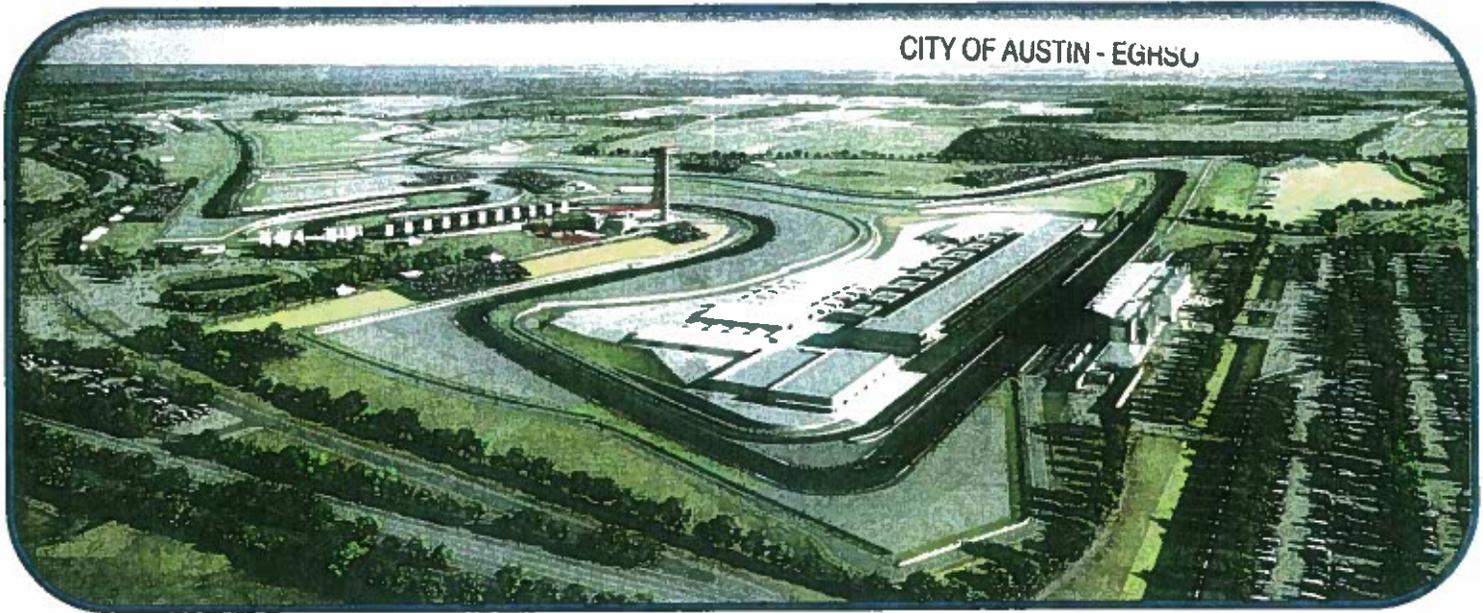


RECEIVED

JUL 17 2012

CITY OF AUSTIN - EGHSU



# Major Event Trust Fund Gain from Formula One United States Grand Prix Austin, Texas

---

Don Hoyte, Ph.D.  
**TEXASECONOMICIMPACT.COM**  
7.5.2012

Prepared for

**Circuit Events Local Organizing Committee**  
100 Congress Avenue, Suite 1300  
Austin, Texas 78701-2744

---

## Underlying Philosophy of Major Event Trust Fund

Back in the late 1990s, the legislature sought to find a way to attract the Pan Am games to San Antonio without having a fiscal impact on the state. A financing structure was put in place to do that specifically recognizing the special nature of attracting huge international and national events: Without support to attract such events, they would go to other states.

Appreciating the huge potential gain to the state from winning these events, the original legislation established a trust fund financing approach that gathered the taxes considered a “gain” to the state from holding the Pam Am games into a separate fund and allowed the host municipality to tap into those funds to attract the event. The approach was simple: Winning the event means winning the taxes generated by the event so that sharing some (or even all) of that tax gain to get the event does not fiscally burden the state.

Because of the all-or-nothing nature of event location decisions, the amount of the gain attributable to getting these events is considered somewhat differently from “normal” impact analysis. That is, the gain to the state is considered the taxes generated by attracting the event-related activity into the state that would not have come to Texas if the event were not here. It is not considered simply the increase above some baseline level of visitor activity. Instead, it is the gain to the state attributable to getting the event to come to Texas.

But in practice, the concept of what constitutes an incremental gain to the state does not mean the TOTAL economic activity related to the event. For the purposes of the gain to the state, only the amount of activity that is drawn into the state from other states or countries is counted as a gain. Similarly, only activity drawn into the local area from outside of that area is considered a local gain.<sup>1</sup>

## Process of METF Approval and Verification

This report presents an **estimate** of the gain to the state and to the host municipality from holding the Formula One United States Grand Prix from November 16-18, 2012. It does not include any impacts of the construction of the Formula One facility. The report focuses solely on the impact of the event itself and the taxes generated under the METF statutes.

The Comptroller must review and approve this estimate. Moreover, the METF statute allows the Comptroller to request verification of the impact and tax estimates after the event is held. Typically, such verifications are sought before all funds are dispersed under the program. Initially, because an appropriation made in 2009 allowed some funds to be paid to the local

---

organizing committee in advance of the F1 event, it appeared to some that the protection usually afforded by post-event verification prior to payment was not applicable to the F1 event. However, the Comptroller has since indicated that no pre-event funding will be approved and that if the U.S. Grand Prix is awarded support from the Major Event Trust Fund, that will occur in accord with the rules and procedures applied to other MEFT recipients—including post-event verification of the preliminary estimate.

Accordingly, this document presents what the local organizing committee believes is a reasonable and responsible estimate of the impact of the 2012 U.S. Grand Prix on Texas and on Austin based on the best available data as of April 2012 to guide the decision of the Comptroller in her consideration for preliminary approval of the race under the METF. Admittedly, some key figures are not known with certainty and some others can really only be known following the event. In cases in which there is little reliable data to go on—such as determining the number and impact of non-ticketed attendees in Texas and Austin for the event—those impacts have been entirely excluded from this analysis.

Immediately after the event, the Circuit Events Local Organizing Committee will analyze and present survey and other data from the event verifying the estimate provided here as well as figures for impacts that currently cannot be properly estimated.

## **Selection of Austin for the 2012 U.S. Grand Prix**

In addition to providing an estimate of the economic and tax gain to Texas and the host city from an event applying for approval under the Major Event Trust Fund, qualified events must also show that they were recruited to Texas, or retained in Texas, instead of going to another state. This recruitment competition is an important part of the history of the U.S. Grand Prix—with the latest chapter seeing the event awarded to Texas for ten years.

Prior to Austin's selection to host the USGP, the last Formula One race in the US was June of 2007. On July 12, 2007, Formula One and the Indianapolis Motor Speedway announced that the 2007 U.S. Grand Prix would be the last one held at IMS for the foreseeable future, as both sides could not agree on the terms for the event. Attempts were made to re-recruit the race to Indianapolis for 2009 based on the track configuration that was used for the 2008 race in the MotoGP championship.<sup>2</sup>

However, in August 2009, Formula One president Bernie Ecclestone remarked that there was no immediate plan to return Formula One to the US, vowing "never to return" to Indianapolis.

---

Nevertheless, shortly before the first race of the 2010 season, Ecclestone continued to fuel speculation that a return to Indianapolis was not out of the question.<sup>3</sup>

In March 2010, Ecclestone announced consideration of plans to bring a Formula One race to New York City for the 2012 season. Ecclestone was quoted as saying the race could take place across the Hudson River in New Jersey, with the Manhattan skyline overlooking the circuit.<sup>4</sup> In May 2010, plans emerged for a circuit to be built in Jersey City's Liberty State Park, but those plans were abandoned shortly thereafter.<sup>5</sup> A race in West New York and Weehawken was later announced in October 2011.<sup>6</sup> In May 2010, it was announced that Monticello Motor Club – a circuit complex modeled on a private country club near Monticello – had submitted a bid for the rights to host the race.<sup>7</sup>

To the surprise of many in Indianapolis, New York and New Jersey, the awarding of the F1 U.S. Grand Prix designation went to Texas. On May 25, 2010, Austin, Texas, was awarded the race on a ten-year contract, as Ecclestone and event promoter Full Throttle Productions agreed to a deal beginning in 2012. For the first time in the U.S. the event will be held on a purpose-built new track.<sup>8</sup>

Austin's ability to secure the Formula One United States Grand Prix is due to two very important factors: 1) the site selection process for the race is VERY competitive, and 2) support and involvement by state and local government is crucial in landing the U.S. Grand Prix.

## Structure of the Report

This report is divided into two portions. First, to estimate the **tax impact** of the F1 event under the METF statutes, the first section builds on the economic impact estimates presented in Appendix A (starting on page 14). This estimate includes consideration of relevant tax rates and tax incidence of the taxes allowed to be contributed to the METF both by the state and the host community. The first section of the report focuses solely on developing the tax gains to the state and host municipality from the economic gains in Appendix A.

Appendix A develops the economic impacts of holding the event in Texas for the state, for the seven-county F1 Study area and the host municipality. These economic impacts include fan spending, spending by drivers, media, race teams and others associated with the event, and various corporate and TV spending levels. Crucial to estimating this economic impact is the capacity limitation on hotel availability in the Austin Metro region as the facilities will likely be able to accommodate only about 70 percent of F1 fans during peak event days in November

---

2012. The overflow from these fans will likely end up in hotels in both Comal and Bexar counties since these are both the closest facilities to the F1 race site and have significant capacity to host fans.

## **Major Event Trust Fund History: Formula One**

In 2009, Senate Bill 1515 (SB1515) passed by the Texas Legislature and signed into law by the Governor amended Article 5190.14, Vernon's Texas Civil Statutes by renaming what had been the Other Events Trust Fund to become the Major Events Trust Fund and making some other modifications to the calculations determining deposits of tax revenue into the fund for events.

One major change in the statute was to include Formula One races in the list of allowable events which could receive funding under the Major Events Trust Fund statutes after September 1, 2009. One step in securing that funding is for the host municipality or local organizing committee to submit an economic impact study of the event detailing the tax gains to the state, the local study area and the host municipality from hosting the event. This study serves to estimate those tax gains from a Formula One Grand Prix race to be held in a seven-county F1 Study area encompassing the Austin Metropolitan area plus Comal and Bexar counties on November 18, 2012.

This study is based on the economic impact estimates of the Formula One races contained in a study of the event updated for the primary race stakeholder, Circuit of the Americas of Austin Texas. These estimates are based on a variety of other studies of similar events held in Texas, on some data known before the race such as hotel rates, and on operating parameters for similar Formula One events throughout the world. These estimates are discussed and presented in detail in Appendix A of this study.

This presentation generally will discuss the economic impact of hosting the Formula One Grand Prix race from two perspectives. The first is the state's gain in tax revenues from hosting the event. This largely centers on economic activity brought in to the state by the event from outside the state. As such, it excludes those impacts generated by Texans attending the event either as fans or as media representatives. In addition, sales tax on admission tickets sold to Texans is excluded from the gain to the state.

---

The second perspective is that of the gain to the F1 Study area containing and surrounding the City of Austin. In that regard the economic impacts of Texans from outside of the F1 Study area attending the event---including non-Austin based media--- are added to the out-of-state economic impacts to estimate the tax gains to Austin as the host municipality. Tables 1, 2 and 3 of this report detail the economic and tax impacts of hosting the Formula One race based on fan attendance, on team, FIA, FOM and Media attendance and on other miscellaneous spending related to the event. Table 4 rolls up these different economic gains into an estimate of what the event should generate in state tax revenues for a Major Event Trust Fund established for the Formula One race including indirect and induced tax impacts. It also includes tax gains accruing to the City of Austin from economic gains within the F1 Study area.

Table 5 rolls up the different economic gains into an estimate of what the event should generate in tax revenues for Austin including indirect and induced tax impacts.

## **Fan Economic Impact**

Table 1 presents a summary of the economic impacts of fan spending discussed in Appendix A (in particular, see Tables 4 and 5 in Appendix A). In total, out-of-state fan spending is expected to reach \$193.5 million on the Formula One event. Based on the relevant state sales tax rate, state hotel tax rate, state rental car tax rate and state alcoholic beverage taxes, it is estimated that this level of direct event spending will generate \$10.7 million in tax revenues from the gain to the state under the applicable taxes allowed to be deposited into the Major Event Trust Fund in support of this event.

Table 1 also indicates that total spending by both out-of-state visitors and Texans visiting the Austin metro region from other parts of the state should reach \$209.4 million. This figure is somewhat higher than that for Texas since under the METF, expenditures from other Texans visiting Austin can be considered a gain to the metro area, but are not considered a gain to the state. Somewhat offsetting these additional visitors is the fact that not all of fan activity (particularly hotel stays) will be in the Austin Metro area. Given this leakage of some economic activity outside the Austin Metro area to Comal and Bexar counties, the Austin taxes generated by the event that parallel those state tax gains allowed to be deposited into the Major Event Trust Fund amounts to more than \$4.1 million.

---

It should be noted that in estimating the local tax gains, only those portions of the relevant F1 Study Area tax gains that will accrue to the City of Austin are considered in the \$4.1 million. In particular, estimated expenditures on food, beverages, alcohol and merchandise at the venue were considered not taxed at the local level. Total tax gains will accrue to other localities within the F1 Study area but are not included in the tax local tax impacts in Table 1.

