

From Rodeos to Indie Rock: The Economic and Fiscal Impacts of Selected Cultural Events in Denton, Texas



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August 1, 2010

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This study was completed under the supervision of Terry Clower, Ph.D., director of the Center for Economic Development and Research at the University of North Texas. Paul Hendershot, M.S. contributed to the IMPLAN modeling process.

EXECUTIVE SUMMARY

Cultural events are part of the fabric of life in Denton, Texas. The events allow for residents to gather and celebrate art, music, local heritage, ethnic diversity, physical fitness, and national holidays. With nearly 100 events scheduled throughout the year, Denton offers its residents a full calendar of opportunities for social participation and community building. Cultural events in Denton also have an economic impact beyond the social and community building benefits they offer. The University of North Texas Center for Economic Development and Research has examined the economic and fiscal impacts of eight selected cultural events in Denton, Texas. This analysis will allow city leaders to better understand how the events function in Denton's economic landscape.

- This study focuses on the following eight cultural events in the city of Denton:

Airshow	Arts and Jazz Festival	Blues Festival
Juneteenth Celebration	NX35 Music Conferette	Cinco de Mayo
Kiwanis 4 th of July Fireworks	North Texas State Fair and Rodeo	

- The eight cultural events generated the following impacts on the City of Denton:
 - 414,500 attendees with approximately 197,000 visiting from outside of the city
 - \$1,452,575 in production costs for the events
 - \$23,344,661 in attendee and performer spending
 - \$24,797,236 in combined direct spending
 - **\$25,839,392 in total economic activity**
 - \$8,489,457 in local labor income
 - **\$287,481 in new tax revenues**

- The Denton Arts and Jazz Festival, the North Texas State Fair and Rodeo, and the NX35 Music Conferette are responsible for the lion's share of the tax revenue generated (\$279,327 of the \$287,481 total).

INTRODUCTION

Cultural events are part of the fabric of life in Denton, Texas. The events allow for residents to gather and celebrate art, music, local heritage, ethnic diversity, physical fitness, and national holidays. With nearly 100 events scheduled throughout the year, Denton offers its residents a full calendar of opportunities for social participation and community building.

In addition to providing activities for residents, cultural events are increasingly recognized by municipalities as important components of their economic development strategy. Highly skilled workers are attracted to areas with a variety of cultural and recreational amenities and that technology and service firms will locate near these skilled labor pools.¹ In order to remain competitive, cities should embrace their cultural resources and leverage them as part of their overall economic development strategy.

Cultural events may also play a role in economic development by becoming an industry in their own right.² One needs only to look a few hours south to Austin to examine how an annual music festival grew from a modest music convention to an organization that hosts a multi-day event spanning music, film, and interactive media affording its host city over \$100 million in economic impact by attracting tens of thousands of participants and visitors from across the globe.³ The annual South by Southwest Music Festival (SXSW) was shepherded early in its inception by representatives of the City of Austin who understood the potential economic value a large cultural event could have for their city.⁴

¹ Florida, R. (2002). *The rise of the creative class: And how it's transforming work, leisure, community, and everyday life*. New York: Basic Books.

² Currid, E. (2009). Bohemia as subculture; "Bohemia" as industry. *Journal of Planning Literature*, 23(4), 368-382.

³ City of Austin, Texas. (2001). *The role of music in the Austin economy*. Austin, TX: TXP, Inc.

⁴ Shank, B. (1994). *Dissonant Identities: The Rock'N'Roll Scene in Austin, Texas*. Hanover, NH: Wesleyan University Press.

Additionally, cultural events such as festivals are beneficial to municipalities and regions in terms of social and professional network building. Festivals offer participants opportunities to potentially cross the divide between volunteerism and professional employment as a result of the dynamic mix of participant backgrounds and the skills obtained while developing an event. Research has found that “cultural festivals develop local skills in leadership, organization, management, and cultural performance,” while they “qualitatively improve local economies and encourage cooperation.”⁵

Denton, Texas is the 11th largest city in the DFW region and located in the 29th fastest growing county in the nation.⁶ As more people continue to migrate to the North Texas region, Denton is a premier option for those looking for a community that is “north of ordinary.” The abundance of cultural events hosted by Denton offers a wide range of entertainment options. Realizing the importance of these events, the City of Denton directly and indirectly provides support and services that are critical to event success. The question is what is the return to the city for incurring expenses and providing support for local cultural events? It is against this backdrop that the University of North Texas Center for Economic Development and Research was asked to examine the economic and fiscal impacts of eight selected cultural events in Denton, Texas.

