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The Economic Importance of the Arts & Cultural Industries in Bernalillo County (Revised). Part I: Quantification of Economic Impacts

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**THE ECONOMIC IMPORTANCE OF THE
ARTS & CULTURAL INDUSTRIES
IN BERNALILLO COUNTY**

**PART I: QUANTIFICATION OF
ECONOMIC IMPACTS**

**MAY 2006
REVISED AUGUST 2006**

UNIVERSITY OF NEW MEXICO

**BUREAU OF BUSINESS AND
ECONOMIC RESEARCH**



THE ECONOMIC IMPORTANCE OF THE ARTS & CULTURAL INDUSTRIES IN BERNALILLO COUNTY

**PART I: QUANTIFICATION OF
ECONOMIC IMPACTS**

**By Dr. Jeffrey Mitchell,
Dr. Lee A. Reynis,
and Molly Bleecker, M.A.**

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ECONOMIC RESEARCH**

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EXECUTIVE SUMMARY

The purpose of this study is to measure the economic impact of arts and cultural industries (A&CIs) in Albuquerque and Bernalillo County. This research draws upon data from secondary data sources, including a comprehensive set of records of individual employers, and information gathered from primary investigation of the cultural content and revenue sources of nearly 400 businesses and institutions. This study also provides data on the impact of art and cultural activities on public finances, including the city, county and state. All measurements are for calendar year 2004.

The main findings of this study include the following:

- Bernalillo County's A&CIs generated receipts of nearly \$1.2 billion, employed more than 19,500, and paid wages and salaries totaling \$413 million. Employment and wages in the cultural sector account for 6.1% and 3.8% of the county totals, respectively.
- On average, about one-half of arts and cultural activities were supported by revenues that originate outside the county. The capacity of A&CIs to draw funds into the county is significant because these dollars create economic growth on a net basis. Including indirect and induced impacts, outside dollars accounted for a net impact of almost \$1 billion in receipts, more than 14,000 jobs and \$300 million in wages and salaries.
- Hospitality businesses serving cultural tourists, artisan producers (particularly jewelry makers), media, and artists, performers and writers registered the greatest impacts in terms of drawing outside dollars to the county. Including indirect and induced impacts, outside revenues to these subsectors contributed an estimated \$357 million, \$187 million, \$125 million and \$98 million, respectively, to the local economy.
- The impact of outside dollars on public finances is marginal. On a net basis, the state of New Mexico and the city of Albuquerque provide substantial subsidies to arts and cultural activities, as public revenues generated by outside dollars, including lodgers taxes, are relatively low.
- Some of the largest and most visible subsectors of the cultural economy contribute little – at least directly – to regional economic growth because they serve county residents primarily. Educational services, for example, is by far the largest employer in the cultural sector, but because the majority of funding is local the net impact on the local economy is relatively small.
- Employment in most subsectors of A&CIs is geographically concentrated in the core areas of downtown, UNM, in the North Valley and along I-25

north of the I-40 exchange, and in the near eastside of Albuquerque. A&CIs have much less of a presence in other areas, especially in the South Valley and on the Westside. Indeed, APS is the only cultural institution of any significance in many parts of the county.

- By comparative measures, the cultural economy of Albuquerque and Bernalillo County is strong. Employment in A&CIs is relatively high for a city of Albuquerque's size; the county's A&CIs compare favorably with some of the largest employers in the state, including UNM and Intel; and existing studies rank the region highly in terms of cultural amenities and economic prosperity, further suggesting the area holds great promise for continued growth in the cultural economy.

This first phase of research quantifies the contribution of A&CIs to the economy of Bernalillo County. However, it is widely recognized that the most significant contributions of arts and cultural activities to economic development are less direct than those captured in this first phase of research. Over the past decade, academic and applied research has begun to demonstrate that the cultural economy plays a key role in creating markets, attracting investment and skilled labor, and fostering a productive and innovative environment in which business and the community prospers. Emerging research also suggests that success in fostering such an environment depends largely on the quality of the relationships that link the cultural sector to business and the community. The nature of these relationships is the principal subject of the second part of this research project.

ACKNOWLEDGEMENTS

BBER would like to offer special thanks to the members of the project's advisory committee who helped to direct us in this work. In particular, we would like to acknowledge the efforts and support of Christopher Mead, Dean of UNM's College of Fine Arts and Chair of the Advisory Council; Regina Chavez, Albuquerque Office of Economic Development; Catherine Gore, Albuquerque Public Art Program; Sherri Olsen, Bernalillo County 1% for Public Art Program; and John McIver, UNM Office of the Vice President for Research. Cricket Appel, Albuquerque Arts Alliance; Pamela and Don Michaelis, publishers of the Collector's Guide of New Mexico; and Janet Kahn, APS Fine Arts Coordinator and many others were instrumental in providing information that is the backbone of this report. This research is made possible by the generous financial support of Albuquerque's Office of Economic Development; Bernalillo County's Office of Economic Development; and the UNM College of Fine Arts, with the support of the McCune Charitable Foundation and the Albuquerque Community Foundation.

BBER would also like to thank Paulius Narbutas, economist with the New Mexico Department of Cultural Affairs; Betty King and Kizito Wijenje of APS's Capital Master Plan Department; Mark Chisholm of Institutional Research at UNM; Colleen Boyarko of Human Resources at UNM; Julie Luna of Central New Mexico Community College's (formerly TVI) Planning, Budget, and Institutional Research Department; Rodger Beimer, Deputy Manager of Expo New Mexico; Ann Lerner, Film Liaison at Albuquerque's Office of Economic Development; Charlie Wollman of the New Mexico State Investment Council; Katie Roberts of the New Mexico Economic Development Department; Bruce Poster of Southwest Planning and Marketing; Gene Harris of the National Hispanic Cultural Center; Denise Hidalgo of the New Mexico Museum of Natural History & Science; Richard S. Towne of KUNM ; Joanne L. Bachmann of KNME TV 5; Linda Ryan of the Albuquerque Convention and Visitors Bureau; Kathryn Minette of New Mexico Arts; and the hundreds of businesses and organizations who shared their time and provided the information that is the backbone of this study.

As always, the authors reserve their deepest appreciation for BBER's remarkable staff. Nick Potter, BBER's newly anointed Implan Czar, patiently, repeatedly and painstakingly ran the data; Kevin Kargacin, as always, provided invaluable advice and tutoring on locating and interpreting data; Mike McDaniel provided timely GIS support and created the maps for this report; and several students, including Sophie Hammett, Rishma Khimji and Erica Freese, also contributed time and energy to this project.

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INTRODUCTION

During recent years policymakers and planners have begun to recognize the crucial role of art and cultural activities in economic development. Increasingly, economic development specialists acknowledge the role of art and culture: in attracting and retaining talented people who drive high productivity industries; in contributing to the complex processes of innovation; as draws for tourism, the largest industry in the U.S. and the world; and, underlying all of these, in the preservation of a vital sense of place during this unprecedented period of social and economic globalization. Fundamentally, art and culture are the last line of defense against what has been described, dismally, as the ‘geography of nowhere’.¹

This report presents the findings of the first of a three part study of the role of arts and cultural industries (A&CIs) on the economy of Bernalillo County, including the city of Albuquerque. This three part study is modeled after a similar project conducted by the UNM Bureau of Business and Economic Research (BBER) during 2003-2004 on the A&CIs in Santa Fe County, but includes changes in the focus to better capture the much larger and more diverse economy of New Mexico’s most populous county.

The overarching purpose of this research is to provide information that will enable policymakers, planners and the community to strengthen Bernalillo County’s A&CIs and to better leverage these industries to create new economic opportunities in the region. The first phase of the project, reported here, provides the initial groundwork with a measurement of the economic impact of arts and cultural activities. The analysis is highly disaggregated, allowing for an evaluation of 14 distinct categories of activities, including arts, design, education, spectator sports, cultural tourism and others. Further, this report provides several measurements of arts & cultural activities, from direct tabulations of these activities, to a broader accounting of the impact of these activities as they generate expenditures in the local economy, to a more specific measurement of the role of A&CIs in drawing outside dollars to the county. In addition, this report analyzes the impact of A&CIs on public finances with a detailed examination of revenues and expenditures associated with arts and culture to various public entities.

The second phase of the research project will build upon this quantitative analysis with an analysis of the relationships that link A&CIs to other sectors of Bernalillo County’s economy. The purpose of this work is to identify opportunities to strengthen and leverage the assets of the county’s cultural sector to create a

¹ Kunstler, James Howard, 1994. *Geography of Nowhere: The Rise and Decline of America's Man-Made Landscape*. New York: Free Press.

stronger and more diversified pattern of economic development. The final phase of the project will survey and evaluate policies and practices to further this end. Parts two and three will be conducted during the summer and fall of 2006.

Following this introduction, this report contains four parts and appendices. Part 2 is a brief discussion of salient conceptual and methodological issues. A more complete discussion of the methodology used in this study is provided in Appendix B. Part 3 presents principal findings of the study in three subsections. The first subsection surveys the direct contributions of the arts and cultural activities to the economy of Bernalillo County. The second subsection is an analysis of the indirect and induced effects of the A&CIs in generating economic activity in other sectors of the economy. The third subsection is a study of the industries' impact on city, county and state public revenues and expenditures. Part 4 of the report provides context for interpreting the findings by comparing the performance of Bernalillo County's A&CIs to similar industries in other regions and to other industries in New Mexico. The report concludes with a brief summary and discussion of the findings.

METHODOLOGICAL CONSIDERATIONS²

This study estimates the economic impact of arts and cultural activities in Bernalillo County. This subject raises two core methodological issues – the definition of arts and cultural activities and the measurement of economic impacts.

Defining Art and Cultural Activities

For the purposes of this study, cultural activities are defined as creative artistic and cultural work and supporting activities that distinguish Bernalillo County and the city of Albuquerque, creating a unique sense of place. These activities build upon the cultural heritage of the Middle Rio Grande region, but also constitute a process by which the region grows and changes.

In developing a definition of cultural activities, BBER sought to balance consideration of the unique character of Bernalillo County with an interest in maintaining consistency with standards used in other cultural studies. To this end, BBER solicited the input of an Advisory Council comprised of key members and policymakers from Bernalillo County’s cultural community³. These insights were balanced by a review of applied and academic studies relevant to cultural policy⁴.

Table 1 summarizes the economic activities included in this study; activities are organized according to category and industrial subsector⁵. The categories grew out of discussions with members of the Advisory Council and reflect an effort to summarize a broad scope of cultural activities according to commonly used

² See Appendix B for a detailed description of data sources and methods used in this study.

³ Members of the UNM-BBER/Bernalillo County Cultural Policy Advisory Committee are listed in Appendix A of this report.

⁴ Americans for the Arts. *Arts & Economic Prosperity*. (Washington D.C. Americans for the Arts, 2003). Ann Markusen and David King. *The Artistic Dividend: The Art’s Hidden Contributions to Regional Development*. (Minneapolis: Humphrey Institute of Public Affairs, 2003). New England Council. *The Creative Economy Initiative: A Blueprint for Investment in Investment in New England’s Cultural Economy*. (Boston: The New England Council, 2001). Pew Charitable Trusts. *Optimizing America’s Cultural Resources*. (Philadelphia: Pew Charitable Trusts, 2001). Cultural Initiatives Silicon Valley. *Creative Community Index*. (San Jose: Cultural Initiatives Silicon Valley, 2003). Bill Bulick with Carol Coletta, Colin Jackson, Andrew Taylor, and Steven Wolff. *Cultural Development of Creative Communities*. (Washington D.C.: Americans for the Arts, 2003). Mark J. Schuster. *Informing Cultural Policy*. (New Brunswick: CUPR, 2002). Allen J. Scott. *Cultural Economy of Cities*. (Thousand Oaks: Sage Publications, 2000).

⁵ The following activities are specifically *excluded* from this study: religious and Native American-based enterprises because reliable information is not available; pornography and other adult-only businesses because of questions regarding their cultural contribution; restaurants and fine dining, except as they relate to cultural tourism; and participatory sports because of the voluntary nature of these activities, the lack of reliable information and the difficulty in estimating their economic value.

definitions. The subsectors are designations established within the North American Industry Classification System (NAICS). Linking categories with NAICS-defined subsectors allowed BBER to move from a broad conceptual understanding of art and cultural activities to a specific and standardized classification system useful in measuring economic activities.

The main source of information used in this study is the Covered Employment database for the year 2004. This database is maintained by the New Mexico Department of Labor (NMDOL) and is known as ES-202. The collection of the data is legislated by the federal government under the National Labor Market Information Program for use in the administration of the unemployment insurance program. An essential feature of the ES-202 database is that industrial classification and employment and wage data is available for specific employers on an establishment by establishment basis. This level of disaggregation enabled BBER to move beyond even the most detailed six digit classification established under NAICS to measure specific activities of businesses included in the broader universe described in **Table 1**.

Data submitted by employers under the ES-202 program is supplemented by 2003 Census Bureau Nonemployer Statistics. Nonemployers are businesses with no employees with taxable receipts of \$1,000 or more for a given year. These businesses are typically self-employed workers, and tend to be strongly represented within certain segments of the A&CIs, most notably artists, writers and performers. It is a limitation of the analysis that such individuals are included only to the extent self-identification for tax purposes places them within the A&CIs. Workers whose cultural activities are of a secondary nature are commonly omitted. Further, the Census Bureau's Nonemployer Statistics do not include individuals who work in a nonprofit capacity.

Art and cultural activities are common in many parts of the economy, not only in the select businesses and institutions that are dedicated to this purpose. A central challenge of this research is to identify these activities in their many forms. To this end, BBER conducted nearly 400 interviews and email surveys of individuals and businesses in Bernalillo County in an effort to precisely measure the extent of the artistic and cultural activities performed. The interview and survey subjects were selected from the ES-202 database by stratified random sample techniques, according to economic sector and the size of the establishment. Based on the interview and survey results, businesses and other institutions were assigned values from 0 to 100% to indicate the share of the enterprise's activities that are relevant to this study. The establishment's total employment was multiplied by this coefficient, indicating the number of employees (full time equivalents) specifically engaged in art and cultural activities.

TABLE 1: ARTS AND CULTURAL ACTIVITIES INCLUDED IN THIS STUDY, ACCORDING TO CATEGORY AND INDUSTRIAL SUBSECTOR (NAICS)

<u>CATEGORY</u>	<u>SUBSECTORS</u>	<u>NAICS</u>
Advocacy	Grantmakers	813211
	Business Associations	813910
	Civic and Social Organizations	813410
	Professional Organizations	813920
Artisans		All 31, 32 & 33
Artists	Independent Artists, Writers, and Performers	71151
	Musical Groups & Artists	71113
	Promoters of Performing Arts, Sports, & Similar Events with Facilities	71131
	Promoters of Performing Arts, Sports, & Similar Events without Facilities	71132
	Theater Companies & Dinner Theaters	71111
Design	Advertising and Related Services	All 5418
	Architectural Services	54131
	Graphic Design Services	54143
	Interior Design Services	541410
	Other Specialized Design Services	54149, 541490
Education	Colleges, Universities, & Professional Schools	611310
	Fine Arts Schools	611610
	Language Schools	611630
	Libraries & Archives	519120
	Other Technical & Trade Schools	611519
Fairs	Fairs & Festivals	
	Farmers Markets	
	NM State Fair	
	Promoters of Performing Arts, Sports, & Similar Events with Facilities	711310
Media	All Other Publishers	511199
	Book Publishers	511130
	Cable & Other Subscription Programming	515210
	Motion Picture & Video Distribution	512120
	Newspaper Publishers	511110
	Other Motion Picture & Video Industries	512199
	Other Sound Recording Industries	512290
	Periodical Publishers	511120
	Radio Broadcasting	515111
	Radio Stations	515112
	Sound Recording Studios	512240
	Television Broadcasting	515120
	Movies	Motion Picture Theaters (except Drive-Ins)
Museums	Museums ¹	All 712110
	Zoo & Botanical Gardens ²	71213

¹Albuquerque Museum, National Hispanic Cultural Center, Indian Pueblo Cultural Center, Balloon Museum, Science Museums, Explora, and Natural History Museum.

