifts in housing preferences to remain competitive going forward.

Among some key housing metrics, we offer the following as past, present and future indicators:

- Home ownership (55.2%) in Pima County is slightly higher than home ownership in Arizona overall (54.4%). However, both are below the 60% standard used by Arizona Health Matters.
- In the 2012 *American Community Survey* (ACS), 53.5% of Pima County renters spent 30% or more of their household income on rent, while statistics for the renter percentages for Arizona and the United States in the same survey are 51.4% and 52.0%, respectively.
- ACS 2012 one-year estimates 2007 through 2012 demonstrate a flattening trend in recent years for all three geographic areas for the percentage of renters spending 30% or more of their household income on rent. Pima County shows a wrong-way trend in the most recent year available, with the percentage of renters spending 30% or more of their household income on rent rising from 52.9% in 2011 to 55.2% in 2012. (In this metric, lower percentage values are better than higher.)
- Median Household Income, a widely-used barometer of economic vitality, indicates that, as a component of the renter spending formula, Tucson and Pima County are 8.2% and 12.2% below that of the state and nation. Of the three comparison areas, growth of Median Household Income in Pima County has been the flattest. Median Household Income in Pima County was $43,867 (ACS 2012, 1-year estimate). Converted to an hourly wage this becomes $21.09 per hour. Based on Economic Modeling Specialists International (EMSI) occupational data, 77% of Pima County's approximate 503,000 jobs do not meet this housing income threshold. Barring other sources of income, this suggests that most households would need

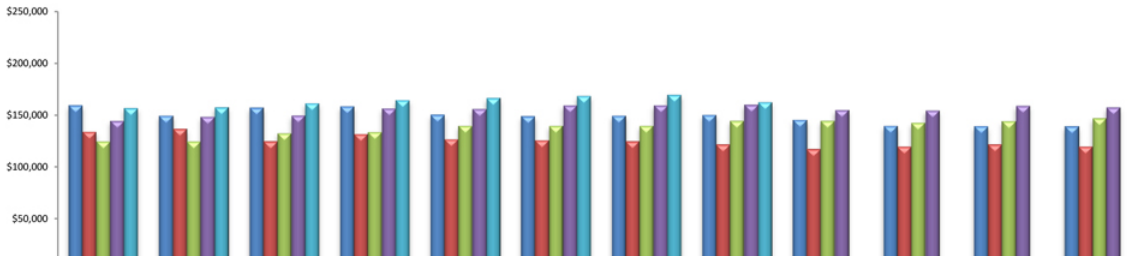
to hold down more than one job or that most households would need to have multiple job holders to be able to purchase a home.

- Home Sales Price: According to Zillow.com, the Median Sales Price of homes in Pima County in May 2014 was $171,775. A measure of housing affordability used in Pima County is household income times 2.8 (City of Tucson and Pima County: 5-Year HUD Consolidated Plan). This affordability indicator for Pima County is $122,827 and 28.5% below the current Median Sales Price.

