

This report focuses on planning efforts, expenses incurred, revenues earned, lessons learned, and recommendations that will guide the planning for future large-scale events.

May 8, 2013

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Acronyms

ABIA:	Austin-Bergstrom International Airport
ACC:	Austin Convention Center
ACVB:	Austin Convention and Visitors Bureau
AE:	Austin Energy
AFD:	Austin Fire Department
APD:	Austin Police Department
ARR:	Austin Resource Recovery
ATCEMS:	Austin/Travis County Emergency Medical Services
ATD:	Austin Transportation Department
ATD-OSE:	Austin Transportation Department Office of Special Events
AWU:	Austin Water Utility
CBP:	Customs and Border Protection
COA:	City of Austin
COTA:	Circuit of the Americas
CPIO:	Corporate Public Information Office
CTM:	Communications and Technology Management
DPS:	Texas Department of Public Safety
DVISD:	Del Valle Independent School District
EGRSO:	Economic Growth and Redevelopment Services Office
EOC:	Austin/Travis County Emergency Operations Center
EPA:	Environmental Protection Agency
ESD 11:	Travis County Emergency Services District 11
FAA:	Federal Aviation Administration
F1:	Formula One
F1 USGP:	Formula 1 United States Grand Prix
FIA:	Fédération Internationale de l'Automobile
FOM:	Formula One Management
GATRRS:	Greater Austin-Travis County Regional Radio System
ICS:	Incident Command System Model
JIC:	Joint Information Center
PACE:	Public Assembly and Code Enforcement Team
PIO:	Public Information Officers
PWD:	Public Works Department
TCOEM:	Travis County Office of Emergency Management
TCSO:	Travis County Sheriff's Office
TFC:	Texas Facilities Commission
THC:	Texas Historical Commission
TMC:	Traffic Management Center
TMS:	Transportation Management Services, Inc.
TSA:	Transportation Security Administration
TTI:	Texas Transportation Institute
TXDOT:	Texas Department of Transportation
UT:	The University of Texas at Austin

Executive Summary

The City of Austin (COA), Travis County, Capital Metro, the Circuit of the Americas (COTA), and other regional, state, and federal partners worked in earnest to host and welcome the Formula One Grand Prix back to the United States (F1 USGP) after a five year absence. A successful first race would help propel the envisioned economic vitality brought by the new COTA facility and focus worldwide attention on the assets Austin has to offer. But, the uncertainties of doing something for the first time and the relative short timeframe for preparation created unique challenges. Austin was set to embark on a test of its ability to host an event of international renown and logistics complexity. The City of Austin and its partners embraced the challenge with a comprehensive planning and execution strategy that involved yearlong dedication and unfailing energy from all involved.

This report covers the intense work and effort put into the planning process, the specific outcomes achieved, and conclusions from which future large-scale event planning can benefit. The report is primarily focused on City of Austin efforts, although an attempt is made to cover the contributions from local, regional, state, and federal partners in order to provide the reader a sense of the breadth of planning and management required for an event of this scale. The report also provides information on City revenues earned during the Austin Grand Prix as well as revenue from direct charges to COTA. This information is presented together with the City's costs to directly support the event. However, the revenue and expense information is not intended to supplant any future economic impact computations, which take into account pre and post consumer and business spending, indirect, and induced benefits derived from the event. From media accounts, local feedback, and comments made by Formula One Grand Prix

Austin Grand Prix by the Numbers Total Three-Day Attendance: 265,499 (3rd highest of 2012)

Race Day Attendance: 117,429 (2nd highest of 2012)

Total Value of Brand Exposure: \$150,933,991 (No. 1 for the 2012 F1 Season)

Outbound Passengers at ABIA on November 19, 2012: 21,725 (Single Day Record)

Downtown Hotel Occupancy on Saturday, November 17, 2012: 97.8%

Total Downtown and Travis County Expo Shuttle Ridership: 98,363

Three-Day Bicycle Ridership to the COTA Facility: 1,153

Airport Operations: 2,546 helicopter flights 300 private planes 54 international planes

Emergency Response Times: No degradation service levels

ATXGrandPrix.com Site Visits from July 1, 2012 to Nov. 10, 2012: 29,901 unique visits

ATXGrandPrix.com Site visits from Nov. 11, 2012 to Nov. 19, 2012: 21,841 unique visits organizers and participants, the event was a resounding success. This report seeks to dissect the event to establish what worked well, why it worked well, and what improvements are necessary to ensure the success of future events.

THE STAKES WERE HIGH FOR GETTING IT RIGHT

The Formula 1 Grand Prix is a globally watched motorsport racing championship series and was watched by more than 500 million unique viewers in 2012.¹ Three-day Grand Prix events are held throughout the world in well-known international cities such as Shanghai, Istanbul, Abu Dhabi, Monte Carlo, Singapore, Sao Paulo, and Melbourne. Economic impacts and activity are derived from race teams, race attendees, seasonal workers, corporate expenditures, and global media attention. Hosting a Formula One Grand Prix brings prestige and attention to each city and, at the same time, an expectation that the event is successfully planned to account for disruptions that can occur. Combined with the perception that the Formula One Grand Prix had not been successful in the U.S. since the era of the Watkins Glen permanent facility, there was significant global attention focused on whether Austin could indeed put forth a successful return of Formula One.

"At stake is the international portion of Austin's reputation. How will it handle this type of event." 2

The F1 USGP brought a higher level of public safety concern and a deeper breadth of partnership with State and federal agencies than had been previously experienced in Austin. In early 2012, COTA provided rich data on attendance projections and the demographic makeup of attendees. By COTA's estimate, 300,000 fans were expected to attend the F1 USGP over the three-day event, with 120,000 expected to attend Sunday's race. Austin would be transformed into a hub for international exchange, with as many as 42,000 fans arriving from other countries. Attendees would run the gamut from political and business elite to jet setters and other celebrities as well as the more typical middle-class and middle-aged race fan. Added to these early 2012 estimates were 2,400 racecar drivers and their team members, 1,250 media representatives, and 1,025 representatives from Formula One Management Limited, Federation Internationale de l'Automobile, and the Automobile Competition Committee for the United States. All of these projections coupled with an average international viewing audience of 30 million per race led to concerns for whether the event would court purposeful attempts to cause harm to the public.

"Super Bowls are designated as a national event, and I think this is definitely a national event," Congressman Mike McCaul said after a meeting with Austin city leaders on Monday. "I will be pursuing, with the Secretary of Homeland Security, additional federal resources for the City of Austin."³

In the week prior to the event, the Environmental Protection Agency (EPA) conducted low-altitude flights over downtown Austin and the COTA facility in order to record baseline chemical and radiological levels. These levels were compared to readings the EPA collected from sweeps conducted during the Austin Grand Prix weekend.

¹ Formulamoney F1 Financial Impact Review for the 2012 United States Grand Prix, March 2013, Editor Christian Sylt.

² "Will F1 cross Austin's finish line as a success?," Austin American-Statesman, November 15, 2012 article by John Maher.

³ "Congressman wants federal help for F1," KXAN Austin, October 22, 2012 story by Chris Sadeghi.

"For large events there is always a concern for terrorism," says Lisa Block, a public information officer with Travis County Emergency Services. "An event like the Super Bowl is an event that the EPA would monitor for any kind of terrorist activity."⁴

For all involved, the F1 USGP was far different than any large event previously held in Austin. The expected multi-day attendance, the international prominence, the opportunity to re-introduce Formula One to the United States after being gone for five years, and the simple fact that Austin had not done this level of event planning before necessitated that the proper planning and management models be put in place.

PLANNING AND MANAGEMENT STRUCTURE

Planning:

As of December 2011, when the Circuit of the Americas reached agreement with Formula One Management Limited to bring the Grand Prix to Austin, there was no constructed facility, no transportation plan or street infrastructure to fully support traffic to/from the yet-to-be built facility, and no plans in place as to how the City, Travis County, Capital Metro, or COTA would partner for hosting the race. At that time, COTA had few employees, far from the estimated number of full-time employees required to support the organization, which meant COTA was double-tasked with simultaneously building a multi-million, multi-purpose facility and forming its organization. Events of this scale take years of preparation and planning, and Austin had 11 months to pull this off.

The concern for preserving Austin's image; the opportunity to gain further international recognition for the City; the short time frame for preparing; and, the sheer scope of the event required executive leadership and a highly structured planning process. With the COTA facility not yet annexed by the City of Austin, Travis County maintained primary responsibility for traffic and law enforcement operations associated with the F1 USGP. The City, however, remained responsible for managing downtown events and traffic and transportation issues throughout the City. In January 2012, the City Manager appointed two Assistant City managers as Executive Sponsors for the Austin Grand Prix, a Project Manager, and a group of City Directors and Assistant Directors to serve on the Austin Grand Prix project team for coordinating the City's efforts with all other partners. Once the City and Travis County leadership structures and team members were formalized, planning efforts were combined and integrated with COTA efforts to create a joint planning apparatus that ultimately included the entire Central Texas area. The result was a symbiotic coordination and planning mechanism capable of assimilating a multitude of resources to prepare for this large-scale event.

The project challenges were broken down into eight individual planning groups: Transportation, Public Safety, Public Information, Legal/Financial, Economic Development, Sustainability/ Resource Recovery, Hospitality/ Marketing, and Special Events/Code Compliance. Initial joint monthly meetings provided an early means to identify issues, discuss progress, and forecast future work plans. Monthly meetings shifted to more frequent planning group meetings of key service areas such as Traffic/Transportation and Public Safety.