²Includes Biopark (Rio Grande Zoo, Rio Grande Botanical Gardens, and Albuquerque Aquarium).

TABLE 1 CONTINUED

<u>CATEGORY</u>	<u>SUBSECTORS</u>	<u>NAICS</u>
Retail Trade		All 44 & 45
	All Other Home Furnishing Stores	442299
	Art Dealers	453920
	Book Stores	451211
	Hobby, Toy, & Game Stores	451120
	Jewelry Stores	448310
	News Dealers & News Stands	451212
	Prerecorded Tape, Compact Disc, & Record Stores	451220
	Used Merchandise Stores	453310
Sports	Newspapers Publishers (sports content)	511110
	Spectator Sports	7112
Tourism	Full Service Restaurants	722110
	Hotels (except Casino Hotels) & Motels	721110
	Travel Arrangement & Reservation Services	5615
Wholesale	Jewelry, Watch, Precious Stone, & Precious Metal Merchant Wholesalers	423940
	Other Miscellaneous Durable Goods Merchant Wholesalers	423990
	Piece Goods, Notions, & Other Dry Goods Merchant Wholesalers	424310

UNM-Bureau of Business and Economic Research, 2006.

Measuring Economic Impacts

The second methodological issue regards the measurement of the economic impacts of arts and cultural activities. There are two aspects of this issue. First, according to economic principles, economic impact is a function of the capacity of a business or industry to draw funds from outside the region into the local economy. Logically, economic activities that depend exclusively on local consumers for their market only serve to recycle and redistribute funds already present in the economy; funds that are not spent on one activity will be spent on another. Thus, nothing is gained on a net basis from the expenditure of local funds. By contrast, activities that draw money into the local economy from outside make a net positive impact by creating jobs, raising incomes and producing additional tax revenues that would otherwise not exist⁶.

To measure the flow of revenues from outside Bernalillo County to businesses and institutions in the county, BBER included in the interviews and surveys described in the previous section questions regarding the geographical source of revenues and funding. As noted, subjects for interviews and surveys were selected by a stratified random sample, according to industry and establishment

⁶ A corollary to this principle is that economic activities that capture local funds that otherwise would be spent outside the region have a comparable benefit.

size as indicated by the ES-202 database. Where appropriate, representatives of businesses and institutions were asked to quantify the share of total receipts that originate in Bernalillo County, in other parts of New Mexico, and from outside the state. Again, arts and cultural employment for each establishment was multiplied by the appropriate coefficient to indicate the number of relevant jobs funded by dollars that originate from outside the county.

The second methodological issue relevant to impact analysis regards the estimation of the indirect and induced impacts of Bernalillo County's A&CIs. According to standard definitions, indirect effects are the result of spending within the local economy by vendors to the A&CIs. Induced effects result from the expenditure of wages within the local economy, including those of individuals employed directly by the A&CIs as well as those employed by vendors to the A&CIs. A full accounting of the economic contribution of the region's A&CIs requires that analysis extend beyond the direct contributions of the industries to include indirect and induced impacts, thus capturing the 'ripple effect' that multiplies the economic impact of cultural activities.

To calculate indirect and induced effects and the impact of financial inflows, BBER used Implan Pro 2.0⁷. Implan Pro is a widely used regional economic modeling application that utilizes data that are specific to Bernalillo County. Implan Pro provides for an analysis of indirect and induced contributions and the impact of external sources of capital by tracing expenditures through local industries and quantifying leakages that occur when expenditures are made outside the regional economy. BBER has validated the estimates generated by Implan Pro 2.0 for New Mexico by comparing results with those produced by BBER's FOR-UNM model.

⁷ Minnesota IMPLAN Group, Inc., IMPLAN System (data and software), 1725 Tower Drive West, Suite 140, Stillwater, MN 55082 www.implan.com

ECONOMIC IMPACT OF ARTS & CULTURAL INDUSTRIES ON BERNALILLO COUNTY

Direct Contributions of Arts & Cultural Industries

Table 2 summarizes employment, wages and output (receipts) of the various subsectors of the A&CIs in Bernalillo County. As the table indicates, A&CIs generate nearly \$1.1 billion in output. A&CIs directly employ 19,508 workers, 6.1% of the county total; and pay \$413 million in wages, about 3.8% of the county total.

TABLE 2: ARTS AND CULTURAL OUTPUT, EMPLOYMENT AND WAGES IN BERNALILLO COUNTY, 2004

	EMPLOYMENT	WAGES (\$000)	OUTPUT (\$000)
Advocacy	169	1,688	4,767
Artisans	1,190	26,387	161,317
Artists	1,982	10,761	121,941
Design	1,154	37,891	88,908
Education	6,790	183,071	293,585
Fairs	296	1,418	6,711
Media	761	32,363	120,681
Movies	457	7,187	42,922
Retail	1,046	15,131	45,845
Museums	583	13,684	43,755
Sports	476	2,186	6,886
Hospitality	4,474	74,995	217,864
Wholesale	129	6,224	17,166
TOTAL	19,508	412,987	1,172,348

UNM-Bureau of Business and Economic Research, 2006.

Figure 1 shows the composition of employment within Bernalillo County's arts and cultural economy. Among A&CIs, education is the largest subsector, accounting for nearly 35% of all employment and 44.3% of all wages in the county's A&CIs. Albuquerque Public Schools is by far the largest institution in the county's arts and cultural sector, accounting for the equivalent of 4,701 jobs and \$142.2 million in wages in the areas considered in this report. By itself, APS contributes more to Bernalillo County's arts and cultural economy than the total of any other subsector. Cultural tourism, principally restaurants and accommodations serving visitors engaged in cultural activities, follows education

as the second largest subsector, with 22.9% of all employment. Artists is the third largest category in terms of employment, accounting for 10.4% of arts and culture-related jobs, but this sector lags well behind several others in terms of the total income that is generated. It is notable that of the 1,982 persons employed as artists as defined in this study, 1,536 or 77%, are not covered by unemployment insurance; i.e., they are self-employed. Beyond these three principal sectors, artisans, retail and media also have a significant presence among Bernalillo County's A&CIs.

FIGURE 1: EMPLOYMENT IN THE ARTS AND CULTURAL INDUSTRIES IN BERNALILLO COUNTY BY SUBSECTOR, 2004

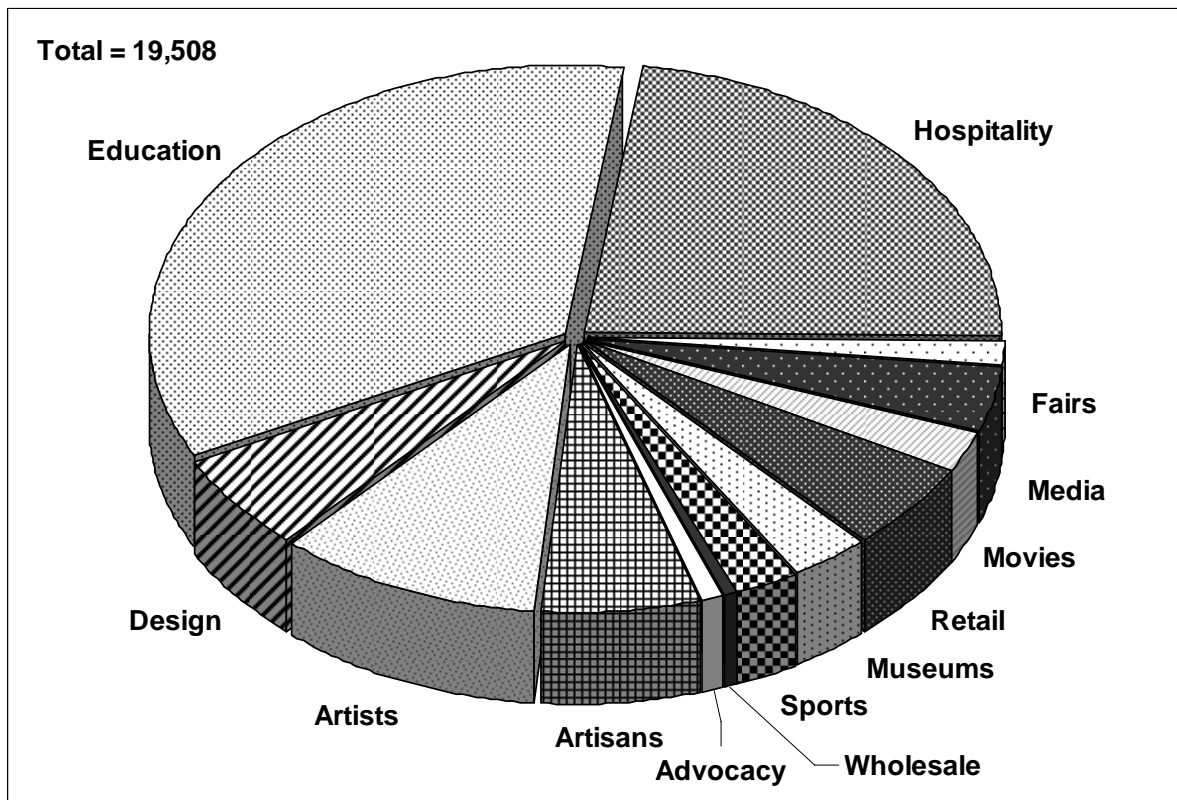


Table 3 is a summary of employment, wages and output of Bernalillo County's A&CIs that are funded with *dollars that originate outside the county*; the bottom half of the table is the percentage of all arts and cultural activities that are funded with 'outside dollars'. These figures best indicate the impact of A&CIs in terms of their capacity to contribute to the growth of the local economy by drawing new sources of revenues into the county.

TABLE 3: ARTS AND CULTURAL RECEIPTS, EMPLOYMENT AND WAGES IN BERNALILLO COUNTY SUPPORTED BY OUTSIDE DOLLARS (EXPORTS), 2004

	EMPLOYMENT	WAGES (\$000)	OUTPUT (\$000)
Advocacy	31	319	900
Artisans	900	20,112	124,156
Artists	861	4,856	57,549
Design	377	13,404	29,793
Education	1,031	33,439	53,617
Fairs	174	831	3,944
Media	420	18,640	71,426
Movies	46	719	4,292
Retail	300	4,475	13,658
Museums	206	4,160	14,344
Sports	101	464	1,461
Hospitality	4,419	73,288	213,331
Wholesale	98	4,705	12,976
TOTAL	8,964	179,411	601,447

**Shares of Art & Cultural Activities Funded by
Outside Dollars (%)**

	EMPLOYMENT	WAGES	OUTPUT
Advocacy	18%	19%	19%
Artisans	76%	76%	77%
Artists	43%	45%	47%
Design	33%	35%	34%
Education	15%	18%	18%
Fairs	59%	59%	59%
Media	55%	58%	59%
Movies	10%	10%	10%
Retail	29%	30%	30%
Museums	35%	30%	33%
Sports	21%	21%	21%
Hospitality	99%	98%	98%
Wholesale	76%	76%	76%
TOTAL	46%	43%	51%

UNM-Bureau of Business and Economic Research, 2006.

Outside dollars account for just over \$600 million in economic output. These dollars are equal to about one-half of all receipts to A&CIs in Bernalillo County, and fund slightly less than one-half of arts and cultural employment and incomes. Cultural tourism (hospitality), which by definition depends on outside revenues, registered an estimated \$213.3 million in outside receipts in 2004, by far the most of the 14 sectors included in this study. Artisan industries, predominantly jewelry manufacturers, received an additional \$124.2 million from sales outside the county in 2004. These sales accounted for more than three-quarters of the total receipts of artisan industries. Other subsectors that draw significant revenues into the county are media industries, including newspapers and television and radio stations that carry advertisements for national businesses; artists, including the performing arts; and education, primarily UNM, which receives research and educational funding from state and federal governments, and tuition payments from students from outside the county. APS has only a marginal role in drawing funds to the county for arts and cultural activities because state funding for public education is, on a net basis, offset by state taxes paid by Bernalillo County residents and businesses.

Indirect and Induced Effects of Arts & Cultural Industries

As defined earlier, indirect effects are the result of spending within the local economy by vendors to the A&CIs. Induced effects are the product of the expenditure of wages in Bernalillo County by persons employed by the A&CIs or employed by vendors to the A&CIs. The economic multiplier is an aggregate measure of the activity associated with direct, indirect and induced effects; as shorthand, the multiplier can be understood as the number of times outside revenues cycle within the local economy. In general, industries that pay high wages and that purchase goods and services produced locally are characterized by high multipliers, sometimes reaching or exceeding a value of 2.0.

Table 4 is a summary of the direct, indirect and induced economic impacts of A&CIs *supported by outside dollars*. The data in this table indicate that, in addition to the \$600 million in receipts of outside dollars that accrued directly to the county's A&CIs, the expenditure and circulation of these dollars by businesses and their employees generated an additional \$393 million in economic activity in 2004. Similarly, the circulation of these revenues created 5,198 additional jobs and \$122.6 million in wage and salary payments. Overall, the multiplicative impact of outside revenues generated by the county's A&CIs was 1.58, 1.68 and 1.65 for employment, labor income and total output, respectively. This compares favorably to most industries in Albuquerque and New Mexico, indicating a propensity of A&CIs, their suppliers and their employees to spend locally.