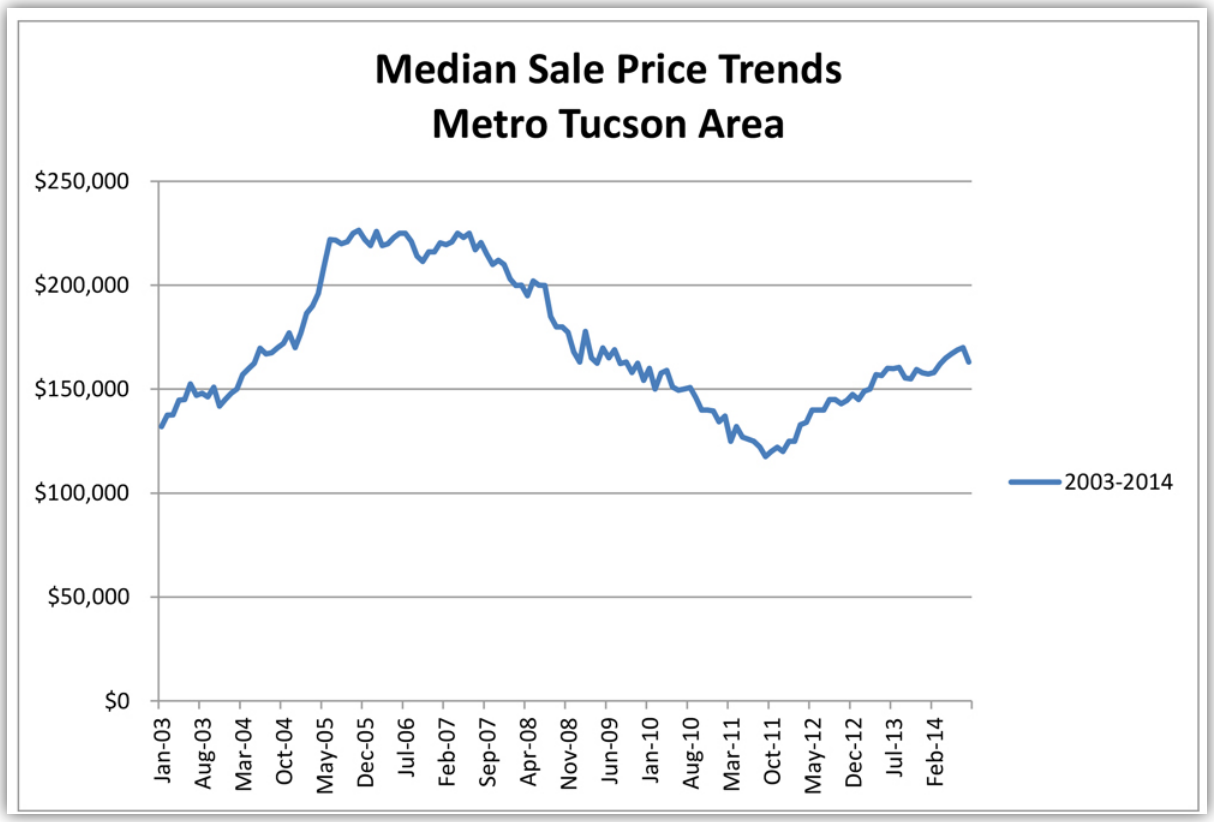


The following graphs and charts are from the Tucson Association of Realtors:

Median Sale Price 2003-2014

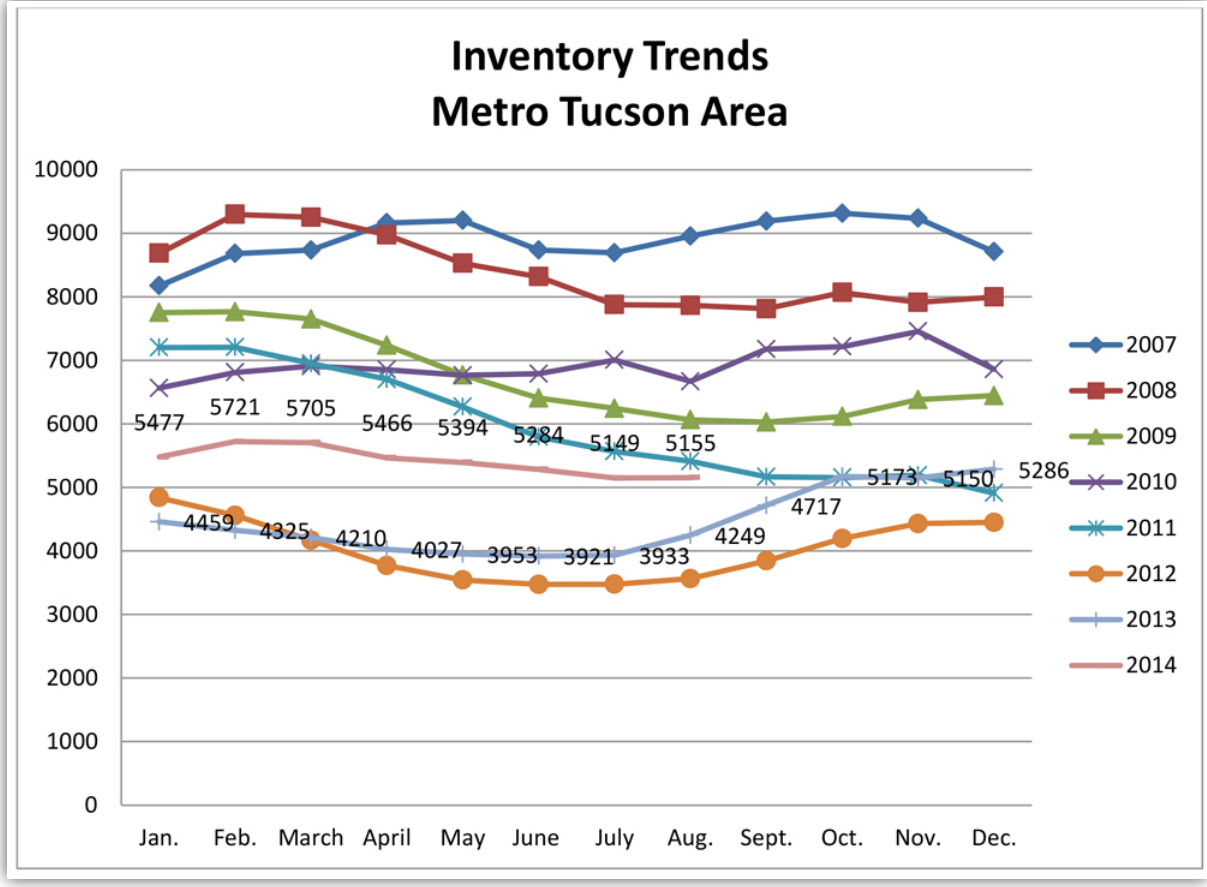


	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003	$132,000	$137,500	$137,610	$144,700	$145,000	$152,450	$146,990	$148,000	$146,350	$150,900	$141,825	$145,000
2004	$148,000	$150,000	$157,000	$159,900	$162,487	$169,700	$167,000	$167,500	$169,950	$172,000	$177,000	$170,000
2005	$177,000	$186,500	$190,000	$196,000	$209,000	$222,000	$221,650	$220,000	$220,915	$225,000	$226,465	$221,900
2006	$219,000	$225,900	$219,000	$220,000	$223,000	$225,000	$225,000	$221,138	$214,000	$211,383	$216,000	$215,995
2007	$220,365	$219,500	$220,815	$224,921	$223,000	$225,000	$217,000	$220,495	$215,000	$210,000	$212,000	$210,000
2008	$203,000	$199,900	$200,000	$195,000	$202,000	$200,000	$199,900	$185,000	$180,000	$180,000	$177,300	$168,000
2009	$163,000	$177,750	$165,000	$162,500	$169,900	$165,000	$169,000	$162,335	$163,000	$158,000	$162,500	$154,262
2010	$160,000	$150,000	$157,680	$159,000	$151,000	$149,450	$150,000	$150,750	$145,855	$140,000	$139,900	$139,500
2011	$134,250	$137,000	$125,000	$132,000	$127,000	$126,000	$125,000	$122,200	$117,500	$120,000	$122,000	$120,000
2012	$125,000	$125,000	$132,900	$134,000	$140,000	$140,000	$140,000	$145,000	$144,950	$143,000	$144,627	$147,500
2013	$145,000	$149,000	$150,050	$157,000	$156,500	$160,000	$159,900	$160,500	$155,399	$155,000	$159,500	$157,900
2014	$157,250	$158,000	$162,000	$164,900	$167,000	$168,815	$170,000	$163,000				