⁵ Gibson, C., Waitt, G., Walmsley, J., & Connell, J. (2010). Cultural festivals and economic development in nonmetropolitan Australia. *Journal of Planning Education and Research*, 29(3), 280-293.

⁶ “Resident Population Estimates for the 100 Fastest Growing U.S. Counties with 10,000 or More Population in 2009: April 1, 2000 to July 1, 2009.” U. S. Census, Population Division.

ECONOMIC AND FISCAL IMPACTS OF ATTENDEE SPENDING AND EVENT PRODUCTION FOR SELECTED CULTURAL EVENTS

Methodology: Data Gathering and Estimations

To accurately assess the economic and fiscal impacts of a cultural event, it is necessary to have certain baseline information concerning the number of attendees, their geographic origin, and how much they spend per day. Ideally, a detailed intercept survey should be used at the event to gather pertinent information from a broad range of attendees. Of the eight cultural events covered in this study, only the North Texas State Fair and Rodeo and the Denton Arts and Jazz Festival have used such a technique. The remaining events utilized a mix of comparatively less detailed surveys, in-person and phone interviews, and visual estimations. Based on this data provided by event organizers, certain assumptions were able to be made. When necessary, cross-referencing and extrapolating among the Denton events, information from the city, and previous research were used to help fill in missing data elements.

For example, in order to estimate attendee spending, it is first important to establish how many attendees were present at each event, and then how many of the visitors are non-residents. In doing this, it is possible to estimate how much of the spending associated with an event is “new” and how much is likely to be “substitute” spending.⁷ Official estimations for the total number of attendees at most events were provided to the author by the Denton Police Department via city staff. The North Texas State Fair and Rodeo provided an attendance figure based on prior research and the NX35 Music Conferette’s attendance is based on organizers’

⁷ Substitute spending refers to spending by local residents at an event that would have occurred in the city in any event. For example, spending by a Denton family that attends the North Texas Fair and Rodeo instead of going out to dinner at a Denton restaurant and seeing a movie at a Denton theater would count as substitute spending.

estimates as reported in the *Denton Record-Chronicle*. The total number in attendance for all eight selected events was 414,500.

In order to assess the origins of the attendees, the author considered each event on a case-by-case basis. Some event organizers provided detailed percentage breakdowns such as the Denton Arts and Jazz Festival, the North Texas State Fair and Rodeo, and the Denton Airshow. Others, including the NX35 Music Conferette, Kiwanis 4th of July Fireworks, and Cinco de Mayo Celebration, provided rough estimates based on observations taken during the event. This information was adjusted where appropriate through careful consideration of the event's geographic appeal and, in the case of NX35 Music Conferette, by extrapolating percentages from the Denton Arts and Jazz Fest. Other event organizers had no detailed attendance estimates available. In these cases, we gave consideration to an event's geographic appeal and estimated a suitable percentage breakdown for attendee origin based on other events for which data were available – i.e., the Denton Blues Festival and Denton Juneteenth Celebration are events estimated to have largely drawn attendees from the city and surrounding counties, as opposed to statewide, nationally, or internationally. In total, an estimated 197,000 event attendees were visitors from outside the city of Denton. In addition, non-resident performers at these events bring new spending to the city and were included in this analysis.

Visitor spending is estimated on a per-visitor, per-day basis. Again, it is ideal to gain this information through the administration of a detailed intercept survey at the event – in this case, asking how much each visitor intends to spend per-day on meals, beverages, lodging, and other items. Unfortunately, this information was not available to the author for any of the eight events selected other than the North Texas State Fair and Rodeo. However, this topic has

been addressed in the past by the Center for Economic Development and Research, a multitude of published studies by other researchers, and the State of Texas' Economic Development and Tourism Division. By drawing on these sources, per-visitor per-day spending on meals and beverages was estimated to be \$60 for cultural events in Denton that incorporated evening entertainment focused on music. For smaller events focused on celebrating ethnic heritage and geared more towards daytime family entertainment, per-visitor per-day spending on meals and beverages was estimated at \$30. Lodging for all events was estimated at \$101.50 per night (hotel) and \$30 (RV space) with an average of 2 visitors per room or space for a portion of out-of-town visitors. Percentage of visitors staying overnight varies by event. Some events attract significantly more visitors from outside of the city of Denton and the immediate area creating more expenditure in lodging, while other events are more locally focused. A conservative estimate concerning lodging was used if detailed data regarding it were not available.