In the interim, cities with prior experience in planning and conducting large-scale events were contacted in order to gather best practices information. The City of Arlington hosted the City of Austin,

⁴ "EPA Plane Surveying Downtown and F1 Track, on the Lookout for 'Dirty Bombs' and More," KUT News, November 13, 2012 story by Wells Dunbar.

COTA, and Travis County teams in February 2012 and shared Arlington's planning and preparation efforts for hosting the 2011 Super Bowl. Government officials from Northamptonshire in the United Kingdom and Silverstone racetrack officials hosted a team of City representatives during the British Formula One Grand Prix in July 2012 to share their planning and preparation efforts. Additionally, other City staff visited or had conversations with former Super Bowl hosts, Texas Motor Speedway, and Montreal, Canada, home to a Formula One Grand Prix.

Management:

The integrated planning process was paramount for determining how all partners would work together and for ensuring that pertinent stakeholders were included in these efforts. The Incident Command System (ICS) model was chosen as the management model because most government agencies had previous experience in ICS, and the learning curve was manageable. ICS is a standardized model to coordinate multi-jurisdictional monitoring and responses to ensure that resources are optimized and efficiencies are maximized. Monitoring and responses are coordinated for incident management, traffic management, resource management, and public information.

Under the ICS model developed for the Austin Grand Prix, a single Area Command was placed at the Austin/Travis County Emergency Operations Center (EOC), and several smaller, specific Command posts were placed near centers of activity in order to respond in a timely manner to incidents, as they would arise. These Command posts were as follows:

- COTA Command, which was located at the COTA facility and managed events within COTA property and along adjacent roadways
- Central Command, which was located at Austin Police Department (APD) Headquarters and managed events occurring downtown
- Capital Command, which was located at the State Capital Complex and focused on activities occurring on State property and highways
- Austin-Bergstrom International Airport (ABIA) Command, which was located at ABIA and managed airport and roadway operations within the property

THE EVENT WAS VIEWED AS A SUCCESS

This report reviews the final outcome based on the perspective of the City departments, partners, media, visitors, COTA, Formula One Management Limited, residents, and businesses. Almost without exception, all agreed that Austin pulled it off with style. The weather was beautiful; traffic delays were minimal; and, the 265,499 fans that attended the Austin Grand Prix were not disappointed. There were moments of anxiety, frustration, and annoyance, but these did not overly tarnish the glow of bringing Formula One racing back to the United States after a five-year hiatus.

"This could not have come off any better," Texas State Comptroller Susan Combs told KVUE Tuesday. "The mood was fantastic. The track looked incredible. The fans were very happy, and what I heard over and over was that the welcome from Austin was like no other city."⁵

⁵ "Comptroller says F1 race well-executed, tax revenue figures months away," KVUE News, November 20, 2012 story by Mark Wiggins.

"Formula One supremo Bernie Ecclestone feels the passionate backing of the city of Austin ensured the United States Grand Prix proved to be a resounding success - and will be for years to come....Ecclestone could not have been happier as he said: 'Everything's good, and everyone in Austin seems happy. It's good when you do something and it works'," Ian Parkes, Formula One Journalist with the Press Association.⁶

"The warm welcome we've had has been fantastic, and I think this is probably one of the best, if not the best grand prix we've had all year," said winner Lewis Hamilton.⁷

"You would think this is the friendliest city in the country. Everybody says, 'Hi. Welcome, welcome, ' " said Jim Bruner, a retired engineering professor from Rio Rico, Arizona, who was riding a shuttle bus from Trinity Street downtown to the circuit Sunday morning.⁷

"I've been to the Indianapolis 500 32 times. This is not a transportation problem," Bruner said of the traffic. "I expected it to take three hours to get to the track from my hotel (on Interstate 35 in North Austin). It's taking a little over one hour."⁷

"This was also a victory for Austin, which went to great lengths to ensure success after the series failed to take hold at the Indianapolis Motor Speedway from 2000 to 2007...There were almost none of the anticipated traffic concerns either, as almost 500 shuttle buses took spectators the seven miles from downtown Austin to the track in Elroy."⁸

"It exceeded all my expectations," Austin financial planner Austin Spencer said during the hour-long shuttle ride back downtown. "I give the city a big round of applause. I'm a critical person, and I have nothing to complain about."⁹

A SNAPSHOT OF POSITIVE IMPACTS AND CONCERNS REPORTED TO AUSTIN'S 311 CALL CENTER

The high level of exposure is one of the main reasons cities choose to host a Formula One race. Television programs, television news outlets, print media, and bloggers cover the Formula One Grand Prix. The worldwide exposure that the race attracted had a dramatic effect on new opportunities for Austin tourism and commerce. The City's Economic Growth and Redevelopment Office Services (EGRSO) worked effectively with COTA, the Austin Convention Center (ACC), the Austin Convention and Visitors Bureau (ACVB), the various local chambers of commerce, and the Governor's Office of Economic Development to showcase the economic and livability benefits of doing business in Austin and investing in Austin.

"I think this is absolutely top of the list in terms of the number of important people at an event," says Mercedes F1 CEO Nick Fry. "That's a combination of celebrities that are of interest to the general population, and make the whole thing what it is, right through to a lot of local people who have small and medium sized technology companies. What organizers

⁶ "Ecclestone Expects Formula One to thrive in Austin after successful inaugural Grand Prix," November 19, 2012 article by Ian Parkes, Press Association.

⁷ "On F1's big day, Austin a success," Austin American-Statesman, November 18, 2012 article by the Austin American-Statesman staff.

⁸ "Formula One makes successful return to U.S.," The New York Times, November 18, 2012 article by Brad Spurgeon.

⁹ "Kudos from the crusty and the upper crust for Formula One," Austin American-Statesman, November 18, 2012 article by Michael Barnes.

have also managed to do, which is quite unique, is have a number of business seminars around the event. On Thursday we were speaking to 300 local business people who run important companies about the economics of F1, how it could benefit Austin and Texas. The following day, the British ambassador to the U.S. hosted a tech rally, which was all about the technology of F1....That was followed by a reception that the Texas governor also attended, and Jackie Stewart gave one of his great speeches". Could this all have happened in Indianapolis, the home of the race until 2007? No, says Fry. "I think the difference is that Austin is a very significant technological town, it's got a lot of very high tech businesses. There's a lot of technology in this area, there's clearly also a lot of wealth in this area, and obviously it's a huge college town. On top of that, it's well known for its music scene. The combination of the technological side, the educational side, the entertainment side means that it's an appealing place for people to come and visit."¹⁰

According to research by Formula One industry monitor Formulamoney, the City of Austin gained global media coverage worth \$191.2 million from hosting the 2012 F1 USGP. This amount was comprised of \$166.7 million in exposure generated verbally and visually through television broadcasts and a further \$24.4 million through mentions of Austin and F1 in print and major online media. The 162 brands displayed on cars and trackside hoardings during the race gained exposure with an advertising value equivalent of \$150.9 million. This total ranks the Austin Grand Prix as the best race of 2012 in terms of brand exposure, giving F1's sponsors bigger benefits than other well-known events such as the Monaco, British, and Italian Grands Prix.¹¹

The physical impact was significant. Most prominent being the addition of the COTA \$400 million racing and entertainment complex, road improvements near the track, and technology improvements. On the technology front, Pan-Tilt-Zoom (PTZ) cameras were placed along the shuttle route, on top of the 56-story Austonian, and on top of the COTA Tower to monitor traffic from several vantage points. Additionally, real-time video feeds from helicopter-mounted cameras were distributed to the Traffic Management Center (TMC) and Command posts to enable traffic management professionals and public safety officials to identify issues, evaluate options, and then develop measured responses. Another technological advance involved the coordination between the Austin Transportation Department (ATD) and the Texas Transportation Institute (TTI) for the provision of 25 "Bluetooth readers" for the collection of real-time travel time information along selected routes. Data was analyzed throughout each day by TTI, and the results were provided on a real-time basis via a secure website to ATD staff.

CRITICAL COMPONENTS FOR HOSTING THE F1 USGP

The two most important components for the event involved Traffic/Transportation and Public Safety. Ensuring the safety of residents and visitors as well as vehicular and air traffic, public transportation, bicycle routes, pedestrian concerns, road conditions, and monitoring demands combined to produce a labyrinth of issues to be resolved in preparation for the event. It required extensive collaboration across multiple agencies to address the challenges.

¹⁰ "Austin GP a Smashing Success," SpeedTV.com, November 21, 2012.

¹¹ Formulamoney F1 Financial Impact Review for the 2012 United States Grand Prix, March 2013, Editor Christian Sylt.

Traffic/Transportation

The Traffic and Transportation group of partner agencies specifically focused on downtown and Travis County Expo Center shuttle operations, public transportation, traffic monitoring and control, and the downtown Fan Fest. The group coordinated activities from Area Command, COTA Command, and the ATD Traffic Management Center (TMC) and had subgroups present at the downtown and Travis County expo shuttle locations and downtown Fan Fest. COTA, Travis County, and the City of Austin put significant effort into formulating an event traffic plan that was then executed during the event. The event traffic plan primarily consisted of utilizing 450 buses for two satellite shuttle operations, traffic contraflow into and out of COTA, new and improved roadways to accommodate on-site parking, bicycle access, way-finding signage, and an exacting coordination of communication and execution between all parties involved.