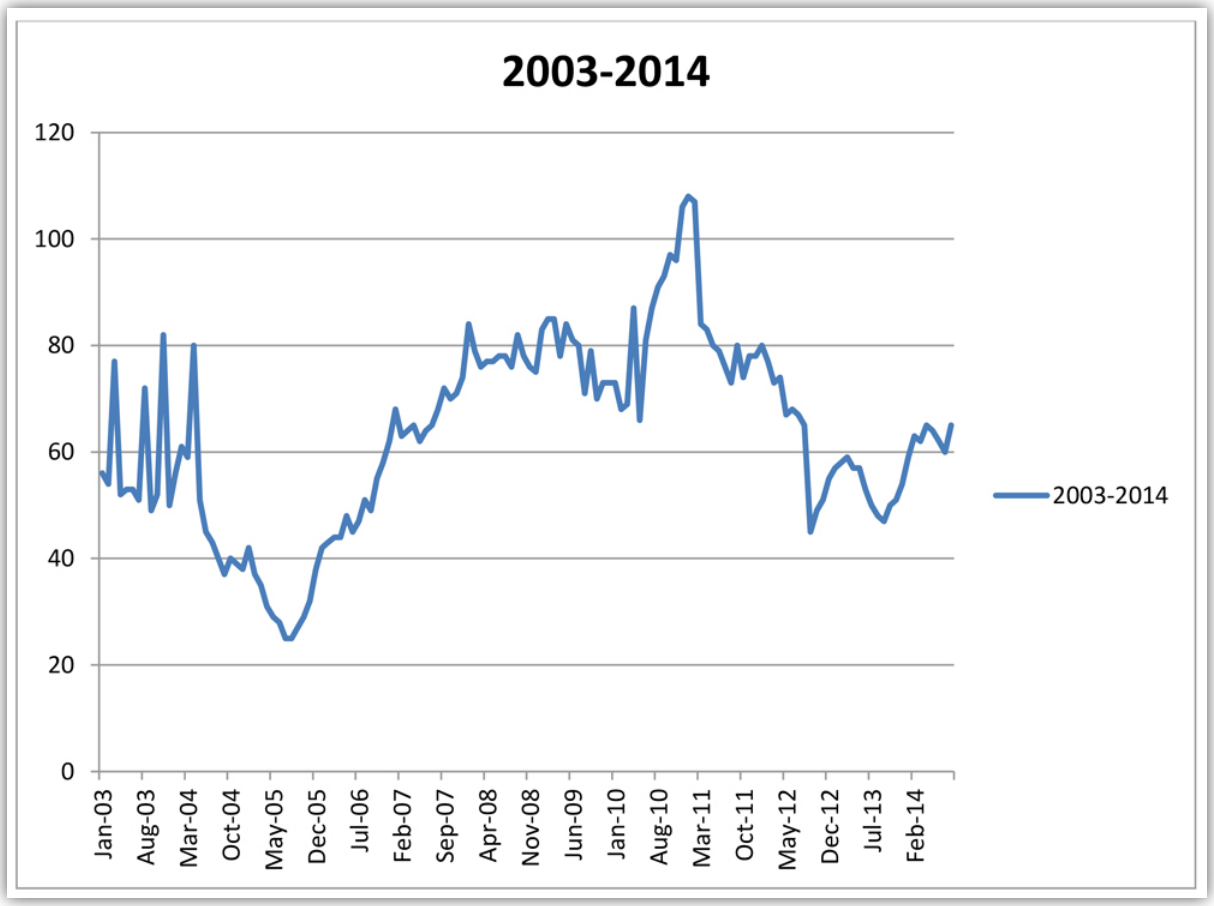
Tucson Metro Area Inventory 2007-2014

	2007	2008	2009	2010	2011	2012	2013	2014
Jan.	8173	8684	7753	6563	7201	4840	4459	5477
Feb.	8679	9297	7765	6810	7207	4560	4325	5721
March	8735	9251	7650	6909	6952	4168	4210	5705
April	9164	8973	7235	6853	6703	3770	4027	5466
May	9201	8527	6769	6764	6269	3544	3953	5394
June	8734	8317	6406	6789	5795	3474	3921	5284
July	8692	7876	6243	7006	5566	3477	3933	5149
Aug.	8954	7864	6064	6668	5412	3564	4249	5155
Sept.	9190	7813	6028	7177	5167	3845	4717	
Oct.	9313	8067	6117	7217	5155	4195	5173	
Nov.	9234	7913	6381	7455	5,191	4430	5150	
Dec.	8708	7995	6445	6859	4,911	4449	5286	



Average Days On Market
Tucson Metro Area

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
JAN	56	56	42	42	68	84	83	73	108	80	57	59
FEB	54	61	37	43	63	79	85	68	107	77	58	63
MAR	77	59	35	44	64	76	85	69	84	73	59	62
APR	52	80	31	44	65	77	78	87	83	74	57	65
MAY	53	51	29	48	62	77	84	66	80	67	57	64
JUN	53	45	28	45	64	78	81	81	79	68	53	62
JUL	51	43	25	47	65	78	80	87	76	67	50	60
AUG	72	40	25	51	68	76	71	91	73	65	48	65
SEP	49	37	27	49	72	82	79	93	80	45	47	
OCT	52	40	29	55	70	78	70	97	74	49	50	
NOV	82	39	32	58	71	76	73	96	78	51	51	
DEC	50	38	38	62	74	75	73	106	78	55	54	



CONCLUSION:

On one hand, housing seems to be returning to a level of historical normalcy. On the other, Tucson and Pima County may offer choice in housing, but a higher than average level of poverty and lower than average household income level greatly restrict access to home ownership by many citizens. **Again, an overall lack of higher income jobs and a less than desirable level of community prosperity may be responsible for negativity in this metric in the past, present and (unless seriously addressed) the future.**

METRIC #7 – HEALTHCARE

SIGN OF LOCAL HEALTHCARE GOING THE RIGHT DIRECTION

"Access and quality of health care services are good and improving."

When the Boomers Bail, Mark Lautman

Healthcare is the final metric on Lautman's list of seven key community measures. A healthy community is widely regarded as a community poised for enjoying a higher quality of life due to the fact that its citizens embrace healthy lifestyles, require less medical attention and spend less of their income on medical treatments.

According to a broad base of healthcare metrics, Tucson and Pima County have a mixed review in this category, but clearly there is a need for some improvement in order to earn positive marks in this category.