Table 1

**Major Event Trust Fund Gain from Out-of-State and Out of Area Visitors at Formula One Race in Austin**

	----- METF Estimate for State Gain -----			METF Estimate for Metropolitan Area Gain		
	Non-Texans	Total Gain	Major Event Trust Fund Direct Tax Gain	Visiting Texans	Total Area Gain	Major Event Trust Fund Direct Tax Gain to Austin
<b>Visitors (outside state / Austin)</b>	84,000			24,489		
Percent Arriving by Air (a)	74%			--		--
Average RT Airfare Cost	\$500.00	\$14,700,000	--	--	\$14,700,000	--
Hotel (hotel price exci. tax)	\$125.06	\$43,529,447	\$2,611,767	\$125.06	\$41,033,731	\$3,323,732
Food & Beverage (ex Alcohol)	\$85.91	\$39,861,535	\$2,301,474	\$85.91	\$43,909,748	\$255,549
Alcoholic Beverage	\$49.11	\$22,787,843	\$1,431,636	\$49.11	\$25,102,105	\$96,967
Shopping & Entertainment	\$103.22	\$47,893,418	\$2,765,209	\$103.22	\$55,405,154	\$358,278
Merchandise at Venue	\$9.97	\$4,626,507	\$267,119	\$9.97	\$5,662,622	--
Rental Car	\$18.73	\$8,692,860	\$790,260	\$9.29	\$9,658,440	--
Other	\$24.53	\$11,382,668	\$492,898	\$24.53	\$13,931,840	\$67,568
<b>TOTAL</b>	<b>\$416.54</b>	<b>\$193,474,277</b>	<b>\$10,660,364</b>	<b>\$407.09</b>	<b>\$209,403,600</b>	<b>\$4,102,094</b>

---

## **Team, FOM, FIA, ACCUS and Media Impacts**

Table 2 presents the estimated economic impacts of the drivers, teams, Formula One Management (FOM), Federation Internationale de l'Automobile (FIA), Automobile Competition Committee for the United States (ACCUS) and media attending the Formula One Grand Prix in Austin. Again, a distinction is made between those visitors from outside Texas versus those Texans visiting Austin for the event from other parts of the state.

Overall the direct economic impact of hosting this event in Texas from out-of-state visitors in these groups should reach about \$22.1 million. In turn, these expenditures should drive state tax gains under the Major Event Trust Fund of \$1.2 million.

Since virtually all of the visitors in the groups considered in Table 2 are from outside Texas, the economic impact differences between only out-of-staters and all visitors from outside the F1 study area is slight. As compared to the \$22.1 million gain from only out-of-staters, other Texas media visiting the F1 Study area for this event add only slightly to this total raising it to \$22.4 million. Based on this level of economic impact and the appropriate local tax rates for taxes generating revenue under the Major Event Trust Fund, the gain to the City of Austin from drivers, teams, FOM, FIA, ACCUS and media should be \$774,286.

Table 2  
**Major Event Trust Fund Impact of Expenditures by  
 Teams, F1 Personnel and Media at Austin Formula One Grand Prix**

	Drivers and Teams	FIA, FOM, ACCUS	Out-Of State Media	Out-of- Area Texas Media	Total Expenditure from Out- of-State	METF Tax Gain	Metro Total Expenditure	METF Gain to Austin
Number in Group	2,400	1,025	1,100	150				
Days Spent at Event	6.5	6.5	6.0	5.0				
Percentage Arriving by Air	100%	90%	90%	0%				
Average RT Airfare Cost	\$800.00	\$700.00	\$500.00	\$500.00	\$1,530,375	--	\$1,530,375	--
Hotel	\$371.20	\$371.20	\$294.40	\$294.40	\$8,611,680	\$516,701	\$8,788,320	\$711,854
Food & Beverage (ex Alcohol)	\$118.03	\$118.03	\$73.02	\$73.02	\$3,109,619	\$179,539	\$3,164,385	\$18,416
Alcoholic Beverage	\$67.31	\$67.31	\$41.74	\$41.74	\$1,774,003	\$111,451	\$1,805,312	\$6,974
Shopping & Entertainment	\$250.00	\$156.34	\$46.62	\$46.62	\$5,249,335	\$303,079	\$5,284,302	\$34,171
Merchandise at Venue	\$0.00	\$9.97	\$9.97	\$9.97	\$132,239	\$7,635	\$139,718	\$0
Rental Car	\$43.08	\$43.08	\$18.73	\$9.37	\$1,082,782	\$98,435	\$1,089,808	\$0
Other	\$18.49	\$18.49	\$24.53	\$24.53	\$573,572	\$24,837	\$591,971	\$2,871
<b>TOTAL</b>	<b>\$868.12</b>	<b>\$784.43</b>	<b>\$509.03</b>	<b>\$499.66</b>	<b>\$22,063,605</b>	<b>\$1,241,677</b>	<b>\$22,394,190</b>	<b>\$774,286</b>

----- State Gain ----- ---Metro/Austin Gain ---

---

## Other Major Event Trust Fund Revenues

In addition to spending driven mostly by individuals, a number of other spending categories will generate direct economic and tax gains to the state and to the City of Austin related to the Formula One Grand Prix race. Table 3 details those other economic and tax gains.

First of all, although ticket expenditures typically are not counted as a direct economic impact, in this case those sales do serve to generate state tax revenues into the trust fund at the state level. Since tickets to the Formula One event will be subject to state sales tax,<sup>9</sup> a portion of this tax itself can be considered as a gain to the state under the Major Event Trust Fund. On the other hand, since sales tax on ticket revenues is determined by the site of the event and Elroy does not impose a local sales tax, no local taxes will be generated from ticket sales.

Secondly, tips earned by service workers from helping at the event and related activities have traditionally been considered as a direct economic gain of the event since they are earned during the event itself. Moreover, based on expenditure patterns by lower-income workers in the state, direct event-related earnings by service workers in the hospitality industry attributable to the event are seen as generating direct sales tax gains as these workers spend these earnings. In this case, the direct gain to the state from these earnings from out of state visitors is \$12.3 million plus an additional \$1.5 million from out-of-state media, drivers, FOM, FIA and ACCUS personnel.

Other significant expenditures by corporate sponsors, TV production and event sponsors themselves also contribute significantly to the over economic and tax impact of the Formula One event. Table 3 estimates that the total impact of this spending by out-of-state sources should reach \$78.3 million generating \$4.3 million in state tax gains into the Major Event Trust Fund. The local tax gains to the City of Austin should be more modest, yielding about \$323,968.



Table 3  
**Other Economic and Tax Gains from Formula One Grand Prix in Austin**

	Out-of-State Fans	422	Out-of-Area Fans	422	Teams, F1, OOS Media	Teams, F1, OOA Media	Sponsor, TV and Event Production	Total	State Tax	Local Total	Austin Tax
Avg. Ticket Price*		422		422	--	--	--	--	--	--	--
Tickets	\$35,448,000		\$10,334,358		--	--	--	\$35,448,000	\$2,085,176	\$45,782,358	--
Gratuities	\$12,325,252		\$12,885,323	\$1,483,092	\$1,511,709			\$13,808,343	\$828,501	\$14,397,032	\$103,659
TV Production Costs	--		--	--	--	--	\$1,500,000	\$1,500,000	\$64,954	\$1,500,000	\$10,393
Advertising	--		--	--	--	--	\$5,000,000	\$5,000,000	\$144,342	\$5,000,000	\$23,095
Event Costs	--		--	--	--	--	\$9,336,583	\$9,336,583	\$404,298	\$9,336,583	\$64,688
Catering	--		--	--	--	--	\$13,221,069	\$13,221,069	\$763,341	\$13,221,069	\$122,135
<b>Total</b>	\$47,773,252		\$23,219,681	\$1,483,092	\$1,511,709		\$29,057,652	\$78,313,995	\$4,290,612	\$89,237,042	\$323,968

----METF State Gain ---- METF Local Gain ---

## Total Major Event Trust Fund Gain

Table 4 rolls up the results from the previous three tables and adds the likely tax gains from the indirect and induced economic impact generated by the direct spending on the Formula One event (see Table 13 in Appendix A and related discussion).

By and large, the estimated direct tax gain is the statutory tax rate for the tax allowed under the Major Events Trust Fund for the expenditures, but in some cases a lower rate was applied if a portion of the expenditure could be exempt from taxation.

Table 4  
State Tax Gain under Major Event Trust Fund for Formula One Race

	State Gain (including tax)	Direct Trust Fund Tax Gain	Trust Fund Gain from Indirect Economic Gain	Trust Fund Gain from Induced Economic Gain	Total Trust Fund Gain
Airfare Cost	\$16,230,375	\$0	\$483,008	\$76,233	\$559,240
Hotel	\$52,141,127	\$3,128,468	\$1,676,445	\$256,432	\$5,061,344
Food & Bev. (ex. Alcohol)	\$42,971,154	\$2,481,013	\$1,095,102	\$208,307	\$3,784,423
Alcoholic Beverage	\$24,561,846	\$1,543,087	\$1,135,419	\$144,319	\$2,822,825
Shopping & Entertainment	\$53,142,752	\$3,068,288	\$2,179,616	\$296,958	\$5,544,863
Merchandise at Sports Venue	\$4,758,746	\$274,754	\$209,657	\$26,860	\$511,271
Rental Car	\$9,775,643	\$888,695	\$398,122	\$44,010	\$1,330,828
Other	\$11,956,240	\$517,736	\$515,161	\$71,952	\$1,104,848
TV Production Costs	\$1,500,000	\$64,954	\$12,596	\$9,043	\$86,593
Advertising	\$5,000,000	\$144,342	\$21,160	\$30,600	\$196,103
Event Costs	\$9,336,583	\$404,298	\$240,646	\$65,597	\$710,541
Catering	\$13,221,069	\$763,341	\$336,934	\$64,090	\$1,164,365
Gratuities	\$13,808,343	\$828,501	\$284,884	\$300,973	\$1,414,357
Subtotal	\$258,403,878	\$14,107,476	\$8,588,749	\$1,595,375	\$24,291,601
Tickets	\$35,448,000	\$2,085,176	-	-	\$2,085,176
<b>TOTAL</b>	<b>\$293,851,878</b>	<b>\$16,192,653</b>	<b>\$8,588,749</b>	<b>\$1,595,375</b>	<b>\$26,376,777</b>

The one exception to this method of calculating the direct trust fund tax gain is in the case of gratuities in which it is assumed that the expenditure of gratuities by workers reflects the percentage of sales taxes that the lowest quintile of income earners in Texas spend on sales tax from of their earnings.<sup>10</sup>

---

Estimation of the tax gain under the taxes allowed to be deposited under Major Events Trust Fund from indirect and induced economic activities relies on the estimated level of induced and indirect economic gain to the state from holding the event (detailed in Table 16 in Appendix A), on the percentage of indirect business taxes paid in the various industries in the IMPLAN model.<sup>11</sup>

Table 4 indicates that the direct, indirect and induced economic activity associated with the Formula One Race should generate a total of \$24.3 million in taxes eligible to be deposited into the Major Event Trust Fund. In addition to this amount, direct taxes from ticket sales to out-of-state attendees should generate another \$2.1 million in sales tax for a total state tax impact of \$26.4 million.

The Major Events Trust Fund statute allows the state to deposit tax revenues gained from hosting the event into the trust fund only to the extent that those revenues are matched by contributions by the host municipality or local organizing committee. Specifically, the state will deposit \$6.25 into the fund for an event for every \$1 in local contributions made for the event. But the amount that the state can contribute is limited to the net gain from hosting the event, and the amount of local contributions that the state will recognize from the host community or local organizing committee is also capped at no more than the taxes accruing to the host municipalities or counties gain from hosting the event. Calculating this total local cap involves estimating the local gain from the event similar to the state gain specified in Table 4.

Table 5 presents the estimated gain to the City of Austin as the host community for the event based on the direct, indirect and induced economic gains to the metro area detailed in Table 17 in Appendix A. In total, the gain to the City of Austin for this event for the taxes specified under the Major Event Trust Fund statutes is more than \$6.0 million. However, to fully match the \$26.4 million gain to the state would require generating only \$4.2 million from the host municipality so the local tax gain in just the City of Austin is more than sufficient to match the state tax gain under the Major Event Trust Fund Statute.

In fact, the total local tax gain accruing to local government in the Austin metro region is an estimated \$11.2 million. Of that amount an estimated \$2.2 would accrue to the Austin MTA and \$3.0 million to local governments in the metro region but outside of the City of Austin. In total, the \$4.2 million local match for the Trust Fund amounts to less than 40% of the total local tax gain in the metropolitan region.