A variety of roadway improvements were completed prior to the event in order to mitigate traffic impact. The Texas Department of Transportation (TxDOT) improved Farm-to-Market road 812, which included shoulder stabilization, repavement, and restriping to accommodate contraflow operations. Travis County improved Elroy Road and McAngus Road, which included overlays, reconstruction, and chip seal. Additionally, Travis County paid for the extension of Kellam Road to Pearce Lane to add vehicular capacity. The event traffic plan called for traffic control in proximity to COTA to be managed by the Travis County Sheriff's Office (TCSO), which successfully implemented contraflow operations and kept vehicle traffic segregated by use (passenger cars, public safety personnel, shuttle buses, etc.) for certain portions of roadways.

The downtown and Travis County Expo Center shuttles carried 98,363 passengers during the three-day race event, which represented 37.0% of the total 265,499 three-day attendances. Passenger counts were approximately equal between the two shuttle locations, and shuttle trips averaged 20-40 minutes per trip during the Austin Grand Prix. The shuttle operations ran very well with only minor issues, which were quickly remedied. These issues included dust created as passengers walked through the corrals to load downtown buses, insufficient port-a-potty supplies, incorrect bus loading procedures, and insufficient way-finding signage and volunteers to assist visitors returning from the race.

Capital Metro successfully ramped up its service levels significantly during the Austin Grand Prix. The MetroAirport bus service intervals were decreased from 30 minutes to 15 minutes; the MetroRail service hours were expanded on Friday and Saturday and, for the first time ever, was operated on Sunday; Capital Metro created and ran a downtown circulator bus route utilizing six buses free of charge to patrons with stops every 15-20 minutes; and Capital Metro launched a mobile app leading up to the event which allowed users to purchase 1 and 7-day passes, plan trips, access maps, and find other helpful information.

"As the public transportation leader in our region, people were depending on Capital Metro to move thousands around the city," says Linda S. Watson, Capital Metro President/CEO. "I'm happy to report that Capital Metro delivered."¹²

¹² "Capital Metro Sees Big Numbers Over F1 Weekend," November 21, 2012 press release from Capital Metro.

Austin-Bergstrom International Airport

Generally the airport received great reviews during and after the event. Commercial passenger traffic increased after the race on Sunday, but peaked on Monday and Tuesday. Monday was a record day with approximately 21,725 passengers processed for outbound flights. A typical Monday is approximately 15,000 to 17,000 passengers. According to Federal Aviation Administration (FAA) reports, ABIA was the 11th busiest airport in the U.S. setting a new air traffic record for the airport. In advance of the anticipated increase in passenger activity, the Aviation Department successfully implemented modifications to its operations that are also aligned with addressing continued growth at ABIA. These modifications were implemented not just to address the Austin Grand Prix, but to also ensure that future visitors coming through ABIA will have a pleasant first experience in Austin. The modifications are discussed later in this report.

Helicopter Activity

In total, there were approximately 2,546 helicopter operations during the Austin Grand Prix weekend, in comparison to a normal weekend activity of 177 operations. There were five (5) local heliports located at the Executive Airport, Dryden Airport, COTA, Barton Creek Country Club, and the downtown Embassy Suites. A planned temporary heliport along MoPac was not used.

In advance of the Austin Grand Prix, helicopter operators were advised to use best practices for noise abatement, including, but not limited to, the use of the Fly Friendly Corridors to avoid flight paths over residential areas. The Aviation Department Noise Office utilized the Aircraft Noise and Operations Monitoring System (ANOMS 8), one of the most sophisticated and comprehensive computerized aircraft noise and flight track data collection and processing systems, to monitor helicopter operations during the Austin Grand Prix. Additionally, the Aviation Department utilized portable microphones to record noise levels during the weekend. The single most maximum noise level was 76.1 decibels and was recorded on Saturday, November 17th at an altitude of 908 feet. The next highest single noise level recorded was 73.8 decibels. An analysis of helicopter air traffic is discussed later in this report.

Public Safety

Office of Homeland Security and Emergency Management

In conjunction with the Travis County Office of Emergency Management (TCOEM), the Office of Homeland Security and Emergency Management (HSEM) activated the Austin/Travis County Emergency Operations Center (EOC) as the Area Command post at 6:00am on November 16, 2012 and sustained joint operations until 10:30am on November 19, 2012. The other Command posts identified earlier operated similar timeframes but did not operate on a 24-hour basis, as did the Area Command. HSEM designed a Command post structure that put the right people and agencies in the right places with resources available not only to manage what was occurring at the present but also to anticipate and take corrective action before issues developed. Having appropriate decision makers within each Command post allowed issues that surfaced early on to be quickly resolved.

Face-to-face coordination at Area Command with representation from a variety of regional, state, and federal governmental agencies was critical in solving a myriad of small issues through the Austin Grand Prix weekend. Web EOC, an interactive web-based incident management software system, played a significant role in providing instantaneous event-related information to all agencies. Regional traffic management was a key function of the Area Command, and video feeds from cameras mounted to DPS and APD helicopters proved invaluable for identifying and resolving traffic and other event-related

issues. And, as has come to be expected, the Greater Austin-Travis County Regional Radio System (GATRRS) provided excellent radio communications coverage throughout the event.

And, for the first time, City of Austin departments and Travis County operated under the Joint Information System (JIS) model and formed Joint Information Center (JIC) within the EOC during the Austin Grand Prix weekend. The JIS provides the mechanism for integrating public information activities to ensure timely, accurate, coordinated, and consistent messaging. The JIC provides a central location used by Public Information Officers (PIO's) to coordinate critical information functions.

Austin Police Department:

APD's planning process was focused primarily on four categories: homeland security, traffic management, crowd management, and tourism-based policing. An operations plan was developed and staffing adjustments were made to reduce overtime requirements. Approximately 11,000 work hours were achieved by realigning assignments to assist with F1-related activities. APD directed most of its energies toward the expectation of issues resulting from the downtown COTA Fan Fest, downtown shuttle operations, and increased traffic and traffic related incidents. Overall, the concerns relating to dramatic increases in vehicular traffic never materialized and the crowds at Fan Fest were very manageable. Most of the issues identified for improvement involved internal operations and communications procedures. Although total call volume was higher than the previous weekend, emergency response time was lower.

Austin Fire Department:

Although Emergency Services District 11 (ESD 11) had primary responsibility for operations at the COTA facility, AFD partnered with ESD 11 to plan for the F1 USGP and to develop service delivery levels during the race weekend. In June 2011, AFD and ESD 11 personnel traveled to Texas Motor Speedway to explore the types of impacts that could be expected during large race events. AFD also contacted the Montreal, Canada Fire Department to learn about their experience with an F1 race. AFD implemented several enhancements to its operations in anticipation of the large crowds. AFD placed an extra engine company in proximity to COTA for multiple hours each day of the event; staffed various Command posts with one command level Chief Officer at each post; assigned inspectors for the Public Assembly and Code Enforcement Team (PACE); and, added two (2) additional dispatchers for the race weekend. The Special Events Section of AFD was heavily impacted with required staffing for PACE teams and inspections. Citywide call volume was normal but included a slight increase in downtown calls. There was no degradation to emergency response time and no incidents received a delayed response due to F1 USGP activities.

Austin/Travis County Emergency Medical Services (ATCEMS):

ATCEMS provided on-site emergency support services at the COTA facility and for the downtown Fan Fest. No significant issues occurred and response time was not impacted. ATCEMS representatives were at the Area Command, COTA Command, and Central Command posts. ATCEMS provided specialty teams, vehicles and equipment as part of its contracted services with COTA. ATCEMS coordinated its responses with other area medical agencies, including STAR Flight and Seton Hospital, both of whom also provided contracted services to COTA.

SUMMARY

The planning and management efforts of the City of Austin, Travis County, Capital Metro, COTA, numerous regional, state, and federal agencies served the public and F1 USGP visitors well. All parties agree that the event was a success, and that the first year's planning and management model will serve as a template for future years. City departments and partner agencies not only performed as requested, but also brought new enhancements to operations that can be used for other large-scale events. For City departments, the expectation was "all hands on deck", which meant that City departments were to be prepared to address unforeseen circumstances as they arose. Because these types of events are labor intense, this naturally meant that the appropriate staffing levels were required during the Austin Grand Prix. As much as possible, City departments rearranged work schedules and assignments to keep overtime to a minimum. Nonetheless, it was not possible to manage this event without the use of overtime. The overtime costs were documented and are accounted for in this report.

City departments are analyzing their staffing levels used for the first Austin Grand Prix and will be making assessments as to staffing levels for future races now that the first year's impact has been experienced. However, the importance of being fully prepared and staffed cannot be discounted. The first Austin Grand Prix was relatively problem free, yet this is not a guarantee that future events will proceed accordingly. The newly annexed COTA facility will bring with it many other large-scale events, future F1 USGP's, and live concerts that will place demands on City resources. To the extent City department budgets cannot accommodate the new demands for service; these departments will make appropriate requests for budgetary increases. The new, large-scale events will especially be taxing to the Special Events Team, which is a recently formed cross-departmental team focused on permitting, planning, and managing the multitude of special events. This group is charged with permitting, managing, and monitoring hundreds of special events per year.