TABLE 4: DIRECT, INDIRECT AND INDUCED IMPACTS OF ARTS AND CULTURAL INDUSTRIES IN BERNALILLO COUNTY SUPPORTED BY OUTSIDE DOLLARS (EXPORTS), 2004

EMPLOYMENT	Indirect &		Total	Multiplier
	Direct	Induced		
	(\$000)	(\$000)	(\$000)	
Advocacy	31	10	41	1.32
Artisans	900	654	1,553	1.73
Artists	861	811	1,672	1.94
Design	377	219	596	1.58
Education	1,031	496	1,526	1.48
Fairs	174	37	211	1.21
Media	420	811	1,231	2.93
Movies	46	42	88	1.92
Retail	300	117	417	1.39
Museums	206	177	382	1.86
Sports	101	17	118	1.17
Hospitality	4,419	1,725	6,145	1.39
Wholesale	98	82	180	1.84
TOTAL	8,964	5,198	14,162	1.58

WAGES	Indirect &		Total	Multiplier
	Direct	Induced		
	(\$000)	(\$000)	(\$000)	
Advocacy	319	255	574	1.80
Artisans	20,112	20,174	40,285	2.00
Artists	4,856	11,176	16,032	3.30
Design	13,404	5,718	19,121	1.43
Education	33,439	12,188	45,627	1.36
Fairs	831	689	1,520	1.83
Media	18,640	15,281	33,920	1.82
Movies	719	963	1,681	2.34
Retail	4,475	3,198	7,673	1.71
Museums	4,160	4,643	8,802	2.12
Sports	464	312	776	1.67
Hospitality	73,288	45,727	119,015	1.62
Wholesale	4,705	2,234	6,939	1.47
TOTAL	179,411	122,556	301,967	1.68

TABLE 4 CONTINUED

OUTPUT	Indirect &		Total (\$000)	Multiplier
	Direct (\$000)	Induced (\$000)		
Advocacy	900	727	1,627	1.81
Artisans	124,156	62,399	186,555	1.50
Artists	57,549	40,346	97,894	1.70
Design	29,793	17,116	46,909	1.57
Education	53,617	39,256	92,874	1.73
Fairs	3,944	2,459	6,404	1.62
Media	71,426	53,280	124,706	1.75
Movies	4,292	3,616	7,908	1.84
Retail	13,658	9,610	23,269	1.70
Museums	14,344	12,910	27,255	1.90
Sports	1,461	1,019	2,480	1.70
Hospitality	213,331	143,888	357,219	1.67
Wholesale	12,976	6,696	19,672	1.52
TOTAL	601,447	393,322	994,769	1.65

UNM-Bureau of Business and Economic Research, 2006.

Geography of Arts & Cultural Industries in Bernalillo County

Figures 2, 3 and 4, and Table 5 provide information on the geography of employment in A&CIs in Bernalillo County in 2004. **Figure 2** shows the location of 1,929 art and cultural businesses and institutions included in this study⁸; each dot represents one arts and cultural employer. **Figure 3** shows the distribution of employment by A&CIs among 27 zip code areas in Bernalillo County in 2004.

The first two maps indicate that employment is most heavily concentrated downtown (87102), in North I-25 (87109), the mid-Heights (87110) and at UNM (87131). Because education comprises such a large share of Bernalillo County's cultural economy and because APS is by its constitution present in all parts of the region, no geographical area is without representation⁹. However, excluding education, several areas, including the South Valley (87105), the West Side along Coors Boulevard (87120) and the West Mesa, including newly developing southwestern Albuquerque (87121), lack a significant representation of A&CIs.

The geographical distribution of arts and cultural employment in part reflects the overall pattern of employment distribution in Bernalillo County. **Figure 4** shows

⁸ The remaining 68 businesses lacked a serviceable address.

⁹ The exceptions, zip code areas 87115 and 87116, are, respectively, on Isleta lands not included in this study and an unoccupied zone controlled by Kirkland Air Force Base.

A&CIs employment as a percentage of total employment for the 27 zip codes, thus standardizing the A&CIs employment for the overall distribution of employment. This figure indicates that A&CIs are indeed significant to the employment structure of Downtown and UNM, as well as north Albuquerque (87122). This figure further indicates that the high levels of A&CI employment in the North Valley, North I-25 and the mid-Heights are more of a function of overall high levels of employment in these areas than any specific concentration of A&CI activities and, similarly, that the low levels of A&CI employment in the South Valley and the West Side are fundamentally a reflection of the small number of jobs in these areas.

FIGURE 2: LOCATION OF ARTS AND CULTURAL BUSINESSES AND INSTITUTIONS IN BERNALILLO COUNTY, 2004

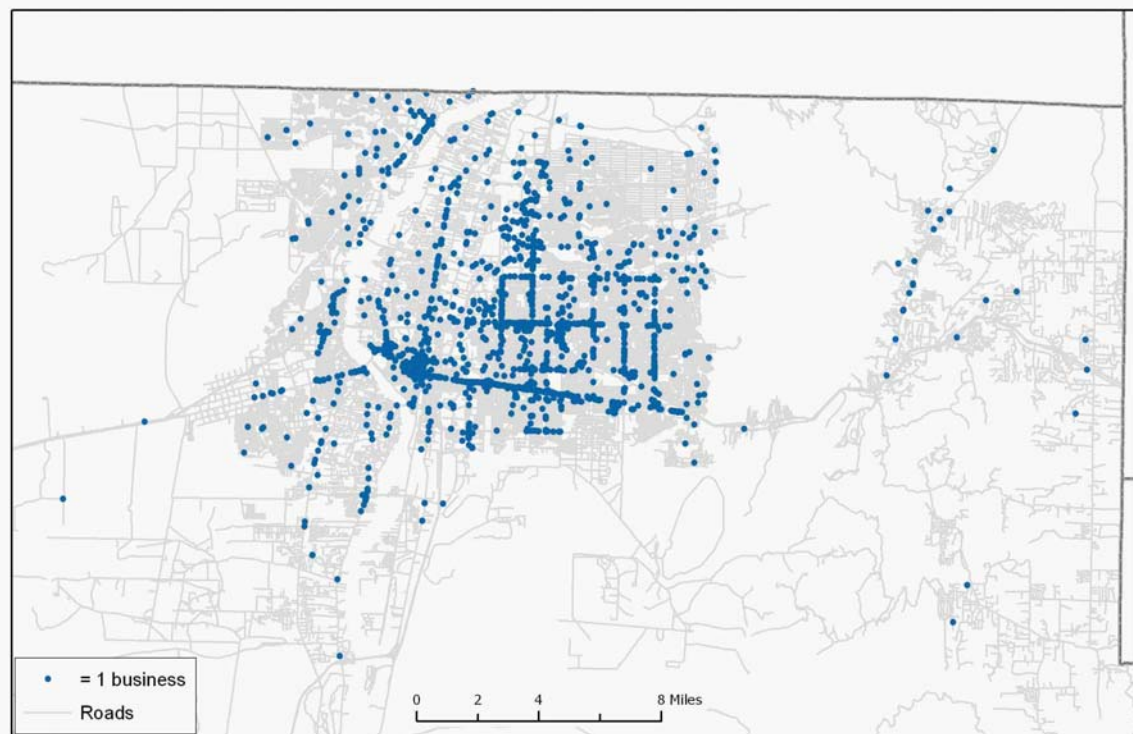


FIGURE 3: THE GEOGRAPHICAL DISTRIBUTION OF ARTS AND CULTURAL EMPLOYMENT IN BERNALILLO COUNTY BY ZIP CODE AREA, 2004

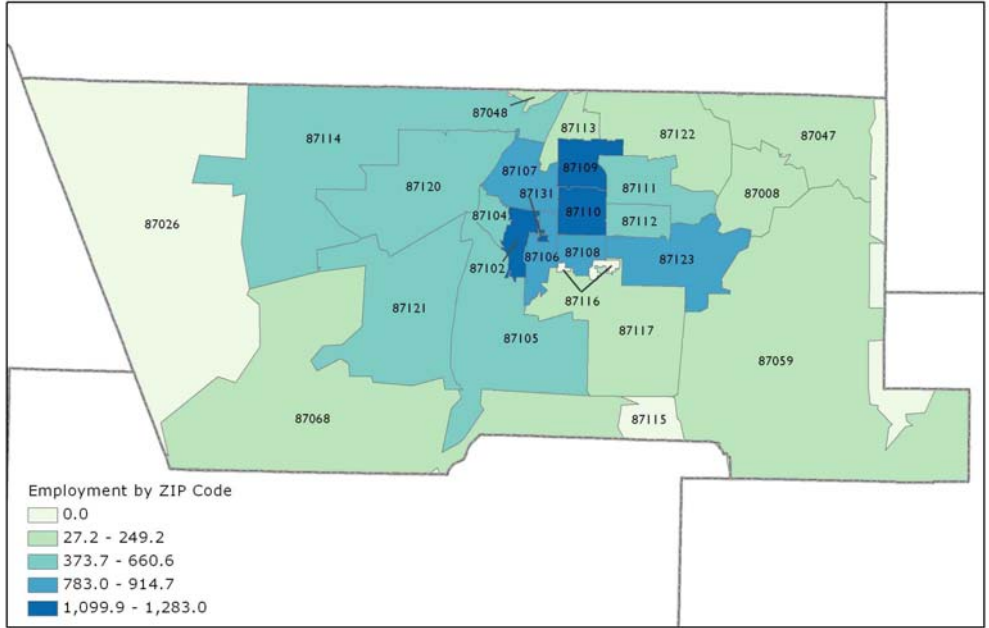


FIGURE 4: ARTS AND CULTURAL EMPLOYMENT AS A PROPORTION OF TOTAL EMPLOYMENT BY ZIP CODE AREA IN BERNALILLO COUNTY, 2004

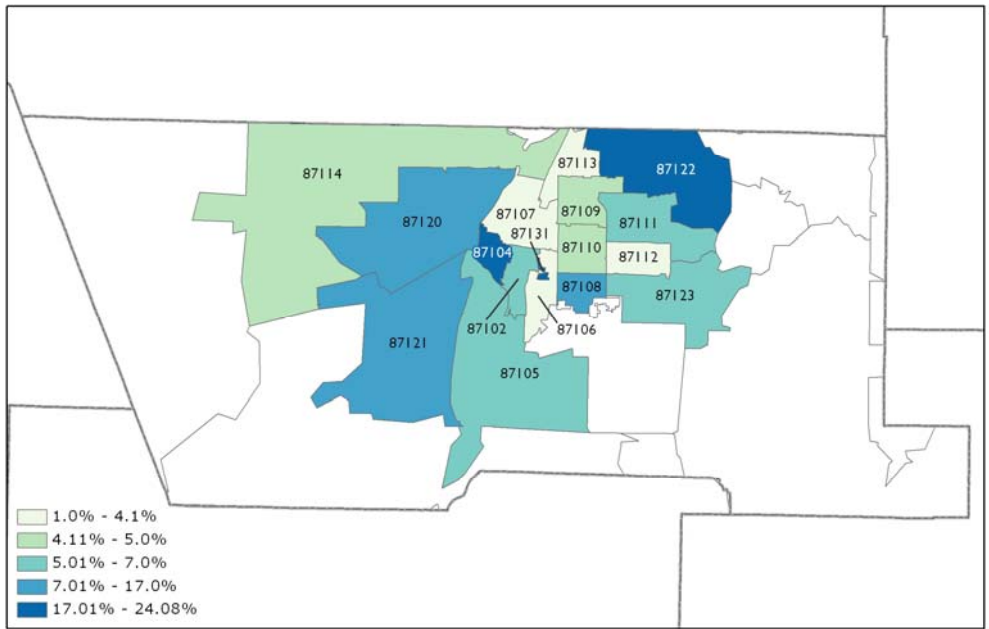


Table 5 provides detail of the geographical location of A&CIs employment by subsector. An examination of this data reveals the relative concentration of specific subsectors. Museums, including the BioPark, are very highly concentrated downtown (87102); artisans, dominated by relatively large jewelry makers, are found predominantly downtown and in the Four Hills area in Southeastern Albuquerque (87123); employment with wholesalers is concentrated in the North Valley (87107) and in the mid-Heights on the east side (87110); and media employment is found both downtown and along I-25 in North Albuquerque (87109). No one area dominates cultural tourism employment, though the largest concentration is in the downtown-Old Town (87104) area.

TABLE 5: ARTS AND CULTURAL EMPLOYMENT IN BERNALILLO COUNTY, BY CATEGORY AND ZIP CODE, 2004

		Advocacy	Artisans	Artists	Design	Education	Fairs	Media
87102	Downtown	19	308	9	189	198		130
87104	Rio Grande/Old Town	65	37	11	56	134		144
87105	South Valley		9	2	0	517		
87106	Nob Hill	9	24	6	78	602		1
87107	North Valley	10	130	114	27	300		71
87108	Near Heights	14	54	19	26	256	280	19
87109	North I-25	11	109		106	529		156
87110	Mid Heights	12	178	80	177	318		112
87111	Northeast Heights	1	12	3	23	449		2
87112	East Heights		6		57	323		3
87113	Alameda		33		14	125	17	24
87114	Paradise Hills		2		10	254		1
87120	Coors Blvd	1			3	442		0
87121	West Mesa		19		4	381		2
87122	North Albuquerque			2	5	114		
87123	Four Hills	2	261	1	35	279		9
87131	UNM			18		811		80
NA /Other		25	40	1,688	343	757		7
TOTAL		169	1,219	1,952	1,154	6,790	296	761

TABLE 5 CONTINUED

	Movies	Museums	Retail	Sports	Tourism	Wholesale	TOTAL
87102 Downtown		329	43		979		2,204
87104 Rio Grande/Old Town		87	102		489	15	1,140
87105 South Valley			15		58		601
87106 Nob Hill			80	94	396	1	1,290
87107 North Valley			76		197	38	963
87108 Near Heights			78		115	2	863
87109 North I-25	241		53	28	567	16	1,815
87110 Mid Heights		61	142		581	31	1,692
87111 Northeast Heights			50		135	3	679
87112 East Heights			139		89		617
87113 Alameda			25		74	5	317
87114 Paradise Hills	21		59		164		510
87120 Coors Blvd			10		72	4	532
87121 West Mesa			7		81	3	497
87122 North Albuquerque			13		122		256
87123 Four Hills	196		15		210	11	1,019
87131 UNM		24	22	144	2		1,102
NA /Other		82	117	231	120	0	3,410
TOTAL	457	583	1,046	497	4,453	129	19,508

UNM-Bureau of Business and Economic Research, 2006.

Government Revenues and Expenditures

Table 6 summarizes the tax payments generated by the A&CIs to various public entities in Bernalillo County and New Mexico. These figures include revenues generated by both direct and indirect/induced activities, but are limited to activities supported by outside dollars. As above, these figures represent contributions otherwise unavailable except for the capacity of the area's A&CIs to attract outside funds.

These figures show that the A&CIs generated an estimated \$59 million in government tax revenues in 2004. Thirty-six percent of the estimated total results from gross receipts taxes directly associated with cultural activities; 36% derives from gross receipts taxes on expenditures by cultural workers and by those whose employment is indirectly supported by the A&CIs; 15% is generated by personal income taxes and property taxes paid by cultural workers and those supported indirectly by the A&CIs; 3% is a conservative estimate of the property taxes paid by the cultural industries, and the remaining 9% are lodgers taxes paid by cultural visitors to the city of Albuquerque.

TABLE 6: TOTAL TAX REVENUES DIRECTLY AND INDIRECTLY ASSOCIATED WITH BERNALILLO COUNTY A&CIS AND SUPPORTED BY INFLOWS FROM OUTSIDE BERNALILLO COUNTY, 2004

Figures in \$1,000's	City	County	Schools	TVI CC	State	Total
Gross Receipts Tax						
Arts, Culture, Spectator Sports	7,693	2,331			11,336	21,361
Gross Receipts & Excise Taxes on Goods and Services Purchased						
by Workers in Arts, Culture, Sports	4,742	788			7,153	12,683
by Other Workers Supported	3,238	538			4,885	8,662
Personal Income Taxes						
Earnings in Arts, Culture, Sports					2,691	2,691
Earnings in Other Industries Supported					1,838	1,838
Property Taxes						
Arts, Culture, Spectator Sports ¹	530	510	410	160	60	1,670
Workers in Arts, Culture, Sports	718	662	714	403	99	2,596
Workers in Other Industries Supported	490	452	488	275	67	1,773
Lodgers Tax	5,390					5,390
Total Tax Revenue	22,802	5,282	1,612	838	28,130	58,664

¹ Primarily property taxes owed by major hotels.