Healthcare costs per capita:

- Tucson $6,324
- Arizona $5,434
- USA $6,815

Case Studies on Regional Health Care Improvement

Southern Arizona: A Desert Region Pursuing Better Health and Health System Performance

By Sarah Klein, Douglas McCarthy and Alexander Cohen

Abstract: The Southern Arizona region encompassing Tucson ranks in the top quartile among 306 U.S. regions on the Commonwealth Fund's *Scorecard on Local Health System Performance*, outperforming other regions with similar socioeconomic characteristics. Its better-than-expected performance may stem in part from the emphasis providers place on delivery system innovation and best practices and the prevalence of managed care arrangements. The region also benefits from the activity of several nonprofit organizations that collaborate with government agencies, health systems, and academic institutions to support patient education and population health initiatives. Also notable are efforts to improve the accessibility and quality of care for underserved populations through the expansion of federally qualified health centers, the creation of health promotion programs by local Native American tribal organizations for their communities, and the use of telemedicine and community health workers.

Local Scorecard Performance Results for the Tucson Hospital Referral Region

Dimension and Indicator	Data Year	Tucson HRR Quartile	Tucson HRR Rate	All-HRR Median	Top 90th Percentile	Top 99th Percentile	AZ State
Access							
Percent of adults ages 18–64 insured	2009–2010	3	80.0	80.2	87.5	92.6	77.3
Percent of children ages 0–17 insured	2009–2010	4	89.3	93.8	96.3	98.2	87.6
Percent of adults reported no cost-related problem seeing a doctor when they needed to within the past year	2009–2010	1	89.3	85.3	90.7	93.9	87.6
Percent of at-risk adults visited a doctor for routine checkup in the past two years	2009–2010	2	85.4	85.2	90.4	92.9	84.2
Percent of adults visited a dentist, dental hygienist, or dental clinic within the past year	2010	2	70.5	69.7	77.9	82.7	70.6
Prevention and Treatment							
Percent of adults with a usual source of care	2009–2010	2	82.7	82.4	88.8	92.0	81.4
Percent of adults age 50 and older received recommended screening and preventive care	2008 & 2010	2	44.5	44.2	50.8	54.5	44.2
Percent of adult diabetics received recommended preventive care	2008–2010	2	49.5	45.5	55.7	63.1	44.8
Percent of Medicare beneficiaries received at least one drug that should be avoided in the elderly (1)	2007	1	22.2	25.0	17.9	12.9	n/a
Percent of Medicare beneficiaries with dementia, hip/pelvic fracture, or chronic renal failure received prescription in an ambulatory care setting that is contraindicated for that condition (1)	2007	1	15.0	19.7	15.3	12.5	n/a
Percent of patients hospitalized for heart failure who received recommended care (2)	2010	3	92.8	94.7	97.5	98.9	93.6
Percent of patients hospitalized for pneumonia who received recommended care (2)	2010	3	93.5	95.1	96.9	98.3	94.1
Percent of surgical patients received appropriate care to prevent complications (2)	2010	3	96.2	96.2	97.4	98.6	95.4
Percent of hospitalized patients given information about what to do during their recovery at home	2010	3	82.4	82.6	86.2	87.9	82.1
Percent of patients reported hospital staff always managed pain well, responded when needed help to get to bathroom or pressed call button, and explained medicines and side effects	2010	3	61.5	63.2	67.1	70.3	62.5
Risk-adjusted 30-day mortality among Medicare patients hospitalized for heart attack (3)	7/2007 – 6/2010	2	15.5	15.6	14.4	13.1	15.7

Risk-adjusted 30-day mortality among Medicare patients hospitalized for heart failure (3)	7/2007 – 6/2010	2	10.8	11.4	9.9	9.1	10.5
Risk-adjusted 30-day mortality among Medicare patients hospitalized for pneumonia (3)	7/2007 – 6/2010	2	11.6	11.8	10.6	9.5	11.5
Percent of home health care patients whose ability to walk or move around improved (4)	4/2010 – 3/2011	4	46.9	53.4	56.7	58.6	46.9
Percent of home health care patients whose wounds improved or healed after an operation (4)	4/2010 – 3/2011	4	86.8	88.0	90.3	92.0	85.7
Percent of high-risk nursing home residents with pressure sores (5)	2008–2009	3	8.4	10.9	7.9	6.1	n/a
Percent of long-stay nursing home residents who were physically restrained (5)	2008–2009	3	3.6	3.3	1.5	0.6	n/a
Percent of long-stay nursing home residents who have moderate to severe pain (5)	2008–2009	3	4.8	3.6	2.2	1.4	n/a
Percent of Medicare decedents with a cancer diagnosis without any hospice or who enrolled in hospice during the last three days of life	2007	1	44.8	55.6	46.6	38.6	43.3