Table 5

**Austin Tax Gain under Major Event Trust Fund for Formula One Race**

Expenditure*	Metro Gain	Austin Direct Tax Gain	Austin Indirect Tax Gain	Austin Induced Tax Gain	Total Austin Tax Gain
Airfare Cost	\$16,230,375	\$0	\$34,375	\$5,425	\$39,800
Hotel	\$49,822,051	\$4,035,586	\$90,904	\$13,905	\$4,140,395
Food & Beverage (exclude Alcohol)	\$47,074,133	\$273,965	\$84,641	\$16,100	\$374,706
Alcoholic Beverage	\$26,907,417	\$103,941	\$116,898	\$14,858	\$235,697
Shopping & Entertainment	\$60,689,457	\$408,968	\$216,885	\$29,549	\$655,402
Merchandise at Sports Venue	\$5,802,340	\$0	\$24,150	\$3,094	\$27,244
Rental Car	\$10,748,248	\$0	\$43,594	\$4,819	\$48,413
Other	\$14,523,810	\$70,439	\$59,117	\$8,257	\$137,813
TV Production Costs	\$1,500,000	\$9,700	\$787	\$565	\$11,052
Advertising	\$5,000,000	\$23,095	\$2,130	\$3,080	\$28,304
Event Costs	\$9,336,583	\$60,375	\$19,001	\$5,179	\$84,556
Catering	\$13,221,069	\$91,601	\$25,470	\$4,845	\$121,916
Gratuities	\$14,397,032	\$103,659	\$28,704	\$29,692	\$162,054
Subtotal	\$275,252,514	\$5,181,327	\$746,655	\$139,369	\$6,067,351
Tickets	\$45,782,358	\$0	\$0	\$0	\$0
<b>TOTAL</b>	<b>\$321,034,872</b>	<b>\$5,181,327</b>	<b>\$746,655</b>	<b>\$139,369</b>	<b>\$6,067,351</b>

\* Figures include Tax except for Hotel expenditures

---

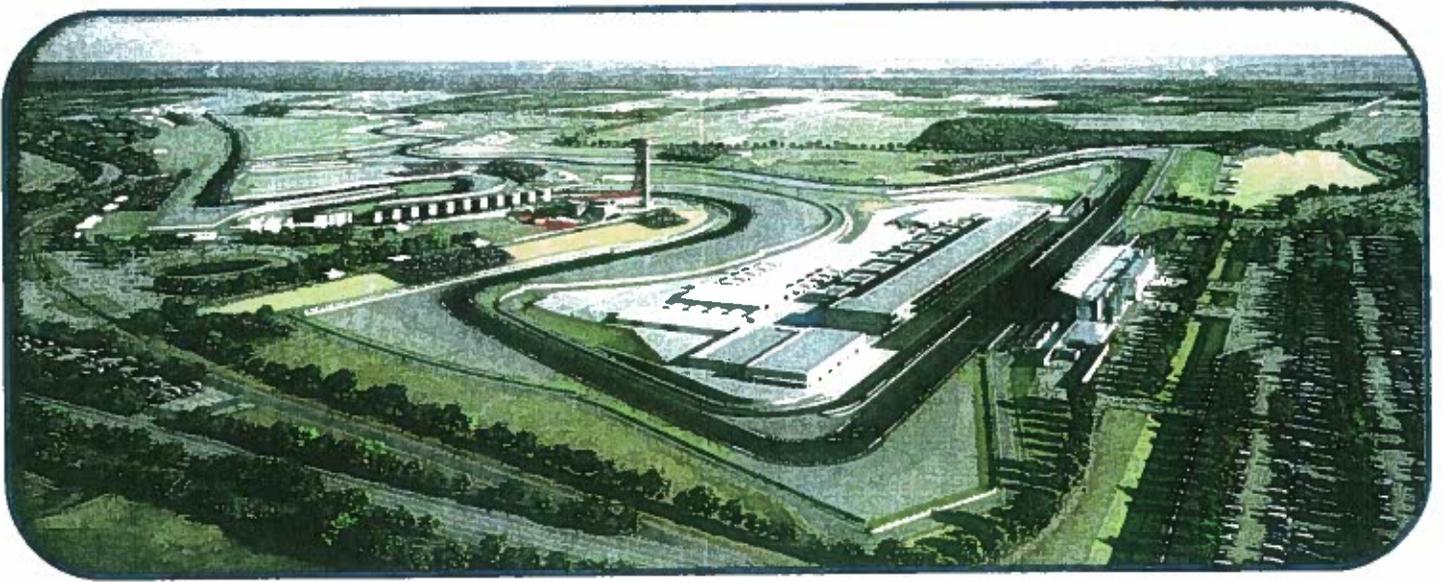
## **Major Event Trust Fund Request**

Based on the estimates provided in the report, the total state tax gain expected to be generated under taxes allowed to be deposited into the Major Event Trust Fund is \$26,376,777. To deposit that amount into the Major Event Trust Fund for this event, local contributions of \$4,220,284 would be required on behalf of the host municipality, which is less than the estimated tax gain to the host municipality under the Major Event Trust Fund. Accordingly, the Circuit Events Local Organizing Committee requests the comptroller approve creating a trust fund for this event containing \$4,220,284 in contributions made on behalf of the City of Austin matched by \$26,376,777 in state contributions in support of this event pending submission of appropriate receipts relating to bringing the Formula One event to Austin for a total Major Event Trust Fund amount of \$30,597,061.

---

# Appendix A

## Austin Formula One Event Impact Study



# Economic Gain from Formula One United States Grand Prix Austin, Texas

---

Don Hoyte, Ph.D.  
REVISED  
5.28.2012

Prepared for

Circuit of the Americas  
Austin, Texas

[TEXASECONOMICIMPACT.COM](http://TEXASECONOMICIMPACT.COM)

---

---

## Executive Summary

Formula One Grand Prix events are without a doubt one of the major sporting events held throughout the world. But because the U.S. market has not hosted a Grand Prix race in years, this impact can go under-appreciated. But lack of familiarity does not change the degree to which a Formula One Grand Prix can support---and possibly transform--- a local economy.

Based on key parameters of Formula One races and similar events held recently in Texas, it is estimated that the total direct, indirect and induced spending by out-of-state visitors to Texas created by a Formula One United States Grand Prix in Austin<sup>12</sup> on November 16-18, 2012 would reach \$482.9 million.

The \$482.9 million is comprised of a direct impact of \$295.7 million from spending by out-of-state visitors spending time (and money) in the Texas at the Grand Prix plus \$187.2 million in indirect and induced spending.

Considering both out-of-state visitors and attendees from other parts of Texas at the event staying in the Austin metro region changes this estimated impact to \$297.7 million in direct spending plus \$165.5 million in indirect and induced spending.

The major portion of this spending comes from fans attending the event. Out-of-state fans at the United States Grand Prix are expected to spend \$203.2 million at the event while fan spending in the Austin metro region (including Texas fans attending the event from other parts of the state) will amount to \$245.1 million. Other significant sources of spending at the event come from out-of-area media, drivers, teams, FIA, FOM and ACCUS personnel along with corporate sponsors and event operations themselves.

These spending gains will serve to support jobs in the state, both from direct spending and from indirect and induced spending. The direct spending gains from hosting the Formula One United States Grand Prix should support 3,694 jobs in the Texas economy based on just visitors from out of state. The indirect and induced gains from this out-of-state spending should support an additional 1,269 jobs for a total of 4,962 jobs.

---

## **Economic Gain of Formula One Race Events**

There are relatively few events that compare in magnitude to hosting a Formula One Grand Prix race. Certainly the month-long World Cup soccer matches have more global interest, and in the U.S. the Super Bowl is the "100-year flood" that other sports shoot to achieve in the U.S. But after those two events, Formula One races have been shown to have the largest global fan base consisting of nearly 600 million television viewers.

The economic impacts of Formula One races stem from many sources. Clearly the number of race-day visitors is the largest single manifestation. But other activities also generate strong economic gains to the host community and the state as well. The earnings by seasonal workers needed to stage the race is significant. Corporate expenditures to host galas, parties and attract media attention range into the millions of dollars. The mere logistics of staging a race are huge. Media interest can bring more than 1,000 reporters, writers, commentators, electronic media technicians and others into the state for four, five or even more days. The drivers, crews and others can often take up more than 100 hotel rooms each night from a single car.

It is important to document and measure the both economic impact of the Formula One race on Austin and on Texas. But it is crucial to estimate the economic GAIN to the region and the state. There is an important distinction between economic impact and economic gain.

A dollar spent in a local or state economy generates an economic impact. If that dollar is used to buy a shirt, part of the dollar goes to pay the salesperson's salary, part to the wholesaler for the shirt, part to the retail business's overhead, part to pay accountants, lawyers, janitors and others hired by the retailer. The portion going to the wholesaler goes in part to the shirt manufacturer, who uses those earnings to pay for cloth, thread and even indirectly to the farmer that raised the cotton.

The simple act of spending one dollar ripples through regions, states and nations. But whether or not the act of spending that dollar represents a GAIN to a region, state or nation depends crucially on where the dollar came from. If a local resident spends a dollar on a shirt locally, that spending has a local economic impact, but is that impact a gain to the locality? Not in the same sense that enticing or encouraging a resident from another region, state or nation to spend their dollar on a shirt bought from a local retailer does. As soon as administrative boundaries become relevant through tax-base concerns or in concepts of local economic

---

welfare (such as being able to find a job to support a family without having to relocate), WHERE the source of the dollar spent comes from becomes crucial in determining if a local expenditure represents an economic gain to the administrative region or not.

To suppose that all of what is spent “would have been spent otherwise SOMEWHERE” so no spending represents a true gain to a locality is a simplistic and a useless concept. Governments make real investments in fixed infrastructure and abandoning that infrastructure because of major shifts in demand is a real economic cost. People have real investments in social networks of emotional support which cements society into efficient economic units. Having to disrupt those networks to relocate in order to find work generates real social and personal costs. WHERE expenditures are made matters.

So the purpose of this report is to gauge both the economic impact of the activities related to hosting a Formula One event in Austin with a primary emphasis on the economic GAIN to the region and to Texas. But there are some gains that range beyond the ability of this report to accurately assess the long-term economic value of Austin hosting the U.S. Formula One Grand Prix. The City of Austin and State of Texas benefit from the international recognition and exposure generated through the hosting of the USGP. These are largely “psychic” gains in how the world views Texas and Austin as a result of the media exposure of hosting this event. These gains are significant in contributing to how Austin and Texas are seen by a much larger world community, but measuring the value of these gains to the state and the city are beyond the scope of this report.

This report examines the magnitude and impact of various streams of direct spending associated with hosting a Formula One event. These streams can range from the highly visible--such as tens of thousands of visitors reveling on race day--to the more obscure such as media spending. This report also gauges the indirect and induced economic gains for that direct spending. But to properly appreciate these revenue streams it is important to first appreciate the activity that comprises a Formula One Race

## **Anatomy of a Formula One Grand Prix<sup>13</sup>**

Essential in estimating the impact of a Formula One Grand Prix event in Austin Texas is first understanding what such an event entails. A Formula 1 Grand Prix weekend is a lot more than just a 2-hour race on Sunday afternoon and it's a lot more than just a weekend.

---

While race day on Sunday is no doubt the high point of the event, it is also the day when many people involved have the least to do. On the Monday before a race, crew members of the dozen teams will travel from the previous event to Austin.<sup>14</sup> Some crew members arrive well before this time. Once here, the teams begin setting up their garages.

The racing cars arrive in pieces and mechanics put them together by Thursday, when they undergo inspection to make sure that they conform to the technical regulations. The race team crewmen also practice pit stops outside their garages.

In addition to the Formula One teams, the USGP will also host up to three support races consisting on average of 30 teams. Other F1 events held around the world typically include these support races to provide additional excitement and activity for the fans. In 2011 the Canadian Grand Prix included four support events: the Canadian Touring Car Championship (CTCC), a Formula 1600 race, the Porsche IMSA GT3 Cup Challenge and the Ferrari Challenge. Both the Spanish and British Grand Prix included Formula 1600 races along with the Porsche IMSA GT3 Cup Challenge and the Ferrari Challenge. The Australian Grand Prix in Melbourne includes racing by V8 Supercars, the Porsche Carrera Cup and Formula Ford.

By Wednesday of the race week many of the drivers and the media arrive—although the extra week now scheduled before the November 18 date could mean crews and drivers will arrive considerably earlier. The International Automobile Federation, the sport's governing body, holds a press conference in the afternoon on Thursday with drivers and other team members. Teams also offer interviews with drivers which should prove to be particularly of interest for the first running of a race at a new site.

Friday morning from 10:00 - 11:30 November 16 will mark the first free practice. It does not count for a starting grid position. The time is used to set up the cars for qualifying and for the race. Friday afternoon from 2:00 - 3:30 is the second free practice to again help determine car set up and qualifying. Usually another FIA press conference takes place after the second practice.

On Saturday November 17, 2012 from 11:00 - 12:00 is typically a Saturday free practice in preparation for qualifying. Later from 2:00 - 3:00 is qualifying. Drivers try to set the fastest lap possible to obtain the best grid position for the race start based on a one-hour qualifying session divided into three parts. For the first 20 minutes (Q1), all cars together on the track try to set the fastest time. The slowest seven cars are eliminated, earning grid positions 18 to 24. Q2 runs from 2:27 to 2:42 during which the 17 remaining cars do another round, their previous lap times having been cancelled. The slowest seven cars are eliminated and take the grid positions 11 to 17. Finally, from 2:50 to 3:00 is Q3 with the 10 last cars fighting for the pole position, or No. 1 spot on the grid, and qualify no lower than 10th.

---

On both Friday and Saturday, teams also allow the media to conduct interviews with their drivers and staff and hold special events with their sponsors.

At just about every Grand Prix location, the race begins between 1:00 and 2:00 pm Sunday. Races run an average of 190 miles, which usually takes about 1 1/2 hours. If they are run during a rain storm, they take longer. But the rules stipulate that a race cannot run any longer than 2 hours on the track, so even with several laps remaining a race will be stopped at that point and the leader is declared the winner.