Visitor spending is only part of the picture when addressing the economic and fiscal impacts of cultural events. Production of the events also pumps significant flows of revenue into a host city. To estimate the economic and fiscal impacts of producing a cultural event in the city of Denton, data provided by the event organizers detailing production expenses, sponsorship revenue, vendor revenue, ticket sales, and other income were used. As in the case of visitor spending, when specific data for an event were not available, estimates were extrapolated from other events and previous studies.

Methodology: IMPLAN Modeling

In assessing the economic and fiscal impacts of spending associated with the selected events we relied on an IMPLAN economic input-output model developed by the Minnesota IMPLAN Group. The IMPLAN model is widely used in professional and academic research. The model provides estimates of total economic activity including direct, indirect, and induced impacts based on the activities of a given entity.

Direct impacts result from spending by visitors and event organizers. For example, visitors buy a hot dog at the Rodeo or rent a room at a local hotel. Indirect impacts capture spending by the vendors and suppliers of the businesses receiving the direct spending. The hotel that hosts event participants and visitors hires an accounting firm to perform bookkeeping services. In turn, the accounting firm rents office space, hires workers, and pays a janitorial service to clean their office. Induced impacts capture the impacts of employees of all these firms, including those hired by event organizers, spending a portion of their earnings for goods and services in the local economy. The IMPLAN model accounts for spending that leaks out of the local economy. For example, the motor fuel purchased by visitors and performers at Denton gas stations was not refined here, so only a portion of that spending would create indirect activity in the city. When added together, the direct, indirect, and induced impacts, adjusted for spending that leaks out of the local economy, usually exceeds the direct spending which is the “multiplier” effect.

Economic input-output models provide estimates of economic activity (value of transactions), labor income, jobs, and indirect tax revenues to state and local jurisdictions. The total number of jobs supported by the estimated economic activity includes direct, indirect, and

induced effects. So, the jobs counted include workers that are hired to be ushers, ticket takers, hawkers and the like at the Fair and Rodeo, plus a portion of the jobs at the accounting firm working for the hotel, and a smaller portion of the jobs at the janitorial service company who cleans the accountant’s offices. Labor income includes salaries, wages, benefits, and proprietors’ income for all of these jobs. Tax revenue estimates include payments for sales and use taxes, property taxes, license and permit fees, and other sources of government revenue.

The following reports the findings of the analysis of the economic and fiscal impacts of each of the selected events:

I. DENTON AIRSHOW

The Denton Airshow is a single day event that takes place at the Denton Airport drawing an estimated 7,000 visitors in 2010. Producing the event cost approximately \$48,000. Attendee and performer spending is estimated at more than \$112,000 resulting in a combined direct spending of \$160,845 in the city of Denton. This impact generated over \$168,180 in total economic activity. Local labor income was boosted by \$55,273 while the City of Denton recorded an increase of \$1,919 in tax revenues (see Table 1).

Table 1
Economic and Fiscal Impacts of Visitor Spending and Production Related to the Denton Airshow

Description	Impact
Total Direct Spending [#]	\$160,845
Total Economic Activity	\$168,180
Total Labor Income (including benefits)	\$55,273
City of Denton Tax Revenues ⁺	\$1,919

[#] Includes retail sales and operating expenses ⁺Includes sales, excise, property taxes, fees, licenses (Source: IMPLAN)

II. DENTON ARTS AND JAZZ FESTIVAL

The Denton Arts and Jazz Festival is a three day event that takes place at Quakertown Park drawing an estimated 205,000 visitors. In 2010, producing the event cost \$507,182. Combined with attendee and performer spending of \$18,023,482, total direct spending in the city of Denton resulting from the Arts and Jazz Festival adds up to \$18,530,664. This impact generated \$19,300,280 in total economic activity. Local labor income rose by \$6,341,114 and the City of Denton received in excess of \$200,000 in tax revenues (see Table 2).

Table 2

Economic and Fiscal Impacts of Visitor Spending and Production Related to the Denton Arts and Jazz Festival

Description	Impact
Total Direct Spending [#]	\$18,530,664
Total Economic Activity	\$19,300,280
Total Labor Income (including benefits)	\$6,341,114
City of Denton Tax Revenues ⁺	\$213,526

[#] Includes retail sales and operating expenses ⁺ Includes sales, excise, property taxes, fees, licenses (Source: IMPLAN)

III. DENTON BLUES FESTIVAL

The Denton Blues Festival is a single day event that takes place at Quakertown Park drawing an estimated 3,500 visitors. Using estimates from similar events, it is presumed that this event cost about \$10,143 to produce in 2009. Total direct spending in the city of Denton as a result of the event was \$180,616 when the production costs were added to the \$170,473 in attendee and performer spending. This impact generated \$188,257 in total economic activity. Local labor income saw an increase of \$61,814 while the City of Denton recorded a modest increase in tax revenues of \$2,144 (see Table 3).

