

City of Scottsdale

Target Industry Study



Executive Summary

Prepared by

Chabin Concepts Applied Economics Austin Consulting

June 2010

I. Introduction

The target industry study provides Scottsdale with a list of industry groups to "target" and allocate resources in order to enhance and diversify the economic base. This study incorporates analytical methods to identify the Scottsdale's best fit with primary industries – those industries that would most benefit from the community's assets and be willing to expand and/or relocate to the area – and those industries that bring value to the community in the form of investment, jobs, payroll and local purchasing.

The methodology employed in the target industry analysis involved quantitative and qualitative screens in the form of a four-step drill down approach, including:

Step 1: Initial Screen - at the regional level based on secondary data to identify those with the best potential for future growth. In addition to looking at high growth industries regionally, other screening criteria included the number of local firms, average wages, above average manufacturing capacity utilization and ability to diversify the local economy.

Step 2: Leverage Targets – investigate what industries may fit for Scottsdale that the Arizona Department of Commerce and the Greater Phoenix Economic Council are targeting.

Step 3: Compatibility Screening – identify industries that are a good fit with the competitive strengths of Scottsdale specifically.

Step 4: Niche and Emerging Industry Sectors

II. Target Clusters for Scottsdale

The recommendations for target industry clusters represent industries with strong performance, projected national growth in employment and output and above-average wages. Scottsdale is best suited for office users and light manufacturing. The city offers an attractive environment for headquarters, sales offices and high-skilled manufacturing that are compatible with the types of sites and buildings that are available, as well as a match with the local workforce.

FIGURE 1
INDUSTRY TARGET RECOMMENDATIONS FOR SCOTTSDALE

Target Cluster	Historic Growth in Maricopa County	Number of Establishments	Projected Employment Growth ¹	Projected Output Growth ¹	High Wages ²	Diversify Local Economy	Strong Regional Presence ³	City Sub- Area
Recreation Equipment	5%	162	1.33%	4.52%	+	+	++	North
Renewable Energy	481%	117	2.30%	6.10%	+++	+	emerging	Central
Information Technology	40%	2,889	3.02%	4.29%	+++		+++	Central & South
Insurance & Financial Svcs Processing Centers	34%	605	0.80%	3.95%	++		+++	North & Central

¹ Based on national projections by industry

A. Recreation Equipment

Recreation Equipment includes golf and tennis equipment manufacturing/R&D, golf and tennis equipment headquarters and related wholesale functions. Scottsdale already has a strong reputation for golf and tennis facilities as part of the tourism industry, which makes it an ideal headquarters location. These types of industries are also more sensitive to quality of life issues and desire an environment that supports the type of workers they need to attract. Additionally, there are a large number of professional golf and tennis players that live in the area and could be a draw for companies doing R&D testing for sports equipment. As a group, these industries have very strong projected output growth nationally as well as projected employment growth. Wage levels in manufacturing and wholesale are average, but wages in R&D and headquarters operations would be above average. This niche within the sporting equipment industry is a good fit for the types of buildings available in north Scottsdale (especially the Airpark), as well as a good fit for the labor force given the base of managerial and professional workers, engineers and professional athletes.

B. Renewable Energy

Renewable Energy is an emerging industry globally, but it is also an industry where GPEC has chosen to focus marketing efforts. There have been several new solar manufacturers that have recently announced new locations in other parts of the metro area. There have also been companies that have been able to take advantage of unused production capacity locally in semiconductor manufacturing facilities to produce solar cells. We believe the focus for Scottsdale is not manufacturing, but rather in headquarters and R&D functions with solar panel and solar cell manufacturing facilities locating throughout the region. This niche is a good fit for the types of buildings available in north and central Scottsdale as well as a good fit for the labor force.

 $^{^{2}}$ Average local wage above \$75,000 = +++, \$50,000 to \$75,000 = ++, \$35,000 to \$50,000 +.

³Over 5,000 employees in Maricopa County =+++, over 2,500 employees=++, 1,000 to 2,500=+.

C. Information Technology

Information Technology includes computer related services such as custom programming and systems design, computer equipment wholesale, internet publishing and web search portals, as well as education technology/digital learning. There is an existing base of information technology industries, including a number of small software companies, already located in the city. However, there is potential for expansion in this cluster where both projected output and employment growth are very strong. In particular, Scottsdale is developing a specialization in software to support digital learning that represents a growth opportunity within this cluster. These types of office users are compatible with the type of space available in the Airpark as well as business parks and mixed-use space in southern Scottsdale. Space at SkySong is a unique offering to leverage research and resources from ASU and strategic partners colocated there. Scottsdale also has a good base of highly skilled software engineers, programmers and systems analysts to support this industry.

D. Insurance and Financial Services Processing

Insurance and Financial Services Processing Centers build on an existing industry base in the region. This target industry cluster includes investment banking and securities, mutual funds, portfolio management, claims adjustment, credit card issuing and other nondepository credit intermediation. Insurance and financial services are generally higher value/higher paying activities than standard back office operations, although this cluster could create jobs at a broader range of skill levels than some of the other clusters. Insurance and financial services industries have experienced strong growth in the region and the national projections for future growth in both employment and output are above average. Based on work force and office space requirements, this cluster would be a good target for the north and central areas of the city.

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I. Introduction

This study incorporates analytical methods to identify the Scottsdale's best fit with primary industries – those industries that would most benefit from the community's assets and be willing to expand and/or relocate to the area – and those industries that bring value to the community in the form of investment, jobs, payroll and local purchasing. The target industry analysis provides Scottsdale with a list of industry groups to "target" and allocate resources in order to enhance and diversify the economic base. The study encompasses analysis of:

- Industry trends in the region and in the local area;
- Local industry specializations;
- Review of current state and regional targets;
- Scottsdale's assets and liabilities influencing "best fit" industries for the city; and
- Potential opportunities with emerging and niche markets.

From this study, elected officials and city staff can better understand Scottsdale's position in meeting the needs of the target industries, prepare strategies to remove any weaknesses or constraints to attracting the target industries and develop the city's value proposition to the industry – why they should consider Scottsdale over other locations.

Along with the presentation of recommended target industries for Scottsdale is an explanation of the methodology and rationale for the recommendations. Industry intelligence is provided for a more indepth understanding of Scottsdale's targets. The final section of this report covers implementation activities to market and position Scottsdale for these industries.

II. Economic Base Analysis

Understanding the City's current economic base and historical trends lays the foundation for identifying target industries. This section includes an analysis of regional trends at the six-digit industry level. Detailed economic base data is included in Appendix A.

A. Regional Trends

The fastest growing industries in Maricopa County (2001-2008) in terms of absolute job growth included professional employer organizations, warehouse clubs, restaurants, hospitals, colleges, doctor's offices, home health care and commercial banking. Each of these industries added between 6,000 and 20,000 jobs during this time period. All of these industries have moderate to strong projected employment and output growth nationally over the next ten years. It is important to note that 2008 data included the beginning of the recession that led to reductions in employment in many industries compared to the previous boom period. Despite the recession, the industries listed above still show strong net increases in employment regionally.

Absolute and percentage job growth are the initial screening criteria in analyzing potential targets. However, the targets should be limited to basic industries—those that bring in new wealth from outside the community. As a result, many of the industries with the highest absolute growth were not included in the final list.

In looking at only basic industries for Maricopa County, the largest industries in terms of employment size include semiconductors and electronics, aerospace, financial and insurance services, e-commerce, information technology, tourism and regional headquarters. These industries form the foundation of the region's economic base (Figure 1).