Totals may not sum due to rounding. Bernalillo Co property taxes here include only operating and debt service levies.

UNM Bureau of Business and Economic Research, 2006. Gross Receipts Taxes on A&S industries estimated by BBER based on data collected through interviews with employers and data reported on taxable and total receipts by industry by the NM Taxation and Revenue Department. Calculations for taxes paid by workers based on tax burden estimates from the Institute for Taxation and Economic Policy, 2003, data compiled by the NM Taxation and Revenue department in Property Tax Facts, 2004, and property tax and gross receipts tax rates in effect for calendar 2004.

Detail on the gross receipts tax contributions by category both for the A&CIs and for spectator sports may be found in Appendix C. Table C.7 provides estimates for the total taxes paid to each of the taxing jurisdictions by businesses in each of the categories as well as estimates of the direct revenues supported by dollars coming in from outside Bernalillo County. Table C.8 provides the estimates of gross receipts tax revenues on the spending of Bernalillo County cultural workers. The table includes estimates of the total taxes paid by jurisdiction and also those supported by receipts from outside the county. Table C.9 expands this analysis to cover workers directly and indirectly supported by Bernalillo County cultural industries, again reporting total revenues and also those supported by dollars coming into the county. In all cases, the tables separately report A&CIs and spectator sports.

Tables 7 and 8 provide detail on revenues and expenditures of the city of Albuquerque and Bernalillo County that are associated with Bernalillo County's

cultural industries.

Table 7 shows that the arts and cultural activities generated \$35.3 million for the city of Albuquerque in 2004 – \$30.5 million for the operating budget and \$4.8 million for the capital program. However, the city of Albuquerque owns and runs the major arts and cultural facilities of the Albuquerque Museum and the BioPark as well as important venues like the KiMo Theater and the South Broadway Cultural Center. The city has a long-standing 1% for the Arts program. It owns a system of libraries throughout Albuquerque and manages a regional library system that covers Bernalillo County and Rio Rancho. It sponsors various cultural events throughout the year, including the well-attended Summerfest on Saturday nights during the summer. The city owns the Albuquerque Stadium where the Isotopes play and it runs an extensive sports and recreation program. The city uses a portion of its lodgers tax receipts to support the tourism promotion activities of the Albuquerque Convention and Visitors Center and the Hispano Chamber. Part of that budget is included here as the arts and cultural offerings of the Albuquerque metro area figure heavily in promotion efforts.

The city's extensive offerings of arts and cultural as well as sports and recreation programs had an estimated operating budget impact of \$35 million in 2004. In addition, the city spent \$19 million on capital outlay for the expansion of the Albuquerque Museum and various projects at the BioPark and for the library system. The total includes about \$1 million from 1% for the Arts.

Table 8 provides similar information for Bernalillo County. In 2004, the dollars brought into the county by arts and cultural activities generated almost \$5.5 million in revenues for Bernalillo County¹⁰. The county spent at least \$3.3 million on operating its libraries in the areas outside the city limits, on sports and recreation programs, and on 1% for the Arts, and \$0.8 million on capital outlay for arts and cultural programs and on recreation and sports.

¹⁰ Property taxes estimates included in Table 8 include only revenues raised from the operating and debt service levies.

TABLE 7: CITY OF ALBUQUERQUE REVENUES AND EXPENDITURES DIRECTLY AND INDIRECTLY ASSOCIATED WITH BERNALILLO COUNTY A&CIS AND SUPPORTED BY INFLOWS FROM OUTSIDE BERNALILLO COUNTY, 2004

	Arts & Culture	Sports	Total
OPERATING BUDGET			
Revenues:			
From Arts, Culture, Sports			
Gross receipts tax	7,533	160	7,693
Property Tax	146	18	164
Lodgers Tax	4,963	427	5,390
From Workers Supported Directly & Indirectly:			
Gross receipts tax	7,648	332	7,980
Property Tax	318	14	332
Intergovernmental	1,080	461	1,541
Fees and charges for Services	3,071	1,852	4,923
Other Sources	2,445	-	2,445
Total	27,204	3,264	30,468
Expenditures:			
Libraries	9,615		9,615
Museums (Art, History, Culture)	3,528		3,528
BioPark, Science Museums	11,262		11,262
Perform Venues, Spec Events ¹	1,694	149	1,843
Cultural Services Admin	1,028		1,028
Recreation programs		3,654	3,654
Baseball Stadium		513	513
Park Design	330	330	659
Film Program in OED	71		71
Tourism Promotion (ACVB, HCC, City)	2,452	97	2,549
1% for the Arts	240		240
Urban Enhancement Trust Fund	225		225
Total	30,443	4,742	35,185
CAPITAL OUTLAY			
Revenues:			
Property Tax Debt Service Levy	1,224	36	1,261
State	2,243		2,243
Miscellaneous	1,291		1,291
	4,758	36	4,795
Expenditures:			
Libraries	3,274		3,274
Museums (Art, History, Culture)	13,107		13,107
BioPark, Science Museums	1,892		1,892
Perform Venues, Spec Events	-		
1% for the Arts	960		960
	19,233	-	19,233

1. Includes proportionate share of debt service on Convention Center

Source: UNM BBER estimates. Data on actual FY04 and FY05 revenues and expenditures for City of Albuquerque from the Approved Budget 2006 and Proposed Budget 2007 as well as the audited financial statements for 2004 and 2005.

TABLE 8: BERNALILLO COUNTY REVENUES AND EXPENDITURES DIRECTLY AND INDIRECTLY ASSOCIATED WITH BERNALILLO COUNTY A&CIS AND SUPPORTED BY INFLOWS FROM OUTSIDE BERNALILLO COUNTY, 2004

	Arts & Culture	Sports	Total
OPERATING BUDGET			
<u>Revenues:</u>			
From Arts, Culture, Sports			
Gross receipts tax	1,200	24	1,224
Property Tax	446	18	463
From Workers Supported Directly & Indirectly:			
Gross receipts tax	1,271	55	1,326
Property Tax	926	40	966
Intergovernmental			
Fees and charges for Services	0	320	320
Other Sources	815		815
Total	4,657	457	5,114
<u>Expenditures:</u>			
Libraries	1,018		1,018
Museums (Art, History, Culture)			-
Perform Venues, Special Events	(1)		-
Recreation programs		2,247	2,247
1% for the Arts	50		50
Total	1,067	2,247	3,315
CAPITAL OUTLAY			
<u>Revenues:</u>			
Property Tax Debt Service Levy	175	6	181
State	230		230
	405	6	411
<u>Expenditures:</u>			
Museums (Art, History, Culture) ¹	230		230
Perform Venues, Spec Events			
Recreation programs		475	475
1% for the Arts	66		66
	296	475	771

1. Data provided on rental receipts but none on operating costs.
Property taxes in this table only include operating and debt service levies.
Totals may not sum due to rounding.

Source: UNM BBER estimates culled from databases and documents provided by Bernalillo County.

Table 9 provides similar information for the state, detailing the fiscal impacts of the Bernalillo County A&CIs on state revenues and the resource commitments of the state of New Mexico, including its financial support for arts and cultural

programs at the University of New Mexico and at Albuquerque Technical and Vocational Institute (TVI), now known as Central New Mexico Community College. The state's Department of Cultural Affairs (DCA) owns and runs two major facilities, the National Hispanic Cultural Center and the Museum of Natural History, and they also provided some \$280 thousand in grants to arts organizations located in Bernalillo County. New Mexico is almost unique among the states in the extent of operating support provided to the public school system. BBER investigated arts and cultural programming at Albuquerque Public Schools (APS) and identified \$171 million in programs supported primarily by the State Equalization Formula. However, as Bernalillo County businesses and households are the source of a significant proportion of the state's general fund tax revenues, it was decided to treat the state's net contribution to APS operating funds as a wash. Altogether, excluding APS, BBER estimated that the state of New Mexico spent \$231 million in operational support for Bernalillo County A&CIs in 2004.

The state also spent \$31 million on capital outlay for arts and cultural facilities and programs in Bernalillo County: \$5.0 million on projects at the two DCA facilities and \$6.4 million on other arts and cultural facilities, including the Explora Science Center, the Wheel Museum, and the Unser Children's Discovery Center and Racing Museum, \$5 million on capital projects at the State Fairgrounds, \$4.6 million for various recreation and sports facilities around Bernalillo County, \$2.2 million on city of Albuquerque facilities, and \$4.6 million on recreation and sports facilities at UNM (versus less than \$100 thousand on readily identifiable arts and cultural projects).

State revenues associated with Bernalillo County A&CIs and supported by dollar inflows from outside the county are estimated to have been at least \$183 million in 2004. State expenditures, both operating and capital in support of A&CIs in Bernalillo County, are estimated to have totaled some \$270 million. Not included are monies that may be spent by the state Tourism Department in advertising A&CIs in Bernalillo County. The state has also made a substantial commitment to the film industry, including tax rebates and loans, as described in Exhibit 1, below.

Based on data provided by the New Mexico Economic Development Department Film Office, since inception, the state has loaned \$47.5 million for productions filmed in Bernalillo County.¹¹ BBER was unable to obtain figures on the amount of foregone taxes, but estimates the total for Bernalillo County projected expenses at \$550 thousand.

¹¹ Bernalillo County's share, based on estimates of the percent filmed within the county.

The Albuquerque area is surrounded by a number of Indian Pueblos and many visitors to Bernalillo County make trips to Acoma's Sky City and to other pueblos, perhaps enjoying the festivities of Feast Days. Within the city limits, the All Indian Pueblo Council owns and operates the Indian Pueblo Cultural Center. BBER requested but was unable to obtain figures on tribal funding for this important arts and cultural resource. Spending from state appropriations for capital projects at the Indian Pueblo Cultural Center was \$217 thousand.

TABLE 9: STATE GOVERNMENT REVENUES AND EXPENDITURES DIRECTLY AND INDIRECTLY ASSOCIATED WITH BERNALILLO COUNTY A&CIS AND SUPPORTED BY INFLOWS FROM OUTSIDE BERNALILLO COUNTY, 2004

	Arts & Culture	Sports	Total
Revenues:			
On Cultural Industries/Tourism Businesses:			
Gross Receipts Tax	11,113	223	11,336
Property Tax (State GO, APS, TVI)	630		630
On Workers Supported Directly & Indirectly:			
Gross Receipts Tax	16,073	812	16,885
Property Tax (State GO, APS, TVI)	1,963	83	2,046
Income Taxes	4,312	218	4,530
Federal Non-Recurring Operations	45		45
UNM & TVI Tuition and Other	96,121	50,563	146,684
Fees and Charges for Services	956		956
	131,213	51,899	183,112
Operating Expenditures (State GF):			
Department of Cultural Affairs			
Hispanic Cultural Center	2,659		2,659
Natural History Museum	2,997		2,997
Grants to ABQ Co. Arts organizations	280		280
University of New Mexico	134,336	76,289	210,625
TVI Community College	14,869		14,869
Total Operating Budget	155,139	76,289	231,429
Capital Outlay from FY 03 & FY 04 Appropriations ¹			
City of Albuquerque ACC Facilities	2,243		2,243
Bernalillo County ACC Facilities	230		230
State Fairgrounds	5,204		5,204
Department of Cultural Affairs Facilities	4,954		4,954
UNM ACC Facilities	84		84
Other ACC Facilities	6,379		6,379
UNM Recreation/Sports		7,344	7,344
Recreation/Sports Facilities & Equipment		4,562	4,562
Total Capital Outlays	19,093	11,906	30,999

1. Spending on FY 03 and FY 04 State capital outlay from General Fund and Severance Tax Bonds. Detail provide by Capital Projects Office of the NM Department of Finance & Administration
Totals may not sum due to rounding.

Source: UNM BBER estimates based on actual revenues and expenditures as reported by the Legislative Finance Committee in their annual Appropriation Recommendations to the Legislature; also as reflected in Budget documents for the University of New Mexico, Albuquerque TVI and Albuquerque Public Schools; the Department of Cultural Affairs provided figures on grants to art organizations; the Hispanic Cultural Center and the Natural History Museum provided estimates of revenues and expenditures; as noted, capital spending estimates are from the NM Department of Finance and Administration. Tax revenues estimated by BBER.

EXHIBIT 1: NEW MEXICO'S FILM INCENTIVES

25% FILM PRODUCTION TAX REBATE

New Mexico offers a 25% tax rebate on all production expenditures (including labor) that are subject to taxation by the state of New Mexico. This is a refund, not a credit.

FILM INVESTMENT LOAN PROGRAM

New Mexico offers a 0% loan for up to \$15 million per project, (which can represent 100% of the budget) for qualifying feature films or television projects. Terms are negotiated and budget must be at least \$1 million.

NO STATE SALES TAX

Not to be used in conjunction with the 25% tax rebate. Type 16 Nontaxable Transaction Certificates (NTTCs) work much like grocery store coupons. A certificate is presented at the point of sale and no gross receipts tax (sales tax) is charged. (Used primarily for commercials & PSAs)

Source: New Mexico Economic Development Department Film Office.

Finally, there are the federal dollars which flow into Bernalillo County in support of A&CIs. In 2004, the Petroglyph National Monument had base funding of \$1.4 million, with additional special project funding of over \$400 thousand. The Atomic Museum is now run by the Atomic Museum Foundation, but it continues to receive \$450 thousand annually in operating funds from Sandia National Laboratory. In addition are various federal contracts and grants. In FY 2003, for example, the Consolidated Federal Funds online database indicates that \$110 thousand flowed to Bernalillo County from the National Endowment for the Arts, \$572 thousand from the National Endowment for the Humanities and \$422 thousand from the Institute of Museum and Library Services.

A COMPARATIVE ANALYSIS OF BERNALILLO COUNTY’S ARTS & CULTURAL INDUSTRIES

A Comparison of Bernalillo County’s Arts & Cultural Industries with Other U.S. Cities

The complexities of definition, measurement and calculation make it difficult to directly compare the economic impact of Bernalillo County’s A&CIs to similar industries in other regions. Although comparisons are necessarily partial, the findings suggest that Albuquerque’s cultural economy is relatively strong for a city of its size. This section draws upon previous research by BBER on A&CIs in Santa Fe; provides a brief summary of two of the best-known studies comparing the cultural economies of U.S. cities; and offers a more focused comparison of the strength of specific sectors of art and cultural markets¹².

BBER’s Study of Santa Fe’s A&CIs

Table 10 compares the direct, indirect and induced impacts of A&CIs, funded by outside dollars, for Bernalillo and Santa Fe Counties¹³. The data in this table show that, in absolute terms, outside dollars generated by A&CIs account for about the same level of receipts in the two areas, although these dollars create substantially more jobs and fund a much larger payroll in Bernalillo County. However, in relative terms, outside dollars play a much greater role in Santa Fe than in Bernalillo County. In Santa Fe, outside dollars account for 78% of all A&CIs receipts, compared to only 51% in Bernalillo County. Indeed, the structure of Bernalillo County’s A&CIs differs substantially from that of Santa Fe County. Broadly stated, Santa Fe’s A&CIs function as a powerful export engine that draw substantial revenues to the city, creating jobs and providing fiscal revenues that otherwise would not be available. By contrast, Bernalillo County’s A&CIs are mainly structured to serve a much larger local population, more than 7 times that of Santa Fe County.