The preparation process taught many lessons, perhaps most importantly that each department is well equipped to handle planning related to their own responsibilities but that a single point for coordination and oversight worked well to tie all the individual efforts into a cohesive, synergistic response and to serve as the City's leadership representative for contacting and being contacted by partner agencies. The Deputy Director of EGRSO was appointed to serve as this single point of contact, and the role consumed 20-30 hours of work each week during the year of planning and many more hours in the weeks leading to and during the event. Continuing to assign a single point of contact or utilizing a dedicated coordinator will serve F1 USGP and large-scale events well. Because the more critical components of management are related to either Public Safety or Transportation, consideration should be given to a position housed within either of these work areas.

The F1 USGP created a media event proportional to the worldwide attention the Grand Prix attracts. News reports were universally positive with the caveat that continued success is dependent on the ability to sustain the interest and excitement usually generated by the first event at a new track. Regardless, newspaper, television, and social media all gave high marks for the event.

Visitors, both foreign and domestic, seemed genuinely pleased with the welcome Austin afforded. City staff heard many comments about the friendliness and helpfulness of persons involved in the Fan Fest as well as at the track. Visitors were not accustomed to the friendly demeanor as exhibited by Austin APD, and it was appreciated according to some comments reported by the press. Of course, there were a few complaints from visitors, primarily involving the high cost of accommodations.

Despite all the anxiety that accompanied the preparations for bringing the Formula One Grand Prix back to the United States, COTA, the FIA, and the FOM were relieved, grateful, and pleased that the weekend came off with only minimal hitches. COTA experienced a few internal issues with tram transportation, vendor servicing and placement, and other logistical problems, but overall, the things that worked well far outweighed those that may require improvement for the future.

Several City departments conducted individual After Action Reviews (AAR) following the event, a summary of which can be found at the conclusion of this report. The resounding echo from each AAR was total agreement that the event was well planned and executed. However, as is the case with any event, there were instances where operations either did not work or were identified as needing improvement. Issues that occurred during the event were remedied as they were identified. Other lower priority issues were of such insignificance that an immediate fix was not warranted and were instead noted to be addressed in the next year's planning efforts. The AAR's serve to document both critical and non-critical issues and to develop initial recommendations for improvement. Action plans are underway to address the changes that are within the City's control.

The inaugural F1 USGP has come and gone, and much goodwill was created between the City and its partners for working well together to make the inaugural race a success. Maintaining partnerships with other agencies is paramount for future races and will help the City continue to achieve its goals for minimizing costs and disruptions to Austin citizenry, maximizing economic benefit, and sustaining a level of preparation that will assure continued attainment of making Austin a great place to live, work, and play.

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1.0 Impact

1.1 PHYSICAL

The most obvious physical impact is the addition of the state-of-the art \$400 million dollar multipurpose complex erected at the Circuit of the Americas, a 375-acre motorsports and entertainment venue constructed on a 1,000-acre site in southeast Austin. In addition to being the first purpose-built Grand Prix facility in the United States, the complex houses a 40,000 square foot conference/media center, a 5,500 square foot medical center, and a 17,000 person capacity amphitheater, the largest of its kind in Central and South Texas. In addition to the facility itself, other physical impacts include the road improvements to Elroy Road, McAngus Road, Farm-to-Market Road 812, and the extension of Kellam Road.

Construction at COTA created approximately 1,700 construction jobs using 16 Texas-based companies with participation by minority- and women-owned businesses totaling an estimated \$50 million. COTA employs approximately 300 full-time equivalent employees and on major event days, more than 3,000 seasonal/event-specific employees are hired.¹³

1.2 INFORMATIONAL

In June 2012, the EGRSO Small Business Development Program and partner agencies surveyed Austin businesses to gain an understanding of what information businesses possessed and what information businesses desired in order to be prepared for the Austin Grand Prix weekend and how businesses wanted to obtain that information. The majority of businesses desired information



that was readily available at their fingertips. For this reason, EGRSO initiated the ATXGrandPrix.org website, which was envisioned to be a full-purpose information center for residents, businesses, visitors, and the media. For the first time ever, a City website was created that was explicitly devoted to disseminating information about a large-scale event. The City's Corporate Public Information Office (CPIO) and Communications and Technology Management (CTM) departments provided the technical expertise and artistic design for creating the website infrastructure. The EGRSO Public Information Officer developed the information content and guided the layout.

ATXGrandPrix.org grew to be a widely used portal of information for local businesses and residents interested in finding out information related to street closures, downtown events, permits required for special events, and watching the video recording of one of the business preparedness workshops. For those business owners from outside of Austin coming to the F1 USGP, information was provided on the Austin economy and how to invest in Austin. For the media, information on previous news releases, City

¹³ www.circuitoftheamericas.com/economic-impact

department contacts, and general information about Austin was provided. And, for visitors, information about Austin, getting around, local live music venues, eating and shopping establishments, and bicycle rental and maps was provided. ATXGrandPrix.org was officially launched on July 1, 2012. Between July 1st and November 10th, there were 29,901 unique visitors to the website. Between November 11th and November 19th, there were 21,841 unique visitors to the website. The largest number of page views was for event routes and road closures.

1.3 SOCIO-CULTURAL

Perhaps one of the biggest impacts of the F1 USGP was the effect on the social and cultural nature of Austin. At the onset, there was a perception that Formula One racing was restricted to the elite, which seemed a foreign fit to Austin's nature. Coupled with an initial agreement dispute between COTA and Formula One Management Limited, there was a constant perception that the F1 USGP would never come to fruition. For this reason, EGRSO and partner agencies began a business-awareness campaign in June 2012 to inform local businesses, specifically those located in downtown Austin, about the F1 USGP. Volunteers from EGRSO and partner agencies walked door-to-door to downtown businesses with informational handouts and invitations to a series of two workshops for local businesses to prepare for the event. The August 2012 workshops were filled to capacity as attendees listened to local business counterparts who had already begun planning for the F1 USGP, businesses who had experience with other Formula One races, an expert on international protocol, and COTA officials ready to talk about the downtown Fan Fest and their efforts to welcome new visitors to Austin. The result was a momentum shift from one of skepticism to one of yearning for information on how to leverage the Austin Grand Prix for increased business revenue.

1.4 SMALL BUSINESSES

Perspectives of the impact of the Austin Grand Prix from local, small businesses varied depending on the geographical location of each concerned. For businesses closest to the core of the downtown Fan Fest, they were subject to a flurry of activity. For businesses outside the core of the downtown Fan Fest, their anticipation for brisk business did not materialize.

In January 2013, the Small Business Development Program surveyed area business owners to collect information regarding how well their preparation and initial expectations measured up against actual outcomes. The respondents self-selected to participate in the survey; therefore, conclusions may not be representative of all businesses. The majority of the 231 business owner respondents were involved in the retail trade, hotel/motel, restaurant, and the arts/entertainment industry. The following are highlights from the 231 business owner responses to the survey. Categories not adding to 100% are the result of "unsure" or "no response" answers.

- Expected impact on business operations:
 - Positive 62%
 - Negative 15%
 - No Impact 15%
- 65% of businesses (151 out of 231 respondents) changed operations for the event. Of the 151 businesses, 140 provided information on how they changed operations. The following percentages are applicable to the 140 businesses who provided this information:
 - 46% increased inventory

- 41% were open longer hours
- 29% hired extra employees
- 29% scheduled a special event
- 14% increased staff hours
- 34 respondents reported a total of 910 extra hires or contracts
- Businesses kept apprised on event activities primarily through news publications (online and paper), television, radio, and the City website ATXGrandPrix.org
- Impact of the Austin Grand Prix weekend as compared to their expectations:
 - 19% better than expected
 - 26% about what was expected
 - 46% worse than expected
- 50% (116 out of 231) reported fewer than expected customers, both local and non-local customers
- 43% (99 out of 231) reported fewer customers, particularly local customers, than the same period in previous years, and 25% (57 out of 231) reported more customers, particularly non-local customers
- 49% (114 out of 231) reported lower total sales revenues than expected, and 42% (97 out of 231) reported lower total sales revenues than the same period in previous years
- Themes from the respondent comments:
 - Local customers are hugely important to maintaining business
 - Timeliness and availability of information is crucial
 - Accurate estimates of visitor numbers and behaviors are desirable
 - Traffic and transportation information is important but should not be over emphasized to scare local residents away
 - Business owners want to connect to business opportunities and visitors

1.5 TAX REVENUE IMPACT

As mentioned previously, the financial data presented in this report is not to be confused with an economic impact analysis, which accounts for revenues generated over a period of time as well as the ensuing indirect and induced revenues earned. However, for illustrative purposes only, the following table presents a year-to-year comparison of specific City of Austin tax revenues typically impacted by large-scale events. No assumptions are being made that the revenue increases in this table are derived solely because of the F1 USGP.

Additionally, below is information on the assembly of the tax revenue data:

- Sales tax revenue is remitted by the State Comptroller on a monthly basis to the City, and therefore, this revenue is shown as November 2011 compared to November 2012.
- Hotel occupancy tax revenue is remitted from hoteliers on a quarterly basis to the City, and therefore, is shown as 4th quarter 2011 compared to 4th quarter 2012.
- The State Comptroller, on a quarterly basis, remits mixed-beverage tax to the City, and therefore, this revenue is shown as 4th quarter 2011 compared to 4th quarter 2012.
- Car rental companies, on a quarterly basis, remit car rental tax to the City, and therefore, this revenue is shown as 4th quarter 2011 compared to 4th quarter 2012.