FIGURE 1 KEY ECONOMIC BASE COMPONENTS MARICOPA COUNTY

		Maricopa		Historic G		Maniana	- 2009	Projected .	
		Employ				Maricop		U.S. Growth 2	
NAICS	Description	2001	2008	Absolute	Percent	Firms	Avg Wage	Employment	Output
	Electronics						****		
334413	Semiconductors and related device mfg.	32,036	19,121	-12,915	-40%	47	\$100,245	-4.0%	5.9%
423690	Electronic Parts and Equipment Wholesalers	10,787	8,221	-2,566	-24%	422	\$81,060	0.4%	5.3%
	Aerospace								
334511	Search, detection, and navigation instruments	5,457	8,007	2,550	47%	29	\$94,898	-0.2%	3.3%
336412	Aircraft engine and engine parts mfg.	7,255	6,136	-1,119	-15%	30	\$82,929	0.0%	2.5%
336411	Aircraft manufacturing	4,208	3,830	-378	-9%	21	\$84,799	0.0%	2.5%
336413	Other aircraft parts and equipment	3,872	3,576	-296	-8%	42	\$63,149	0.0%	2.5%
	Back Office/Financial and Insurance Services								
522210	Credit card issuing	4,641	6,000	1,359	29%	54	\$68,160	0.5%	3.7%
522320	Financial transaction processing	11,675	9,269	-2,406	-21%	111	\$38,649	0.5%	3.7%
522390	Other credit intermediation activities	13,201	10,142	-3,059	-23%	211	\$63,933	0.5%	3.7%
523120	Securities brokerage	6,673	6,985	312	5%	186	\$85,892	1.1%	7.3%
524126	Direct property and casualty insurers	7,104	7,900	796	11%	181	\$65,533	-0.5%	1.5%
524113	Direct life insurance carriers	4,648	3,684	-964	-21%	149	\$71,266	-0.5%	1.5%
561422	Telemarketing bureaus	7,234	7,825	591	8%	142	\$35,945	1.4%	1.8%
	E-Commerce								
454113	Mail-order houses	834	4,849	4,015	481%	64	\$59,695	0.4%	4.2%
454111	Electronic shopping	2,494	2,721	227	9%	181	\$60,030	0.4%	4.2%
	Information Technology & Software								
541511	Custom computer programming services	4,449	6,539	2,090	47%	1,086	\$80,871	3.8%	3.8%
541512	Computer systems design services	5,249	7,741	2,492	47%	1,087	\$76,910	3.8%	3.8%
	Designal Handamarkan								
551114	Regional Headquarters Managing offices/Headquarters	16,763	21,636	4,873	29%	431	\$76,577	0.5%	4.3%
331114	Managing offices/ficauquarters	10,703	21,030	4,073	29%	431	\$70,577	0.570	4.570
712010	Tourism	5 3 5 0	7 60 7	1.240			#22 200	1 40/	2.50/
713910	Golf courses and country clubs	6,258	7,607	1,349	22%	114	\$23,300	1.4%	2.5%
713940	Fitness and recreational sports centers	4,783	6,824	2,041	43%	314	\$15,023	1.4%	2.5%
721110	Hotels and motels, except casino hotels	26,068	28,319	2,251	9%	375	\$28,242	0.5%	2.0%
722110	Full-service restaurants	48,615	61,911	13,296	27%	2,289	\$17,516	0.7%	1.5%
722211	Limited-service restaurants	38,272	45,708	7,436	19%	2,215	\$14,712	0.7%	1.5%
722310	Food service contractors	6,653	5,110	-1,543	-23%	195	\$21,627	0.7%	1.5%

In terms of high growth industries, those industry groups with the highest employment growth (25 percent or more from 2001 to 2008) and above average wages include managing offices and holding companies, insurance and financial services, information technology, instruments manufacturing, research & development, and telecommunications including satellite communications. These are not necessarily the largest industries in the region, but are the fastest growing. Also, while all of these industries have a presence in the region, they are not necessarily concentrated in Scottsdale. The Greater Phoenix market is very diverse and it is important to consider industries that have the best potential for expansion in Scottsdale.

In looking at high growth industries, it is also important to consider how the region compares to the nation. Figure 2 shows a listing of high growth industries nationally in terms of output and employment. It is interesting to note that while some of these industries have experienced growth historically in Greater Phoenix, others have not. Professional services, which tops the list for projected employment growth nationally, has experienced mixed trends in Maricopa County with about half of these industries showing positive historical growth. Technical and trade schools are projected to have strong growth nationally. This industry group has experienced recent growth locally as well. Other high growth industries nationally in terms of employment include social services, information services, design services and computer related services, most of which have also been growing in the region.

The other measure of industry growth is output. Top growth industries nationally in terms of output include those that will experience growth mostly as a result of new technology rather than increased manpower. These include computer and electronics manufacturing, software and internet publishing, financial services, medical equipment and research and development. With the exception of electronics which has experienced global downturns in recent years, all of these technology-based industries have performed well in the region.

FIGURE 2 NATIONAL HIGH GROWTH INDUSTRIES

		Maricopa			Growth		2000	Projected	
NAICS	Description	Employ 2001	yment 2008	Absolute	1-08 Percent		pa - 2008 Avg Wage	U.S. Growth 2 Emp	2008-2018 Output
TTTTGS	High Employment Growth	2001	2000	Hosorate	rereene	1 11 1113	nvg wage	шир	output
	Administrative management consulting	4,824	7,666	2,842	59%	2,313	\$71,320	6.2%	5.3%
	Human resource consulting services	3,592	1,704	-1,888	-53%	201	\$59,987	6.2%	5.3%
	Marketing consulting services	1,291	3,355	2,064	160%	684	\$45,306	6.2%	5.3%
	Process and logistics consulting services Other management consulting services	1,035 1,127	666 1,082	-369 -45	-36% -4%	157 237	\$53,649 \$69,381	6.2% 6.2%	5.3% 5.3%
	Environmental consulting services	683	693	10	1%	136	\$58,364	6.2%	5.3%
	Other technical consulting services	964	514	-450	-47%	180	\$63,410	6.2%	5.3%
	Business and secretarial schools	260	64	-196	-75%	12	\$53,331	4.5%	2.7%
611420	Computer training	845	468	-377	-45%	65	\$59,227	4.5%	2.7%
	Management training	565	542	-23	-4%	117	\$56,854	4.5%	2.7%
	Cosmetology and barber schools	117	431	314	268%	29	\$31,323	4.5%	2.7%
	Flight training	500	910	410	82%	49	\$40,118	4.5%	2.7%
	Apprenticeship training	101	209	108	107%	16 70	\$42,218	4.5%	2.7%
	Other technical and trade schools Fine arts schools	1,492 507	1,724 743	232 236	16% 47%	116	\$53,214 \$15,985	4.5% 4.5%	2.7% 2.7%
	Sports and recreation instruction	526	1,278	752	143%	143	\$16,039	4.5%	2.7%
	Language schools	93	62	-31	-33%	11	\$12,530	4.5%	2.7%
	Exam preparation and tutoring	308	769	461	150%	91	\$17,011	4.5%	2.7%
611692	Automobile driving schools	116	185	69	59%	14	\$30,936	4.5%	2.7%
611699	Miscellaneous schools and instruction	860	475	-385	-45%	68	\$33,234	4.5%	2.7%
	Educational support services	478	1,228	750	157%	129	\$44,086	4.5%	2.7%
	Child and youth services	1,128	1,036	-92	-8%	50	\$28,936	4.0%	4.1%
	Services for the elderly and disabled	1,757	4,391	2,634	150%	127	\$18,272	4.0%	4.1%
	Other individual and family services Home health care services	2,215	4,225 12,832	2,010 7,406	91% 136%	202 196	\$30,398 \$29,822	4.0% 3.9%	4.1% 4.1%
	Data processing and related services	5,519	3,618	-1,901	-34%	257	\$63,446	3.9%	9.3%
	News syndicates	131	125	-6	-5%	11	\$44,450	3.8%	9.3%
	Libraries and archives	36	105	69	192%	12	\$69,328	3.8%	9.3%
519130	Internet Publishing, Web Search Portals	162	540	378	233%	96	\$64,905	3.8%	9.3%
519190	Other information services	350	294	-56	-16%	48	\$45,404	3.8%	9.3%
	Interior design services	706	781	75	11%	278	\$47,500	3.8%	3.0%
	Industrial design services	134	136	2	1%	22	\$39,541	3.8%	3.0%
	Graphic design services	1,015	960	-55	-5%	294	\$50,002	3.8%	3.0%
	Other specialized design services Custom computer programming services	61 4,449	49 6,539	-12 2,090	-20%	33 1,086	\$38,497 \$80,871	3.8% 3.8%	3.0% 3.8%
	Computer systems design services	5,249	7,741	2,492	47% 47%	1,080	\$76,910	3.8%	3.8%
	Computer facilities management services	777	834	57	7%	33	\$52,270	3.8%	3.8%
	Other computer related services	401	738	337	84%	294	\$66,912	3.8%	3.8%
	High Output Growth								
334111	Electronic computer manufacturing	283	106	-177	-63%	8	\$70,737	-3.8%	17.0%
	Computer storage device manufacturing	283	160	-123	-43%	3	\$78,467	-3.8%	17.0%
	Computer terminal manufacturing	0	0	0	0%	0	\$0	-3.8%	17.0%
334119	Other computer peripheral equipment mfg	680	337	-343	-50%	11	\$85,730	-3.8%	17.0%
511210	Software publishers	1,861	1,677	-184	-10%	106	\$82,817	2.7%	10.5%
	Data processing and related services	5,519	3,618	-1,901	-34%	257	\$63,446	3.8%	9.3%
	News syndicates	131	125	-6	-5%	11	\$44,450	3.8%	9.3%
	Libraries and archives	36	105	69	192%	12	\$69,328	3.8%	9.3% 9.3%
	Internet publishing, web search portals Other information services	162 350	540 294	378 -56	233% -16%	96 48	\$64,905 \$45,404	3.8% 3.8%	9.3%
	Audio and video equipment mfg	509	207	-302	-59%	10	\$50,798	-6.0%	8.4%
	Investment banking and securities	914	1,280	366	40%	121	\$80,728	1.1%	7.3%
	Securities brokerage	6,673	6,985	312	5%	186	\$85,892	1.1%	7.3%
	Commodity contracts dealing	20	29	9	45%	12	\$73,450	1.1%	7.3%
523140	Commodity contracts brokerage	58	126	68	117%	21	\$65,842	1.1%	7.3%
	Securities and commodity exchanges	4	17	13	325%	9	\$46,238	1.1%	7.3%
	Miscellaneous intermediation	300	185	-115	-38%	67	\$55,828	1.1%	7.3%
	Portfolio management	312	453	141	45%	160	\$87,744	1.1%	7.3%
	Investment advice	931	2,213	1,282	138%	596	\$64,387	1.1%	7.3%
	Trust, fiduciary, and custody activities Misc financial investment activities	583 47	364 100	-219 53	-38% 113%	40 32	\$79,346 \$123,371	1.1% 1.1%	7.3% 7.3%
	Laboratory apparatus and furniture mfg	22	74	52	236%	18	\$41,713	1.1%	6.3%
	Surgical and medical instrument mfg	68	120	52	76%	7	\$55,310	1.5%	6.3%
	Surgical appliance and supplies mfg	218	282	64	29%	30	\$45,749	1.5%	6.3%
	Dental equipment and supplies mfg	66	34	-32	-48%	2	\$45,643	1.5%	6.3%
339115	Ophthalmic goods manufacturing	67	34	-33	-49%	7	\$57,825	1.5%	6.3%
	Dental laboratories	537	690	153	28%	110	\$38,249	1.5%	6.3%
	Biotechnology research and development	46	266	220	481%	19	\$57,564	2.3%	6.1%
	Physical and engineering research	174	1,010	836	481%	115	\$79,308	2.3%	6.1%
	Social science and humanities research	258	236	-22	-9%	33	\$70,419	2.3%	6.1%
811310	Comm machinery repair and maintenance	2,315	2,459	144	6%	267	\$56,786	0.4%	6.0%