¹² Phase 3 of this research project will offer a comparative analysis of cultural and economic development policies employed in metropolitan areas in the U.S. and other parts of the world.

¹³ The source of information for Santa Fe is *The Economic Importance of the Arts & Cultural Industries in Santa Fe County: The Quantification of Economic Impacts*, 2004. The report is available at <http://www.unm.edu/~bber/pubs/SFCoArtsPt1.pdf>.

TABLE 10: DIRECT, INDIRECT AND INDUCED IMPACTS OF ARTS AND CULTURAL INDUSTRIES SUPPORTED BY OUTSIDE DOLLARS IN BERNALILLO AND SANTA FE COUNTIES

Bernalillo County Arts & Cultural Industries, 2004				
	Direct	Indirect & Induced	Total	Multiplier
Employment	8,964	5,198	14,162	1.58
Wages & Salaries (\$000s)	179,411	122,556	301,967	1.68
Output (\$000s)	601,447	393,322	994,769	1.65

Santa Fe County Arts & Cultural Industries, 2001				
	Direct	Indirect & Induced	Total	Multiplier
Employment	9,261	3,692	12,953	1.40
Wages & Salaries (\$000s)	209,642	100,687	310,329	1.48
Output (\$000s)	527,299	255,955	783,254	1.49

UNM-Bureau of Business and Economic Research, 2004, 2006.

Table 11 shows attendance figures for the largest museums and parks in Bernalillo and Santa Fe Counties. These figures illustrate the differences in the structure of the A&CIs in the two counties. In all, of museums and parks included in this table, those in Bernalillo County draw more than three times as many as those in Santa Fe County; indeed, Albuquerque’s BioPark alone draws nearly twice the number of visitors as all Santa Fe museums combined. Yet, Bernalillo County’s attractions, including the BioPark, the Natural History Museum and Explora! are directed primarily to local markets, whereas Santa Fe’s museums, including the O’Keeffe and the Museums of Fine Arts and International Folk Arts are, by comparison, targeted toward visitors.

TABLE 11: ATTENDANCE FOR MUSEUMS IN BERNALILLO AND SANTA FE COUNTIES, 2004 AND 2005.

MUSEUM	LOCATION	2005	2004
Albuquerque BioPark	Bernalillo County	1,095,476	995,906
NM Museum of Natural History & Science	Bernalillo County	246,705	244,732
EXPLORA Science Museum	Bernalillo County	183,962	286,133
Albuquerque Museum	Bernalillo County	131,829	99,712
Indian Pueblo Cultural Center	Bernalillo County	73,204	157,587
LodeStar Astronomy Center	Bernalillo County	65,262	86,078
National Atomic Museum	Bernalillo County	38,840	42,735
Tinkertown Museum	Bernalillo County	15,560	16,850
Georgia O'Keeffe Museum	Santa Fe County	162,497	172,504
NM Museum of Fine Arts	Santa Fe County	68,871	112,179
NM Museum of International Folk Art	Santa Fe County	87,400	85,733
NM Palace of the Governors	Santa Fe County	60,422	64,688
NM National Hispanic Cultural Center	Santa Fe County	84,460	38,822
NM Museum of Indian Arts & Culture	Santa Fe County	49,561	46,248
El Rancho de las Golondrinas	Santa Fe County	50,244	44,654
TOTAL		2,988,850	3,112,643

Source: Tourism Association of New Mexico, *New Mexico TravelTrends*

Table 12 shows the output of selected subsectors of A&CIs in Bernalillo County and Santa Fe County, and their respective shares in relation to county totals. In Santa Fe, cultural tourism (or hospitality) is the largest subsector of the art and cultural economy, followed by art galleries and museums, performing arts and the production of art. Educational services account for only 7.5% of the output of A&CIs in Santa Fe. In Albuquerque, educational services is by far the largest sector, accounting for 25% of the total output value; APS dominates this category, suggesting the central role of the county's A&CIs in serving the local population. Cultural tourism is also important to Bernalillo County, though less so than in Santa Fe County. The important role of museums, performing arts and artists in Bernalillo County is a surprising finding. The strength of this sector in Albuquerque is driven by the large number of artists living in the county and, equally, to activities associated with Albuquerque's BioPark, which are included in the Museum category. The importance of the BioPark again reflects the role of Bernalillo County's A&CIs in serving the local population.

TABLE 12: OUTPUT OF SELECTED SECTORS OF ARTS AND CULTURAL INDUSTRIES FOR BERNALILLO AND SANTA FE COUNTIES, 2004

	Bernalillo County		Santa Fe County	
	Output (\$000)	%	Output (\$000)	%
Artisans, Manufacturing	161,317	14%	74,384	7%
Art Dealers (Retail)	38,157	3%	225,620	22%
Museums, Perf Arts, Artists	165,696	14%	124,781	12%
Educational Services	293,585	25%	78,090	7%
Hospitality	217,864	19%	327,986	31%

UNM-Bureau of Business and Economic Research, 2004, 2006.

Americans for the Arts: Economic Impact of the Arts

Economic Impact of the Arts in Albuquerque, published by Americans for the Arts (AFA) in 1998¹⁴, reports findings of two surveys conducted in Albuquerque in 1997: one survey measured the economic impact of Albuquerque’s nonprofit arts organizations, and the second measured the economic impact of Albuquerque’s arts audiences. The AFA study utilized a methodology repeated in scores of cities across the U.S., allowing for direct comparisons among communities.

The AFA study found that, in 1997, Albuquerque’s nonprofit and for-profit arts organizations and their audiences supported 3,218 full-time equivalent local jobs, had total expenditures of \$112.3 million, and generated \$11.2 million in local and state government revenues. According to AFA comparisons, Albuquerque ranked high among its peer cities for full-time equivalent jobs created; the city had an average rank in terms of the generation of incomes and state government revenues; the generation of local government revenues was below the norm.

The scope and methods of the AFA study differ significantly from those of the present study. The AFA study focused on nonprofit arts organizations while this study evaluated the pertinent activities of business and organizations, including both those operating for-profit and not for-profit. Further, the AFA study included only the city of Albuquerque whereas the geographical scope of this study is the entire county of Bernalillo. Finally, the two studies were conducted nearly ten years apart. For these reasons, direct comparison of the findings of the two studies is not supportable.

¹⁴ Americans for the Arts. 1998. *Economic Impact of the Arts in Albuquerque*. Washington, D.C. Americans for the Arts.

Richard Florida: The Rise of the Creative Class

A second, widely referenced study was conducted by Professor Richard Florida, author of *The Rise of the Creative Class*¹⁵. Rather than directly comparing the economic impact of cultural industries in U.S. cities, Florida uses four indicators to measure the potential for creative economic activity among cities. Florida argues that his indicators correlate strongly with other measures of cultural activity.

Table 13 shows rankings of the top two dozen cities according to Florida's four variables. The 2002 study ranks Albuquerque first among 32 medium size metropolitan areas (with populations 500,000 to 1 million), and eighth among all U.S. metropolitan areas. Among medium sized cities, Albuquerque metropolitan area ranked first in the high-tech and diversity indices, second in creative workers as a share of total employment, and seventh according to innovation. Among all metropolitan areas, Albuquerque ranks eighth, with a total creativity index value of 965, just ahead of Washington, New York, Dallas and Minneapolis. San Francisco ranks first according to Florida's measures, with an overall creativity index value of 1057.

¹⁵ Richard L. Florida 2002. *The Rise of the Creative Class: and How it's Transforming Work, Leisure, Community and Everyday Life*. New York: Basic Books.

TABLE 13: CREATIVITY INDICES FOR LEADING U.S. METROPOLITAN AREAS

	Overall Rank	Creativiity Index	Creative Class	High Tech	Inno- vation	Diversity
San Francisco, CA	1	1057	12	1	5	1
Austin, TX	2	1028	7	13	6	23
San Diego, CA	3	1015	30	14	13	4
Boston, MA	3	1015	6	2	12	41
Seattle, WA	5	1008	20	3	34	11
Raleigh--Durham, NC	6	996	5	16	8	52
Houston, TX	7	980	22	19	39	16
Albuquerque, NM	8	965	26	9	62	18
Washington--Baltimore	9	964	4	5	85	18
New York City, NY	10	962	25	15	54	20
Dallas, TX	11	960	55	6	40	15
Minneapolis, NM	11	960	14	28	11	60
Los Angeles, CA	13	942	46	4	79	5
Atlanta, GA	14	940	32	7	87	10
Denver, CO	14	940	17	65	29	25
Chicago, IL	16	935	29	10	56	46
Albany, NY	17	932	15	68	21	45
Portland, OR	18	929	73	11	32	31
Philadelphia, PA	19	927	27	17	36	70
Madison, WI	20	925	19	82	14	31
Hartford, CT	21	922	16	41	35	61
Phoenix, AZ	22	909	92	8	46	21
Santa Fe, NM	23	907	10	130	26	16
Indianapolis, IN	24	891	68	20	55	42

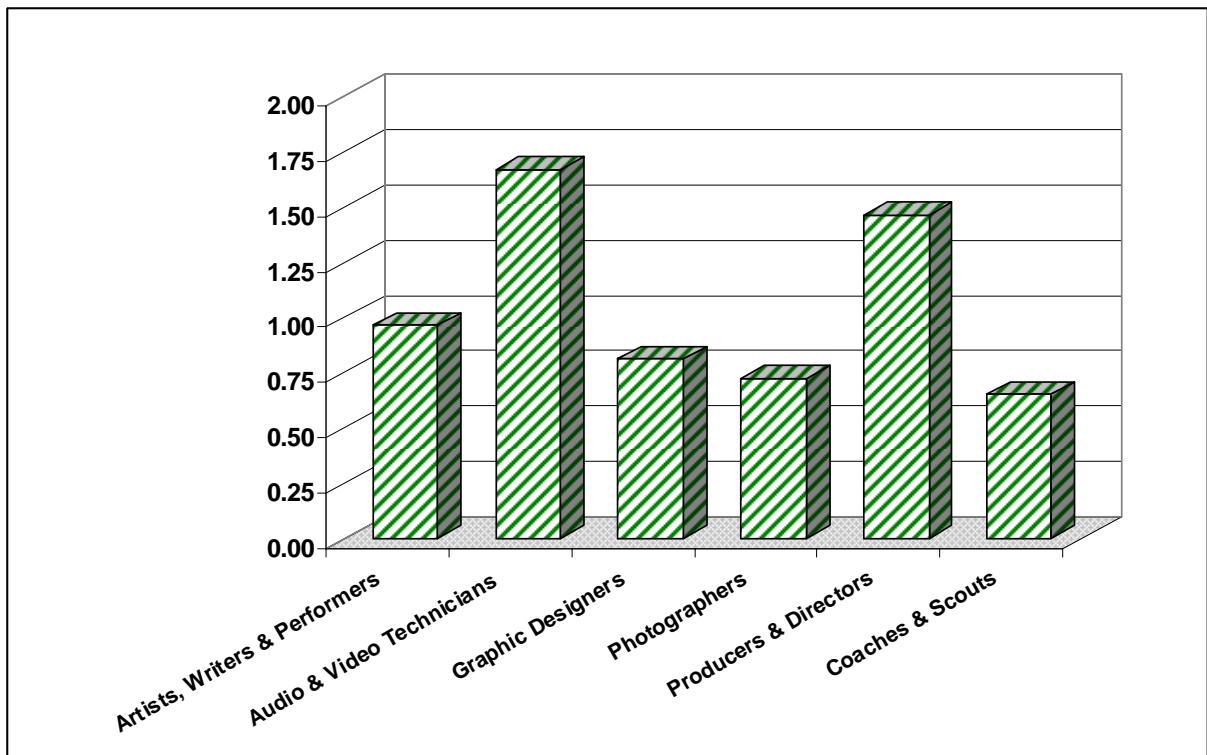
Source: Richard Florida Creative Group, CreativeClass.org
UNM Bureau of Business and Economic Research, 200.6

Prevalence of Selected Arts and Cultural Occupations in Bernalillo County

A&CIs in Bernalillo County can be placed in context by comparing the prevalence of key occupations in local markets with the use of location quotients. A location quotient compares the share of a given occupation in a local labor market with the national average for that same occupation. A location coefficient of 1.0 indicates that the number of persons employed in a given occupation in an area is proportionate to the national average; coefficients above 1.0 indicate that the occupation is more strongly represented in the study area.

Figure 4 shows location quotients for selected arts and cultural occupations in Bernalillo County¹⁶. Prevalence of these occupations varies significantly, but in most cases the location quotient is between 0.75 and 1.50. This suggests that for most art and cultural occupations, employment opportunities in Albuquerque roughly parallel those for the U.S. as a whole. Among specific occupations, audio and visual equipment technicians tend to be well represented locally; artists, writers and performers are close to but slightly below the national average; and athletic coaches and scouts are less well represented.

FIGURE 4: LOCATION QUOTIENTS FOR SELECTED OCCUPATIONS IN THE CULTURAL INDUSTRIES IN BERNALILLO COUNTY, 2003



Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics, 2003; U.S. Census Bureau, Nonemployer Statistics, 2003.

Location quotients for the cultural economy should be interpreted with care. More than in other economic sectors, employment in the cultural economy tends to be highly concentrated geographically, and, as a result, location quotients for

¹⁶ These data include occupational data, as defined by the Standard Occupational Classification, and nonemployer (self-employed) data. The combination better reflects actual employment shares, as many who work in this sector are self-employed. However, it is important to note that these data include only those who identify an occupation or self-employment within an industrial sector as their primary occupation. These data do not include individuals who work at a particular occupation as secondary employment, which is very common within the arts and cultural sector.

cultural occupations in most cities can be surprisingly low. With this in mind, another strategy for interpreting location quotients is to examine the ranking of location quotients for specific occupations among a large number of cities.

Tables 14 and 15 rank cities according to location quotients for artists, performers and writers, and architects, respectively. Note that while Albuquerque has a location quotient of slightly less than 1.0 for the first group, its ranking among all metropolitan areas is remarkably high – 17th. Albuquerque ranks similarly for architects.