Table A:	City of	Austin	Тах	Revenue	Comparison
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	SALES PERIOD:	SALES PERIOD:	(DECREASE) OVER	SALES PERIOD:	(DECREASE) OVER
	NOVEMBER	NOVEMBER	PREVIOUS	NOVEMBER	PREVIOUS
REVENUE SOURCE	2010	2011	YEAR	2012	YEAR
Sales Tax	\$ 11,005,739	\$ 11,688,179	6.2%	\$ 12,546,565	7.3%

			PERCENT INCREASE		PERCENT INCREASE
	SALES	SALES	OR	SALES	OR
	PERIOD:	PERIOD:	(DECREASE)	PERIOD:	(DECREASE)
	4 TH	4 TH	OVER	4 TH	OVER
	QUARTER	QUARTER	PREVIOUS	QUARTER	PREVIOUS
REVENUE SOURCE	2010	2011	YEAR	2012	YEAR
Hotel Occupancy Tax*	\$ 10,895,231	\$ 11,532,389	5.8%	\$ 15,027,303	30.3%
Mixed Beverage Tax	\$ 1,500,169	\$ 1,298,811	(13.4%)	\$ 1,434,069	10.4%
Car Rental Tax	\$ 1,565,940	\$ 1,616,485	3.23%	\$ 1,974,349	22.1%

Because the COTA facility was not annexed by the City of Austin during the 2012 F1 USGP, ticket, merchandise, and taxable food and beverage sales at the COTA facility did not generate sales tax revenue for the City of Austin. Similarly, mixed beverage sales at the COTA facility did not generate mixed beverage tax revenue for the City of Austin. However, a basis for estimating future sales tax revenues for the City can be developed by reviewing the sales tax revenues collected by the East Travis Gateway Library District, which encompasses the COTA facility. The following table reflects East Travis Gateway Library District sales tax revenues for retail sales made between March 1, 2012 and November 30, 2012. The sales period captured includes the beginning date for personal seat licenses and ticket sales at COTA (March 2012) and includes merchandise sales, and taxable food and beverage sales during the F1 USGP (November 2012). Upon annexation, the City of Austin will also impose a 0.5% sales tax rate upon sales made at the COTA facility. For any City annexed areas that encompass the Library District, the following local sales tax rates will apply: Capital Metro (1.0%), City of Austin (0.5%), and the Library District (0.5%).

Table B: East Travis Gateway Library District ½ Cent Sales Tax Revenue Comparison

Sales Tax	\$ 222,637	\$ 621,410	279.0%	\$ 398,773
REVENUE SOURCE	NOV. 30, 2011	NOV. 30, 2012	(DECREASE)	(DECREASE)
	ТО	ТО	INCREASE OR	INCREASE OR
	MARCH 1, 2011	MARCH 1, 2012	PERCENT	REVENUE
	SALES PERIOD:	SALES PERIOD:		

Smith Travel Research, which tracks hotel industry data and provides market share analyses for major hotel chains and brands, performed an analysis of the race weekend as compared to the same time period in the previous year. The hotel room revenue and occupancy rate increases described in this analysis are primarily the result of the F1 USGP.

Hotel Occupancy	67.5%	81.9%	21.3%
Hotel Room Revenue	\$ 10,421,931	\$ 32,700,481	313.8%
	SUN., NOV. 20, 2011	SUN., NOV. 18, 2012	(DECREASE)
	WEDS., NOV 16 –	WEDS., NOV 14 –	INCREASE OR
			PERCENT

Table C: Hotel Room Revenue and Occupancy Comparison

Smith Travel Research (STR) reported that over the five-day period ending on Sunday, November 18th, Austin area hotels took in \$32 million – triple what hotels made over the same time period in 2011 which included a University of Texas (UT) home football game.¹⁴ STR is an American company that tracks hotel industry supply and demand data and provides market share analyses for major chains in the U.S., Canada, Mexico and the Caribbean. STR focused its analysis on nearly 30,000 hotel rooms in the Austin Market Service Area, which is bounded by Round Rock and San Marcos between Bastrop and Lake Travis.

"Basically, we had a very good weekend," said Bob Lander, President and CEO of the Austin Convention and Visitors Bureau. Lander said that in some instances F1-related revenues were "astronomical" and far exceeded expectations...Lander said the prices for hotel rooms in Austin during F1 week weren't out of line with what travelers might pay in New York City or San Francisco for rooms, or with what might be charged during South by Southwest. "It compares very well, although it's over a much shorter period of time."¹⁴

Hotel occupancy and rates were much higher as compared to the same weekend last year according to STF figures as follows:¹⁴

- Hotel occupancy rates
 - On the comparable Saturday in November 2011, area hotels were 89.9% occupied. On Saturday, November 17, 2012, area hotels were 94.4% occupied.
 - On the comparable Sunday in 2011, area hotels were 41.1% occupied. On Sunday, November 18, 2012, area hotels were 76% occupied.
- Hotel occupancy rates
 - On the comparable Saturday in November 2011, guests paid an average of \$111.40 per night.
 On Saturday, November 17, 2012, guests paid an average of \$300.44 per night.
 - On the comparable Sunday in 2011, guests paid an average of \$86.52 per night. On Sunday, November 18[,] 2012, guests paid an average of \$266.16 per night.

Hotels for Hope, which served as the booking partner for Circuit of the Americas reported the bookings of more than 27,000 room nights at Central Texas hotels during Formula One week, with the average length of stay being 4.18 nights and an average daily rate of \$364.68. For Austin hotels that average

¹⁴ "Austin area hotels saw boost during F1 race week," Austin American-Statesman, December 6, 2012 article by John Maher.

rate was \$393.69, according to Neil Goldman, Founder and CEO of Hotels for Hope.¹⁵ On February 27, 2013, Hotels for Hope and COTA announced that their combined fundraising effort through the hotel room booking partnership raised \$25,400 each for the Boys and Girls Club of Austin and the Austin Partners in Education.

According to an American-Statesman analysis, Austin alcohol sales for November 2012 were 23% higher than November 2011. The Circuit of the Americas facility, sold \$2.8 million worth of beer, wine, and mixed drinks in November, more than any other venue in the state.¹⁶

The F1 race should get most - but not all - the credit for that double-digit jump, according to the owner of several downtown-area bars and restaurants. "It was a great first year for F1," said Doug Guller, owner of ATX Brands, "I'm really excited about the future."¹⁶

1.6 REVENUE IMPACT FROM DIRECT CHARGES TO COTA AND OTHER FEES

The City has in place fee structures that allow City departments, primarily public safety departments, to charge event organizers for direct services in accordance with City Council approved fee schedules. The table below reflects direct charges to COTA for ATCEMS, APD, and AFD services.

Figure 1: City of Austin Direct Charges to COTA

DEPARTMENT		CONTRACT FOR SERVICES	REIMBURSED OVERTIME
Austin/Travis County Emergency Medical Services *		51,840	N/A
Austin Fire Department		N/A	6,888
Austin Police Department		N/A	52,509
	Total	51,840	59,397

* - The ATCEMS contract includes personnel-related expenses.

The table below reflects City department revenue earned during the Austin Grand Prix from fees and facility charges. It is anticipated that additional fees will be assessed to the COTA facility, such as health inspection fees, for the 2013 F1 USGP because the COTA facility is now annexed.

Figure 2: City of Austin Revenue Earned During the Austin Grand Prix

DEPARTMENT		PERMIT FEES	FACILITY REVENUE
Austin/Travis County Health and Human Services		10,005	N/A
Austin Transportation Department		19,013	N/A
Aviation Department		N/A	106,000
Austin Convention Center		N/A	63,341
	Total	29,018	169,341

¹⁵ "Austin area hotels saw boost during F1 race week", Austin American-Statesman, December 6, 2012 article by John Maher.

¹⁶ "State's top alcohol seller in November: F1 track", Austin American-Statesman, January 7, 2013 article by Gary Dinges.

1.7 EXPENSE IMPACT

The City has historically hosted large-scale events, but none to date has required the combined resources and consolidated efforts of so many departments. This event was unique in that being the first of its kind for Austin, it was laden with unknowns. And, unlike UT football games, South-by-Southwest, or Austin City Limits, this event did not start small and experience year-over-year growth. And, unlike these events, the Austin Grand Prix resulted in two very significant events taking place that were miles apart: the F1 USGP race at the COTA facility and the downtown Fan Fest. Throngs of people traveled back and forth from the track daily to attend concerts, private parties, the downtown Fan Fest, and other special events held throughout the City. The contingency planning and coordination among so many organizations and governmental agencies was unlike anything attempted before.

As described above, COTA paid for direct services provided. However, as is the case with other largescale events, there is a "surge" of visitors that create a demand on City resources such as traffic management and resource recovery. City departments increase their staffing levels to meet the demand in an effort to maintain order throughout the event and to ensure that public health and safety needs are met. As is often the case, the increased staffing levels result in overtime expenses. But, the increases in staffing levels are never billed to event organizers because the entire "surge" of visitors cannot be solely attributed to the event itself. City departments made every effort to minimize overtime costs during the Austin Grand Prix by reassigning personnel and through schedule changes while continuing to ensure continuity of service levels throughout the City; however, overtime was still incurred.

The chart on the next page captures City costs for overtime and other expenses associated with hosting the Austin Grand Prix. The other costs include consumables, such as food and water needed to support Command post personnel, contractuals, and small tools and equipment. These costs may be overstated as some of the tools and equipment consist of frequently used items that will continue to be used in the course of normal operations. For example, ABIA purchased shirts to identify customer service staff and way-finding signage that will continue to be used for all large special events.