B. Local Industry Specializations

The next step in the analysis is to look at local industry specializations in Scottsdale. Although detailed industry employment data is not available for Scottsdale specifically, it is possible to look at Scottsdale's share of regional employment by sector. The location quotients shown in Figure 3 compare the share of total industry employment in a given sector in Scottsdale to that same ratio for the county. The industries in italics are those where Scottsdale has a high level of specialization within the region. These include information industries, real estate, headquarters and other management companies, professional and business services, entertainment and recreation, and tourism (accommodation and food services). Several of these industries, including business services, headquarters and tourism, are current targets for the City.

FIGURE 3
CITY OF SCOTTSDALE SHARE OF EMPLOYMENT BY INDUSTRY

	_	Mai	ricopa Coun	ty					Scottsdale
		Employ	yment	Firms		Scottsda	ale 2007		Location
NAICS	S Description	2001	2008	2008	Firms	Share	Emp	Share	Quotient
Т	l'otal	1,364,286	1,552,907	101,553	12,113	12%	192,858	12%	
11	Agriculture, Forestry, Fishing	8,217	6,511	425	28	7%	89	1%	0.11
21	Mining	1,124	2,402	78	10	13%	342	14%	1.15
22	Utilities	7,474	8,627	79	4	5%	21	0%	0.02
23	Construction	126,348	135,362	10,898	964	9%	16,543	12%	0.98
31-33	Manufacturing	150,277	125,971	3,592	250	7%	7,091	6%	0.45
42	Wholesale Trade	78,455	83,829	9,781	666	7%	8,149	10%	0.78
44	Retail Trade	181,836	218,770	10,589	1,343	13%	26,278	12%	0.97
48-49	Transportation	50,203	56,358	2,133	121	6%	2,522	4%	0.36
51	Information	41,204	30,021	1,654	245	15%	5,934	20%	1.59
52	Finance and Insurance	95,079	105,054	6,859	1,321	19%	16,987	16%	1.30
53	Real Estate	32,713	38,220	5,950	1,174	20%	9,433	25%	1.99
	Services	589,145	740,684	47,290	5,982	13%	99,459	13%	1.08
54	Professional and technical services	81,137	97,520	15,151	2,104	14%	18,704	19%	1.54
55	Management of companies	17,365	23,348	583	106	18%	4,800	21%	1.66
56	Administrative and support services	158,838	178,528	7,012	660	9%	14,244	8%	0.64
61	Educational services	15,682	32,093	1,249	172	14%	2,470	8%	0.62
62	Health Services	121,392	178,535	8,797	1,373	16%	17,452	10%	0.79
71	Arts, entertainment, and recreation	19,537	25,379	1,179	197	17%	7,427	29%	2.36
72	Accommodation and food services	130,004	155,431	6,090	658	11%	26,831	17%	1.39
81	Repair and maintenance, pers svcs	42,998	48,161	5,525	712	13%	7,531	16%	1.26

Source: IMPLAN ES202 Data for Maricopa County, County Business Patterns Zip Code Data for Scottsdale.

Industries in italics have high locations quotients indicating local specialization.

Part of the economic base analysis also includes projections of employment by sector in Scottsdale. The information about Scottsdale's share of regional employment can be used as a basis for industry employment projections at the sector level. The methodology involves applying national employment growth projections from the Bureau of Labor Statistics at the detailed industry level to county employment by industry. The base year for the projections is 2008 and employment is projected to 2018, based on available national projections for employment growth. Once the national projections by industry are applied, projected county employment for 2018 can be summed by sector. Then the totals for each sector can be multiplied by Scottsdale's share of county employment. It is important to note that this approach assumes that regional industry growth will mirror national growth in terms of trends in specific industries. However, the region's current economic base and the mix of employment in high and low growth industries will certainly have an impact on projected employment. Additionally, this approach assumes that Scottsdale will maintain its current share of regional employment by industry. Although the city may gain or lose market share in certain industries over the next 10 years, Scottsdale is

a relatively mature city with established specialties relative to the region's economic base. These projections can be compared to the projections based on land use to validate some of these assumptions.

Figure 4 shows current and projected employment by sector in Scottsdale. The sectors with the greatest amount of projected absolute growth include professional services, health services, administrative services and construction. This projected growth will be compared to the inventory of available land for future development in subsequent tasks.

FIGURE 4
CITY OF SCOTTSDALE PROJECTED INDUSTRY EMPLOYMENT

		Maricopa	County	Scotts	dale	Industry (Growth
		Employ	yment	Employ	ment	2007-2	018
NAICS	Description	2008	2018	2007	2018	Absolute	Percent
-	Fotal	1,552,907	1,715,515	192,858	215,785	162,608	10%
11	Agriculture, Forestry, Fishing	6,511	6,232	89	85	-4	-4%
21	Mining	2,402	2,289	342	326	-16	-5%
22	Utilities	8,627	7,713	21	19	-2	-11%
23	Construction	135,362	158,374	16,543	19,355	2,812	17%
31-33	Manufacturing	125,971	111,785	7,091	6,292	-799	-11%
42	Wholesale Trade	83,829	87,192	8,149	8,476	327	4%
44	Retail Trade	218,770	227,525	26,278	27,330	1,052	4%
48-49	Transportation	56,358	61,448	2,522	2,750	228	9%
51	Information	30,021	30,581	5,934	6,045	111	2%
52	Finance and Insurance	105,054	110,834	16,987	17,922	935	6%
53	Real Estate	38,220	42,510	9,433	10,492	1,059	11%
	Services	740,684	869,034	99,459	116,694	17,235	17%
54	Professional and technical services	97,520	126,056	18,704	24,177	5,473	29%
55	Management of companies	23,348	24,515	4,800	5,040	240	5%
56	Administrative and support services	178,528	208,412	14,244	16,628	2,384	17%
61	Educational services	32,093	40,538	2,470	3,120	650	26%
62	Health Services	178,535	220,821	17,452	21,585	4,133	24%
71	Arts, entertainment, and recreation	25,379	28,998	7,427	8,486	1,059	14%
72	Accommodation and food services	155,431	165,737	26,831	28,610	1,779	7%
81	Repair and maintenance, pers svcs	48,161	53,957	7,531	8,437	906	12%

Source: IMPLAN ES202 Data for Maricopa County for 2008, County Business Patterns Zip Code Data for Scottsdale for 2007.

III. Screening the Targets

The methodology employed in the target industry analysis involves quantitative and qualitative screens in the form of a four-step drill down approach.

A. Initial Screen

The first step involves screening industries at the regional level based on secondary data to identify those with the best potential for future growth.

- Analyze historical regional industry trends in Maricopa County in terms of employment, establishments and wages from 2001 to 2008 (newest data available) at the 6-digit NAICS level
- Screen for fast-growing industries regionally, above average wages and strong national growth projections
- Screen for best expansion and retention targets

Then we looked at local specializations for Scottsdale's industries:

- Analyze sector level employment in Scottsdale versus the region to identify local industry specializations
- Look for sectors with location quotients greater than one

In addition to looking at high growth industries regionally, the methodology employed here also includes other screening criteria such as the number of local firms, average wages, above average manufacturing capacity utilization and ability to diversify the local economy.

Using this drill down approach, target industries were identified based on employment growth, wage levels and positive national projections, then further screened for the industry's match within the local marketplace. A more detailed description of the results from the secondary data analysis is presented below.

For this analysis of secondary data, industries were screened at two different levels, a high and low screen, to identify a larger universe of potential target industries.

The most restrictive or high screen included industries with historic regional employment growth of 25 percent or more from 2001 to 2008, average wages of \$50,000 or more, positive projected national employment and output growth, manufacturing capacity utilization of 70 percent or more, and an established presence in the county based on current employment of at least 100.