Table 3

Economic and Fiscal Impacts of Visitor Spending and Production Related to the Denton Blues Festival

Description	Impact
Total Direct Spending [#]	\$180,616
Total Economic Activity	\$188,257
Total Labor Income (including benefits)	\$61,814
City of Denton Tax Revenues ⁺	\$2,144

[#] Includes retail sales and operating expenses ⁺Includes sales, excise, property taxes, fees, licenses (Source: IMPLAN)

IV. DENTON CINCO DE MAYO CELEBRATION

The Denton Cinco de Mayo Celebration is a single day event that takes place at Quakertown Park drawing an estimated 15,000 visitors in 2010. Producing the event cost \$25,000. Attendee and performer spending is estimated at more than \$150,000 resulting in a combined direct spending of \$181,182 in the city of Denton. This impact generated over \$188,000 in total economic activity. Local labor income rose by \$62,145 while tax revenues in the City of Denton increased by just over \$2,000 (see Table 4).

Table 4

Economic and Fiscal Impacts of Visitor Spending and Production Related to the Denton Cinco de Mayo Celebration

Description	Impact
Total Direct Spending [#]	\$181,182
Total Economic Activity	\$188,878
Total Labor Income (including benefits)	\$62,145
City of Denton Tax Revenues ⁺	\$2,003

[#] Includes retail sales and operating expenses ⁺Includes sales, excise, property taxes, fees, licenses (Source: IMPLAN)

V. DENTON JUNETEENTH CELEBRATION

The Denton Juneteenth Celebration is a four day event that took place at Fred Moore Park drawing approximately 5,000 visitors. Estimations based on similar events were used to give a complete picture of the economic and fiscal impact of this event. It is presumed this event cost approximately \$8,250 to produce in 2010. Attendee and performer spending was estimated at \$100,615 resulting in combined direct spending of just over \$108,000 in the city of Denton. This impact generated \$113,392 in total economic activity and boosted local labor income by \$37,302. The City of Denton saw an increase of \$1,197 in tax revenues (see Table 5).

Table 5

Economic and Fiscal Impacts of Visitor Spending and Production Related to the Denton Juneteenth Celebration

Description	Impact
Total Direct Spending [#]	\$108,865
Total Economic Activity	\$113,392
Total Labor Income (including benefits)	\$37,302
City of Denton Tax Revenues ⁺	\$1,197

[#] Includes retail sales and operating expenses ⁺ Includes sales, excise, property taxes, fees, licenses (Source: IMPLAN)

VI. DENTON KIWANIS CLUB'S 4TH OF JULY FIREWORKS

The Denton Kiwanis Club's 4th of July Fireworks is a single day event that takes place inside the Fouts Field football stadium on the University of North Texas campus. The event drew an estimated 12,000 visitors. Producing the event cost \$22,000 in 2010. This event mainly serves residents of Denton and those who attended spent \$60,240. Total direct spending related to the event was \$82,240 in the city of Denton. This impact generated almost \$86,000

in total economic activity. Local labor income increased \$28,278 and tax revenues were modest with the City of Denton seeing a bump of \$887 (see Table 6).

Table 6

Economic and Fiscal Impacts of Visitor Spending and Production Related to the Denton Kiwanis Club's 4th of July Fireworks

Description	Impact
Total Direct Spending [#]	\$82,240
Total Economic Activity	\$85,850
Total Labor Income (including benefits)	\$28,278
City of Denton Tax Revenues ⁺	\$887

[#] Includes retail sales and operating expenses ⁺Includes sales, excise, property taxes, fees, licenses (Source: IMPLAN)

VII. NORTH TEXAS STATE FAIR AND RODEO

The North Texas State Fair and Rodeo is an eight day event that takes place at the North Texas State Fairgrounds drawing an estimated 147,000 visitors. Producing the event cost \$652,000. Attendee and performer spending is significant with \$2,973,666 estimated for the 2009 edition of the event. The resulting combined direct spending in the city of Denton was well over \$3,000,000. This impact generated \$3,784,723 in total economic activity. Local labor income rose by \$1,243,596 while the City of Denton saw an increase of over \$42,000 in tax revenues (see Table 7).