Table D: City of Austin Overtime and Other Costs

DEPARTMENT	OPERATIONS	OVERTIME	OTHER COSTS	TOTALS
General Fund Depar	tments			
ATCEMS	Special Events, Concerts, Command Posts	50,763	0	50,763
AFD	Extra engine company, Inspections, Command Posts, Aircraft Rescue	62,163	0	62,16
APD	Traffic/law enforcement, Command Posts, Enhanced		2,097	42,91
СМО		40,819	0	26
СТМ	Area Command Support	501	0	50
Fleet	Contingency-Extended Hours	22,813	0	22,81
Health	Area Command	2,343	0	2,34
HSEM			5,388	5,38
Planning and Development Review		271	0	27
Parks		561	0	56
Transportation	Downtown Shuttle, Traffic Management, Command Posts	25,589	4,469	30,05
Wireless	Radio support	5,503	36	5,53
nterprise Departme	Total General Fund Departments	211,593	11,990	223,58
Airport	Enhanced Staffing, Contractuals, Commodities	249,918	282,262	532,180
Austin Energy	Staging Crew, Enhanced Staffing at 3-1-1, On-Call Status	17,465	0	17,46
Austin Resource Recovery	Enhanced Street Sweeping/ Litter Control	57,549	762	58,31
Austin Water	Staging Crew, Off-site Waste Disposal	26,242	1,343	27,58
Code Compliance	Special Events, Command Posts, Inspections	5,409	5,393	10,80
Convention Center	Concerts, Palmer Parking Garage	16,567	0	16,56
EGRSO	Special Events	597	3,576	4,17
Watershed Protection		214	0	21
	Total Enterprise Departments	373,961	293,336	667,29
	Total For All Departments	585,554	305,326	890,88

2.0 Traffic/Transportation

2.1 TRAFFIC/TRANSPORTATION

The Traffic/Transportation Planning Team was one of the critical planning groups for making the Austin Grand Prix successful. Private and commercial vehicular and air traffic, bicycle routes, pedestrian concerns, road conditions, and monitoring demands combined to produce a labyrinth of issues to be resolved in preparation for the event.

2.1.1 Austin Transportation Department

The Traffic Management Branch at Area Command included

representatives from the City of Austin, Travis County, COTA, Capital Metro, TxDOT, DPS and others. This group was well positioned to implement the plans that had been put in place and make adjustments as necessary. Highlights include:

- 1. Regional traffic management as a key function and branch of Area Command. In order to provide greater visual access to traffic patterns and flow, helicopter video feeds from APD and DPS were installed in Area Command. The video feeds proved to be invaluable for coordinating and aligning ground resources effectively.
- 2. Examination of real-time video feeds from several pan-tilt-zoom (PTZ) traffic cameras located

throughout Austin as well as two PTZ cameras mounted on the COTA tower to monitor shuttle bus operations and track activities.

- GATRRS radio communications coverage, which proved to be excellent and was especially critical as cell phones and smart phone devices floundered during peak periods.
- Collection of real-time travel time information from 25 "Bluetooth readers" provided by TTI.
- 5. Field observations of traffic operations in the vicinity of COTA, shuttle bus operations, taxi operations, general flow of patrons, and other similar activities.

- In conjunction with the ICS, ATD added three important subgroups:
- ATD Traffic Management Center (TMC) Located at Toomey Road, this group provided support to Area Command and Central Command and monitored traffic throughout the City. The TMC was staffed with employees of ATD and graduate student volunteers from UT's Center for Transportation Research. The TMC group addressed emerging needs such as missing way-finding signs, creating new way-finding signs, revisions to the traffic control plans, and field verification of

F1 USGP ATTENDANCE		
Friday	65,360	
Saturday	82,710	
Sunday	117,429	
Total	265,499	

reported issues. For example, when pedestrian activity along FM 812 increased to the point of raising concerns for safety, "No Pedestrian" signs were fabricated and immediately transported to the field. The TMC group was sufficiently staffed to continue normal monitoring processes for the entire City to ensure there was no gap or reduction in traffic management services.

 Downtown Shuttle Bus Loading Area - Located along Trinity and North of 15th Street, this area was chosen due to the availability of ample State and UT parking facilities. ATD prepared the barricading plan for the area and had the appropriate staffing levels to ensure the operation ran smoothly. Over the three-day period, 50,285 people utilized this shuttle route to go to and from the COTA facility. ATD, APD, and DPS managed the intersections in the area and provided way-finding

Number of I	-
Downtowr	i Snuttle
Friday	13,565
Saturday	19,719
Sunday	17,001
Fotal	50,285

assistance. Public Works assisted with dust control overnight on Saturday and Austin Resource Recovery aided with trash removal. The primary concerns involved unanticipated dust issues caused by foot traffic, the lack of sufficient port-a-potty supplies, and the disorientation of visitors returning from the track who required way-finding assistance.

• Travis County Expo Center Shuttle Bus Loading Area - This area provided shuttle service to 48,078 patrons and was managed by COTA and Travis County Sheriff's Office. Monitoring of this area by helicopter-mounted cameras revealed that on Friday most patrons were approaching from the south but there was only a single gate open resulting in long queue times to enter the area. The immediate fix was to dispatch Travis County staff to open the second gate for vehicles to enter from the south side of the Expo Center. Throughout the race weekend, the helicopter-mounted cameras were instrumental in maintaining traffic flow for this area.

The partnership between ATD and TTI for the provision of 25 "Bluetooth readers" proved to work well for identifying traffic slowdowns. TTI analyzed the data throughout the race weekend and provided the results via a secure website to ATD staff. The information was then sent to the JIC to inform motorists and shuttle patrons of travel times. The partnership with TTI also allowed for the monitoring of known potential bottlenecks. A specific example was the intersection of State Highway 71 (SH 71) and Riverside Drive. Because this intersection is undergoing a major multi-year construction project, ATD and TxDOT made significant efforts prior to the Austin Grand Prix to improve the efficiency of this intersection. However, ATD and APD understood that at peak conditions during the Austin Grand Prix, there could be a need for intervention to manually advance the traffic signal timing at this intersection. On Friday afternoon, the Bluetooth readers registered a significant increase in travel times westbound on SH 71 between Farm-to-Market Road 973 and Riverside Drive. A helicopter was dispatched, and video feed confirmed significant traffic queues. APD dispatched officers to the intersection to begin manual operation of the traffic signal. Within a few minutes, Bluetooth data confirmed a reduction in travel times in this corridor. The officers remained at this intersection for approximately $1\frac{1}{2}$ hours until travel times at this intersection dropped to acceptable levels. On Saturday and Sunday, APD officers were deployed in advance to this intersection and manually operated the traffic signals continually during peak periods. Travel times remained consistently minimized as a result of this action.

2.1.2 ATD Office of Special Events

The Austin Transportation Department Office of Special Events (ATD-OSE) and the Austin Police Department Special Events Unit managed the street closures for the downtown Fan Fest festival, which included three large concerts held at the Convention Center and the Erwin Center. ATD-OSE staff coordinated dozens of meetings in advance of the Austin Grand Prix with event producers, affected residents, small businesses, downtown employers and office landlords, COA departments, Capital Metro, Texas Facilities Commission, Texas Historical Commission, DPS, Travis County, and The University of Texas (UT). These meetings were instrumental for developing the final permitted street closures and for addressing concerns. In addition to permitting activities, site inspections, and planning meetings, the ATD-OSE utilized a variety of means to disseminate information to assist residents, businesses, and visitors navigate the downtown area:

- Website links including the downtown shuttle location/route and two interactive web maps, with one including a daily breakdown of F1 USGP activities. These online maps received approximately 80,000 hits;
- 2. Downtown parking garage maps to show ingress and egress for multiple downtown office buildings affected by street closures;
- 3. Transit location maps for pedicabs, valets, taxi stands, car share, bike corrals, and bus stops;
- 4. Downtown pedestrian way-finding signage; and
- 5. A tri-fold pocket guide to assist visitors with navigating through downtown Austin, including the Fan Fest footprint, downtown shuttle location, the Capital Metro Circulator, and other information and links to sites regarding the COTA facility and F1 USGP. 30,000 pamphlets were produced, and 98% were distributed via Capital Metro, COTA, Fan Fest, ABIA, ACVB, Austin 311, APD, and DPS.

The Special Events Unit of APD employed several techniques for managing crowds and traffic during the Austin Grand Prix. Those techniques are explained later in this report. ATD-OSE, APD, and its partners successfully coordinated street closures and maintained order during the downtown Fan Fest such that traffic impact was minimal in downtown and visitors had a very positive experience.

Months prior to the Austin Grand Prix, a Special Events Team, comprised of multiple staff from various City departments, was formed in response to a May 2012 Council resolution for doing so, which was also recommended by the Austin Music Commission. The interdepartmental team was created to streamline and consolidate planning efforts for multiple special events throughout the year and to provide a higher level of service. In September 2012, the interdepartmental team of City employees from APD, AFD, Music Office, ATD-OSE, ATCEMS, Code Enforcement, and the Health Department was moved into the newly created Austin Center for Events, which is located on the 10th floor of One Texas Center and serves as a one-stop shop for special events. Assembling the team and creating a single, combined office suite for this team allowed for economies of effort and expedited planning and decision making related to the Austin Grand Prix and related events, such as the downtown Fan Fest and 72 permitted special events that took place during that weekend.