When this high screen resulted in a relatively small number of potential targets for Scottsdale, the criteria were modified to create a less restrictive low screen. The low screen included industries with historic employment growth of 10 percent or more from 2001 to 2008, average wages of \$40,000 or more, positive projected national employment and output growth, manufacturing capacity utilization of 65 percent or more, and an established presence in the county based on current employment of at least 100. While the low screen yielded a larger number of industries, many of the industries are in similar clusters.

The results from the high and low screens were then limited to basic industries. The target industry clusters from the high screen included space vehicles, biotechnology, recreation equipment, information technology, insurance and financial transaction processing and headquarters and professional services (Figure 5).

It is important to note that since this screening is based on regional data, not all of these industries are appropriate targets for Scottsdale. Further qualitative screening based on locational compatibility is required.

FIGURE 5 INITIAL SCREENING OF BASIC INDUSTRIES BASED ON SECONDARY DATA MOST RESTRICTIVE SCREEN

Figure includes industries in Maricopa County that have grown by 25% or more from 2001 to 2008, have positive projected output and employment growth, manufacturing capacity utilization of 70% or higher, generally have average wages above \$50,000, and have current metro area employment of 100 or more.

		Maricopa County Employment	County	Historic Growth 2001-08	rowth 08	Maricor	Maricopa - 2008	Projected Annual U.S. Growth 2008-2018	nnual 108-2018	Manufg Capacity
NAICS	Description	2001	2008	Absolute Percent	Percent	Firms	Firms Avg Wage	Employment	Output	Utilization
336415	Space Vehicles Space vehicle propulsion units and parts mfg.	8	1.153	1.145	14313%	1	\$72,585	0.0%	2.5%	78%
541712	Physical and engineering research	174	1,010	836	481%	115	\$79,308	2.3%	6.1%	
	Biotech									
333314	Optical instrument and lens manufacturing	43	809	992	1781%	9	\$53,508	0.0%	1.2%	75%
339112	Surgical and medical instrument manufacturing	89	120	52	%92	7	\$55,310	1.5%	6.3%	%02
541711	Biotechnology research and development	46	266	220	481%	19	\$57,564	2.3%	6.1%	
	Recreation Equipment									
423920	Toy and Hobby Goods Wholesalers	192	240	48	25%	39	\$52,706	0.4%	5.3%	
	Information Technology									
519130	Internet Publishing, Web Search Portals	162	240	378	233%	96	\$64,905	3.8%	9.3%	
541511	Custom computer programming services	4,449	6,539	2,090	47%	1,086	\$80,871	3.8%	3.8%	
541512	Computer systems design services	5,249	7,741	2,492	47%	1,087	\$76,910	3.8%	3.8%	
541519	Other computer related services	401	738	337	84%	294	\$66,912	3.8%	3.8%	
	Insurance and Financial Processing Centers									
522210		4,641	6,000	1,359	29%	54	\$68,160	0.5%	3.7%	
522298	All other nondepository credit intermediation	398	622	224	26%	65	\$58,854	0.5%	3.7%	
523920	Portfolio management	312	453	141	45%	160	\$87,744	1.1%	7.3%	
523110	Investment banking and securities dealing	914	1,280	366	40%	121	\$80,728	1.1%	7.3%	
525000	Funds, trusts, and other financial vehicles	559	970	411	74%	115	\$71,351	1.6%	1.2%	
	Headquarters and Professional Services									
541110	Offices of lawyers	802'6	12,166	2,458	25%	1,952	\$86,967	2.0%	2.1%	
541320	Landscape architectural services	1,001	1,303	302	30%	154	\$52,265	2.0%	1.6%	
541611	Administrative management consulting	4,824	2,666	2,842	26%	2,313	\$71,320	6.2%	5.3%	
541820	Public relations agencies	289	379	06	31%	119	\$69,126	0.8%	3.2%	
541930	Translation and interpretation services	63	161	86	156%	31	\$54,242	2.0%	2.1%	
541990	All other professional and technical services	1,209	1,531	322	27%	225	\$59,405	2.0%	2.1%	
551114	Managing offices	16,763	21,636	4,873	78%	431	\$76,577	0.5%	4.3%	
561110	Office administrative servcies	3,938	9,043	5,105	130%	823	\$60,563	1.8%	3.1%	Ī

The results from the low screen show a larger number of industries as well as several additional clusters including renewable energy and higher education (Figure 6). However, not all of these industries are compatible with Scottsdale's locational attributes or economic development goals, thus further screening is required.

FIGURE 6
INITIAL SCREENING OF BASIC INDUSTRIES BASED ON SECONDARY DATA
LESS RESTRICTIVE SCREEN

Tables includes industries in Maricopa County that have grown by 10% or more from 2001 to 2008, have positive projected output and employment growth, manufacturing capacity utilization of 65% or higher, generally have average wages above \$40,000, and have current metro area employment of 100 or more.

		Maricopa		Historic		Manier	200C	Projected A		Manufg
NAICS	Description	Employ 2001	2008	Absolute	Percent		pa - 2008 Avg Wage	U.S. Growth 20 Employment	Output	Capacity Utilization
1111100	Space Vehicles	2001	2000	110001410	1 01 00110	1 11 1110	mg mage	ziiipioj ilielie	output	o timbution
336415	Space vehicle propulsion units and parts mfg.	8	1,153	1,145	14313%	1	\$72,585	0.0%	2.5%	78%
	Biotech									
333314	Optical instrument and lens manufacturing	43	809	766	1781%	6	\$53,508	0.0%	1.2%	75%
339112	Surgical and medical instrument manufacturing	68	120	52	76%	7	\$55,310	1.5%	6.3%	70%
339113	Surgical appliance and supplies manufacturing	218	282	64	29%	30	\$45,749	1.5%	6.3%	70%
541711	Biotechnology research and development	46	266	220	481%	19	\$57,564	2.3%	6.1%	
423450	Medical and dental equipment wholesalers	2,358	2,876	518	22%	394	\$89,947	0.4%	5.3%	
	Recreation Equipment									
339920	Sporting and athletic goods manufacturing	1,307	1,128	-179	-14%	16	\$46,308	2.2%	3.8%	61%
423910	Sporting and recreational goods wholesalers	564	808	244	43%	105	\$46,187	0.4%	5.3%	
423920	Toy and hobby goods and supplies wholesalers	192	240	48	25%	39	\$52,706	0.4%	5.3%	
422020	Renewable Energy	4 4 9 4	1 100	205	250/		#40.40	0.407	E 20/	
423930	Recyclable material wholesalers	1,124	1,409	285	25%	75	\$40,485	0.4%	5.3%	
423720	Plumbing and heating equipment wholesalers	1,295	1,445	150	12%	122	\$53,097	0.4%	5.3%	
541712	Physical and engineering research	174	1,010	836	481%	115	\$79,308	2.3%	6.1%	
F40400	Information Technology	4.60	F.40	250	22221	0.6	¢64.005	2.00/	0.207	
519130	Internet publishing, web search portals	162	540	378	233%	96	\$64,905	3.8%	9.3%	
541511	Custom computer programming services	4,449	6,539	2,090	47%	1,086	\$80,871	3.8%	3.8%	
541512 541519	Computer systems design services Other computer related services	5,249 401	7,741 738	2,492 337	47% 84%	1,087 294	\$76,910 \$66,912	3.8% 3.8%	3.8% 3.8%	
423430	Computer equipment and software wholesalers	4,207	4,653	446	11%	326	\$98,180	0.4%	5.3%	
		,	,		70		,			
522210	Insurance and Financial Processing Centers	4 (41	6,000	1,359	2007	54	\$68,160	0.5%	3.7%	
522210	Credit card issuing All other nondepository credit intermediation	4,641 398	622	224	29% 56%	65	\$58,854	0.5%	3.7%	
523110	Investment banking and securities dealing	914	1,280	366	40%	121	\$80,728	1.1%	7.3%	
525000	Funds, trusts, and other financial vehicles	559	970	411	74%	115	\$71,351	1.6%	1.2%	
524291	Claims adjusting	1,040	1,197	157	15%	90	\$56,591	1.4%	2.7%	
523920	Portfolio management	312	453	141	45%	160	\$87,744	1.1%	7.3%	
	-						,			
611310	Private Higher Education Colleges and universities	2 768	12,997	10,229	370%	71	\$43,667	1.5%	1.0%	
611519	Other technical and trade schools	,	1,724	232	16%	70	\$53,214	4.5%	2.7%	
	Headquarters and Professional Services									
541110	Offices of lawyers	9 708	12,166	2,458	25%	1,952	\$86,967	2.0%	2.1%	
541211	Offices of certified public accountants	4,497	5,397	900	20%	837	\$54,842	1.9%	0.9%	
541320	Landscape architectural services	1,001	1,303	302	30%	154	\$52,265	2.0%	1.6%	
541330	Engineering services	11,683		2,347	20%	1,158	\$82,188	2.0%	1.6%	
541370	Other surveying and mapping services	423	476	53	13%	83	\$52,184	2.0%	1.6%	
541611	Administrative management consulting services	4,824	7,666	2,842	59%	2,313	\$71,320	6.2%	5.3%	
541613	Marketing consulting services	1,291	3,355	2,064	160%	684	\$45,306	6.2%	5.3%	
541820	Public relations agencies	289	379	90	31%	119	\$69,126	0.8%	3.2%	
541930	Translation and interpretation services	63	161	98	156%	31	\$54,242	2.0%	2.1%	
541990	All other professional and technical services	1,209	1,531	322	27%	225	\$59,405	2.0%	2.1%	
551114	Managing offices (headquarters)	16,763		4,873	29%	431	\$76,577	0.5%	4.3%	
561110	Office administrative services	3,938	9,043	5,105	130%	823	\$60,563	1.8%	3.1%	

B. Leverage Opportunities

Before we screened the results of the initial screen for compatibility, we also considered the industries that the Arizona Department of Commerce and the Greater Phoenix Economic Council (GPEC) are targeting for business recruitment. There may be opportunities to expand targets or confirm targets that surfaced in the initial screen.