Dimension and Indicator	Data Year	HRR Quartile	HRR Rate	All-HRR Median	Top 90th Percentile	Top 99th Percentile	State Rate
Potentially Avoidable Hospital Use and		1	n/a	n/a	n/a	n/a	n/a
Hospital admissions among Medicare beneficiaries for ambulatory care–sensitive conditions, per 100,000 beneficiaries	2009	1	4,057	6,184	4,045	2,691	4,165
Readmissions within 30 days of discharge as percent of all admissions among Medicare beneficiaries	2008	2	16.7	17.7	15.1	13.1	17.0
Potentially avoidable emergency department visits among Medicare beneficiaries, per 1,000 beneficiaries	2009	1	165	197	162	139	190
Percent of long-stay nursing home residents hospitalized within six-month period	2008	1	9.5	20.0	11.9	8.3	10.8
Percent of first-time nursing home residents readmitted within 30 days of hospital discharge to the nursing home	2008	3	21.4	20.6	15.8	12.7	21.8
Percent of home health care patients with a hospital admission	4/2010 –3/2011	2	25.8	26.6	22.4	19.9	26.9
Medicare imaging costs per enrollee	2008	4	$393	$288	$189	$143	$429
Total Medicare (Parts A & B) reimbursements per enrollee (6) (expressed as a ratio to all-HRR median)	2008	2	$7,201 (0.91)	$7,952	$6,432	$5,699	$7,563
Total reimbursements per commercially insured enrollee ages 18–64 (6) (expressed as a ratio to all-HRR median)	2009	1	$2,603 (0.79)	$3,314	$2,801	$2,524	$3,130
Healthy Lives		2	n/a	n/a	n/a	n/a	n/a
Potentially preventable mortality, deaths per 100,000 population (7)	2007 – 2009	2	91.2	91.3	71.6	59.1	82.3
Breast cancer deaths per 100,000 female population (8)	1996 – 2005	1	21.6	28.9	22.6	19.4	21.5
Colorectal cancer deaths per 100,000 population (8)	1996 – 2005	1	15.6	22.8	16.9	12.8	16.3
Infant mortality, deaths per 1,000 live births (8)	1996 – 2005	3	7.4	6.8	4.9	4.0	6.7
Percent of live births with low birth weight (8)	1996 – 2005	2	7.1	7.5	6.0	5.4	7.0
Suicide deaths per 100,000 population (8)	1996 – 2005	3	17.5	15.4	8.2	4.7	16.0
Percent of adults who smoke	2009 – 2010	1	14.3	19.0	12.6	8.4	14.9
Percent of adults ages 18–64 who are obese (BMI >= 30)	2009 – 2010	2	29.5	29.5	23.8	17.9	27.0
Percent of adults ages 18–64 who have lost six or more teeth because of tooth decay, infection, or gum disease	2009 – 2010	3	10.7	10.1	5.9	3.6	9.1
Percent of adults ages 18–64 report fair/poor health, 14 or more bad mental health days, or activity limitations	2009 – 2010	3	31.1	29.5	23.5	19.6	29.4

Demographic and Market Characteristics

	Data Source	Data Years	City of Tucson	Tucson HRR	Arizona	Median HRR
DEMOGRAPHICS						
Total Population	American Community Survey, U.S. Census	2007 -2011	520,981	1,298,642	6,337,373	616,212
Age, under 18			23.1	23.3	25.6	23.7
Age, 65 and over			11.8	15.2	13.6	13.6
Race (1)						
White	American Community Survey, U.S. Census	2007 -2011	74.7	78.5	78.7	82.6
Black or African-American			4.8	3.3	4.0	6.5
Other race or multiracial			20.5	18.2	17.3	7.4
Ethnicity						
Hispanic or Latino			41.3	35.4	29.4	6.6
Non-Hispanic, White			47.9	55.4	58.2	74.4
Non-Hispanic, Black or African-American			4.4	3.0	3.8	6.3
Non-Hispanic, Other Race or multiracial			6.4	6.2	8.6	4.1
Median Household Income			$37,448	$48,049	$50,752	$49,276
Percent below Federal Poverty Level (FPL)			22.6	17.9	16.2	14.8
Percent below 200% FPL			46.8	38.6	36.1	34.5
High school education or less, adults over 25			41.1	38.6	39.5	45.3
Bachelor's degree or higher			24.5	27.1	26.4	24.1
MARKET CHARACTERISTICS						
Hospital Beds per 1,000 population	Dartmouth Atlas	2006		2.0	2.1	2.4
Hospital Market Concentration **(2)**	Medicare Provider of Service File	2010		1,563 (Moderate)	1,669* (Moderate)	2,541 (High)
Primary care physicians per 100,000 residents	Dartmouth Atlas	2006		66.7	61.1*	68.8
Specialty physicians per 100,000 residents				124.3	113.7*	117.5
Market share of top 3 insurers (commercial)	Managed Market Surveyor, Healthleaders-Interstudy **(3)**	2010		65.1	66.9	74.6
HMO Penetration (among all payors)				30.2	24.9	16.5
Total reimbursements per commercially-insured patient under age 65	Commercial Claims **(4)**	2009		$2,603	$3,130	$3,314
Total standardized Medicare (Parts A & B) spending per beneficiary	IOM analysis of Medicare claims **(5)**	2009		$7,556	$7,906	$8,483
Percent change in standardized Medicare spending per beneficiary (2007-2011)	IOM analysis of Medicare claims **(5)**	2007 -2011		9.2	12.5	10.5