TABLE 14: LOCATION QUOTIENTS OF U.S. CITIES FOR ARTISTS, PERFORMERS AND WRITERS, 2003

	Total Employment	Artists, Performers & Writers	Artists / Employment	Avg Income per Artist (\$)
National	127,980,430	525,921	0.411%	18,169
1 Santa Fe, NM MSA	71,930	1,382	1.921%	23,347
2 Austin-San Marcos, TX MSA	658,400	3,764	0.572%	19,950
3 New York, NY PMSA	4,056,640	49,958	1.232%	24,890
4 Nashville, TN MSA	638,970	6,703	1.049%	38,218
5 San Francisco, CA PMSA	997,320	8,866	0.889%	25,474
6 Santa Barbara, CA MSA	101,640	1,378	1.356%	24,416
7 Boulder-Longmont, CO PMSA	180,980	1,483	0.819%	16,851
8 Asheville, NC MSA	104,540	700	0.670%	13,576
9 Flagstaff, AZ MSA	51,290	340	0.663%	16,044
10 Portsmouth-Rochester, NH-ME PMSA	116,720	734	0.629%	16,064
11 Boston, MA-NH PMSA	1,971,030	11,462	0.582%	17,754
12 Tucson, AZ MSA	327,630	1,830	0.559%	13,848
13 Seattle, WA PMSA	172,150	7,032	4.085%	16,737
14 Minneapolis-St. Paul, MN-WI MSA	1,696,040	8,898	0.525%	13,942
15 Portland, OR PMSA	155,320	4,782	3.079%	14,284
16 San Diego, CA MSA	1,208,050	6,134	0.508%	17,392
17 Albuquerque, NM MSA	339,390	1,651	0.486%	13,354
18 Colorado Springs, CO MSA	234,120	1,153	0.492%	14,827
19 Washington, DCPMSA	2,673,890	12,550	0.469%	18,508
20 Honolulu, HI MSA	392,230	1,724	0.440%	15,982

Source: Bureau of Labor Statistics, OES, 2001; Economic Census, Non-Employed Workers, 2001
UNM Bureau of Business and Economic Research, 2006.

TABLE 15: LOCATION QUOTIENTS OF U.S. CITIES FOR ARCHITECTS, 2003

	Total Employment	Architects	Architects/ Employment (%)	Avg Income per Architect (\$)
NATIONAL	127,980,410	132,673	0.104%	59,013
1 Seattle, WA PMSA	1331820	22,783	1.711%	35,088
2 San Francisco, CA PMSA	997320	4,753	0.477%	64,293
3 Boston, MA-NH PMSA	1,971,030	5,798	0.294%	61,964
4 Stamford-Norwalk, CT PSMA	207,750	601	0.289%	75,333
5 New York, NY PMSA	4,056,640	11,391	0.281%	62,103
6 Santa Fe, NM MSA	71,930	172	0.239%	49,810
7 Charlottesville, VA MSA	84,190	199	0.236%	47,576
8 Nassau-Suffolk, NY PMSA	1184580	2,444	0.206%	58,291
9 Anchorage, AK MSA	132,360	269	0.203%	65,904
10 Lawrence, KS MSA	47,090	95	0.202%	43,775
11 Olympia, WA PMSA	83,710	164	0.196%	53,483
12 Madison, WI MSA	271,500	505	0.186%	50,816
13 Fort Myers-Cape Coral, FL MSA	173,540	310	0.179%	60,991
14 Honolulu, HI MSA	392,230	693	0.177%	54,705
15 Columbus, OH MSA	855,230	1,423	0.166%	51,339
16 Albuquerque, NM MSA	339390	560	0.165%	44,162
17 Portland, OR MSA	933600	1,486	0.159%	52,971
18 Denver, CO PMSA	1150070	1,804	0.157%	54,304
19 Santa Rosa, CA PMSA	191,330	300	0.157%	58,864
20 Santa Barbara, CA MSA	162130	246	0.152%	70,467

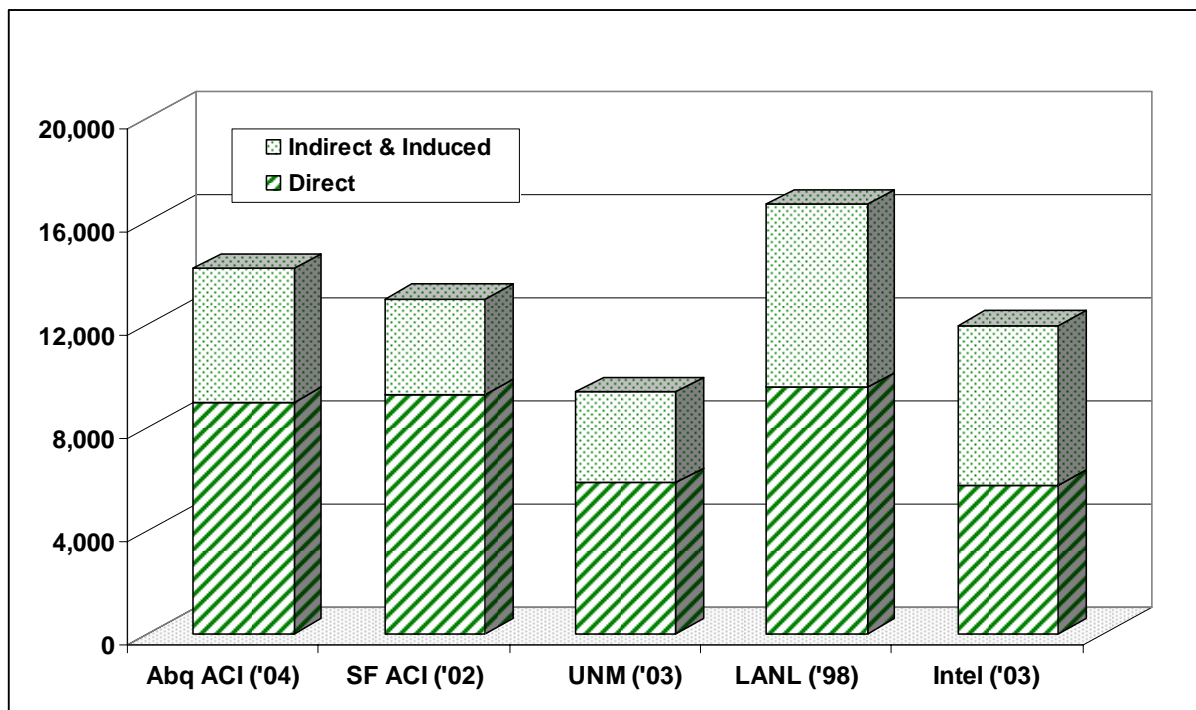
Source: Bureau of Labor Statistics, OES, 2001; Economic Census, Non-Employed Workers, 2001

UNM Bureau of Business and Economic Research, 2004.

A Comparison of Santa Fe’s Arts & Cultural Industries to Other Leading Industries in New Mexico

How does the economic impact of Santa Fe’s A&CIs compare to other industries in New Mexico, such as the University of New Mexico, Intel’s Sandoval County production facility and federally funded research at Los Alamos National Laboratories? The results, in terms of employment creation, are summarized in Figure 5.

FIGURE 5: DIRECT, INDIRECT & INDUCED EMPLOYMENT IMPACTS OF SELECTED NEW MEXICO INDUSTRIES



The University of New Mexico

In 2004, BBER completed an analysis of the economic impact of the University of New Mexico on the state’s economy¹⁷. The UNM study focuses exclusively on the impact of funds that the university draws from other regions into the state. Total receipts of the university from out-of-state sources are estimated to be \$384.5 million, which, combined with indirect and induced impacts, results in a total impact of \$641.3 million. The impact of Bernalillo County’s A&CIs is about

¹⁷ The University of New Mexico impact study, release in 2004, disaggregates university operations according to the main branch in Albuquerque, the university hospital in Albuquerque, Health Sciences and branch campuses. This analysis includes total university activities.

50% greater, with a total impact of about \$994.8 million. In nearly the same proportion, the cultural industries have greater employment impact: 14,162 compared to 9,362. However, because of the relatively high wages paid by the university system, particularly in hospital and health science operations, wages supported by outside activities at the university slightly exceed those of Bernalillo County's A&CIs. It is interesting to note that the multiplier effects of UNM operations – impacts associated with in-state expenditures by vendors and employees – are nearly equal to those of Bernalillo County's A&CIs, adding about \$60 dollars for every 100 outside dollars that flow into respective entities. However, impacts for the university, as tallied in this study, encompass expenditures made anywhere in New Mexico, whereas impacts for Bernalillo County's A&CIs include only those made within the county. If the analysis were conducted on comparable geographical scales, the indirect and induced effects of the A&CIs would be higher although the share of direct effects would correspondingly be lower.

Intel Operations in Sandoval County, New Mexico

According to figures available from Albuquerque Economic Development Corporation, Intel employs 5,770 workers at the Sandoval product production facility. According to State Department of Labor statistics, the average annual income for covered employees of the computer and electronic product manufacturing industry in New Mexico is \$57,888, yielding an estimated \$289.9 million in disposable (after tax) income. The total impact of Intel operations, including indirect and induced effects, can be estimated with multipliers available from Implan Pro. With an employment multiplier of just under 2.1 and a wage and salary multiplier of 1.34, Intel's operations directly and indirectly support 11,945 workers in New Mexico, who receive \$388.8 million in income. By these estimates, Intel supports slightly fewer employees than Bernalillo County's cultural industries but, because of the higher wages paid to their direct employees, contributes about 29 percent more to the state's wage bill.

Los Alamos National Laboratories

In 1998 – the most recent year for which reliable figures are available – LANL directly employed 9,757 workers, and paid \$527 million in wages and salaries. Using multipliers from Implan, it is estimated that LANL generates an additional 7,083 jobs and \$177.1 million in wages through indirect and induced impacts. Thus, in total, LANL is responsible for 16,840 jobs and \$704.1 million in income. Because LANL is funded entirely by federal expenditures, virtually all activity should be considered export related or funded by outside sources. In terms of its sheer size, there is little question but that LANL is the most significant economic engine in central and northern New Mexico.

SUMMARY AND CONCLUSIONS

Arts and cultural industries are a large and highly visible sector of Bernalillo County's economy. In 2004, A&CIs generated receipts of nearly \$1.2 billion, employed more than 19,500, and paid wages and salaries equal to \$413 million. The sector provides services and amenities to residents of the county, but also contributes to economic growth by drawing outside dollars to the county. On average, outside dollars funded about one-half of arts and cultural activities in the county. Including indirect and induced impacts, these funds accounted for a net impact of almost \$1 billion in receipts, more than 14,000 jobs and \$300 million in wages and salaries.

Hospitality businesses serving cultural tourists, artisan producers (particularly jewelry makers), and artists, performers and writers registered the greatest impacts in terms of drawing outside dollars to the county. The impact of educational services, ostensibly the largest arts and cultural category, was significantly less because the subsector depends largely on local funds for its activities.

In 2004 A&CIs generated slightly over \$50 million for the city of Albuquerque and Bernalillo County. However, as a major population center, the county's residents are a principal market for the area's A&CIs and thus the source of nearly half of all tax dollars generated by the industry. Other public revenues, including various taxes that the industry draws into the region from outside sources, admission charges, rental fees, and federal and state grants, total just over \$31 million. In 2004, the city of Albuquerque spent an estimated \$35 million in its operating budget on arts and cultural facilities and programs. Thus, maintaining and staffing facilities and running programs required some additional subsidy from general revenues. The arts and cultural facilities and programs of the city, including the BioPark, Explora!, the Natural History and Science Museum, and the Albuquerque Museum, are important amenities that make this city a wonderful place in which to live and do business. They may play a critical role in the vitality of the area's arts and cultural industries, but the city's arts and cultural offerings still require funding from additional local tax dollars.

By most measures, the arts and cultural economy of Albuquerque and Bernalillo County is vibrant. Employment in A&CIs is relatively high for a city of Albuquerque's size; the sector compares favorably with some of the largest employers in the state, including UNM and Intel; and comparative studies suggest that the region has a healthy cultural economy with great promise for further growth.

Beyond these direct and indirect measures of economic performance, the

potential for the arts and cultural sector to foster a broader pattern of economic growth in the region remains uncertain. Academic and applied research suggests that the cultural economy plays a key role in creating markets, attracting investment and skilled labor, and fostering a productive and innovative environment for business. Research further suggests that success in fostering such an environment depends largely on the quality of the relationships that link the cultural sector to the community at large. The nature of these relationships is the principal subject of second part of this research project.

APPENDIX A: MEMBERS OF THE UNM-BBER/BERNALILLO COUNTY CULTURAL POLICY ADVISORY COUNCIL

Contractors of UNM-BBER Study:

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McCune Charitable Foundation

Elliot Lewitt
CEO, Digital Media Group

Pamela & Don Michaelis
Publishers, Collector's Guide of New Mexico

APPENDIX B: METHODOLOGICAL NOTES

Overview of Research Methodology

The methodology used in this study included the following steps.

1. In consultation with an advisory committee of arts and cultural leaders from Bernalillo County, BBER defined and categorized the arts and cultural activities to be included in this study.
2. Employment, wages and industrial classification of more than 18,000 business establishments located in Bernalillo County were gathered from New Mexico's Department of Labor ES-202 database. These establishments included private for-profit businesses, private not for-profit businesses and institutions, and public institutions.
3. Data for self-employed persons was collected from the Census Bureau's Nonemployers Statistics.
4. ES-202 establishments were sorted according to industrial classification; 2,443 businesses and institutions corresponding to 144 industrial categories were selected for further investigation.
5. BBER attempted to contact 381 establishments, and gathered information from 160 establishments on the volume of arts and cultural activities (measured in terms of the proportion of all activities, from 0 to 100%, and applied to total employment); and the geographical source of revenues (i.e. from Bernalillo County, other parts of New Mexico or outside of New Mexico). The establishments were selected for interview and/or survey with the use of stratified random sampling techniques, according to industrial classification and establishment size.
6. Values for the composition of arts and cultural activity and the source of funding were applied to ES-202 establishment data
7. Total employment in A&CIs was calculated by multiplying the coefficient gathered from primary research by total employment for each business establishment, and then summed for all establishments located in the county. Similarly, total employment of A&CIs funded by outside dollars was calculated by multiplying arts and cultural employment for each establishment by the associated share of outside dollars, and then summed for all establishments located in the county.
8. Total arts and cultural employment, and total arts and cultural employment funded by outside dollars was analyzed with widely used regional economic impact analysis software (Implan Pro 2.0) to calculate the indirect and induced impacts of arts and cultural activities.

The following offers a detailed discussion of specific methodological issues.

Secondary Data Sources

The secondary data sources used in this study include the *Covered Employment (ES-202)* database and the U.S. Census Bureau's *Nonemployer Statistics*. Covered employment data is collected by the New Mexico Department of Labor (NMDOL) under the national labor market information program, known as ES-202, for use in the administration of the unemployment insurance program¹⁸. These data are compiled from quarterly reports submitted by employers in compliance with U.S. and New Mexico law, and provides detailed information on unemployment and wages on an establishment by establishment basis. The data is widely used in detailed regional economic analyses, and, because of the legal requirement that businesses file it, it is considered among the most reliable sources of disaggregated employment information. The search of the ES-202 database yielded data on more than 18,000 businesses registered for unemployment insurance in Bernalillo County.

Data submitted by employers under the ES-202 program was supplemented by 2003 Census Bureau Nonemployer Statistics. Nonemployers are businesses with no employees with taxable receipts of \$1,000 or more for a given year. These businesses are typically self-employed workers, and tend to be strongly represented within certain segments of the A&CIs, most notably artists, writers and performers. It is a limitation of the analysis that such individuals are included only to the extent self-identification for tax purposes places them within the A&CIs. Workers whose cultural activities are of a secondary nature are commonly omitted. Further, the Census Bureau's nonemployer statistics do not include individuals who work in a nonprofit capacity.