Table 7

Economic and Fiscal Impacts of Visitor Spending and Production Related to the North Texas State Fair and Rodeo

Description	Impact
Total Direct Spending [#]	\$3,625,666
Total Economic Activity	\$3,784,723
Total Labor Income (including benefits)	\$1,243,596
City of Denton Tax Revenues ⁺	\$42,766

[#] Includes retail sales and operating expenses ⁺Includes sales, excise, property taxes, fees, licenses (Source: IMPLAN)

VIII. NX35 MUSIC CONFERETTE

The NX35 Music Conferette is a four day event that has daytime and nighttime programming in multiple venues and spaces within walking distance of the historic downtown square. In addition, a large concert takes place on Saturday evening. In 2010, the concert was held at the North Texas State Fairgrounds. The entire event drew an estimated 20,000 visitors and cost \$180,000 to produce. Spending by attendees and performers is estimated at \$1,747,156 and that combined with production costs totals \$1,927,156 in direct spending. This impact generated \$2,009,824 in total economic activity. Local labor income rose by \$659,931 while the City of Denton recorded an increase of \$23,035 in tax revenues (see Table 8).

Table 8

Economic and Fiscal Impacts of Visitor Spending and Production Related to the NX35 Music Conferette

Description	Impact
Total Direct Spending [#]	\$1,927,156
Total Economic Activity	\$2,009,824
Total Labor Income (including benefits)	\$659,931
City of Denton Tax Revenues ⁺	\$23,035

[#] Includes retail sales and operating expenses ⁺Includes sales, excise, property taxes, fees, licenses (Source: IMPLAN)

IX. SUMMARY OF EIGHT EVENTS

When considered in total, the eight selected cultural events addressed in this study produced significant economic and fiscal impacts for the City of Denton. The events attracted an estimated 414,500 attendees with approximately 197,000 visiting from outside of the city. Producing the events cost \$1,452,575 and that combined with attendee and performer spending of \$23,344,661 resulted in combined direct spending of almost \$25,000,000 and \$25,839,392 of total economic activity in Denton. The events boosted local labor income by

\$8,489,457 and afforded the City of Denton an increase of \$287,481 in tax revenues (see Table 9).

Table 9

Economic and Fiscal Impacts of Visitor Spending and Production Related to Combined Cultural Events

Description	Impact
Total Direct Spending [#]	\$24,797,236
Total Economic Activity	\$25,839,391
Total Labor Income (including benefits)	\$8,489,457
City of Denton Tax Revenues ⁺	\$287,481

[#] Includes retail sales and operating expenses ⁺Includes sales, excise, property taxes, fees, licenses (Source: IMPLAN)

CONCLUSION

Considered as a whole, the economic and fiscal impacts of the eight events studied are considerable. When one takes a closer and considers each event separately, a more diverse economic story emerges. Three events, the Denton Arts and Jazz Festival, the North Texas State Fair and Rodeo, and the NX35 Music Conferette are responsible for a disproportionate amount of the total tax revenue generated (\$279,327 of the \$287,481 total) for the City of Denton. While the economic and fiscal impacts of the three large events are impressive, it is important to examine all events in terms of what each contributes to the cultural experience of living in Denton. The Denton Juneteenth Celebration and Denton Cinco de Mayo Celebration offer residents a chance to celebrate the ethnic diversity of the city. The Kiwanis 4th of July Fireworks provides a community amenity that unites a broad spectrum of residents from differing backgrounds while also raising money for local charities. The Denton Airshow serves as a very public way to celebrate the continuing success of the Denton Airport and the continuing growth

of the aeronautics industry in the city. Similarly, the North Texas State Fair and Rodeo capitalizes on the rural heritage of the Denton, while its success points to the continuing health and growth of the equine industry in greater Denton County.

Even amongst music festivals, important differences draw attention to specific opportunities that the City might leverage for further growth and fiscal returns. Denton Arts and Jazz Festival serves as the most prominent cultural event in the city with family-friendly entertainment attracting people locally, regional, and nationally. Conversely, the Denton Blues Festival focuses on a single genre of music which offers aficionados from Denton and the greater DFW region an easy way to spend a day enjoying the blues without leaving the area. The NX35 Music Conferette falls more in line with the SXSW music festival in that it appeals to performers and attendees locally, regionally, nationally, and internationally. By utilizing the historic downtown as its base and being featured in top tier media outlets across the country, the NX35 Music Conferette promotes not only Denton's already internationally recognized indie rock music scene but the city itself.

Cities must closely examine every type of spending in fiscally-challenging times. Although further evaluation needs to be completed in order to assess return on investment of related city event spending, this report finds that the tax revenue generated by the selected eight events is substantial. Furthermore, the level of tax revenue generated by the selected events suggests that the program of events in the City of Denton are, on the whole, fiscally sustainable.