HRR = Hospital Referral Region, as defined by the Dartmouth Atlas of Health Care.

Note: The U.S. rate represents the median of all HRR-level rates.

* State rate not available. Figure reported represents the median of all HRRs anchored within the state.

(1) The authors stratified each region's population by those identifying as 'White only', 'Black or African-American only', or 'any other race or combination of racial backgrounds'. These three categories capture 100 percent of the population. Individuals identifying as Hispanic or Latino ethnicity (and non-Hispanic racial prevalence) are displayed separately.

(2) Market concentration is calculated using the Herfindahl-Hirschmann Index (HHI). General standards outlined by the U.S. Department of Justice divide the spectrum of market concentration into three broad categories: unconcentrated (HHI below 1,000), moderately concentrated (HHI between 1,000 and 1,800), and highly concentrated (HHI above 1,800).

(3) Commonwealth Fund's analysis of Managed Market Surveyor, Healthleaders-Interstudy (Jan. 2010). HealthLeaders-Interstudy. Used with Permission. All Rights Reserved.

(4) Commercial spending estimates provided by M. Chernew, Harvard Medical School Department of Health Care Policy, analysis of the Thomson Reuters MarketScan Database. Total per-enrollee spending estimates generated from a sophisticated regression model, include reimbursed costs for health care services from all sources of payment including the health plan, enrollee, and any third-party payers, incurred during 2009. Outpatient prescription drug charges are excluded, as were enrollees with capitated plans and their associated claims. Estimates for each HRR were adjusted for enrollees' age and sex, the interaction of age and sex, partial-year enrollment, and regional wage differences.

(5) Analysis performed by the Institute of Medicine. Total Medicare per-person spending estimates include payments made for hospital (part A) and outpatient (part B) services. Estimates exclude extra payments to support graduate medical education and treating a disproportionate share of low-income patients. Data are standardized by making adjustments for regional wage differences.

- Pima County is ranked 6th among Arizona's 15 counties in health outcomes according to County Health Rankings and Roadmaps.
- America's Health Rankings ranks Arizona 28th in health among other states.
- Approximately 26.6% of adults in Pima County are obese, which is higher than the state's obesity rate of 24.7% according to Centers for Disease Control and Prevention.
- In Pima County, the uninsured population is 18%, which is lower than the overall Arizona average (20%) according to County Health Rankings and Roadmaps.
- Pima County Community Health Needs Assessment report states that Pima County is a federally designated Health Professional Shortage Area (HPSA) for primary care, behavioral health and dental. The County also is federally designated a Medically Underserved Area (MUA). Twenty-seven percent of the population is located in a Primary Care HPSA; 55 % is located in a dental care HPSA, 100 % is in a low-income behavioral health HPSA and 31 % in a medically underserved area.
- In Pima County, families and children living below the poverty level are on the rise according to Arizona Health Matters.
- Medicare beneficiaries who were treated for asthma have increased in Pima County according to Arizona Health Matters.
- On the bright side, the Pima County Community Health Needs Assessment report shows Pima County experienced a significant decline in the number of teen pregnancies.

CONCLUSION:

Despite a mixed set of statistics, the overall picture of Pima County's healthcare is positive. Pima County has an adequate number of hospitals and beds. Quality of care is rated average or good. There are plenty of clinics available but funding, especially government-paid services, has been cut back over the span of the recession. Expanded care at the state level for low income people means more people will have access.