STATE TARGETS

According to Bennett Curry, Program Manager at the Arizona Department of Commerce, the state is targeting the following industries:

- Biotech
- Renewable Energy/Sustainability
- Defense/Aerospace
- High-Tech, especially semiconductors
- Tourism
- Business Services
- Back Office

The Department of Commerce has not prepared an analytical target industry study and the state is simply focused on these sectors. In addition, it is important to note that some of the state targets are functions and not industries that can be tracked by NAICS.

REGIONAL TARGETS

The Greater Phoenix Economic Council represents Scottsdale, and other valley communities of the region, as the lead agency for external marketing and business attraction of basic industries. Their proactive marketing program aims at key influencers, such as site selectors, and specific industry targets, including:

- Advanced Business Services, including data centers and financial services
- Aerospace
- Bioscience
- Health Care
- High-Tech
- Solar
- Sustainability, related to the greater Phoenix 'living laboratory'

With the state and regional targets, we see some commonalities and additional industries compared to the low and high screen results of Step 1. In the next two steps of the industry identification process, we take into account the opportunities of leveraging state and region targets for Scottsdale.

C. Compatibility Screening

Screens based on secondary data, while important, are only one part of the target industry analysis. The findings from the initial screen and opportune state and regional targets need to be further screened to account for the results from the Corporate Location Assessment. Since the Corporate Location Assessment presents a critical evaluation of Scottsdale from the perspective of a site location consultant, it is helpful in understanding Scottsdale's advantages and limitations in meeting the needs of specific industries. The outcome of this screening process will determine targets not only compatible with the region, but are a good fit with the competitive strengths of Scottsdale specifically.

The following table summarizes Scottsdale's competitiveness factors. More details of the assessment are available in a separate report, titled *Competitive Position Analysis & Recommendations*. The list for limiting factors does not encompass all weaknesses observed, but instead zeros in on factors that would be cause for eliminating industries from the target list.

COMPETITIVE ADVANTAGES LIMITING FACTORS Premier address for corporate users Very limited manufacturing space Abundant existing space, especially Class A and B Limited Greenfield sites for development Limited public transportation Competitive lease rates Community approaching build-out Buildings and sites have good access to highways In general, difficulty in recruiting talent for HQ and labor shed executives and top managers into the region due to Maricopa Community College's workforce training few HQ operations in the region (i.e. limited programs align to industry needs opportunities in case it does not work out with recruiting firm) SkySong – facility and partnerships City's green development program **Exceptional airport access** Quality community appearance Exceptional permitting timeline **Table 1: Scottsdale Competitiveness Factors**

Based on Scottsdale's capabilities, the following potential industry targets were cut from consideration for the final targets:

1. SPACE VEHICLES

Space Vehicles were eliminated as a target for Scottsdale due to limitations of manufacturing space. As well, the growth in this cluster is happening in the region but mainly outside of Scottsdale. Considering the fact that your targets help you to decide where to allocate resources for the best return on your marketing investment, targeting Space Vehicles is not an industry that will yield a substantial ROI for Scottsdale.

2. BIOTECH

Despite GPEC having Biosciences as a target industry, we see this to be less of an opportunity for Scottsdale due to the overall competitiveness of the Phoenix region in this sector coupled with Scottsdale's limited manufacturing space. Regional assets, such as the ASU School of Life Sciences and Biodesign Institute, Maricopa and Chandler-Gilbert Community Colleges as well as two high schools in the region focusing on health sciences and bioscience, the region is not as competitive for biotech as other leading research metros throughout the United States. It is true that although some smaller biotech firms may locate in Airpark flex-tech space, the question is "should Scottsdale invest in targeting this industry?" Just because an industry does not make the final list of recommended targets, does not mean Scottsdale will never see companies from that industry locate here. This screen is simply a prioritization for resource allocation.

3. HEADQUARTERS AND PROFESSIONAL SERVICES

The industries identified within this cluster from the initial screen for growth include offices for lawyers and certified public accountants, marketing and public relations consulting services, landscape architectural services, and office administrative services to name a few. These particular NAICS, although growing in the region, are highly fractionized in their approach to selecting a business location. It would be difficult to focus on this cluster with your marketing efforts. For the most part, these industries will organically locate throughout the region, most likely with a high probability in Scottsdale due to the quality of real estate and community amenities.

4. PRIVATE HIGHER EDUCATION

This cluster has been eliminated for several reasons, including the limited number of large-scale Greenfields to accommodate a campus setting, impact of current economy on funding for educational institution expansions and the demographics of Scottsdale. It is observed that some valley communities are targeting colleges, universities, technical and trade schools within their city limits. For Scottsdale, an attraction of this sort will not necessarily further enhance Scottsdale's business climate and talent pool. Scottsdale's competitive advantage of highly skilled local residents as well as a convenient in-commuting transportation system enables a company to benefit from a Scottsdale location. Private sector corporate investment will bring more benefit to Scottsdale than the attraction of a private higher education institution.

C. Niche and Emerging Industry Sectors

The following additions as recommended target industries are based on primary research and assessment of Scottsdale as well as current experience in site selection that indicates emerging industry trends.

1. RENEWABLE ENERGY

Although elements of the renewable energy cluster surfaces in results of the initial screen, there are additional niche opportunities within the emerging Renewable Energy arena for Scottsdale to focus. To be competitive, however, communities and regions need to be globally competitive including modern infrastructure, an educated and eager workforce, research and technology support activities, competitive tax structure, policies to support the industry, quality of life to support attraction of talent, and

reasonable operating costs. Arizona and specifically Scottsdale has most of these competitive advantages to offer solar companies. Yet, almost all solar manufacturers currently seeking a production location require an existing building. With Scottsdale's limitations for manufacturing space, the renewable industry cluster as a target has been refined for Scottsdale to focus on headquarters and R & D functions. Executives and innovators value a Scottsdale address as prestigious in a state aggressively positioning for a leadership role in the solar industry. The region and Scottsdale are already home to solar companies. Scottsdale, above all other communities in the valley, is appealing as a place to show off to their customers. Testing installations and production for the companies that locate their headquarters in Scottsdale may occur in outskirt communities of the region.

2. EDUCATION TECHNOLOGY AND DIGITAL LEARNING

There is a unique opportunity for Scottsdale in targeting this industry niche based on the specialized research and resources provided by ASU at SkySong to the emerging field of education technology and digital learning. In particular, ASU's *Applied Leaning Technologies Institute* and *Technology-based Learning and Research* offer large-scale technology support to companies in this specialized sector. Whenever you can zero in on a unique sector and exploit opportunities that can set Scottsdale apart from the competition, you have the opportunity to develop a 'top of mind' location for this industry.

IV. Target Clusters for Scottsdale

The final recommendations for target industry clusters represent industries with strong performance, projected national growth in employment and output and above-average wages. In addition to looking at regional industry performance, this study specifically analyzed locational compatibility for Scottsdale. Some additional target industries were added based on the site location assessment, while others were eliminated.

Scottsdale is best suited for office users and light manufacturing. The city offers an attractive environment for headquarters, sales offices and high-skilled manufacturing that are compatible with the types of sites and buildings that are available, as well as a match with the local workforce.

The resulting target clusters include Recreation Equipment, Renewable Energy, Information Technology, and Insurance and Financial Processing Centers (Figure 7). A full listing of the specific NAICS included in each of these target clusters is provided at the end of this section (Figure 8). Some of these industries, like Information Technology and Financial Services, already have a strong presence in the region, and to some degree in Scottsdale. However, based on national projections there are opportunities for expansion and attraction of additional industries in that cluster. Other target industries like Renewable Energy are emerging but have shown recent success in the metro area. For Scottsdale, there are specific niche sectors within these clusters that have the best potential as targets.

FIGURE 7
INDUSTRY TARGET RECOMMENDATIONS FOR SCOTTSDALE

Target Cluster	Historic Growth in Maricopa County	Number of Establishments	Projected Employment Growth ¹	Projected Output Growth ¹	High Wages ²	Diversify Local Economy	Strong Regional Presence ³	City Sub- Area
Recreation Equipment	5%	162	1.33%	4.52%	+	+	++	North
Renewable Energy	481%	117	2.30%	6.10%	+++	+	emerging	Central
Information Technology	40%	2,889	3.02%	4.29%	+++		+++	Central & South
Insurance & Financial Svcs Processing Centers	34%	605	0.80%	3.95%	++		+++	North & Central

¹ Based on national projections by industry

 $^{^{2}}$ Average local wage above \$75,000 = +++, \$50,000 to \$75,000 = ++, \$35,000 to \$50,000 +.