ES-202 and nonemployer files are categorized according to six-digit North American Industrial Classification System (NAICS) codes. NAICS codes describe the nature of the enterprise according to the principal products and services provided by the business¹⁹. BBER sorted and selected ES-202 and nonemployer files according to NAICS codes for potential fit with general definitions of art and cultural industries, including spectator sports. Selection was strongly biased in favor of inclusion, with the understanding that businesses or groups of businesses would later be surveyed for inclusion in the analysis. The initial sorting and selection of the ES-202 database captured 2,443 businesses from 142 6-digit NAICS categories for further investigation.

¹⁸ BBER has access to this data through a confidentiality agreement with the New Mexico Department of Labor.

¹⁹ See <http://www.census.gov/naics> for a complete description of NAICS coding system and to look up the codes by economic activity.

Primary Data Collection

To shape these secondary data sources to fit the specific demands of this project, BBER undertook an extensive process of primary data collection. Primary research involved a phone and email-based survey of businesses identified in the ES-202 database to determine whether the businesses were engaged in work that was consistent with the definition of A&CIs used in this study, and, if so, what proportion of an enterprise’s activity was specifically relevant to the subject of this study. Each business was thus assigned a value from 0 to 100%, known as the “art & cultural coefficient” (ACC) and/or a similar “spectator sport coefficient” (SSC). During the same process, businesses were asked to estimate the geographical source of revenues. Proportions were assigned for Bernalillo County, other parts of New Mexico and outside New Mexico; the three shares totaled 100%. The sum of the latter two shares, equal to the proportion of revenues originating outside of Bernalillo County, was designated as the “non-local coefficient” (NLC).

Of the 2,443 establishments identified in the initial survey of ES-202 data, 887 were subject to further investigation. 1,158 establishments were restaurants and accommodations, which, as described below, were considered separately. Another 396 were found to not match the criteria used to define arts and cultural activities.

The survey of the 889 establishments was twice stratified. First, businesses were assigned to one of 32 categories according to the nature of their business activity, and in a manner generally consistent with their NAICS designation. Second, within each category businesses were stratified according to the number of employees. Any individual business that represented a large share of its respective category (typically more than 25%) was interviewed to determine its ACC/SSC. Within each of the 32 categories, a target sample of 15% of the remaining businesses was selected for survey to determine ACC/SSC and NLC.

Table B.1 lists the number of entities in each category, the number of entities contacted and the number of these who responded to our requests. The interviewing process began by researching the original entities in order to determine whether they had been accurately included in the artistic or cultural grouping and to obtain contact information. Of the original 887 entities (column 1), 240 were found ineligible for the sample either because of lack of artistic or cultural content or lack of contact information, leaving 647 establishments. Of these establishments, attempts were made to contact 381 (column 2) and 160 provided data (column 3). The response rate is provided in the fourth column. BBER staff supplemented the interview data with online research in those cases where the response rate was zero – agents, broadcasting and photography.

TABLE B.1: SAMPLING AND RESPONSES TO PRIMARY RESEARCH

Category	Number of Entities	Sample Size	Data Acquired	Response Rate
Advertising	44	13	1	8%
Agents	4	3	0	0%
Architects	89	12	7	58%
Art Schools	40	23	9	39%
Artists	27	9	5	56%
Books & Music	48	24	10	42%
Broadcasting	24	4	0	0%
Ceramics	12	7	4	57%
Education	71	20	9	45%
Film & Recording	35	20	6	30%
Foods	20	13	5	38%
Frames	14	12	6	50%
Galleries	31	21	14	67%
Grantmakers/Advocates	20	8	1	13%
Graphic Design	31	21	9	43%
Interior Design	17	11	2	18%
Jewelry	72	35	16	46%
Lawyers	19	5	4	80%
Libraries	2	1	1	100%
Metal	12	8	3	38%
Miscellaneous Artisan	6	5	1	20%
Miscellaneous Retail	12	5	2	40%
Movie Theaters	11	7	2	29%
Museums & Cultural Centers	10	6	5	83%
Musical Instruments	13	12	5	42%
Performing Arts	18	15	7	47%
Photography	33	8	0	0%
Publishing	52	21	10	48%
Social Organizations	19	6	2	33%
Sports	37	3	2	67%
Wholesale	29	16	7	44%
Wood	15	11	5	45%
Total	887	385	160	42%

UNM-Bureau of Business and Economic Research, 2006.

The methods BBER used to estimate the ACC/SSC of some of the largest and

most complex entities, namely, the University of New Mexico, Albuquerque Public Schools, the Albuquerque Journal, the Albuquerque Tribune, and Expo NM, are described in detail here.

University of New Mexico

We began by isolating the artistic, cultural and sports-related units of UNM, along with support services for each. These included instruction, research, athletics, performance venues (Popejoy Hall, Keller Hall, the Rodey Theater, Theater X, the Carlisle Dance Space, and the Art Museum), the Maxwell Museum, KUNM, KNME, UNM bookstore, UNM libraries, UNM publications, ASUNM, and the Lodestar Planetarium.

BBER estimated the percent of instruction that was artistic or cultural in nature by selecting courses that fit our description of art and culture. These included all fine arts and humanities courses, along with any design courses not included in these broader categories.²⁰ We obtained total student credit hour (SCH) figures for each of these courses as well as the geography of SCH – Bernalillo County resident SCH, New Mexico resident SCH, and non-New Mexico resident SCH – from Institutional Research at UNM. All three SCHs were totaled and divided by the total SCH for all courses at UNM (Main Campus, not including the Health Science Center) to arrive at an ACC percentage for instruction of 36%.

We calculated an ACC for research by summing the funding awarded to research projects that fit our definition of artistic or cultural activity in fiscal year 2005 (\$6,200,670) and dividing this number by the total funding of all grants awarded (\$295,400,000). The resulting percentage was 2%.

The performing arts venues and museums were assigned 100% ACC. The remaining units were surveyed and an ACC was assigned based on this information. KUNM and KNME each received an ACC of 75%; the Bookstore received 50%; the libraries, 36%; university publications, 75%; ASUNM, 50%; and the Lodestar, 50%.

Finally, using employment numbers provided by UNM Human Resources, we multiplied the employment numbers for each unit by the ACC percentages we had attained. We did not compile these percentages to come up with an

²⁰ The following courses were considered to be art/culture courses: Architecture, Art Studio, Landscape Architecture, African American Studies, American Studies, Anthropology, Chinese, Japanese, Classics, Greek, Italian, Latin, Modern Language, Portuguese, Spanish, German, French, Russian, Comparative Literature, English, English-Philosophy, History, Latin American Studies, Linguistics, Philosophy, Religion, Sociology, Women's Studies, Fine Arts, Art History, Museum Studies, Media Arts, Music, Applied Music, Music Education, Theater, Dance, Law School

aggregate ACC for the university as a whole; rather, each unit was treated as a separate entity throughout the analysis.

Albuquerque Public Schools

Based on discussions with APS officials, it was determined that middle and high schools and elementary schools should be assessed individually, using a methodology specific to each. To estimate the ACC of APS high schools and middle schools, BBER obtained enrollment numbers for all courses offered in APS high schools and middle schools and extracted the relevant art/culture course enrollment. The courses counted included fine arts, history, geography, foreign language, and a proportion of English courses (instruction time devoted to creative writing and literature was counted; grammar, spelling, and reading were not counted). We divided this number by total enrollment to get an ACC for middle schools of 36% (of which 8% was arts and 28% was humanities), and for high schools of 39% (of which 9% was arts and 30% was humanities).

BBER used the standards set by APS to estimate the elementary schools' ACC. We compared the subject areas we had used for high schools and middle schools to the standards to come up with an elementary school ACC of 34%. Finally, we computed an ACC for APS as a whole as the weighed average of the three grade levels (elementary, middle schools and high schools) with the use of enrollment numbers. The aggregate ACC for APS was estimated to be 36%, indicating that share of APS employment directly or indirectly related to arts and cultural education. As noted, the majority of this arts and cultural education in APS is related to cultural studies, including the study of literature.

Albuquerque Journal and Albuquerque Tribune

In order to estimate the ACC for Albuquerque's main newspapers, we surveyed both in order to estimate the percent of content that was devoted to art/culture and sports. We determined that the most accurate measure of artistic/cultural and sports content was the proportion of newspaper space (measured in column inches) dedicated to each category.

Since each paper has various columns and features that happen only once a week, we counted an entire week's worth of papers to get an accurate sense of the total artistic/cultural content. We intended to do this for one week per quarter, randomly selected, for each paper, but were thwarted when the university's Zimmerman Library experienced a fire in the basement. We managed to survey one week for each paper before the fire, and it was upon these numbers that our ACC of 10% for art/culture and 7% for sports for the newspapers was based.

Expo NM

To calculate the ACC/SSC for Expo NM, we collected information on all the events (including the New Mexico State Fair) during the period March 2005 through February 2006 (the most recent 12-month period for which information was available). The ACC and SSC were computed as the proportion of all event days that corresponded to the relevant definitions.²¹

The employment figures for Expo NM provided in the ES-202 data do not include individuals directly employed by promoters who rent space for events held at Expo NM. Therefore, BBER conducted a random survey of 25% of the events held in 2005, asking vendors about the number of paid employees working their event and where these employees resided. From this sampling, BBER found that events at Expo NM create 1,465 person-days of work; of these, 1,285 are workers residing in Bernalillo County. This is equivalent to 5.35 full time employees.

Cultural Tourism

By far, the greatest number of employers relevant to this study are in the area of tourism and visitor services, including restaurants and hotels. Of the 2,443 establishments initially selected for investigation, nearly 40% (980) are restaurants; another 168 are hotels and other short term accommodations. These establishments include several of the region's largest employers.

To estimate the cultural content of tourism and other visitor related services in Bernalillo County, BBER utilized secondary sources of information. Travelscope, a publication of the Travel Industry Association of America, is a quarterly survey of trip characteristics and demographics of travel within the US. The data includes a listing of 21 possible activities undertaken by travelers, eight of which were considered in the present study as cultural in nature.²² Respondents would identify up to three activities. Of the 377 survey respondents who visited Central New Mexico (Bernalillo County) in 2003, 66% reported having engaged in at least one category of cultural activities during their visit; in total, 44.9% of all activities were cultural in nature. This value was used as the ACC for the hotel category.

²¹ Besides hosting many obviously artistic or cultural events, such as arts and crafts fairs, Expo NM also hosts a large number of horse-related events and a smaller number of weapon and auto shows. Of these events, BBER counted those that seemed to be competitive in focus as sports events and the events that seemed to be hobby or collector's events as art/culture events.

²² Visits to historical places and museums; performing arts, cultural events and festivals, art museums and galleries, nightlife, national and state parks, rural sightseeing and urban sightseeing.

According to a study by the Bureau of Economic Analysis, 16% of all restaurant customers are visitors to an area²³. Using this figure, and again assuming that 44.9% of all tourism-related travel is cultural in nature, suggests that 7.18% of all restaurant employment is directly or indirectly due to cultural tourism.

These general coefficients of ACC for restaurants and hotels were further modified based on an informal survey of business owners and managers. Businesses in the Old Town section of Albuquerque indicated that, on average, one half of all business is associated with out-of-town visitors. Estimates for 14 restaurants and 8 hotels in this area were adjusted accordingly. Further, it was assumed that fast-food estimates would receive only one-half the share of tourism-related business as other restaurants. Again, the ACC for these establishments was adjusted accordingly.

Verification

BBER sought to verify the integrity of the ES-202 database with other reliable sources of information. First, we canvassed parts of the metro area that historically have a high concentration of art or culture-related businesses (downtown, Nob Hill, and Old Town) to identify establishments that should be included in the study. These businesses were checked against the ES-202 database. From these areas, nine businesses were added to the database. In each case, the omission was due to an incorrect NAICS classification.

Second, in order to assure that we had included all the non-profits in this sector, we conducted a search of Guidestar™, a website that serves as a clearinghouse for information about non-profits nation-wide, isolating relevant organizations we wanted to make sure we had included. We then checked our compiled database for these organizations and added eleven entities that we found in the complete ES 202 database that had not been included in the first cut, again due to incorrect NAICS classification.

Calculating Government Revenues and Expenditures Related to the Arts & Cultural Industries and Sports

Taxes on Arts and Cultural Industries and Sports Activities Gross Receipts Taxes.

Based on BBER staff knowledge of the applicability of the gross receipts tax to different industries and types of businesses and using data from the NM Taxation and Revenue Department's (TRD) Report 80, estimates of total output (receipts) and of output supported by dollars from outside Bernalillo County were converted into taxable gross receipts by detailed NAICS industry for each of the categories

²³ Cited by Paulius Narbatus, 2003.

and separately for A&CIs and spectator sports activities. The estimates made use of the information collected by BBER staff on the percentages of customers who were from Bernalillo County, from the rest of the state, and from outside New Mexico, as validated by the Report 80 data for individual NAICS codes. In estimating the taxable gross receipts supported by outside dollars, it is critical to determine whether a service is provided in Bernalillo County (tourism) and whether delivery of a product is taken in Bernalillo County, elsewhere in New Mexico or outside the state, since sales out of state will generally not be taxed (Interstate Commerce Clause). Factored into the calculations was ownership, since nonprofit organizations are not subject to gross receipts tax on their receipts and since government cultural and recreational facilities are subject to governmental gross receipts on their ticket sales. The latter is a revenue source for the state of New Mexico. There are no distributions to local governments, although the revenue collected supports New Mexico Finance Authority financing for approved local government projects.

Applicable tax rates by jurisdiction are available on TRD's website. Jurisdictions may implement changes in their gross receipts taxes on July 1 or January 1. Since the study period is calendar 2004, it was necessary to average rates in place for the first 6 months of the year and those for the latter half. The city of Albuquerque dominates as the center for retail and commercial activity and many of the arts and cultural facilities are within the city limits. In general, we assumed 90% of direct arts and cultural activity was within the city limits and weighted the different jurisdictional tax rates accordingly (since the county and state applicable rates depend on whether the business is within or outside an incorporated area).

Property Taxes.

BBER staff were able to collect information from the Bernalillo County Assessors Office on individual properties and estimate the 2004 property taxes owed to each of the taxing jurisdictions. We targeted major hotels and tourist attractions, like Old Town. The resultant list is incomplete (since none of the design industries, media, movies, etc. are included), but it begins to suggest the amount of property taxes directly related to A&CIs. Where the tax records did not include taxes owed, property taxes paid were allocated to different taxing jurisdictions based on the tax rates on non-residential property in place and reported by the Department of Finance and Administration Local Government Division on their website.

Lodgers Tax.

The city of Albuquerque reports monthly data on lodgers tax on its website and fiscal year figures are available in the city's financial documents. BBER staff estimated total lodgers tax receipts to the city from cultural tourism and sports by assuming that these tax receipts were proportionate to the percents of lodging

employment identified as related respectively to arts and culture and to sports.