After the race the top three drivers receive trophies on the victory podium, they then take part in a television press conference, followed by one for the print media.

Immediately after the race itself, teams begin to dismantle their garages and pack equipment into their trucks. But the process of packing up the paddock goes on into the next day and beyond, before the trucks head out to the next race site or back to the team factory

## **Fan Attendance**

The most visible effects of hosting a Formula One race are the fans coming to view the spectacle. While Formula One races have been held in the U.S. as recently as 2007 the experience of the latter races in drawing a fan base is unlikely to have much relevance today. Earlier races that were well promoted and funded drew in excess of 225,000 fans, but later races less well supported or publicized saw much smaller crowds.<sup>15</sup> It is estimated that average Sunday race day attendance the last six years of Formula One racing at Indianapolis was about 125,000.<sup>16</sup>

At least as relevant to the estimation of visitors to a Formula One race today are recent international race experiences. From 2005 to 2008, average total attendance at Formula One races range from about 190,000 to 207,000.<sup>17</sup> Race-day totals, though closely guarded numbers, are often cited in local news media reports of the race. Based on these estimates, recent large Formula One events have averaged in excess of 114,000 fans on race day (see Table 1).<sup>18</sup>

Clearly attendance at Formula One events can easily exceed the 100,000 fans seen at some of Texas' largest sporting events. But other recent race attendance figures dwarf even these

---

numbers. For example from 2007 to 2011, eight NASCAR races in Dallas averaged attendance in excess of 160,000.

For the first running of the U. S. Grand Prix in Austin, it is conservatively estimated that fan attendance will reach 120,000 to 125,000 on race day.<sup>19</sup>

Table 1  
**Recent Fan Attendance Estimates at Formula One Grand Prix Races  
in Countries with Similar Economic and Cultural Environments to Austin**

<u>Year</u>	<u>Grand Prix</u>	<u>Location</u>	<u>Attendance</u>
2012	Australian Grand Prix	Melbourne, Australia	114,900
2011	Australian Grand Prix	Melbourne, Australia	111,000
2011	Canadian Grand Prix	Montreal, Canada	116,000
2011	British Grand Prix	Silverstone, England	122,000
2010	British Grand Prix	Silverstone, England	115,000
2010	Australian Grand Prix	Melbourne, Australia	108,500
2009	Australian Grand Prix	Melbourne, Australia	105,000
2009	British Grand Prix	Silverstone, England	120,000
	Average		114,050

It should be noted that the entire discussion of fan attendance through this report includes only fans with tickets. This is a serious underestimate of fan attendance on two counts. First, as is noted in most major sporting events, there is a sizable number of fans that do not have tickets to the event yet spend time in the host city and the host state for the event. These non-ticketed fans can simply be in the area to enjoy the celebrations connected with the sporting event or they can be spouses or others (such as event planners, party planners, sponsor activation support personnel, etc) who are accompanying a ticket-holder but do not themselves intend to attend the actual event. Because the size of this group is notoriously hard to estimate particularly for a new event like Formula One, no attempt is made in this analysis to examine their impact. After the event when survey data will likely confirm the presence and size of this group, their impact will be assessed and added to the impact estimate.

Second, it is assumed in this analysis that there is a one-ticket, one-fan policy in effect for the U.S. Grand Prix. However, race policy will allow tickets to be transferrable so two or more fans

could actually share the same ticket (on different days) increasing all fan-related expenditures to the extent that persons sharing a ticket stay in the Austin area for the time of the event. Again, given the novelty of this situation, no attempt is made to quantify the impact of shared tickets (if that turns out to be the policy) until after the event when some survey data will be available.

While race-day attendance certainly anchors the overall level of single-day economic impact of a Formula One race, of equal importance to the concept of economic GAIN to the state and the F1 Study area is the degree to which the event attracts visitors from outside Austin (in the case of the economic gain to Austin) and from outside Texas (in the case of the economic gain to the state). This involves not only where the visitors come from, but how long the visitors stay.

Table 2 presents the estimates for four large national-market events either held or to be held in Texas and the associated out-of-area, in-Texas and local visitor figures. All four events estimate in-state, out-of-state attendance based on survey data. In estimating the local, in-state and out-of-state split for the Formula One race in Austin, it was conservatively assumed that out-of-state fans would account for about 70 percent of all fans—significantly below the 78.4 percent figure seen in the four large sporting events in Texas since 2008. Moreover, that percentage is also seen in the distribution of contacts about Formula One tickets received through May 2012.<sup>20</sup>

**Table 2**  
**Visitor Origins at Recent Large National Sporting Events Held in Texas**

	2011 Super Bowl (Dallas)	2011 Men's Final Four (Houston)	2010 NBA All-Star (Dallas)	2008 Men's Final Four (San Antonio)	Four Event Average	Formula One Estimate
Total Event Attendance*	93,221	77,220	81,086	88,000	84,882	120,000
Out-of State Attendance	74,577	67,954	64,853	66,000	78.4%	84,000
In-Texas, non-local fans	10,254	4,633	8,917	13,200	12.3%	20,489
Local Fans	8,390	4,633	7,316	8,800	9.3%	15,511

Also crucial in estimating the state and local economic gain from hosting the Formula One U.S. Grand Prix is the length of time visitors spend in Austin and surrounding areas. Table 3 presents the estimated length of stay for both out-of-state visitors and other Texans visiting Austin for the U.S. Grand Prix. It is assumed that approximately one-half of those staying three nights will stay one additional night either after the race is completed or arriving earlier to spend an extra evening in the region. Overall, it is estimated that the average length of time out-of-staters will spend in the Austin area is 4.5 nights while Texans visiting Austin from other parts of the state will stay for 4.0 nights.<sup>21</sup>

A survey of required minimum stays at Austin hotels during the race week in 2012 conducted by COTA in March 2012 indicated 76 hotels in the Austin area are requiring average stays of 3.5 nights. In 21 downtown hotels the average required stay is 4.5 nights. Given that required minimums are being imposed by hotels, these minimums form a starting point for fan stays during the race. Recognizing that starting point and the fact that out-of-state attendees typically staying longer, based on this data the actual length of stay for the race could easily meet or exceed the average used in this estimate of 4.5 nights for out-of-state fans and 4.0 nights for in-state fans.

Table 3  
Estimated Arrival and Length of Fan Stay, U.S. Grand Prix in Austin

Day of <u>Arrival</u>	<u>Nights</u>	----- Out-of-State Fans -----			--- Non-Local Texas Fans ---		
		<u>Number</u> <u>Arriving</u>	<u>Total in</u> <u>Austin</u>	<u>Total</u> <u>Nights</u> <u>Stayed</u>	<u>Number</u> <u>Arriving</u>	<u>Total in</u> <u>Austin</u>	<u>Total</u> <u>Nights</u> <u>Stayed</u>
Tuesday	6	18,000	18,000	108,000	2,000	2,000	12,000
Wednesday	5	20,000	38,000	100,000	4,000	6,000	20,000
Thursday	4	22,000	60,000	88,000	6,000	12,000	24,000
Friday*	3.5	24,000	84,000	84,000	12,489	24,489	43,712
Total		84,000		380,000	24,489		99,712
Average Nights Stayed				4.52			4.07
Average Days Stayed				5.52			5.07

This overall pattern of fans arriving at the venue will generate peak-capacity conditions at hotels in the Austin metro region during the three days of the event. On these days hotels in the Austin Metro area will be able to serve only about 70% of the F1 fans and the remaining attendees will shift to hotel facilities in Bexar and Comal counties.<sup>22</sup> Based on the expected

---

arrival patterns of fans at the event and available capacity of area hotels, Table 4 presents the likely hotel availability and hotel revenue generated by the F1 race both within the Austin Metro region and in Bexar and Comal Counties. As is readily apparent in Table 4, capacity constraints will occur in the Austin Metro area with regard to housing F1 Fans. As a result, room rates are projected to rise about what have been historical norms in this region.<sup>23</sup> As noted in Table 4 (and in Table 5) for the entire race week, these rates equate about \$130 per person per night for fans.<sup>24</sup>

Currently the Austin metro area has 32,067 hotel rooms available which should increase slightly by the time the race is held.<sup>25</sup> Estimating that 10 percent of rooms in the Austin Metro area will be used by non-F1 guests and about 4,250 rooms will be used by race teams, media and other non-fans attending the race, it is estimated that hotels in Austin will be able to serve about 70% of fan room demand for the peak three nights of the race. On an overall basis, for the seven days covered in Table 4, an average of 81% of all Formula One fan room-nights will be spent at hotels in the Austin Metro area but that share falls to 70 percent for the peak racing period.

Table 4  
**Hotel Room Usage by F1 Inside and Outside Austin Metro Area**

	Tue	Wed	Thu	Fri	Sat	Sun	Total or Average
Total Fans Attending from Outside Metro	20,000	44,000	90,245	108,489	108,489	108,489	479,712
Total Fans in Hotels	17,900	39,300	80,308	96,416	96,416	96,416	426,755
Percent Fans in Hotels	89.5%	89.3%	89.0%	88.9%	88.9%	88.9%	89%
Total Rooms Needed for Fans	8,524	17,864	33,462	37,083	37,083	37,083	171,098
Persons per room	2.10	2.20	2.40	2.60	2.60	2.60	2.42
Total Rooms Needed for Event Personnel <sup>26</sup>	4,250	4,250	4,250	4,250	4,250	4,250	25,500
Total Rooms Needed for F1	12,774	22,114	37,712	41,333	41,333	41,333	196,598
90% of Rooms Available in Austin Metro	28,860	28,860	28,860	28,860	28,860	28,860	173,160
Rooms Used in Austin Metro for F1 Fans	8,524	17,864	24,610	24,610	24,610	24,610	124,827
Rooms Used for F1 Fans Outside of Austin Metro	0	0	8,852	12,473	12,473	12,473	46,270
% F1 Fan Room Demand met in Austin Metro	100%	100%	77%	70%	70%	70%	81%
Fan Hotel Expenditure In Austin Metro	\$2,429,286	\$5,627,045	\$8,244,350	\$8,244,350	\$8,244,350	\$8,244,350	\$41,033,731
Out of State Fans	\$2,198,571	\$4,896,818	\$6,652,327	\$6,464,437	\$6,464,437	\$6,464,437	\$33,141,026
Other Texas Fans	\$230,714	\$730,227	\$1,592,023	\$1,779,913	\$1,779,913	\$1,779,913	\$7,892,705
Hotel Expenditure in Comal and Bexar Counties	\$0	\$0	\$2,520,491	\$3,551,670	\$3,551,670	\$3,551,670	\$13,175,502
Out of State Fans	\$0	\$0	\$2,033,772	\$2,784,883	\$2,784,883	\$2,784,883	\$10,388,421
Other Texas Fans	\$0	\$0	\$486,719	\$766,788	\$766,788	\$766,788	\$2,787,082
Hotel Expenditure Per person Per Day	\$135.71	\$143.18	\$134.04	\$122.35	\$122.35	\$122.35	\$130.00
Ttl Spent By Fans Staying in Austin Metro	\$2,429,286	\$5,627,045	\$8,244,350	\$8,244,350	\$8,244,350	\$8,244,350	\$41,033,731
Ttl Spent By Fans Staying in Comal & Bexar Cos.	\$0	\$0	\$2,520,491	\$3,551,670	\$3,551,670	\$3,551,670	\$13,175,502

## Fan Expenditures

Many crucial figures for estimating the total economic impact on Austin of fan spending on the Formula One race are, unfortunately, impossible to derive directly. Because there has been no race of this type in the area---or in Texas or even the U.S. in recent years---fan expenditure survey results are not available. Nor are survey results available for previous races in other parts of the U.S.

Survey-based expenditure estimates are however available for similar events held in Texas and one large nation-wide survey of expenditures by attendees at trade shows also contains some relevant and confirming data.

There have been four major sporting events that have provided expenditure estimates of fans to the Comptroller's office in the past three years. These studies include the 2008 NCAA Men's Final Four in San Antonio<sup>27</sup>, the 2010 NBA All-star Game in Dallas<sup>28</sup>, the 2011 NFL Super Bowl in Dallas<sup>29</sup> and the 2011 NCAA Men's Final Four in Houston.<sup>30</sup> In addition, a major survey effort of attendees at conferences in the U.S.<sup>31</sup> provides confirming figures to the Texas-based event expenditures. Moreover, this survey provides other data relevant to expenditures (such as airline ticket expenditures) that is missing from other studies. All of the economic impact estimates of fan spending at these events are grounded in surveys either of previous events held in Texas or previous events of the same series.