³Over 5,000 employees in Maricopa County =+++, over 2,500 employees=++, 1,000 to 2,500=+.

A. Recreation Equipment

Recreation Equipment includes golf and tennis equipment manufacturing/R&D, golf and tennis equipment headquarters and related wholesale functions. Scottsdale already has a strong reputation for golf and tennis facilities as part of the tourism industry, which makes it an ideal headquarters location. These types of industries are also more sensitive to quality of life issues and desire an environment that supports the type of workers they need to attract. Additionally, there are a large number of professional golf and tennis players that live in the area and could be a draw for companies doing R&D testing for sports equipment. As a group, these industries have very strong projected output growth nationally as well as projected employment growth. Wage levels in manufacturing and wholesale are average, but wages in R&D and headquarters operations would be above average. This niche within the sporting equipment industry is a good fit for the types of buildings available in north Scottsdale (especially the Airpark), as well as a good fit for the labor force given the base of managerial and professional workers, engineers and professional athletes.

B. Renewable Energy

Renewable Energy is an emerging industry globally, but it is also an industry where GPEC has chosen to focus marketing efforts. There have been several new solar manufacturers that have recently announced new locations in other parts of the metro area. There have also been companies that have been able to take advantage of unused production capacity locally in semiconductor manufacturing facilities to produce solar cells. We believe the focus for Scottsdale is not manufacturing, but rather in headquarters and R&D functions with solar panel and solar cell manufacturing facilities locating throughout the region. This niche is a good fit for the types of buildings available in north and central Scottsdale as well as a good fit for the labor force.

C. Information Technology

Information Technology includes computer related services such as custom programming and systems design, computer equipment wholesale, internet publishing and web search portals, as well as education technology/digital learning. There is an existing base of information technology industries, including a number of small software companies, already located in the city. However, there is potential for expansion in this cluster where both projected output and employment growth are very strong. In particular, Scottsdale is developing a specialization in software to support digital learning that represents a growth opportunity within this cluster. These types of office users are compatible with the type of space available in the Airpark as well as business parks and mixed-use space in southern Scottsdale. Space at SkySong is a unique offering to leverage research and resources from ASU and strategic partners colocated there. Scottsdale also has a good base of highly skilled software engineers, programmers and systems analysts to support this industry.

D. Insurance and Financial Services Processing

Insurance and Financial Services Processing Centers build on an existing industry base in the region. This target industry cluster includes investment banking and securities, mutual funds, portfolio management, claims adjustment, credit card issuing and other nondepository credit intermediation. Insurance and financial services are generally higher value/higher paying activities than standard back office operations, although this cluster could create jobs at a broader range of skill levels than some of the other clusters. Insurance and financial services industries have experienced strong growth in the region and

the national projections for future growth in both employment and output are above average. Based on work force and office space requirements, this cluster would be a good target for the north and central areas of the city.