Taxes on Workers Directly Employed or Supported Indirectly by the Dollars that the Arts & Cultural Industries Bring into Albuquerque/Bernalillo County

Estimates were made using the total earnings figures from the economic impact analysis produced using Implan. The shares of income going to different types of taxes were based on the Institute on Taxation and Economic Policy's (ITEP) January 2003, *Who Pays: A Distributional Analysis of the Tax Systems in All 50 States*. Figures were calculated for General Sales and Excise Taxes, Income Taxes and Property Taxes. The methodology used by ITEP makes use of IRS data and allocates taxes paid by businesses but born by households as well as those paid directly by individuals. The estimated total revenues paid by New Mexico workers supported directly and indirectly by the Bernalillo County cultural industries were then apportioned to the different taxing jurisdictions depending upon each jurisdiction's rate relative to the total tax imposed. Thus, for example, Bernalillo County residents residing within the city of Albuquerque in 2004 – roughly 80% of the population -- paid an average of 0.375% in county gross receipts tax out of a total gross receipts tax of 6.125%. Where appropriate the figures were adjusted to reflect the 2000 Census data which indicated that 85% of Bernalillo County workers actually live in the county. Revenues to different levels of government were determined for sales and excise taxes, property taxes and income taxes. The property tax estimates were adjusted to reflect the higher rates paid by property owners in Bernalillo County versus the state as a whole.

Other Revenue Sources

While taxes clearly dominate, other revenue sources to the city, the county and the state were identified based on budget documents and annual financial statements, supplemented by discussions with knowledgeable staff in government agencies. These other revenue sources include admissions revenues (Zoo and Bio-Park), rental of city and county properties (City Museum, Zoo) and government grants (State Library to the city).

Expenditures

BBER staff is quite familiar with city of Albuquerque finances. City of Albuquerque operating and capital expenditures related to A&CIs and sports were identified in the city's budget documents and their annual financial statements for FY 04 and FY 05. Similar documents were examined for Bernalillo County, but assistance was required to ferret out revenues and expenditures, as the activities were often buried within larger programs. We also made use of information collected in BBER's study of city-county consolidation, but suspect that our information for the county is still incomplete. State expenditures in Bernalillo County were estimated from a variety of sources,

including Legislative Finance Committee budget documents, which include actual expenditures for prior fiscal years, and the Appropriations Acts for FY04 and FY05. We also made some use of the ES 202 data on employment and wages by establishment in Bernalillo County and budget and other financial information available online for the University of New Mexico and Albuquerque Technical and Vocational Institute. BBER staff and students also talked with staff at state facilities, including the NM Hispanic Cultural Center and the Natural History Museum as well as to staff within state agencies knowledgeable about grants made by the Department of Cultural Affairs and about the film program and incentives. We talked to people at APS, TVI and UNM. Finally, we made contact and requested financial data from the Petroglyph National Monument, the Atomic Museum, and the Indian Pueblo Cultural Center.

APPENDIX C: DETAILED TABLES**TABLE C.1: OUTPUT, EMPLOYMENT AND WAGES OF ARTS AND CULTURAL INDUSTRIES (EXCLUDING SPORTS) IN BERNALILLO COUNTY, 2004**

	EMPLOYMENT	WAGES (\$000)	OUTPUT (\$000)
Advocacy	169	1,688	4,767
Artisans	1,190	26,387	161,317
Artists	1,982	10,761	121,941
Design	1,154	37,891	88,908
Education	6,790	183,071	293,585
Fairs	261	1,248	5,913
Media	696	30,069	113,629
Movies	457	7,187	42,922
Retail	1,046	15,131	45,845
Museums	583	13,684	43,755
Hospitality	4,073	67,560	196,687
Wholesale	129	6,224	17,166
TOTAL	18,532	400,900	1,136,436

UNM-Bureau of Business and Economic Research, 2006.

TABLE C.2: OUTPUT, EMPLOYMENT AND WAGES OF SPECTATOR SPORTS IN BERNALILLO COUNTY, 2004

	EMPLOYMENT	WAGES (\$000)	OUTPUT (\$000)
Fairs	35	170	798
Media	65	2,294	7,052
Sports	476	2,186	6,886
Hospitality	401	7,436	21,177
TOTAL	976	12,086	35,912

UNM-Bureau of Business and Economic Research, 2006.

TABLE C.3: OUTPUT, EMPLOYMENT AND WAGES OF ARTS AND CULTURAL INDUSTRIES (EXCLUDING SPORTS) IN BERNALILLO COUNTY SUPPORTED BY OUTSIDE DOLLARS (EXPORTS), 2004

	EMPLOYMENT	WAGES (\$000)	OUTPUT (\$000)
Advocacy	31	319	900
Artisans	900	20,112	124,156
Artists	861	4,856	57,549
Design	377	13,404	29,793
Education	1,031	33,439	53,617
Fairs	154	732	3,481
Media	404	18,064	69,657
Movies	46	719	4,292
Retail	300	4,475	13,658
Museums	206	4,160	14,344
Hospitality	4,042	66,639	194,208
Wholesale	98	4,705	12,976
TOTAL	8,449	171,624	578,631

Shares of Art & Cultural Activities Funded by Outside Dollars (%)

	EMPLOYMENT	WAGES	OUTPUT
Advocacy	18%	19%	19%
Artisans	76%	76%	77%
Artists	43%	45%	47%
Design	33%	35%	34%
Education	15%	18%	18%
Fairs	59%	59%	59%
Media	58%	60%	61%
Movies	10%	10%	10%
Retail	29%	30%	30%
Museums	35%	30%	33%
Hospitality	99%	99%	99%
Wholesale	76%	76%	76%
TOTAL	46%	43%	51%

UNM-Bureau of Business and Economic Research, 2006.

TABLE C.4: OUTPUT, EMPLOYMENT AND WAGES OF SPECTATOR SPORTS IN BERNALILLO COUNTY SUPPORTED BY OUTSIDE DOLLARS (EXPORTS), 2004

	EMPLOYMENT	WAGES (\$000)	OUTPUT (\$000)
Fairs	20	99	463
Media	16	576	1,770
Sports	101	464	1,461
Hospitality	377	6,649	19,123
TOTAL	515	7,788	22,816

Shares of Art & Cultural Activities Funded by Outside Dollars (%)

	EMPLOYMENT	WAGES	OUTPUT
Fairs	58%	58%	58%
Media	25%	25%	25%
Sports	21%	21%	21%
Hospitality	94%	89%	90%
TOTAL	53%	64%	64%

UNM-Bureau of Business and Economic Research, 2006.

TABLE C.5: DIRECT, INDIRECT AND INDUCED IMPACTS OF ARTS AND CULTURAL INDUSTRIES (EXCLUDING SPORTS) IN BERNALILLO COUNTY SUPPORTED BY OUTSIDE DOLLARS (EXPORTS), 2004

EMPLOYMENT	Indirect &		Total	Multiplier
	Direct	Induced		
Advocacy	31	10	41	1.32
Artisans	900	654	1,553	1.73
Artists	861	811	1,672	1.94
Design	377	219	596	1.58
Education	1,031	496	1,526	1.48
Fairs	154	32	187	1.21
Media	404	802	1,205	2.98
Movies	46	42	88	1.92
Retail	300	117	417	1.39
Museums	206	177	382	1.86
Hospitality	4,042	1,572	5,614	1.39
Wholesale	98	82	180	1.84
TOTAL	8,449	5,013	13,462	1.59

WAGES	(\$000)			Multiplier
	(\$000)	(\$000)	(\$000)	
Advocacy	319	255	574	1.80
Artisans	20,112	20,174	40,285	2.00
Artists	4,856	11,176	16,032	3.30
Design	13,404	5,718	19,121	1.43
Education	33,439	12,188	45,627	1.36
Fairs	732	608	1,340	1.83
Media	18,064	15,007	33,072	1.83
Movies	719	963	1,681	2.34
Retail	4,475	3,198	7,673	1.71
Museums	4,160	4,643	8,802	2.12
Hospitality	66,639	41,626	108,264	1.62
Wholesale	4,705	2,234	6,939	1.47
TOTAL	171,624	117,788	289,411	1.69

TABLE C.5 CONTINUED

OUTPUT	Direct	Indirect & Induced	Total	Multiplier
	(\$000)	(\$000)	(\$000)	
Advocacy	900	727	1,627	1.81
Artisans	124,156	62,399	186,555	1.50
Artists	57,549	40,346	97,894	1.70
Design	29,793	17,116	46,909	1.57
Education	53,617	39,256	92,874	1.73
Fairs	3,481	2,171	5,652	1.62
Media	69,657	52,449	122,105	1.75
Movies	4,292	3,616	7,908	1.84
Retail	13,658	9,610	23,269	1.70
Museums	14,344	12,910	27,255	1.90
Hospitality	194,208	131,025	325,233	1.67
Wholesale	12,976	6,696	19,672	1.52
TOTAL	578,631	378,320	956,951	1.65

UNM-Bureau of Business and Economic Research, 2006.

TABLE C.6: DIRECT, INDIRECT AND INDUCED IMPACTS OF SPECTATOR SPORTS IN BERNALILLO COUNTY SUPPORTED BY OUTSIDE DOLLARS (EXPORTS), 2004

EMPLOYMENT	Indirect &		Total	Multiplier
	Direct	Induced		
Fairs	20	4	25	1.21
Media	16	10	26	1.59
Sports	101	17	118	1.17
Hospitality	377	154	531	1.41
TOTAL	515	185	700	1.36

LABOR INCOME

	(\$000)	(\$000)	(\$000)	Multiplier
Fairs	99	81	180	1.82
Media	576	273	849	1.47
Sports	464	312	776	1.67
Hospitality	6,649	4,102	10,751	1.62
WAGES	7,788	4,768	12,556	1.61

OUTPUT

	(\$000)	(\$000)	(\$000)	Multiplier
Fairs	463	288	751	1.62
Media	1,770	831	2,601	1.47
Sports	1,461	1,019	2,480	1.70
Hospitality	19,123	12,863	31,986	1.67
TOTAL	22,816	15,002	37,818	1.66

UNM-Bureau of Business and Economic Research, 2006.

**TABLE C.7: ESTIMATED GROSS RECEIPTS TAX REVENUES, 2004
DIRECTLY ASSOCIATED WITH ARTS/CULTURE AND SPORTS ACTIVITIES**

Figures in \$000's	TOTAL			EXPORTED		
	City of Albuquerque	Bernalillo County	State	City of Albuquerque	Bernalillo County	State
Advocacy	5.0	0.6	7.4	0.7	0.1	0.9
Artisans	1,240.1	150.3	1,813.7	265.5	40.2	369.8
Artists	2,365.2	286.7	3,459.4	657.6	99.6	916.1
Design	1,898.0	230.1	2,776.1	416.7	63.1	580.5
Education	106.9	13.0	156.4	-	0.0	-
Fairs	131.7	16.0	192.6	77.6	11.8	108.1
Media	1,963.0	237.9	2,871.1	703.1	106.5	979.3
Movies	1,009.2	122.3	1,476.1	53.1	8.0	74.0
Museums ¹	974.6	118.1	1,425.5	341.5	51.7	475.7
Retail	0.4	0.4	1,873.8	0.4	0.4	238.5
Tourism	4,722.0	572.4	6,906.5	4,722.0	715.4	6,577.4
Wholesale	120.7	14.6	176.6	68.9	10.4	95.9
Total	14,536.9	1,762.4	23,135.3	7,307.0	1,107.4	10,416.1
SPORTS						
Fairs	17.8	2.7	24.8	11.6	1.8	16.2
Media	121.8	18.5	169.7	52.4	7.9	72.9
Sports	168.4	25.5	234.5	2.1	0.3	2.9
Tourism	94.3	14.3	131.4	94.3	14.3	131.4
Total	402.3	61.0	560.4	160.4	24.3	223.4
Grand Total	14,939.2	1,823.3	23,695.6	7,467.4	1,131.8	10,639.6

¹ Where the museum is a state or local government facility, Governmental Gross Receipts Tax of 5% is assessed on admissions and is paid to a state account.

UNM Bureau of Business and Economic Research, 2006.

TABLE C.8: ESTIMATED GROSS RECEIPTS TAX REVENUES OF WORKERS DIRECTLY SUPPORTED BY ARTS/CULTURE AND SPORTS ACTIVITIES, 2004

Figures in \$000's	TOTAL			EXPORTED		
	City of Albuquerque	Bernalillo County	State	City of Albuquerque	Bernalillo County	State
Advocacy	44.9	7.5	75.3	8.4	1.4	12.7
Artisans	693.4	115.2	1,162.2	531.5	88.3	801.8
Artists	275.9	45.8	462.4	128.3	21.3	193.6
Design	1,009.7	167.8	1,692.4	354.2	58.9	534.3
Education	4,887.1	812.3	8,191.5	883.7	146.9	1,333.1
Fairs	32.9	5.5	55.2	19.4	3.2	29.2
Media	784.1	130.3	1,314.2	477.4	79.3	720.2
Movies	189.9	31.6	318.3	19.0	3.2	28.7
Museums	328.2	54.5	550.1	109.9	18.3	165.8
Retail	387.1	64.3	648.8	118.3	19.7	178.4
Tourism	1,785.2	296.7	2,992.2	1,761.1	292.7	2,656.6
Wholesale	164.5	27.3	275.7	124.3	20.7	187.6
Total	10,582.7	1,758.9	17,738.3	4,535.5	753.8	6,842.0
SPORTS						
Fairs	4.5	0.7	7.6	2.6	0.4	3.9
Media	60.6	10.1	101.6	15.2	2.5	23.0
Sports	57.8	9.6	96.8	12.3	2.0	18.5
Tourism	196.5	32.7	329.4	176.2	29.3	265.8
Total	319.4	53.1	535.4	206.3	34.3	311.2
Grand Total	10,902.2	1,812.0	18,273.7	4,741.8	788.1	7,153.2

UNM Bureau of Business and Economic Research, 2006.

TABLE C.9: ESTIMATED GROSS RECEIPTS TAX REVENUES OF ALL WORKERS SUPPORTED BY ARTS/CULTURE AND SPORTS ACTIVITIES, 2004

Figures in \$000's	TOTAL			EXPORTED		
	City of Albuquerque	Bernalillo County	State	City of Albuquerque	Bernalillo County	State
Advocacy	80.8	13.4	135.5	15.2	2.5	22.9
Artisans	1,388.9	230.8	2,328.0	1,064.6	176.9	1,606.0
Artists	910.7	151.4	1,526.5	423.7	70.4	639.1
Design	1,440.4	239.4	2,414.3	505.3	84.0	762.3
Education	6,668.3	1,108.3	11,177.0	1,205.8	200.4	1,819.0
Fairs	60.2	10.0	101.0	35.4	5.9	53.4
Media	1,435.5	238.6	2,406.0	874.0	145.3	1,318.4
Movies	444.4	73.9	744.8	44.4	7.4	67.0
Museums	694.5	115.4	1,164.1	232.6	38.7	350.9
Retail	663.6	110.3	1,112.4	202.8	33.7	305.9
Tourism	2,900.3	482.0	4,861.3	2,861.1	475.5	4,316.1
Wholesale	242.6	40.3	406.6	183.4	30.5	276.6
Total	16,930.1	2,813.9	28,377.5	7,648.3	1,271.2	11,537.7
SPORTS						
Fairs	8.2	1.4	13.7	4.7	0.8	7.2
Media	89.4	14.9	149.8	22.4	3.7	33.8
Sports	96.7	16.1	162.0	20.5	3.4	30.9
Tourism	316.8	52.7	531.0	284.1	47.2	428.6
Total	511.1	84.9	856.6	331.8	55.1	500.5
Grand Total	17,441.2	2,898.9	29,234.1	7,980.1	1,326.3	12,038.2

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