For example, the estimates of fan spending at the 2011 NCAA Final Four in Houston heavily utilize the results of an expenditure survey of attendees at the 2009 Final Four in Detroit.<sup>32</sup> The estimates in the 2011 Dallas Super Bowl Study were grounded in two separate consumer surveys. One interviewed 500 attendees at the 2003 Super Bowl in San Diego and the other was a telephone survey of 400 random households in the San Diego region area during Super Bowl week.<sup>33</sup> The 2007 Study of the San Antonio Final Four relied on several surveys. One was conducted of attendees before, during and after at the 2004 Final Four in San Antonio<sup>34</sup> and another was survey results from the 2007 Final Four in Atlanta.<sup>35</sup> Some survey results are also cited in the 2010 NBA Basketball study.<sup>36</sup> Finally, the ExPact Study surveyed 12,920 delegates at approximately 1,000 conventions in the U.S. about their event-related expenditures.<sup>37</sup>

In total, then, relevant estimates of fan expenditures at large sporting and corporate events abound and they are all grounded in survey-based estimates of consumer expenditure behavior. But, these estimates have not been put on a consistent comparable basis for the events examined. Table 5 collects and standardizes the estimates of fan expenditures from different events to develop realistic estimates for fan expenditures at the future Formula One

---

race in Austin. This table presents per person per day expenditures at the four Texas events and one national conference survey.<sup>38</sup>

Overall, expected average out-of-state fan expenditure at the Formula One race should be less than \$421 per day excluding airfare costs. This estimate is about 5 percent below the average of \$449 (adjusted for inflation to 2011) for all five reference event studies and is nearly 20% less than the spending projected for the 2011 Super Bowl and 14% less than projected spending at the 2011 Final four. The one area where expenditures are expected to reach relatively high levels compared to the reference studies are in at-event merchandise sales. These are expected to match those seen in the 2008 survey of fans at the San Antonio Final Four when adjusted for inflation.

Expenditures by other Texans at the Formula One race should reach about \$412 per person per day. While this is somewhat above the average expenditures by similar groups in the ExPact survey,<sup>39</sup> it is substantially below the more than \$533 per day figure estimated for the North Texas Super Bowl or the \$497 at the Houston Final Four. Finally, it is assumed fans at hotels and eating establishments will include gratuities in their expenditures at those locations.

Based on the number of fans estimated in Table 2, the average length of stay of fans presented in Table 3, pattern of stay in Table 4 and average expenditures per fan per day in Table 5, Table 6 presents the estimate of total fan spending at the Formula One Grand Prix race in Austin Texas. Overall spending by both out-of-state fans and visiting Texas at the event should reach nearly \$233.5 million. The majority of these expenditures should come from out-of-state visitors, accounting for \$193.5 million of that total with visiting Texas accounting for another \$40.0 million. Because of capacity constraints largely due to hotel room availability, it is estimated that the total direct gain from fan spending that will accrue to the Austin Metro region will be \$209.4 from out-of-state fans and visiting Texans.

Table 5  
**Expenditure Comparison of Expenditures by Out-of-State Visitors at Major Sporting and Visitor Events**

	2008 Men's Final Four in San Antonio <sup>41</sup>	2010 NBA All Star Game Dallas <sup>42</sup>	2011 Super Bowl Dallas <sup>43</sup>	2011 Men's Final Four in Houston <sup>44</sup>	Formula One Estimate Non-Texans (e)	Formula One Estimate Visiting Texans
<b>Out-of-State Visitors</b>						
Percent Arriving by Air (d)	na	64,853	85,534	77,220	84,000	20,489
RT Airfare Cost	69.6%	72.0%	80.4%	Na	70.0%	--
Hotel	\$555.56	na	na	Na	\$500.00	--
Food & Beverage	\$184.07	\$209.28	\$120.31	\$128.89	\$130.00	\$130.00
Alcoholic Beverage (b)	\$99.68	\$70.85	\$185.34	\$171.64	\$135.02	\$135.02
Shopping & Entertainment	na	\$44.43	\$67.31	\$31.01	\$49.11	\$49.11
Merchandise at Venue (a)	\$59.78	\$95.36	\$166.31	\$151.20	\$113.19	\$113.19
Rental Car	na	\$3.37	\$5.36	\$2.37	\$9.97	\$9.97
Other	\$9.29	\$23.23	\$43.08	\$11.81	\$18.73	\$9.29
TOTAL	\$12.58	\$29.91	\$18.49	\$33.50	\$24.53	\$24.53
	\$365.40	\$380.05	\$533.54	\$497.03	\$421.47	\$412.03
<b>In-State Visitors:</b>						
Other Texas Visitor Expend (c)	\$126.65	na	na	--	--	--

(a) Included in shopping and entertainment, but not identified separately

(b) Not clearly identified separately

(c) Super Bowl and NBA All-Star had a mixture of Other Texas and Local merchandise sales which could not be made consistent with other definitions used.

(d) For Super Bowl and NBA All-Star game, assumed equal to percentage of visitor groups renting cars

(e) Since reference events were held from 2008 to 2011 with studies prepared no later than 2010, the dollar averages based on these studies were increased 2.85% to reflect expected CPI changes from 2010 to 2012 based on Comptroller Winter 2010-11 forecast.

Table 6  
**Economic Impact of Fan Spending at Formula One Grand Prix  
 In Austin, Texas**

Expenditure	----- Total Spending by -----		Gain to F1 Study Area	Gain to Austin Metro Area
	Out-of-State Visitors	Visiting Texans Staying in Study Area		
Airfare Cost	\$14,700,000	--	\$14,700,000	\$14,700,000
Hotel	\$43,529,447	\$10,679,787	\$54,209,233	\$41,033,731
Food & Beverage	\$62,649,379	\$14,030,458	\$76,679,836	\$69,011,853
Alcoholic Beverage	\$22,787,843	\$5,103,385	\$27,891,228	\$25,102,105
Shopping & Entertainment	\$52,519,924	\$11,761,946	\$64,281,870	\$61,067,776
Merchandise at Venue	\$4,626,507	\$1,036,116	\$5,662,622	\$5,662,622
Rental Car	\$8,692,860	\$965,579	\$9,658,440	\$9,658,440
Other	\$11,382,668	\$2,549,172	\$13,931,840	\$13,931,840
TOTAL w/o airfare	\$178,774,277	\$39,986,942	\$218,761,219	\$194,703,640
TOTAL w airfare	\$193,474,277	\$39,986,942	\$233,461,219	\$209,403,640

### **Team, FIA, FOM and ACCUS Expenditures**

A significant source of expenditures at Formula One races stem from the size and spending of the teams themselves as well as from the various racing organizations administering Formula One rules, enforcing safety precautions, monitoring race events and managing the entire process that collectively makes up Formula One racing.

The size and logistics involved in staging a Formula One race are staggering. The usual traveling teams can include upward to 100 personnel per team for as many as a full 24 field car race with each team fielding two cars.<sup>45</sup> In addition, other professionals directly involved with each race include those representing the Fédération Internationale de l'Automobile (FIA), Formula One Management (FOM), and for races run in the United States, the Automobile Competition Committee of the United States (ACCUS). ACCUS is the National Sporting Authority (ASN) of the FIA for the United States.

Table 7

**Expenditures by Teams, Drivers, Related Personnel and Reference Groups at Austin  
Formula One Grand Prix**

----- Reference Groups-----

	2011 Super Bowl Dallas OOS Visitors	Formula One Estimate Non-Texans	Drivers and Teams <sup>46</sup>	Out-of State FIA, FOM, ACCUS <sup>47</sup>
Number in Group	85,534	84,000	2,400	1,025
Days Spent at Event	5.3	5.5	6.5	6.5
Percentage Arriving by Air	80%	70%	100%	90%
Airfare Cost	na	\$500.00	\$800.00	\$700.00
Hotel <sup>48</sup>	\$120.31	\$130.00	\$371.20	\$371.20
Food & Beverage	\$185.34	\$135.02	\$185.34	\$185.34
Alcoholic Beverage	\$67.31	\$49.11	\$67.31	\$67.31
Shopping & Entertainment	\$166.31	\$113.19	\$250.00	\$166.31
Merchandise at Sports Venue	\$5.36	\$9.97	0	\$9.97
Rental Car	\$43.08	\$18.73	\$43.08	\$43.08
Other	\$18.49	\$24.53	\$18.49	\$18.49
TOTAL (w/o airfare)	\$533.54	\$421.47	\$868.12	\$784.43

Not only are the number of team members and other professionals involved in each Formula One significant, but their spending patterns tend to be substantially above average. It is not unusual for team members to be given per diems of upwards to \$300 in addition to teams paying for hotels, meals and incidentals. While this level of spending may seem high to some, it constitutes only a minor part of the overall budgets for the teams. Altogether in 2006, Formula One teams spent a mind-boggling estimated 2.5 billion dollars.<sup>49</sup>

Table 7 presents the estimated number of drivers, team members, FIA, FOM and ACCUS staff attending the Formula One Grand Prix in Austin along with their estimated patterns of expenditures. For comparison, the estimated expenditure pattern for out-of-state fans at the Super Bowl and at the Formula One race is also presented. Per-day hotel expenditure rates reflect the nightly room rates at 20 hotels in downtown Austin for the race week in November 2012 (see endnote).

Table 8 presents these estimates on a total expenditure basis by expenditure category. In total, drivers, teams, FIA, FOM and ACCUS personnel are expected to spend more than \$18.7 million at the U.S Grand Prix in Austin.

Table 8

**Economic Impact of Driver, Team and Related Personnel  
at Formula One Grand Prix in Austin, Texas**

Expenditure	----- Total Spending by -----		TOTAL SPENDING
	Drivers and Teams	Out-of State FIA, FOM, ACCUS	
Airfare Cost	\$960,000	\$322,875	\$1,282,875
Hotel	\$4,899,840	\$2,092,640	\$6,992,480
Food & Beverage	\$2,891,322	\$1,234,836	\$4,126,158
Alcoholic Beverage	\$1,050,034	\$448,452	\$1,498,486
Shopping & Entertainment	\$3,900,000	\$1,108,049	\$5,008,049
Merchandise at Venue	\$0	\$66,431	\$66,431
Rental Car	\$672,094	\$287,040	\$959,134
Other	\$288,465	\$123,199	\$411,663
TOTAL (w/o airfare)	\$12,651,721	\$4,845,763	\$17,497,484
TOTAL w airfare	\$13,611,721	\$5,168,638	\$18,780,359

**Media and Press Expenditures**

Media coverage of Formula One events in many ways rivals that of the Super Bowl, and in some aspects surpasses even that media milestone. For example, the world-wide television audience of an F1 Grand Prix is estimated at 515 million viewers in 2011.<sup>50</sup> In comparison, an estimated 153.4 million total viewers watched all or part of Super Bowl XLIV the largest.<sup>51</sup>

Comparable events again can serve to establish some likely boundaries for expected media attendance at the Formula One event. The 2007 survey of the Atlanta Final Four included 1,650 media averaging a 4-day stay plus \$814,530 in expenditures by ESPN, CSTV, and CBS Sports on televising the event.<sup>52</sup> The 2010 study of the NBA All-Star game estimated 1,800 media covering the event, 78% from outside Texas, 18% non-local Texas.<sup>53</sup> The 2011 study of the Final Four in Houston estimated a more modest 850 media attendees with 75 percent coming from outside of Texas and staying five days.<sup>54</sup> On the other hand, the 2011 Super Bowl projects 4,600 credentialed media personnel attending the event, but this includes halftime show participants and crew along with broadcast and production personnel. Media is expected to stay 7.5 days at the Super Bowl with 90 percent attending the event from outside Texas.<sup>55</sup>

For the Formula One Grand Prix in Austin, it is estimated that a total of 1,100 out-of-state media will attend the event staying, on average, 6 days (Table 9). Another 150 media from other Texas markets will join their out-of-state colleagues in covering the event, staying 5 days.

Table 9

**Expenditures by Media Groups at Austin Formula One Grand Prix**

	Formula One Estimate Non-Texans	Out-Of State Media	Out-of- Area Texas Media
Number in Group	84,000	1,100	150
Days Spent at Event	5.5	6	5
Percentage Arriving by Air	74%	90%	0%
Average RT Airfare Cost	\$500.00	\$500.00	\$500.00
Hotel <sup>56</sup>	\$130.00	\$294.40	\$294.40
Food & Beverage	\$135.02	\$114.77	\$114.77
Alcoholic Beverage	\$49.11	\$41.74	\$41.74
Shopping & Entertainment	\$113.19	\$56.59	\$56.59
Merchandise at Sports Venue	\$9.97	\$9.97	\$9.97
Rental Car	\$18.73	\$18.73	\$9.37
Other	\$24.53	\$24.53	\$24.53
<b>TOTAL (w/o airfare)</b>	<b>\$421.47</b>	<b>\$509.03</b>	<b>\$499.66</b>

Table 10 presents the total estimated media expenditures by expenditure category at the Formula One Grand Prix to which should also be added an estimated \$1.5 million in television production costs.<sup>57</sup> Including that amount, media expenditures at the Formula One race in Austin should reach approximately \$5.1 million.

Table 10

**Expenditures by Media Groups at Austin Formula One Grand Prix**

Expenditure	Out-Of State Media	Out-of- Area Texas Media	Total Media
Airfare Cost	\$247,500	--	\$247,500
Hotel	\$1,619,200	\$176,640	\$1,795,840
Food & Beverage	\$757,463	\$86,075	\$843,539
Alcoholic Beverage	\$275,517	\$31,309	\$306,826
Shopping & Entertainment	\$373,525	\$42,446	\$415,971
Merchandise at Venue	\$65,808	\$7,478	\$73,286
Rental Car	\$123,648	\$7,025	\$130,674
Other	\$161,909	\$18,399	\$180,307
TOTAL (w/o airfare)	\$3,035,746	\$330,586	\$3,366,331
TOTAL w airfare	\$3,283,246	\$330,586	\$3,613,831

**Corporate and Sponsor Expenditures**

Colin Chapman revolutionized the Formula One by putting the engine behind the driver. It was also Chapman who ignored what had been a gentlemen's agreement that cars should carry colors representative of their country, and made his Lotuses the world's fastest billboards.<sup>58</sup> Since then, corporate sponsorship in and around Formula One racing has been an integral part of the sport.