Fan Fest Observations:

Although visitors appeared to enjoy the Fan Fest held in the Warehouse District, it was not well attended by local residents, presumably because of the fear of heavy traffic and lack of parking. Neither of these conditions proved problematic. Valet zones, bike parking, taxi zones, and parking garages were not heavily used, a further indication that attendance primarily involved visitors staying in the downtown hotels.



The ATD-OSE led an After Action

Review (AAR) with COTA and members of the Special Events Team. The following concerns were identified and will be addressed prior to the 2013 festival:

- Keeping northbound traffic open on Congress on Friday helped with traffic flow, but it posed some safety concerns with pedestrian traffic that might not realize that only half the street was closed. Some of the vendors on Congress also encroached into the open northbound lanes.
- COTA's barricade company was not responsive concerning traffic control.
- A more robust waste and recycling plan is needed for Fan Fest.
- Attendance was heaviest on Friday and Saturday nights with lowest attendance on Sunday night.
- Most of the crowd left early on Sunday leading to a consideration for beginning the 2013 festival earlier and ending it earlier.
- COTA reported a favorable response from participating vendors.
- The Cultural Arts stage was lightly attended all three days probably because of placement. Other stages should stop earlier with perhaps only one stage going beyond 11:00pm.
- Concert attendance at the Austin Convention Center was below expectations.
- The valet zone was not heavily used.
- Bicycle parking was not heavily used. Existing bicycle parking would have sufficed.
- Taxi zones on 4th Street were not utilized and usually had cars parked in the spaces.
- Some unpermitted vending occurred but was quickly removed.
- Restaurants and bars within the footprint did better than expected; however, businesses outside the footprint experienced slower business.
- South Congress, Rainey Street and East 6th Street experienced average or lower than average traffic.
- Pictures with the State Capitol in the background were very popular.
- There were many questions about where to buy Austin souvenirs.

It was agreed that COTA would make adjustments in 2013 to the placement of vendors, beer gardens, and large activations. COTA will decide on the festival footprint by June 2013 and will try to keep the

event more contained. For example, the 2013 festival may have one large concert and the main festival. The City and COTA will jointly seek remedies for the issues that arose this year and determine if there is a more efficient way to power the venue without the large number of generators that were used. Local businesses and the ACVB should explore marketing opportunities to encourage visitors to visit other businesses in Austin.

2.2 AUSTIN-BERGSTROM INTERNATIONAL AIRPORT (ABIA)

There were aspects of the Austin Grand Prix that were unique and presented challenges that were met by the Aviation Department. These included an increase in private aircraft operations, for-hire helicopter operations, temporary heliports, cargo operations, and an increase in international and domestic arrivals both at the Barbara Jordan Terminal and the fixed-base operators. In the months leading to the Austin Grand Prix, the Aviation Department led several meetings of regional airports, including the San Antonio municipal airport, in an effort to coordinate air operations and to inform other airports about the impact of this global event. The Aviation Department also worked closely with the Federal Aviation Administration (FAA), the Transportation Security Administration (TSA), and the Customs and Border Protection (CBP) throughout the planning process to develop plans for accommodating not just increased general aviation and charter flights, but to also determine the appropriate management of helicopter flight operations. The Aviation Department planning, coordination, and ramp-up efforts focused on security, international traffic, airside operations, ground transportation, and hospitality.

In terms of security and international traffic, the Aviation Department worked closely with the TSA to develop operational procedures and staffing plans to accommodate the anticipated increase in passengers during the Austin Grand Prix. The Aviation Department expanded its customs facility, increasing the capability of processing international visitors from approximately 100 people per hour to approximately 180. The TSA brought "flex staff" from across the country to accommodate the increase in traffic. And, the Aviation Department added a fourth security checkpoint at the East end of the Barbara Jordan Terminal in order to maintain reasonable wait times. The fourth security checkpoint kept wait times for screening at less than 45 minutes during peak periods. The average wait time during the race weekend was less than 20 minutes. Without the fourth security checkpoint, it is estimated that wait times would have been approximately 1 to 1 ½ hours. On Monday, November 19, 2012, outbound F1 USGP-related air traffic contributed to an ABIA record 21,725 passengers passing through security.

In preparation for an unprecedented number of aircraft destined for Austin, the Aviation Department put in place a Prior Permission Required (PPR) system months in advance of the F1 USGP. The system required PPR numbers for parking aircraft at the ABIA airfield to be obtained prior to the event. The Aviation Department issued a Notice to Airmen (NOTAM) and a news release targeting aviation trade publications and airports announcing the PPR system. Additionally, the application for PPR's were made available on a special ABIA webpage developed for the F1 USGP. Through these efforts, the Aviation Department received over 470 PPR applications, which was the largest volume of aircraft ever at ABIA. The applications provided the Aviation Department with advance information as to the types of aircraft and number of passengers to be expected during the Austin Grand Prix weekend.

Demand for ground transportation was expected to increase as well. The Aviation Department modified curbside operations in order to ease congestion on the lower level roadway. Specifically, pick-up locations for limousines, shuttles, and charter buses were relocated, as were the drop-off

locations for rental cars. Ground services seemed to keep up with the demand most of the time. There were only a few peak times where passengers waiting on taxis exceeded a 25-minute wait time. The increased Capital Metro Airport Flyer service times were beneficial to passengers.

In terms of hospitality, the Aviation Department developed and utilized an in-house welcome program. The program included the use of over 70 volunteers who spoke various languages and who were trained on various facets of ABIA operations, including ground transportation. The volunteers wore specific shirts and buttons for identification and were available to greet incoming passengers, answer questions, and provide information about Austin. Additionally, most ABIA concession vendors operated extended hours to accommodate expanded ABIA operations, and reports indicate sales at approximately 30% over Austin City Limits and South-by-Southwest.

2.2.1 Helicopter Air Traffic Analysis

There were five (5) local heliports located at the Executive Airport, Dryden Airport, Austin Bergstrom International Airport, the downtown Embassy Suites, and the Barton Creek Country Club. In total, the five (5) local heliports accounted for 1,569 of the estimated 2,546 helicopter operations during the Austin Grand Prix weekend. The following table shows the distribution of helicopter operations from these five heliports for the race weekend.

GATES		FRIDAY	SATURDAY	SUNDAY	TOTAL	PERCENT
Executive Airport		70	117	203	390	24.9%
Dryden Airport		110	132	143	385	24.5%
ABIA FBO's		35	60	143	238	15.2%
Embassy Suites		79	133	83	295	18.8%
Barton Creek Golf Course Area		16	113	132	261	16.6%
	Totals	310	555	704	1,569	100.0%

Table E: Estimated Helicopter Operations per Local Heliport

Over the race weekend, the Aviation Department received 114 complaints related to helicopters. Through ANOMS 8 monitoring, the Aviation Department concluded the cause for complaints was primarily related to the larger number of trips per site, prolonged hovering, and multiple helicopter operators per site. For the most part, helicopter operators abided by the Fly Friendly Corridor recommendation; however, ANOMS 8 detected a declining use of the corridor policy from Friday through Sunday.

Two of the local heliports seemed to cause the most complaints: the Embassy Suites temporary heliport and a site located somewhere near the Barton Creek Golf Course, which was not permitted by the City of Austin as a temporary heliport. Of the 114 complaints, 28 callers did not complain about a specific heliport site, thus the tally of the distribution adds up to 86.

Table F: Helicopter Complaints by Heliport Site

HELIPORT SITE	NUMBER OF COMPLAINTS	PERCENTAGE OF TOTAL
Embassy Suites	59	68.6%
Barton Creek Golf Course Area	22	25.6%
Other	5	5.8%

The table below shows the distribution, by zip code, of complaints received related to helicopter operations. Of the 114 complaints, 28 callers did not provide call back numbers or locations information, thus the tally of the distribution adds up to 86.

ZIP CODE	COUNT	ZIP CODE	COUNT	ZIP CODE	COUNT
78617	4	78735	4	78746	3
78703	1	78744	2	78747	1
78704	56	78745	8	78748	4
				78749	3
		Total Complaints Reported and Identified by Zip Code			86

Table G: Helicopter Complaints by Zip Code

According to the ANOMS 8 data, there were 174 helicopter flights over the Travis Heights neighborhood during the race weekend. The shaded region in the figure below depicts the Travis Heights neighborhood in relation to helicopter flight tracks recorded over race weekend. The bright green squares represent caller locations.





On December 10, 2012, the Aviation Department released its Helicopter Air Taxi Analysis that included flight and noise data tracked during the event and an analysis of complaint information and primary causes. In January 2013, the Aviation Department held a helicopter stakeholder meeting to review the analysis and to work with stakeholders to develop recommendations for changes, including changes to City Code governing temporary heliports. Stakeholders included helicopter operators, COTA and other large-scale event producers, Embassy Suites, the Air Division of APD, three members of the Austin Airport Advisory Commission, a member of the Planning Commission, and the following six neighborhood groups: Barton Hills, Zilker, Bouldin Creek, Travis Heights-South River City Citizens, Downtown Austin Neighborhood Alliance, and the Austin Neighborhoods Council. In a March 2013 Planning Commission meeting, the Aviation Department presented recommended changes to City Code to address the issues uncovered in its analysis and stakeholder concerns.

2.3 F1 USGP CYCLING ACCESS

As part of its agreement with the City, COTA agreed to establish a dedicated bike facility that would provide direct access to the site and provide public showers. COTA met and coordinated this bike facility with the Public Works Department (PWD), Travis County Traffic Program, Travis County Parks, and Council Member Chris Riley and his staff. After assessing perimeter roads and taking into account the requirements of the traffic management plan, COTA determined that access for cyclists could be provided by utilizing City bike route 72 (Burleson Road) which terminates at Richard Moya Park, a few

miles from the COTA facility. COTA developed a bike corral at Richard Moya Park, where they provided a free bike valet, temporary showers, and complimentary shuttle service to the COTA facility. A total of 1,153 cyclists utilized the bike corral.