FIGURE 8
RECOMMENDED TARGET INDUSTRIES FOR SCOTTSDALE

Recreation Equipment 2001 2008 Absolute Percent Recreation Equipment 2,063 2,176 113 5% Sporting and athletic goods manufacturing (R&D) 1,307 1,128 -179 -14% Sporting and recreational goods wholesalers 564 808 244 43% Toy and hobby goods and supplies wholesalers 192 240 48 25% Golf and tennis equipment headquarters NA NA NA A A 48 25% Golf and tennis equipment headquarters NA NA NA NA A A A A A A A A B 25% A B 25% A B A B A B A B A B A B A B B A B B B B B B B B B B B B B B B B B B		Maricopa County Employment	County ment	Historic Growth 2001-08	rowth 08	Maricol	Maricopa - 2008	Projected Annual U.S. Growth 2008-2018	nnual 108-2018
Recreation Equipment 2,063 2,176 113 5% Sporting and athletic goods manufacturing (R&D) 1,307 1,128 -179 -14% Sporting and recreational goods wholesalers 564 808 244 43% Toy and hobby goods and supplies wholesalers 192 240 48 25% Golf and tennis equipment headquarters NA NA NA A A 82% Solar company headquarters and R&D NA NA NA NA A A 481% Physical and engineering research 174 1,010 836 481% Internet publishing web search portals 162 540 378 233% Custom computer related services 5,249 5,743 40% Computer systems design services 4,449 6,539 2,090 47% Other computer related services 5,249 7,741 2,492 47% Other computer related services 6000 4,600 1,96 1,10% Education technology/digital learning		2001	2008	Absolute 1	ercent	Firms	Firms Avg Wage	Employment	Output
Sporting and athletic goods manufacturing (R&D) 1,307 1,128 -179 -14% Sporting and recreational goods wholesalers 564 808 244 43% Toy and hobby goods and supplies wholesalers 192 240 48 25% Golf and tennis equipment headquarters NA NA NA NA NA Renewable Energy NA NA NA NA NA 174 1,010 836 481% Physical end engineering research 174 1,010 836 481% 110 11	Recreation Equipment	2,063	2,176	113	2%				
Sporting and recreational goods wholesalers 564 808 244 43% Toy and hobby goods and supplies wholesalers 192 240 48 25% Golf and tennis equipment headquarters NA NA NA S6% Renewable Energy NA NA NA A8 481% Solar company headquarters and R&D NA NA NA A83 481% Physical and engineering research 174 1,010 836 481% Information Technology 162 540 378 233% Custom computer programming services 4,449 6,539 2,090 47% 1 Computer systems design services 4,449 6,539 2,090 47% 1 Other computer related services 4,207 4,653 4,65 4,7% 1 Computer equipment and software wholesalers 4,207 4,653 4,65 1 Education technology/digital learning A,641 6,000 1,359 2,9% Credit card issuing A,6		1,307	1,128	-179	-14%	16	\$46,308	2.2%	3.8%
Toy and hobby goods and supplies wholesalers 192 240 48 25% Golf and tennis equipment headquarters NA NA A A A B 25% Renewable Energy Solar company headquarters and R&D NA NA NA A81% A81% Physical and engineering research 174 1,010 836 481% A81% Internet publishing, web search portals 162 540 378 233% A9% Custom computer programming services 4,449 6,539 2,090 47% 1 Computer systems design services 4,449 6,539 2,090 47% 1 Other computer related services 4,449 6,539 2,090 47% 1 Other computer equipment and software wholesalers 4,207 4,653 446 11,9 Beducation technology/digital learning NA NA NA A A Insurance and Financial Services Processing 7,864 10,522 2,658 34% Credit card issuing </td <td></td> <td>564</td> <td>808</td> <td>244</td> <td>43%</td> <td>105</td> <td>\$46,187</td> <td></td> <td>5.3%</td>		564	808	244	43%	105	\$46,187		5.3%
Renewable Energy NA Physical energy Physical energy NA NA<		192	240	48	25%	39	\$52,706		5.3%
Renewable Energy NA NA NA Solar company headquarters and R&D 174 1,010 836 481% Physical and engineering research 174 1,010 836 481% Information Technology 14,468 20,211 5,743 40% Internet publishing, web search portals 162 540 378 233% Custom computer programming services 4,449 6,539 2,090 47% 1 Computer systems design services 4,41 7,741 2,492 47% 1 Computer related services 4,01 738 337 84% Computer equipment and software wholesalers 4,207 4,653 446 11% Education technology/digital learning NA NA NA NA A 4,641 6,000 1,359 29% All other nondepository credit intermediation 398 622 224 56% Funds, trusts, and other financial vehicles 1,040 1,197 157 15%	Golf and tennis equipment headquarters	NA	NA			2			
Solar company headquarters and R&D NA NA NA Physical and engineering research 174 1,010 836 481% Physical and engineering research 174 1,010 836 481% Information Technology 162 540 378 233% Internet publishing, web search portals 162 540 378 40% Custom computer programming services 5,249 7,741 2,492 47% 1 Computer systems design services 401 738 337 84% 1 Other computer related services 4,207 4,653 446 11% Computer equipment and software wholesalers 4,207 4,653 446 11% Education technology/digital learning NA NA NA A A 4,661 1,000 1,359 29% All other nondepository credit intermediation 398 622 224 56% Funds, trusts, and other financial vehicles 559 970 411 74% Fund	Renewable Energy								
Physical and engineering research 174 1,010 836 481% Information Technology 14,468 20,211 5,743 40% Internet publishing, web search portals 162 540 378 233% Custom computer programming services 4,449 6,539 2,090 47% 1 Computer systems design services 4,04 7,741 2,492 47% 1 Other computer related services 401 738 337 84% 1 Computer equipment and software wholesalers 4,207 4,653 446 11% 1 Education technology/digital learning NA NA NA NA A Insurance and Financial Services Processing 7,864 10,522 2,658 34% All other nondepository credit intermediation 398 622 224 56% Funds, trusts, and other financial vehicles 559 970 411 74% Funds, trusts, and other financial vehicles 1,197 1,197 157 15%	Solar company headquarters and R&D	NA	NA			3			
Information Technology 14,468 20,211 5,743 40% Internet publishing, web search portals 162 540 378 233% Custom computer programming services 4,449 6,539 2,090 47% Computer systems design services 5,249 7,741 2,492 47% Other computer related services 401 738 337 84% Computer equipment and software wholesalers 4,207 4,653 446 11% Education technology/digital learning NA NA NA 11% Insurance and Financial Services Processing 7,864 10,522 2,658 34% Credit card issuing 7,864 6,000 1,359 29% All other nondepository credit intermediation 398 622 224 56% Funds, trusts, and other financial vehicles 559 970 411 74% Funds, trusts, and other financial vehicles 559 970 411 74% Claims adjusting 1,197 1,197 1,5% <td></td> <td>174</td> <td>1,010</td> <td>836</td> <td>481%</td> <td>115</td> <td>\$79,308</td> <td>2.3%</td> <td>6.1%</td>		174	1,010	836	481%	115	\$79,308	2.3%	6.1%
Internet publishing, web search portals 162 540 378 233% Custom computer programming services 4,449 6,539 2,090 47% Computer systems design services 401 738 337 84% Other computer related services 401 738 337 84% Other computer related services 4,207 4,653 446 11% Education technology/digital learning NA NA NA 11% Insurance and Financial Services Processing 7,864 10,522 2,658 34% Credit card issuing 4,641 6,000 1,359 29% All other nondepository credit intermediation 398 622 224 56% Investment banking and securities dealing 914 1,280 366 40% Funds, trusts, and other financial vehicles 559 970 411 74% Claims adjusting 1,040 1,197 157 15%	Information Technology	14,468	20,211	5,743	40%			3.0%	4.3%
Custom computer programming services 4,449 6,539 2,090 47% Computer systems design services 5,249 7,741 2,492 47% Other computer related services 401 738 337 84% Other computer related services 4,207 4,653 446 11% Education technology/digital learning NA NA NA 11% Insurance and Financial Services Processing 7,864 10,522 2,658 34% Credit card issuing 4,641 6,000 1,359 29% All other nondepository credit intermediation 398 622 224 56% Investment banking and securities dealing 914 1,280 366 40% Funds, trusts, and other financial vehicles 559 970 411 74% Claims adjusting 1,040 1,197 157 15%		162	540	378	233%	96	\$64,905	3.8%	9.3%
Computer systems design services 5,249 7,741 2,492 47% 1, Other computer related services 401 738 337 84% 1, Computer equipment and software wholesalers 4,207 4,653 446 11% Education technology/digital learning NA NA NA 1,8 Insurance and Financial Services Processing 7,864 10,522 2,658 34% Credit card issuing 4,641 6,000 1,359 29% All other nondepository credit intermediation 398 622 224 56% Funds, trusts, and other financial vehicles 559 970 411 74% Claims adjusting 1,040 1,197 157 15%		4,449	6,539	2,090	47%	1,086	\$80,871	3.8%	3.8%
Other computer related services 401 738 337 84% Computer equipment and software wholesalers 4,207 4,653 446 11% Education technology/digital learning NA NA NA 11% Insurance and Financial Services Processing 7,864 10,522 2,658 34% Credit card issuing 4,641 6,000 1,359 29% All other nondepository credit intermediation 398 622 224 56% Investment banking and securities dealing 914 1,280 366 40% Funds, trusts, and other financial vehicles 559 970 411 74% Claims adjusting 1,040 1,197 157 15%		5,249	7,741	2,492	47%	1,087	\$76,910	3.8%	3.8%
Computer equipment and software wholesalers4,2074,65344611%Education technology/digital learningNANA10,5222,65834%Insurance and Financial Services Processing7,86410,5222,65834%Credit card issuing4,6416,0001,35929%All other nondepository credit intermediation39862222456%Investment banking and securities dealing9141,28036640%Funds, trusts, and other financial vehicles55997041174%Claims adjusting1,0401,19715715%		401	738	337	84%	294	\$66,912	3.8%	3.8%
Education technology/digital learning NA NA NA Insurance and Financial Services Processing 7,864 10,522 2,658 34% Credit card issuing 4,641 6,000 1,359 29% All other nondepository credit intermediation 398 622 224 56% Investment banking and securities dealing 914 1,280 366 40% 1 Funds, trusts, and other financial vehicles 559 970 411 74% 1 Claims adjusting 1,040 1,197 157 15%		4,207	4,653	446	11%	326	\$98,180	0.4%	5.3%
Insurance and Financial Services Processing 7,864 10,522 2,658 34% Credit card issuing 4,641 6,000 1,359 29% All other nondepository credit intermediation 398 622 224 56% Investment banking and securities dealing 914 1,280 366 40% 1 Funds, trusts, and other financial vehicles 559 970 411 74% 1 Claims adjusting 1,040 1,197 157 15%	Education technology/digital learning	NA	NA						
Credit card issuing 4,641 6,000 1,359 29% All other nondepository credit intermediation 398 622 224 56% Investment banking and securities dealing 914 1,280 366 40% 1 Funds, trusts, and other financial vehicles 559 970 411 74% 1 Claims adjusting 1,040 1,197 157 15%	Insurance and Financial Services Processing	7,864	10,522	2,658	34%			0.8%	3.9%
All other nondepository credit intermediation 398 622 224 56% Investment banking and securities dealing 914 1,280 366 40% 1 Funds, trusts, and other financial vehicles 559 970 411 74% 1 Claims adjusting 1,040 1,197 15%		4,641	6,000	1,359	78%	54	\$68,160	0.5%	3.7%
Investment banking and securities dealing 914 1,280 366 40% Funds, trusts, and other financial vehicles 559 970 411 74% Claims adjusting 1,197 157 15%		398	622	224	26%	65	\$58,854	0.5%	3.7%
Funds, trusts, and other financial vehicles 559 970 411 74% Claims adjusting 1,040 1,197 157 15%		914	1,280	366	40%	121	\$80,728	1.1%	7.3%
Claims adjusting 1,040 1,197 157 15%		559	970	411	74%	115	\$71,351	1.6%	1.2%
		1,040	1,197	157	15%	06	\$56,591	1.4%	2.7%
Portfolio management 312 453 141 45%	523920 Portfolio management	312	453	141	45%	160	\$87,744	1.1%	7.3%

V. Industry Intelligence

Now that you know the target industries for Scottsdale, it will be important to gain insights on each cluster to customize marketing to these industries in an informed and professional way. Each cluster has different drivers for site location and expansion.

The following topics are presented in this section, with more in-depth resources available in the appendix:

- Typical Company Pro Formas
- Industry Importance Factors
- Industry Occupations
- Source Geographies
- Industry Profiles from First Research in the appendices

A. Typical Company Pro Formas

For each target industry cluster the following table presents an overview of a typical company's operation based on employment, facility square feet, building type, capital investment and average wages. These pro formas have been developed in the context of establishments by employment size in the United States. The context data has been included along with the sample pro formas in Appendix B.

FIGURE 9
TARGET INDUSTRY PRO-FORMAS

	Average	Average	Square	Building	Avg Capital
	Est Size	Wage*	Footage**	Туре	Investment**
Information Technology	12	\$78,627	3,750	Office	\$265,473
Insurance and Financial Services	14	\$69,955	4,350	Office	\$1,120,077
Recreational Equipment	14	\$46,969	4,311	Office/Light Mfg	\$905,963

Source: IMPLAN ES202 Data for 2008; 2007 Economic Census; IRS Statistics of

^{*}Average wage for Maricopa County

^{**}Based on average firm size for the U.S. as shown.

B. Industry Importance Factors

Every industry has different drivers for their site search. To better understand the differences, a list of priority location factors detailing which factors are most important to each target cluster are found in Appendix C. You will use this information to customize marketing and prospect proposals, showing how a Scottsdale location can competitively meets their specific needs.

The following table illuminates factors for site selection of high priority.

RECREATION EQUIPMENT	RENEWABLE ENERGY	INFORMATION TECHNOLOGY	INSURNACE & FINANCIAL SERVICES PROCESSING
 Geographic proximity to markets Cost of transportation services for good and products Workforce – Sales Workforce – Operators & Assemblers Workforce – Handlers, Equipment Cleaners and Laborers Effective cost of skilled and unskilled labor Reliability of the workforce 	 Geographic proximity to markets Available air transportation Energy dependability Energy cost Water availability and cost Workforce – Executive, Administrative and Managerial levels Workforce - Professional Specialty Workforce - Technical Availability and cost of built space Quality of higher education Business incentives Regulatory policies favorable to solar industry Climate/physical environment Recreation/Cultural opportunities Image of area 	 Telecommunication services Energy dependability Access to business, professional, and technical services Workforce – Technical Availability of built space Financial Capital (debt form) Quality of secondary education Quality of higher education Local transportation and commuter services Cost of living (except housing) Personal and property security Climate/physical environment Recreation/Cultural opportunities Image of area 	 Telecommunication Services Energy Dependability Access to business, professional, and technical services Workforce – Executive, Administrative and Managerial levels Workforce - Administrative support Effective cost of skilled and unskilled labor Availability of built space Quality of secondary education Regulatory policies Business taxes Personal and property security Image of area

C. Industry Occupations

The distribution of occupations has been sourced from the Bureau of Labor Statistics, Industry to Occupation Matrix. When preparing proposals and marketing materials, you will know which occupations are most important to each industry. A list for each target industry cluster is presented in Appendix D.