Corporate sponsorships have become so pervasive that it is estimated that the various forms of sponsorship involved in Formula One racing generate nearly one in every four dollars in the sport (Table 11). This is not done idly or with philanthropic goals. Sponsors receive valuable media and direct fan exposure. Just the value of the estimated media exposure to the sports 600 million global viewers for the top 50 sponsors in 2009 exceeded \$686 million.<sup>59</sup>

Table 11  
**Formula One's Sponsorship Revenue, 2009**

<b>Category</b>	<b>Amount</b>
On-car Team sponsorship	\$770,750,000
Sponsorship Activation	\$130,600,000
FOA Sponsorship	\$102,000,000
Sponsorship of TV Broadcasts	\$65,000,000
Off-car Team Sponsorship	\$49,800,000
Driver Sponsorship	\$34,500,000
Total Sponsorship Revenue	\$1,152,650,000
Total Revenue	\$4,686,550,000
Sponsorship as % Total Revenue	24.6%

Corporate expenditures have been significant at recent major sporting events in Texas as well. The 2007 Men's Final Four survey of expenditures in Atlanta estimated corporate expenditures at \$2.8 million while the 2008 San Antonio study placed that figure at \$3.2 million.<sup>60</sup> The 2010 NBA All-Star game study noted that 125 major corporations spent approximately \$75,000 each for catered event related to the game.<sup>61</sup> Table 12 presents the corporate expenditures on the four major events in Texas and uses the average of those expenditures to estimate sponsor and corporate expenditures at the Austin Formula One Grand Prix. Most of these expenditures will be made on advertising, catered functions and promotions.

Table 12  
**Corporate and Sponsor Expenditures at Reference Events and  
 Estimated Expenditures at the Austin Formula One Grand Prix**

<b>Event</b>	<b>Corporate Expenditure</b>	<b>Event Attendance</b>	<b>2012 Dollars</b>
2008 Final Four San Antonio	\$3,226,123	88,000	\$3,367,567
2010 NBA All-Star Dallas	\$9,525,000	81,086	\$9,800,897
2011 Final Four Houston	\$1,751,839	77,220	\$1,782,908
2011 Super Bowl Dallas	\$29,015,098	93,221	\$29,529,690
<i>Average</i>		<i>84,882</i>	<i>\$11,120,265</i>
<i>Formula One GP Estimate</i>		120,000	\$15,721,069

---

## Event Costs

The last area of economic impact deals with the actual production of the race itself. This entails a variety of expenses from advertising to security to parking to emergency staff and all related costs. Although such information is typically tightly held, F1 industry experts Christian Sylt and Caroline Reid estimate the operating costs of fourteen Formula one races.<sup>62</sup> Based on thirteen of these races the average gross operating budget for a race is about \$11 million (Table 13).

To be consistent with most of the other races for which some estimates are available, it is assumed that the cost of the race in Austin will reach this event average in 2012 dollars or a total of \$11.8 million. About \$9.3 million of that amount will be spent as race presentation costs with \$2.5 million of that amount dedicated to advertising costs.

Table 13

### Estimated Formula One Race Costs

Canadian Grand Prix	\$9,000,000
French Grand Prix	\$16,000,000
British Grand Prix	\$9,000,000
German Grand Prix	\$16,000,000
European Grand Prix	\$9,000,000
Belgian Grand Prix	\$14,000,000
Italian Grand Prix	\$9,000,000
Singapore Grand Prix	\$9,000,000
Japanese Grand Prix	\$9,000,000
Malaysian Grand Prix	\$20,000,000
Brazilian Grand Prix	\$9,000,000
Bahrain Grand Prix	\$9,000,000
Spanish Grand Prix	\$9,000,000
2009 Average	\$11,307,692
<b>Estimated 2012 Austin Grand Prix</b>	<b>\$11,836,583</b>

---

## Direct Economic Gains

Based on the estimates contained in the previous tables, Table 14 presents the total direct economic gain from out-of-state visitors to Texas for the Formula One Grand Prix race. Fans are the biggest group contributing to this impact, accounting for \$205.8 million of the total \$258.4 million gain. From the perspective purely of the Austin region, the gain is a bit more based on two opposing trends. On the one hand, some Texas fans will travel to the F1 Study area for the event that are not counted in Table 14 since they are not from outside Texas. But, not all out-of-state or Texans from outside the F1 Study area attending the event will be able or choose to stay within the greater Austin Metropolitan area. Some will likely have to stay in Comal or Bexar Counties taking at least part of their spending outside the 5-county Austin Metro region.

In total, counting these visiting Texans staying in the seven-county F1 study area, total expenditures should reach \$301.6 million (Table 15). But, within the somewhat smaller Austin Metropolitan area, out-of-staters and visiting Texans will add a total direct economic gain to the Austin metro area of \$275.3 million with fans contributing \$222.3 million of this gain (Table 16).

## Table 14

### Direct Economic Impact on Texas of Out-of- State Spending at Formula One Grand Prix

(Spending occurring in Texas by Out-of-State Fans and Event Personnel)

Expenditure	Out-of-State			Drivers, Teams, FIA			Event Costs	Total Direct Spending
	Fans	Media	Out-of-State	FOM & ACCUS	Corporate Sponsors	Costs		
Airfare Cost	\$14,700,000	\$247,500	\$1,282,875	-	-	-	-	\$16,230,375
Hotel	\$43,529,447	\$1,619,200	\$6,992,480	-	-	-	-	\$52,141,127
Food & Beverage	\$62,649,379	\$757,463	\$4,126,158	-	-	-	-	\$67,533,000
Alcoholic Beverage	\$22,787,843	\$275,517	\$1,498,486	-	-	-	-	\$24,561,846
Shopping & Entertainment	\$52,519,924	\$373,525	\$5,008,049	-	-	-	-	\$57,901,498
Merchandise at Venue	\$4,626,507	\$65,808	\$66,431	-	-	-	-	\$4,758,746
Rental Car	\$8,692,860	\$123,648	\$959,134	-	-	-	-	\$9,775,643
Other	\$11,382,668	\$161,909	\$411,663	-	-	-	-	\$11,956,240
TV Production Costs	-	-	-	-	-	\$1,500,000	\$1,500,000	\$1,500,000
Advertising	-	-	-	-	\$2,500,000	\$2,500,000	\$2,500,000	\$5,000,000
Catering	-	-	-	-	\$13,221,069	\$13,221,069	\$13,221,069	\$13,221,069
Event Costs	-	-	-	-	-	\$9,336,583	\$9,336,583	\$9,336,583
TOTAL w/o airfare	\$178,774,277	\$3,035,746	\$17,497,484	\$15,721,069	\$15,721,069	\$11,836,583	\$228,365,159	
TOTAL w airfare	\$193,474,277	\$3,283,246	\$18,780,359	\$15,721,069	\$15,721,069	\$11,836,583	\$244,595,534	
Gratuities	\$12,325,252	\$258,309	\$1,224,782	-	-	-	-	\$13,808,343
TOTAL	\$205,799,529	\$3,541,555	\$20,005,141	\$15,721,069	\$15,721,069	\$11,836,583	\$258,403,878	

**Table 15**  
**Direct Economic Impact of Out-of-Area Spending at Formula One Grand Prix on Austin Area**  
 (Spending in Seven County F1 Study Area)

Expenditure	Out of State and Texas		Out of State and Texas		Drivers, Teams, FIA		Corporate Sponsors		Event Costs		Total Direct Spending	
	Fans	Media	FOM & ACCUS	FIA	Sponsors	Costs	Costs	Costs	Costs	Costs	Costs	
Airfare Cost	\$14,700,000	\$247,500	\$1,282,875	-	-	-	-	-	-	-	\$16,230,375	
Hotel	\$54,209,233	\$1,795,840	\$6,992,480	-	-	-	-	-	-	-	\$62,997,553	
Food & Beverage	\$76,679,836	\$843,539	\$4,126,158	-	-	-	-	-	-	-	\$81,649,533	
Alcoholic Beverage	\$27,891,228	\$306,826	\$1,498,486	-	-	-	-	-	-	-	\$29,696,540	
Shopping & Entertainment	\$64,281,870	\$415,971	\$5,008,049	-	-	-	-	-	-	-	\$69,705,890	
Merchandise at Venue	\$5,662,622	\$73,286	\$66,431	-	-	-	-	-	-	-	\$5,802,340	
Rental Car	\$9,658,440	\$130,674	\$959,134	-	-	-	-	-	-	-	\$10,748,248	
Other	\$13,931,840	\$180,307	\$411,663	-	-	-	-	-	-	-	\$14,523,810	
TV Production Costs	-	-	-	-	-	-	-	\$1,500,000	-	\$1,500,000	\$1,500,000	
Advertising	-	-	-	-	\$2,500,000	-	\$2,500,000	-	\$2,500,000	-	\$5,000,000	
Catering	-	-	-	-	\$13,221,069	-	\$13,221,069	-	\$9,336,583	-	\$13,221,069	
Event Costs	-	-	-	-	-	-	-	-	\$9,336,583	-	\$9,336,583	
TOTAL w/o airfare	\$218,761,219	\$3,366,331	\$17,497,484	\$17,497,484	\$15,721,069	\$11,836,583	\$11,836,583	\$15,721,069	\$11,836,583	\$268,682,687		
TOTAL w airfare	\$233,461,219	\$3,613,831	\$18,780,359	\$18,780,359	\$15,721,069	\$11,836,583	\$11,836,583	\$15,721,069	\$11,836,583	\$284,913,062		
Gratuities	\$15,178,645	\$286,927	\$1,224,782	-	-	-	-	-	-	-	\$16,690,354	
TOTAL	\$248,639,864	\$3,900,758	\$20,005,141	\$20,005,141	\$15,721,069	\$11,836,583	\$11,836,583	\$15,721,069	\$11,836,583	\$301,603,416		

**Table 16**  
**Direct Economic Impact of Out-of-Area Spending at Formula One Grand Prix on Austin Area**  
 (Spending in Austin Metro Area)

	Out of State and Texas		Out of State and Texas		Drivers, Teams, FIA FOM & ACCUS		Corporate Sponsors	Event Costs	Total Direct Spending
	Fans	Media	Media	FOM & ACCUS	Corporate Sponsors	Event Costs			
Expenditure									
Airfare Cost	\$14,700,000	\$247,500	\$1,282,875	-	-	\$16,230,375			
Hotel	\$41,033,731	\$1,795,840	\$6,992,480	-	-	\$49,822,051			
Food & Beverage	\$69,011,853	\$843,539	\$4,126,158	-	-	\$73,981,550			
Alcoholic Beverage	\$25,102,105	\$306,826	\$1,498,486	-	-	\$26,907,417			
Shopping & Entertainment	\$61,067,776	\$415,971	\$5,008,049	-	-	\$66,491,796			
Merchandise at Venue	\$5,662,622	\$73,286	\$66,431	-	-	\$5,802,340			
Rental Car	\$9,658,440	\$130,674	\$959,134	-	-	\$10,748,248			
Other	\$13,931,840	\$180,307	\$411,663	-	-	\$14,523,810			
TV Production Costs	-	-	-	-	-	\$1,500,000			
Advertising	-	-	-	-	\$2,500,000	\$5,000,000			
Catering	-	-	-	-	\$13,221,069	\$13,221,069			
Event Costs	-	-	-	-	-	\$9,336,583			
TOTAL w/o airfare	\$194,703,640	\$3,366,331	\$17,497,484	\$15,721,069	\$11,836,583	\$244,625,107			
TOTAL w airfare	\$209,403,640	\$3,613,831	\$18,780,359	\$15,721,069	\$11,836,583	\$260,855,482			
Gratuities	\$12,885,323	\$286,927	\$1,224,782	-	-	\$14,397,032			
<b>TOTAL</b>	<b>\$222,288,962</b>	<b>\$3,900,758</b>	<b>\$20,005,141</b>	<b>\$15,721,069</b>	<b>\$11,836,583</b>	<b>\$275,252,514</b>			

---

## Indirect and Induced Economic Gains

As is presented in Tables 14, 15 and 16, the direct spending gain from hosting a Formula One Grand Prix is substantial ranging from \$258.4 million for the state primarily from just out-of-state visitors to \$301.6 million which includes both out-of-staters as well as some Texans, but is limited to just direct impacts in the F1 Study Area. Impacts in just the Austin Metro region fall in between at \$275.3 million.

But these direct spending gains are not the only impact which will be felt in Texas or in Austin. A second economic gain accrues as the money spent on the direct impact is spent and re-spent within the economy driving further INDIRECT and INDUCED economic gains.

For example, the concrete used to build the Formula One facility is usually purchased locally so that concrete companies employ additional workers to meet the new demand and purchase additional sand and gravel. Workers at the concrete plant benefit as their hours are expanded or new workers hired. Sand and gravel pits may also need to add more workers or increase hours of existing workers. The earnings by those employees at concrete plants and sand and gravel pits may go out to eat more often at local restaurants driving activity at those facilities or new employees may feel secure enough to make larger purchases such as automobiles or homes.