- The nursing shortage is always an issue. Southern Arizona has a doctor shortage due to new doctors moving out after school, some seeking better compensation in Phoenix.
- Long term pressure on doctors and hospitals to cut costs because of lower government reimbursement and rules will create tremendous uncertainty in the future.
- In general, the big unknown for the future of medical care are the trajectory of costs, new rules and the implementation of the Patient Protection and Affordable Care Act.
- There seems to be enough insurance programs offering a variety of choices for local consumers.

Communities across the country are promoting wellness as a solution to today's healthcare crises. Simply put, a community that is healthy needs less healthcare. A community that needs less healthcare is a community that will spend less on indigent and uncompensated care, the source of so many healthcare funding debates. Wellness is widely regarded as the best antidote to many of the "self inflicted" diseases that drive illness such as obesity and diabetes. Short of an improvement in overall community wellness, there is no question that more and more resources must be put into treating illness, a proposition that is growing more expensive and more contentious in the political policy arena.

Bottom line: Trends look good for healthcare availability in the short term. However, there may be cause for concern about the future as the debate about who gets what healthcare services and who pays for those services continues.

Tucson MSA Community Pass/Fail Report Card

	Past	Present	Future
Economy	+	--	--
Population	+	+	+
Ecosystem	+	+	+
Education	+	--	--
Crime	--	--	--
Housing	--	--	--
Health Care	--	+	+

Overall grade: 10 out of 21

TUCSON METRO CHAMBER EPILOG

The Tucson Metropolitan Statistical Area (MSA) has a lot going for it, but also has some areas that need attention and improvement if we are to compete as effectively as possible on the national stage. As the battle for a qualified workforce intensifies over the next decade or two, the marketplace will naturally select the winners and losers as it always does.

To compete, we have to offer the entire spectrum of what qualified workers are looking for. The seven main components are profiled in this document. We must remain acutely vigilant of the fact that this process will unfold itself in an insidious kind of way. Quietly. Gradually. Almost imperceptively. The process of this march toward economic Darwinism will unfold whether we want it to or not. That it will happen is not the question. What we do to prepare Tucson and Southern Arizona to emerge successfully from the process IS the question.

We should not ignore or discount the areas of our social, political and economic drivers that are negative indicators of our future -- we should address them and fix them. To do so will require bold thinking, political resolve, leadership and a culture of doing what is best for the entire community and not what is best for small special interest groups. There is too much at stake to think and act otherwise.

The Chamber's assessment (subjective decisions based on available data) is that we score a 10 out of a possible 21. If we discount the assessments given for past and present performance and just focus on the future, we score three out of seven. In the view of the Tucson Metro Chamber, the Tucson MSA is performing well in the areas of:

- Population
- Ecosystem
- Healthcare

We need to up our game in the areas of:

- Economy
- Education
- Housing
- Crime

Since we cannot do anything to change the past and since the present is but a single point in time, it is the FUTURE that must receive our utmost attention. John F. Kennedy once said, *"Let us not seek the Republican answer or the Democrat answer, but the right answer. Let us not seek to fix blame for the past. Let us accept our own responsibility for the future."*

The Tucson Metro Chamber will use the Tucson MSA Community Self Evaluation to focus the energies of the private and public sectors on the aspects of our community that will make the most difference to our citizens and to the future of our community going forward. Indeed, **let us accept our own responsibility for the future.**

CONTINUOUS MONITORING OR PROGRESS

This Tucson Metro Chamber report makes it clear that our region needs to continually monitor key indicators for the future. The Tucson Metro Chamber looks forward to the December 5 launch of the **Making Action Possible (MAP) Dashboard**, a trusted data source for key socio-economic indicators compiled by the University of Arizona. The MAP Dashboard will be continually updated, measuring our region's progress and inspiring action to improve our communities for the future.

COMMUNITY QUALITY SCORECARD PROJECT CREDITS

This body of work is the result of a devoted effort of investors in the Tucson Metro Chamber who mined data and provided input and support in the creation of this document. Without the efforts of this talented group of volunteers, this whitepaper would not have been possible. The Tucson Metro Chamber is truly grateful for the time and effort invested in the E>P Project by the following:

- Bill Assenmacher, CAID Industries, chair of the Tucson Metro Chamber Economic Development Committee
- Chris Bannon, University of Arizona College of Science
- Jesse Blum, CB Richard Ellis
- Carissa Fairbanks, Tucson Metro Chamber
- Dr. Nicola Richmond, Pima Community College
- Cristie Street, Nextrio
- Shirley Wilka, Tucson Metro Chamber