D. Source Geographies

The listing of geographies that have a major presence of each industry cluster has been researched. With this information, you will be able to target your external marketing efforts for each industry cluster in specific areas.

Following is a list of top source geographies for each target cluster. The complete list geographies for every target industry is presented in Appendix E.

TARGET INDUSTRY CLUSTER	TOP FIVE SOURCE GEOGRAPHIES ¹
Recreation Equipment	 Los Angeles-Long Beach, CA San Diego, CA Orange County, CA Chicago, IL Seattle-Bellevue-Everett, WA
Renewable Energy	 Chicago, IL San Diego, CA Atlanta, GA Los Angeles-Long Beach, CA San Jose, CA Columbus, OH International (but not listed in appendix): Germany, Spain, China
Information Technology	 Washington, DC-MD-VA-WV San Jose, CA New York, NY Chicago, IL Boston, MA-NH
Insurance and Financial Service Processing	 New York, NY Chicago, IL Los Angeles-Long Beach, Ca Dallas, TX Boston, MA-NH

¹ Metropolitan Statistical Area based on total employment in target industry.

F. Industry Profiles

In Appendix F, you will find several industry profiles covering subsectors and general industry clusters representative of Scottsdale's target industries. The information has been researched and assembled by First Research (www.firstresearch.com). First Research, the leading provider of market analysis tools, synthesizes hundreds of sources in an easy to read format that help sales and marketing teams perform faster and smarter, to ultimately open doors and close more deals.

Each report covers:

- Industry Overview competitive landscape, product operations and technology, sales and marketing, finance and regulations, regional and international issues, human resources, employment growth, earning and wages
- Recent Developments industry indicators, monthly news, quarterly industry update
- Business Challenges critical issues
- Trends and Opportunities business and trends, industry opportunities
- Executive Insight for CEO, CFO, CIO, HR, VP Sales/Marketing
- Call Preparation Questions
- Financial Information
- Industry Forecast
- Web Links & Acronyms

Regular updates are available and recommended for Scottsdale to stay on top of industry trends and indicators.

VI. Implementation

In this section of the Target Industry report, we present implementation tactics for the City of Scottsdale's Economic Vitality Department to conduct effective outreach marketing and sales. Additional recommendations focused on enhancing Scottsdale's competitiveness for attracting target industries are included in the *Competitive Position Analysis & Recommendations*.

A. Industry Research

Goal:

Become an industry expert to better position Scottsdale for target industries.

Why Important:

It is important to speak the industry's language (acronyms, terms, etc) and understand industry trends when working with clients. As well, each cluster has different drivers for site location and expansion. Knowing the difference will help you to better customize your responses and set Scottsdale apart from other cities in the region.

- Research Champions Because it may be too much work for one staff person, determine who among the Economic Vitality staff is interested in being an "industry champion", responsible for researching and following industry trends for a specific target industry.
- Research industries to understand industry drivers, issues and opportunities.
 - Read industry intelligence materials in the appendix of this report
 - Visit, even "bookmark"/"favorite", websites listed in the First Research Reports
 - Subscribe to First Research (www.firstresearch.com) for quarterly updates (\$1,000) or purchase from Chabin Concepts (\$100 per report)
 - Customize Google for target industry research (Finance, news alerts and RSS feeds on companies and industry topics, customize Google news page)
 - Join industry-related LinkedIn groups
 - As budget allows, join industry associations relevant to target industries

B. Business Cases

Goal:

Document and package Scottsdale's relevant assets into a business case that presents Scottsdale's value proposition why Scottsdale is the location of choice for each target industry

Why Important:

To differentiate Scottsdale from other competitors, a *Business Case* is recommended. The business case is focused on promoting the assets and value proposition that the region offers to specific target audiences. Most communities promote their area with features and programs – not that those are not important – but a business case markets the assets that will contribute to making a business's bottom-line achieve success. *It offers a clear, compelling case of why a business should be considering your region for a location.* A business case answers the question, "Why should I locate in Scottsdale versus any place else?"

- Document proof points aligned to the high and medium priority location factors (Appendix C). List large and noteworthy Scottsdale employers in the industry. Include regional assets since businesses located in Scottsdale will utilize these resources.
- Research and develop case studies to include as part of Scottsdale's business case.
- Assemble business case data, information and case studies into a two to four-page document. Print on-demand as you will want to update this piece frequently in order to stay relevant to the industry and Scottsdale's assets.
- Update at least quarterly based on changes in Scottsdale and industry trends.
- See Appendices G and H for more specific instructions in preparing a business case and case studies.

C. Website Enhancement

Goal:

Present Scottsdale's business case and additional relevant industry resources on the city website.

Why Important:

A website is the most important communication and fulfillment tool in the economic development "tool box." Businesses seeking new locations or expansion opportunities will first use the website to evaluate location opportunities, and they expect to find robust data and information on the site.

Websites are dynamic – they should always be evolving with new information, data and news. Because of this dynamic nature, the website not only promotes Scottsdale but must deliver **critical data or links to data** in an effective and efficient manner.

Note: The following tactics are specifically related to target industries. As evaluated in the Competitive Position Analysis & Recommendations, the City of Scottsdale's website is lacking critical content for business attraction, retention and expansion.

- Add a page to the Economic Vitality section for "Industry Focus" linking to one page for each business case. Do not use the term "Target Industries" – no one wants to be "targeted".
- The business case pages should not simply be a PDF of the business cases. The Internet is an excellent vehicle to expand the business cases beyond two to four-page fact sheets and dynamically integrate links in order to connect web visitors to resources and supporting facts for the business case.
- Add relevant state and local industry news so that your webpage is a resource to local and prospective companies.
- At least quarterly, update data and verify links.

D. Leverage Marketing for Leads

Goal:

Enhance relationships with state and regional partners for generating leads from target industries.

Why Important:

In most cases, companies and site selectors will approach state and regional economic development organizations for assistance with their site searches. At the same time, most cities do not have the budget or capacity to implement a very aggressive marketing program for lead generation.

By working through state and regional partners, leads will flow to Scottsdale. Your challenge is to speak up to these groups and inform them of the industries that are "best fit" for your community.

- Share the Target Industry Study Report with the Arizona Department of Commerce and GPEC. Ask to participate in marketing activities related to your target industries.
- When completed, share Scottsdale's businesses cases to show you have done your homework and can make Scottsdale's case for the specific industry.
- Provide ongoing updates to the state and GPEC with news about target industry businesses in Scottsdale – i.e. expansions, new products, services and markets, etc.

your understanding of industry needs and Scottsdale's corresponding business case. If possible, include a cover letter. At minimum, the cover letter may help your leverage marketing partners to better articulate Scottsdale's value proposition for the project.

E. Proposals

Goal:

Prepare competitive and customized proposals that demonstrate that the project and company would be successful in Scottsdale.

Why Important:

The time cycle for finding and siting a company has shortened considerably over the past few years because of the "time to market" need. Often the information they are requesting is needed in a two-day to one-week turn-around, which pushes economic developers to have critical information readily available and up-to-date. The actual decision process, though, may be 18 to 36 months, depending on the company and the market. An 18 to 36-month cycle would be typical for an owner-operator relocating a facility. Expansions of local companies are often on a shorter timeline, but they are still often looking at alternatives.

Being prepared to not only meet timelines but to create a customized and compelling proposal that will ensure Scottsdale makes the cut takes into account your industry research and work on the business case.

- Appendix I provides feedback on the mock project proposal, submitted during the Corporate Location Assessment. Appendix J is a suggested outline for an ideal proposal. Review both appendices.
- For a comprehensive proposal, start with the business case data so that your proposal will be industry-specific. Build upon that data and transform it to be not only industry-specific but also company and project-specific.
 - Review RFP
 - Speak with company or project representative (state, GPEC, site selector) to gather more insights on company and project, if possible.
 - If you know the company, research online.
 - Customize data to project priorities. If the project priorities are unknown, customize to industry priority location factors.
 - Write a compelling cover letter that summarizes Scottsdale's value proposition for this project. The cover letter should make the case, with the content in the rest of proposal serving as supportive documentation.
- There will be instances when you will not be asked for a comprehensive proposal because the lead may only want specific answers or the project is being handled by GPEC/state. In these instances, answer the requested information and be sure to not only give facts but tie to benefits of a Scottsdale location, based on

Appendix

- A. Historical Industry Trends
- B. Target Industry Pro-Formas
- C. Industry Importance Factors
- D. Occupational Needs
- E. Source Geographies
- F. FirstResearch Industry Reports
- G. Building a Business Case
- H. Case Study Template
- I. Ideal Community Proposal Outline
- J. RFP Response Assessment & Project Juicy Fruit Proposal

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