As the direct expenditures get spent and then re-spent, the economy increases in size, wages may rise and hours worked invariably increase.

In economics, flow of expenditures on goods and services are traced through input-output models. These models simplify and present the interdependencies between different branches of regional economies or even between branches of different, often competing economies.

Input-output models use a matrix representation of a nation's (or a region's) economy to predict the effect of changes in one industry on others and by consumers, government, and foreign suppliers on the economy. The models show how the output of one industry is an input to each other industry. A given input is typically enumerated in the column of an industry and its outputs are enumerated in its corresponding row. This format shows how dependent each industry is on all others in the economy both as customer of their outputs and as supplier of their inputs. Each column of the input-output matrix reports the monetary value of an industry's inputs and each row represents the value of an industry's outputs.

Turning the mathematical concept of an input-output model into an analytical tool requires vast data resources and consistent methods to update and manipulate that data. MIG, Inc. (Formerly "Minnesota IMPLAN Group, Inc.") maintains IMPLAN (IMPact analysis for PLANning) data and

---

software to create input-output models of states, sub-state regions and even multi-state regions based on county, state, zip code, and federal economic statistics. The models are used to measure the effect on a regional or local economy of a given change or event in the economy's activity.

While the changes in the flow of goods and services in a local economy in response to some external shift can be very complex, the ultimate net effect of such changes can be succinctly summarized in a "multiplier." Multipliers are a numeric way of describing the secondary impacts stemming from an initial change. For example, an industry-employment multiplier of 1.8 suggests that by hiring 10 additional employees in an industry ultimately results in creating 8 additional jobs in other industries, such that 18 total jobs would be added to the given economic region.

For a variety of purposes---including tax revenue generation estimates---the Texas State Comptroller maintains an IMPLAN model for the state of Texas as well as for various regions of the state, including the Austin Metropolitan region.<sup>63</sup> Based on the Texas and Austin IMPLAN models maintained by the Comptroller of Public Accounts, Table 17 presents the overall economic impact of the Formula One race in on Texas and Table 18 presents the same analysis for the impact on the Austin Metro Area.

As seen in Table 17, the total direct spending gain to Texas from out-of-state expenditures of \$258.4 million generates additional indirect spending in Texas of \$99.3 million based on IMPLAN multipliers. This direct and indirect spending in turn induces additional spending of \$89.8 million for total spending of \$447.6 million.

In addition to this spending, out-of-state attendees will likely spend another \$35.4 million on tickets for the event. However, because this spending will actually be used to support the presentation of the event (including promotion and other event costs) the indirect and induced effects of ticket expenditures are actually included in other spending categories so to include them here as well would double count the effects of ticket expenditures.

**In total, the Formula One event should generate \$293.9 million in direct expenditures in Texas from out-of-state visitors and total expenditures of \$483.0 million.**

Table 17

**Direct, Indirect and Induced Spending in Texas From Formula One Race**  
(Gain to Texas)

<b>Expenditure*</b>	<b>Direct Spending</b>	<b>Indirect Spending</b>	<b>Induced Spending</b>	<b>Total Spending</b>
Airfare	\$16,230,375	\$10,573,489	\$5,082,169	\$31,886,032
Hotel	\$52,141,127	\$20,244,470	\$17,095,459	\$89,481,056
Food & Beverage (ex Alcohol)	\$42,971,154	\$20,196,270	\$13,887,117	\$77,054,541
Alcoholic Beverages	\$24,561,846	\$7,442,927	\$9,621,268	\$41,626,042
Shopping and Entertainment	\$53,142,752	\$16,941,165	\$19,797,216	\$89,881,134
Merchandise at Sports Venue	\$4,758,746	\$1,353,173	\$1,790,673	\$7,902,592
Rental Car	\$9,775,643	\$5,374,003	\$2,934,032	\$18,083,678
Other	\$11,956,240	\$3,390,084	\$4,796,807	\$20,143,131
TV Production Costs	\$1,500,000	\$700,443	\$602,895	\$2,803,338
Advertising	\$5,000,000	\$2,178,115	\$2,040,030	\$9,218,145
Event Costs	\$9,336,583	\$3,528,071	\$4,373,143	\$17,237,797
Catering	\$13,221,069	\$6,213,850	\$4,272,693	\$23,707,611
Gratuity	\$13,808,343	\$1,199,324	\$3,548,744	\$18,556,412
<b>Subtotal</b>	<b>\$258,403,878</b>	<b>\$99,335,385</b>	<b>\$89,842,247</b>	<b>\$447,581,510</b>
Tickets	\$35,448,000			\$35,448,000
<b>TOTAL</b>	<b>\$293,851,878</b>	<b>\$99,335,385</b>	<b>\$89,842,247</b>	<b>\$483,029,510</b>

\* figures include state and local taxes except hotels

As seen in Table 18, the total direct spending gain to the F1 Study Area from out-of-area expenditures generates a similar-sized total economic gain. In this case total out-of-area spending should reach \$301.6 million. The additional indirect spending in the F1 Study Area would be \$91.6 million based on IMPLAN multipliers. This direct and indirect spending in turn induces additional spending of \$75.9 million for total spending of \$469.2 million in the F1 Study area.

Table 18

**Direct, Indirect and Induced Spending in Austin Metro Area from Formula One Race**  
 (Direct Spending from Fans and Race Personnel Spending in the F1 Study Area)

Expenditure	Direct Spending	Indirect Spending	Induced Spending	Total Spending
Airfare	\$16,230,375	\$8,365,622	\$3,360,808	\$27,956,805
Hotel	\$62,997,553	\$19,348,628	\$15,197,215	\$97,543,396
Food & Beverage (ex Alcohol)	\$51,952,994	\$14,984,075	\$12,096,319	\$79,033,388
Alcoholic Beverages	\$29,696,540	\$7,493,625	\$8,701,294	\$45,891,458
Shopping and Entertainment Merchandise at Sports	\$63,903,550	\$16,792,191	\$17,952,488	\$98,648,230
Venue	\$5,802,340	\$1,388,349	\$1,635,053	\$8,825,742
Rental Car	\$10,748,248	\$5,744,627	\$2,255,144	\$18,748,018
Other	\$14,523,810	\$3,459,121	\$4,367,353	\$22,350,285
TV Production Costs	\$1,500,000	\$693,423	\$378,045	\$2,571,468
Advertising	\$5,000,000	\$1,816,760	\$1,589,245	\$8,406,005
Event Costs	\$9,336,583	\$3,527,426	\$2,479,731	\$15,343,741
Catering	\$13,221,069	\$3,813,168	\$3,078,288	\$20,112,525
Gratuities	\$16,690,354	\$4,218,755	\$2,818,788	\$23,727,897
<b>Subtotal</b>	<b>\$301,603,416</b>	<b>\$91,645,770</b>	<b>\$75,909,771</b>	<b>\$469,158,956</b>
Tickets	\$45,782,358			\$45,782,358
<b>TOTAL</b>	<b>\$347,385,774</b>	<b>\$91,645,770</b>	<b>\$75,909,771</b>	<b>\$514,941,314</b>

As seen in Table 19, the total direct spending gain to the Austin Metro area from out-of-area expenditures generates a similar, but somewhat smaller, total economic gain. In this case total out-of-area spending should reach \$275.2 million. The additional indirect spending in the Austin metro area would be \$84.0 million based on IMPLAN multipliers. This direct and indirect spending in turn induces additional spending of \$69.5 million for total spending of \$428.8 million.

In addition to this spending, out-of-area attendees will likely spend another \$45.8 million on tickets for the event. In total, the Formula One event should generate \$321.0 million in direct expenditures in the Austin Metro area from out-of-state visitors and total expenditures of \$474.6 million.

These spending gains will serve to support jobs in the region, both from direct spending and from indirect and induced spending. Table 20 translates the direct, indirect and induced spending gains into jobs supported by out-of-state visitors and by the larger group of both out-of-state visitors and other Texans visiting the area.

The direct spending of \$301.6 million by out-of-state visitors should support a total of 3,731 jobs in Texas plus an additional 641 jobs supported by indirect expenditures and another 642 jobs from induced expenditures in Texas for a total job gain of 5,012 jobs.

Table 19

**Direct, Indirect and Induced Spending in Austin Metro Area from Formula One Race**

(Direct Spending from Fans and Race Personnel Spending in the Austin Metro Area)

<b>Expenditure</b>	<b>Direct Spending</b>	<b>Indirect Spending</b>	<b>Induced Spending</b>	<b>Total Spending</b>
Airfare	\$16,230,375	\$8,365,622	\$3,360,808	\$27,956,805
Hotel	\$49,822,051	\$15,301,996	\$12,018,823	\$77,142,870
Food & Beverage (ex Alcohol)	\$47,074,133	\$13,576,933	\$10,960,364	\$71,611,430
Alcoholic Beverages	\$26,907,417	\$6,789,818	\$7,884,061	\$41,581,296
Shopping and Entertainment	\$60,689,457	\$15,947,611	\$17,049,550	\$93,686,618
Merchandise at Sports Venue	\$5,802,340	\$1,388,349	\$1,635,053	\$8,825,742
Rental Car	\$10,748,248	\$5,744,627	\$2,255,144	\$18,748,018
Other	\$14,523,810	\$3,459,121	\$4,367,353	\$22,350,285
TV Production Costs	\$1,500,000	\$693,423	\$378,045	\$2,571,468
Advertising	\$5,000,000	\$1,816,760	\$1,589,245	\$8,406,005
Event Costs	\$9,336,583	\$3,527,426	\$2,479,731	\$15,343,741
Catering	\$13,221,069	\$3,813,168	\$3,078,288	\$20,112,525
Gratuities	\$14,397,032	\$3,639,081	\$2,431,475	\$20,467,588
<b>Subtotal</b>	<b>\$275,252,514</b>	<b>\$84,063,935</b>	<b>\$69,487,940</b>	<b>\$428,804,389</b>
Tickets	\$45,782,358			\$45,782,358
<b>TOTAL</b>	<b>\$321,034,872</b>	<b>\$84,063,935</b>	<b>\$69,487,940</b>	<b>\$474,586,747</b>

Table 20  
Total Jobs Supported by Formula One Race in Texas

Expenditure	Direct Spending	Jobs Supported by Direct Spending	Jobs Supported by Indirect Spending	Jobs Supported by Induced Spending	Total Jobs Supported
Airfare	\$16,230,375	55.8	47.7	43.0	146.5
Hotel	\$62,997,553	550.9	127.0	120.4	798.4
Food & Beverage (ex Alcohol)	\$51,952,994	787.1	116.3	107.4	1,010.7
Alcoholic Beverages	\$29,696,540	422.2	49.9	74.4	546.5
Shopping and Entertainment	\$63,903,550	992.0	120.1	152.6	1,264.8
Merchandise at Sports Venue	\$5,802,340	104.2	9.1	13.9	127.2
Rental Car	\$10,748,248	46.9	35.0	21.9	103.8
Other	\$14,523,810	290.7	23.0	37.1	350.8
TV Production Costs	\$1,500,000	6.1	4.4	5.7	16.2
Advertising	\$5,000,000	39.2	14.9	1.3	55.4
Event Costs	\$9,336,583	125.1	31.9	16.1	173.1
Catering	\$13,221,069	227.5	33.6	6.6	267.7
Gratuity	\$16,690,354	81.4	28.0	41.9	151.3
<b>TOTAL</b>	<b>\$301,603,416</b>	<b>3,729.0</b>	<b>641.0</b>	<b>642.4</b>	<b>5,012.4</b>

---

<sup>1</sup>In this report the basic economic impact region used is the five-county Austin Metropolitan area plus Comal and Bexar counties. This is termed the **F1 Study Area**. Throughout the report some of the impacts and calculations will detail figures for just the five-county Austin Metro area or, sometimes just for the City of Austin. But because as is shown in Table 4 of the Appendix there will be a significant overflow of visitors from the Austin Metro region to Bexar and Comal Counties, these two counties will also see a significant economic impact from the F1 Grand Prix and should be included in the study region.

<sup>2</sup> Autosport: 11. 27 March 2008.

<sup>3</sup> "Ecclestone eyes Canada Grand Prix for 2010". AFP. 4 August, 2009. See also "F1: Indianapolis Admits US GP Return Possible". SPEEDTV.com. 15 March 2010. See also <http://sports.espn.go.com/rpm/news/story?seriesId=6&id=2903573> Well into 2010, Indianapolis continued to court the return of F1. See "Indianapolis Keen on seeing F1 Return," in *The F1 Times*, April 26, 2010.

<sup>4</sup> Lostia, Michele (25 March 2010). "Ecclestone hoping for New York GP". Autosport.com. <http://www.autosport.com/news/report.php/id/82366>. See also [http://news.bbc.co.uk/sport2/hi/motorsport/formula\\_one/8697770.stm](http://news.bbc.co.uk/sport2/hi/motorsport/formula_one/8697770.stm) and "F1: Monticello in Bid for US GP," SpeedTV.com. May 21,2010.

<sup>5</sup> Collantine, Keith (4 May 2010). "New York F1 track plans revealed – Jersey City bids for 2012 night race". *F1 Fanatic*. See also "VeteranPromoter in New Jersey F1 Bid," *YallaF1.com*, July 7, 2010.

<sup>6</sup> Noble, Jonathan (4 May 2010). "Jersey City eyes Formula 1 race". Autosport.com. <http://www.autosport.com/news/report.php/id/83312>. Elizalde, Pablo (5 May 2010). "Jersey City cans F1 grand prix plan". Autosport.com. <http://www.autosport.com/news/report.php/id/83332>.

<sup>7</sup> Collantine, Keith (May 22, 2010). "Monticello Motor Club making United States Grand Prix bid". *F1 Fanatic*.

<sup>8</sup> "Formula One returns to the United States". *formula1.com* (Formula One Administration). May 25, 2010.

<sup>9</sup> Based on e-mail from Dan Allen at the Circuit of the Americas on May 11, 2012, in the opinion of COTA's financial firm, Ernst and Young, tickets to the F1 event are fully taxable. COTA is proceeding with agreements with Ticketmaster to assure sales or use tax is remitted to the state on all tickets.

<sup>10</sup> See Texas Comptroller of Public Accounts, "Tax Exemptions and Tax Incidence: A Report to the Legislature and the 82nd Legislature," (Austin, Texas) February 28, 2011, page 45.

<sup>11</sup>IMPLAN presents the proportion of production cost for each industry that goes to pay indirect business taxes. This is the amount that the comptroller has used to estimate the indirect tax impacts of events under the Major Events Trust Fund. The tax gain from induced effects applies a formula used by the Office of the Governor to determine the estimates sales taxes generated from consumer expenditures. This formula assumes that 80 percent of household income is used in the purchase of consumer goods and

---

services and it is assumed that 30 percent of the consumer goods and services purchased is subject to sales taxes. These proportions are then multiplied by the state portion of the sales tax rate.

<sup>12</sup> In this report the basic economic impact region used is the five-county Austin Metropolitan area plus Comal and Bexar counties. This is termed the **F1 Study Area**. Throughout the report some of the impacts and calculations will detail figures for just the five-county Austin Metro area or, sometimes just for the City of Austin. But because as is shown in Table 4 there will be a significant overflow of visitors from the Austin Metro region to Bexar and Comal Counties, these two counties will also see a significant economic impact from the F1 Grand Prix and should be included in the study region.

<sup>13</sup> From Brad Spurgeon: [http://formula1.about.com/od/seasonstructure/ss/f1anatomy\\_7.htm](http://formula1.about.com/od/seasonstructure/ss/f1anatomy_7.htm)

<sup>14</sup> At this point, the 2011 provisional F1 calendar has the Austin race preceded by the November 4 race in Abu Dhabi, so some activity at the race locale in Austin could begin to ramp up well before the traditional Monday before the scheduled race.

<sup>15</sup> <http://www.autoracing.com/formula-1/races/us/>

<sup>16</sup> <http://sports.espn.go.com/rpm/news/story?seriesId=6&id=2933630>

<sup>17</sup> Christian Sylt and Caroline Reid, "Formula One's Financial Performance Guide," published by Communications and Network Consulting, 2010.

<sup>18</sup> See <http://www.formula1.com/news/headlines/2010/10/11435.html> and <http://www.grandprixcities.com/raceattendances.html> 2011 Australian GP race day attendance from <http://paddocktalk.com/news/html/story-156646.html> . More recent figures from Christian Sylt and Caroline Reid, Formula Money: Formula One's Financial Performance Guide, various issues, FormulaMoney.com.

<sup>19</sup> The 120,000 figure is in-line with ongoing traffic studies of the site while the higher 125,000 figure reflects possible addition of new satellite parking facilities near the site but away from heavily travelled access routes.

<sup>20</sup> Although tickets have yet to be sold, through May 2012 COTA has logged 99,168 ticket inquiries with 28,321 coming from fans in Texas or 28.6% of the total. As reported in a recent Austin American Statesman article, 61 percent of the early sales of personal seat licenses have been to non-Texans. But, since the PSLs entail access to many events held at the track, it is believed those sales would appeal more strongly to local residents and other Texans so that percentage of PSL sales to out-of-staters would be somewhat below F1 ticket sales to non-Texans for the U.S. Grand Prix event. See John Maher, "Want a great seat for F1?" *Austin American Statesman*, April 14, 2012, page C1.

<sup>21</sup> This pattern of arrivals is consistent with the data on the pattern of attendees at other F1 events, considering that many arrivals for the race with tickets to the race preliminaries may not actually go to the track. See, for example, the attendance at the Korean Grand Prix (<http://www.formula1.com/news/headlines/2010/10/11435.html>). Because of multi-day tickets and limited availability of hotel facilities, it is believed that while peak attendance at the race facility will not be reached until Sunday, arrivals in Austin will occur sooner as fans spend time at other area attractions.

---

<sup>22</sup> Texas Comptroller of Public Accounts records of hotel taxes in the second quarter of 2011 indicated that there are 32,067 hotel rooms in the greater Austin area. Assuming that some 10% will be used for other purposes indicates that total available rooms for the race would be 28,860. Of that total those in the city of Austin would fill first so that it is likely that numerically Austin would account for more than 80 percent of the rooms used in the metro area by F1 attendees. However, since those facilities also tend to be the more expensive rooms, by value, expenditures by F1 attendees in the City of Austin will greatly exceed 80 percent of hotel expenditures in the metro area.

<sup>23</sup> In 2001, the Austin American Statesman documented this peaking problem with room rates when they visited Montreal during the 2011 Canadian Grand Prix. A survey of 76 Austin-area hotels conducted by COTA in March 2012 indicated an average room rate of \$353 per night during the four-day race period. Data cited for 16 Austin-area hotel rates during the race averaged \$316 a night based on research published in the Austin American Statesman (see Gary Dinges, "Hotels hit the gas on race-day rates," Austin American Statesman, February 5, 2012, page 1).

Averaging this recent survey data it is assumed that the average room rate during the peak nights of the U.S. Grand Prix will reach about \$335 per night in the Austin Metro area. These rates will be somewhat less in days well before the event. Moreover, it is assumed that the overflow into Comal and Bexar county hotels will occur at about 80 percent of the Austin Metro rate.

For comparison purposes this rate is converted to a per-person-per night rate in Table 5 weighted by the number of nights stayed.

It should be noted that the rates based on currently available survey data in 2012 are about 30 percent higher than the rates estimated in the Formula One race impact study submitted in July 2011.

<sup>24</sup> Figures cited in the COTA survey and in the Austin American Statesman article do not include state or local room taxes.

<sup>25</sup> Total of all hotel rooms listed in the 5-county Austin metro area in the Comptroller's hotel tax database as of 2<sup>nd</sup> Quarter 2011.

<sup>26</sup> This figure consists of 1,200 rooms to house F1 team members, 600 rooms for team members in other races (30 teams with 20 members per team), another 600 rooms for tire and engine manufacturers, paddock club executives, and other equipment sponsors, 675 rooms for out-of-state marshals, security and firefighters and 250 rooms for out-of-state medical personnel and 925 rooms for about 1,100 media.

<sup>27</sup> Richard Irwin and Dan Rascher, 2008 NCAA Men's Final Four: A Forecast of Economic and Fiscal Impact, (San Antonio Sports Foundation, San Antonio Texas), October 18, 2007.

<sup>28</sup> Marketing Information Masters, Revenue and Tax Estimates Regarding the National Basketball Association's 2010 All-Star Event: Estimates for the State of Texas and Local Market Area Cities and Counties, (All Star North Texas Basketball Local Organizing Committee, Inc., Dallas, Texas), September 1, 2009.

---

<sup>29</sup> Marketing Information Masters, Inc., Revenue and Tax Estimates Regarding the National Football Leagues' Super Bowl XLV in 2011: Estimates for the State of Texas, and Market Area Cities and Counties, (North Texas Super Bowl XLV Host, Committee, Inc. Dallas Texas), February 3, 2010.

<sup>30</sup> Marketing Information Masters, Inc. Revenue and Tax Estimates Regarding the 2011 NCAA Division I Men's Basketball Final Four, (Houston NCAA Final Four Organizing Committee, Inc, Houston, Texas), April 28, 2010.

<sup>31</sup> ExPact2004, Convention Expenditure and Impact Study, (International Association of Convention and Visitors Bureaus, Washington, D.C), February 2005.

<sup>32</sup> 2011 Houston Final Four Report, page 13.

<sup>33</sup> 2011 Super Bowl Study, pages 19 – 21.

<sup>34</sup> 2008 Men's Final four in San Antonio, page 7 – 8 and page 14.

<sup>35</sup> 2008 Men's Final four in San Antonio, page 8 and page 19.

<sup>36</sup> 2010 NBA All Star Study, page 21.

<sup>37</sup> ExPact2004, page 3.

<sup>38</sup> Although it is a little unusual, figures are presented on a per person per day basis. Hotel expenditures are on a per person per night basis.

<sup>39</sup> The ExPact Survey did not explicitly look at Texans spending on on-state conventions but did look at expenditures by "local attendees" at these events as distinct from other visitors.

<sup>40</sup> ExPact2004, Convention Expenditure and Impact Study, (International Association of Convention and Visitors Bureaus, Washington, D.C), February 2005.

<sup>41</sup> Richard Irwin and Dan Rascher, 2008 NCAA Men's Final Four: A Forecast of Economic and Fiscal Impact, (San Antonio Sports Foundation, San Antonio Texas), October 18, 2007.

<sup>42</sup> Marketing Information Masters, Revenue and Tax Estimates Regarding the National Basketball Association's 2010 All-Star Event: Estimates for the State of Texas and Local Market Area Cities and Counties, (All Star North Texas Basketball Local Organizing Committee, Inc., Dallas, Texas), September 1, 2009.

<sup>43</sup> Marketing Information Masters, Inc., Revenue and Tax Estimates Regarding the National Football Leagues' Super Bowl XLV in 2011: Estimates for the State of Texas, and Market Area Cities and Counties, (North Texas Super Bowl XLV Host, Committee, Inc. Dallas Texas), February 3, 2010.

<sup>44</sup> Marketing Information Masters, Inc. Revenue and Tax Estimates Regarding the 2011 NCAA Division I Men's Basketball Final Four, (Houston NCAA Final Four Organizing Committee, Inc, Houston, Texas), April 28, 2010.

---

<sup>45</sup> Communication from Christian Sylt to Dan Allen, COTA on May 25, 2012.

<sup>46</sup> Includes 1,200 for 12 teams participating in the F1 events, 30 teams of 20 drivers and crews for support races, 600 persons affiliated with the paddock club operations, engine and tire manufacturers or other parts and equipment representatives. The figures for the F1 team participation were suggested by Christian Sylt in a communication with Dan Allen of COTA on May 16, 2012 while the support race personnel attendance are estimates by COTA.

<sup>47</sup> From figures suggested by Christian Sylt in a communication with Dan Allen COTA, May 16, 2012.

<sup>48</sup> The room rate is based on a survey of rates at 20 downtown Austin hotels for the race week in which the average rate was \$464 per night. The rate in Table 7 is based on an occupancy of 1.25 persons per room since some F1 personnel and others affiliated with the race teams will bring spouses or other friends and family.

<sup>49</sup> <http://web.archive.org/web/20080209182616/http://www.f1.com/content/view/4377/0/>

<sup>50</sup> Updated 2011 figure supplied by Christian Sylt in e-mail to Dan Allen COTA on May 25, 2012. Earlier figure of 600 million viewers cited in "[Formula 1's Global TV Audience Expands](http://paddocktalk.com/GlobalBroadcastReport)". paddocktalk.com/Global Broadcast Report.

<sup>51</sup> <http://tvbythenumbers.zap2it.com/2010/02/09/cbss-super-sunday-super-week/41551>

<sup>52</sup> 2008 Men's Final Four Study, page 21.

<sup>53</sup> 2010 Study of NBA All-Star game, pages 6 and 21.

<sup>54</sup> 2011 Final Four Houston Study, page 15.

<sup>55</sup> 2011 Super Bowl Study, pages 6, 20 and 23.

<sup>56</sup> The room rate is based on a survey of rates at 22 South Austin hotels for the race week in which the average rate was \$368 per night. The rate in Table 7 is based on an occupancy of 1.25 persons per room.

<sup>57</sup> This estimate of the costs of producing the television programming for the Formula One race was provided by Carol Pirie, Deputy Director, Texas Film Commission in an e-mail on November 8, 2010.

<sup>58</sup> [http://articles.sun-sentinel.com/1998-03-06/news/9803050488\\_1\\_f1-team-lotus-alex-zanardi](http://articles.sun-sentinel.com/1998-03-06/news/9803050488_1_f1-team-lotus-alex-zanardi)

<sup>59</sup> Christian Sylt and Caroline Reid, "Formula One's Financial Performance Guide," pages 39 and 139-140.

<sup>60</sup> 2008 San Antonio Final Four Study, page 19.

<sup>61</sup> 2010 NBA All Star study, page 28.

<sup>62</sup> The report citing these race costs covers races held in 2008 and 2009, although it is not specific which year the data for each race covered. Since the data contain references to both the Canadian and French

---

Grand Prix which took place in 2008 but not 2009, it is likely most of the race cost data cover the 2008 race season. Christian Sylt and Caroline Reid, "Formula One's Financial Performance Guide." Section 6: Races.

<sup>63</sup> In a series of e-mails from May 1, 2011 to May 24, 2011 Jojo Estrada at the Texas Comptroller of Public Accounts graciously and patiently provided statewide and some local output and job multipliers from the Comptroller's IMPLAN model based on the industry expenditures considered in this analysis. His help in doing this is acknowledged and greatly appreciated.