3.0 Public Safety

3.1 OFFICE OF HOMELAND SECURITY AND EMERGENCY MANAGEMENT (HSEM)

HSEM coordinated among City departments, Travis County, regional, state, and federal stakeholders to establish the Incident Command System model specific to the F1 USGP. HSEM developed the Area Command staffing plan, coordinated twice-a-day multi-Command post briefings, ensured that all technological components at the EOC were functioning, managed the coordination of all Command posts, and reported on the day's activities. HSEM established and operated the Joint Information Center, which served as the hub for distributing information to the public and the media. And, HSEM developed and disseminated the Regional Interoperable Communications plan, which assigned specific radio channels to all agencies involved in managing the Austin Grand Prix.



The Command posts managed activities under their purview and requested assistance from Area Command when action was needed beyond the Command post span of control. Formal, twice-a-day conference calls were held between all Command posts prior to and after each day's events in an effort to recap incidents that had occurred and to share lessons learned for each day. In doing so, all parties were privy to issues that had arisen and methods used to resolve each situation. More frequent phone calls, radio calls, and other communication were held within each Command post and between Command posts as each day's events transpired.

HSEM and TCOEM jointly managed and operated the EOC upon activation. In advance of the F1 USGP, HSEM took the lead in planning for five key areas, which served as the glue that held together the multi-jurisdictional management of the F1 USGP. These five areas were:

- Incident Command System model
- Emergency Operations Center/Area Command
- Joint Information Center
- Regional Interoperable Communications plan
- Training on all technological equipment

At the Area Command, multiple jurisdictions participated in branches of activity that allowed for coordinated responses in a single, unified manner. The branches are identified below.

Figure 5: Incident Command System Branches

THE ICS MODEL ALLOWS MULTIPLE JURISDICTIONS TO COME TOGETHER AND OPERATE WITHIN THE FOLLOWING BRANCHES:

- Emergency Operations •
- Air Operations
- Joint Information Center
- Fire and Hazardous Materials •
- Ground Transportation •

- .
- **Medical Operations**

- Law Enforcement •
- Utility and Infrastructure •
- Human Services •
- Permitting and Enforcement
 Traffic Management

All Command posts were linked together via video conferencing, telephone, radio communications, and Web EOC, which has been in use by the Austin/Travis County Emergency Operations Center (EOC) for some years. Due to needs anticipated for the Austin Grand Prix, HSEM accelerated a plan to migrate to a region-wide instance of Web EOC. This meant that, for the first time, Web EOC could be used by partner agencies and other Command posts not located at Area Command. Partner agencies and Command posts accessed Web EOC via secure Internet connections through desktops, laptops, smartphones, and tablets. The enhancement to Web EOC facilitated direct coordination among Area Command and all of the other Command posts. This regional application of Web EOC will improve coordination for future emergencies and planned events.

In August 2012, City of Austin departments and Travis County entered into a memorandum of understanding (MOU) that calls for all parties to provide PIO and JIC staffing support in response to EOC activation; share incident information, media and public inquiries, media monitoring; and to develop, vet, and communicate joint news releases, information about media briefings, and other joint activities in a collaborative manner. In response, City PIO's and Travis County PIO's developed a staffing plan to support the JIC and collaborated jointly on all aspects of the JIC.

Following the Austin Grand Prix, HSEM coordinated a multi-jurisdiction After Action Review that focused on planning and communications, Area Command operations, and public messaging. The summary of the After Action Review can be found in the conclusion of this report.

3.2 AUSTIN POLICE DEPARTMENT (APD)

APD coordinated law enforcement planning and management with the UT Police Department, Travis County Sheriff's Office, the Texas Department of Public Safety, and other state and federal agencies. As mentioned previously, APD focused primarily on homeland security, traffic management, crowd management, and tourism-based policing. APD developed teams of officers that were nimble enough to be deployed to problem areas as they arose. These teams focused on citywide traffic management during the day and crowd management and traffic management in the downtown area during the nighttime. In an effort to reduce overtime costs and maintain service levels, APD changed officer work schedules.

Although call volume was higher and there was an increase in Index Crime (murder, rape, robbery, aggravated assault, burglary, theft, and auto theft), overall there was no negative impact to police service resulting from the F1 USGP weekend activities. And, there were no incidents that received a
delayed response specifically related to F1 USGP weekend activities. In fact, response time improved significantly. Comparing the weekend preceding the race (November 9th-11th) to the race weekend (November 16th-18th), the following was observed:

- Call volume increased 7.6%
- Response time to emergency calls citywide decreased
- Twenty-one (21) more Index Crimes were reported for a 6% increase
 - Property Crimes were responsible for the increase as Violent Crime actually decreased by one
- The increase in Index Crime was more pronounced in the downtown area where seven more Index Crimes were reported accounting for a 29% increase for the weekend

The following chart compares call volume, APD response time, and Index Crime that occurred during race weekend as compared to the weekend preceding the race.

Table H: APD Calls for Service and Response Time

	WEEKEND PRIOR TO RACE NOVEMBER 9-11, 2012		RACE WE NOVEMBER 1	
TYPES OF CALLS	NUMBER OF CALLS	RESPONSE TIME	NUMBER OF CALLS	RESPONSE TIME
Total Citywide	4,369		4,702	
Citywide P0* calls	113	7:32	114	6:08
Citywide P1 calls	253	9:11	235	7:28
Total Downtown (George Sector)	506		610	
Downtown** P0 calls	9	3:36	8	3:42
Downtown** P1 calls	20	7:01	23	6:17

* - P0 calls are the highest priority call and must be dispatched immediately. Officers respond to P0 calls using lights and sirens. P1 calls are emergency calls that must be dispatched within one minute.

** - Calls from the Downtown George Sector

3.2.1 Fan Fest:

Because the downtown Fan Fest was a free event, there are no official attendance estimates. However, APD observed that largest crowds occurred on Friday and Saturday with attendance on Sunday considerably lighter causing several vendors and venues to close earlier than originally planned.

3.2.2 Downtown Shuttle:

A critical component to the overall success of the Austin Grand Prix weekend was the ability to move race fans to and from the different venues around town with as little difficulty as possible while simultaneously reducing the number of vehicles (i.e. traffic congestion) on the roadways. APD assisted Transportation Management Services, Inc. (TMS), the COTA shuttle contractor, with road closures, pedestrian safety, and traffic flow around the downtown shuttle operations area. The shuttle bus queuing area worked well much of the time, but it was not efficient during the heaviest rush of riders, which occurred on Sunday morning (race day) between 8:00am and 11:00am. The surge of riders approaching the queuing area created a bottleneck that slowed the boarding process and ultimately

created an overflow that temporarily backed up into the crosswalk at 15th Street. The situation required that APD officers manually control the intersection until the rush subsided in order to ensure pedestrian safety. APD has developed several alternatives to the design of the queuing area in preparation for future Grands Prix that will provide more flexibility to utilize the queue in a different manner depending upon passenger demand. Regardless of the temporary problems that occurred during the heaviest passenger flow, once pedestrians entered the queuing area, they never stopped the entire way through allowing for quick and efficient loading onto the buses with little, if any, delay.



COTA relied on numerous volunteers to assist with directing buses through the pick-up/drop-off area. There were plenty of volunteers on Friday, far fewer on Saturday, and very few on Sunday, the busiest of days. In the future, reliance on this critical task should not be left to volunteers and instead, APD officers should handle traffic for shuttle area intersections as well as provide direction to the buses. Another change for APD in future years will be the placement of APD translators. Translators were present during evening hours on Congress Avenue at the temporary mobile sub-station, but the translators would have been better utilized at the downtown shuttle location.

3.2.3 Traffic Related Incidents:

For the majority of the weekend, the concerns expressed about a dramatic increase in vehicular traffic never materialized. APD believes that this was due in large part to the traffic control plans that had been developed ahead of time.

Travis County was responsible for traffic surrounding the perimeter of the track, but APD retained traffic control for areas within the City jurisdiction. Some APD patrol officers, especially those working in the area near the track, were not aware or familiar with the Traffic Control Plan, which led them to pass on erroneous information to citizens. There were several Austin neighborhoods that were greatly affected by the unannounced contraflow traffic diversions. Although contraflow plans had been announced early on, the exact timing of the occurrence was unknown to neighborhood residents, and APD patrol officers only discovered the detours as they came on duty.

3.2.4 Incident Command System:

Within APD, there were simply too few resources for optimum preparation of Incident Command forms. Having one or two APD officers responsible for these duties made it impossible to complete all the tasks in a timely fashion. Consequently incomplete documentation hampered written communication between Central Command and Area Command. The APD Emergency Planning and Response (EPR) team also needed a larger staff to better coordinate information with Special Events staff. A majority of the issues experienced by APD all seemed to involve a breakdown in communication at one or more levels. In the future, it is suggested that the SharePoint site for the Austin Grand Prix be used for all final operational plans and information so that all personnel have equal access to the most current information. SharePoint is an Internet-based application that allows City employees, regardless of location, the ability to share documents via the Internet. These issues, among others, have been assigned for correction.

3.2.5 APD Communications:

The APD Emergency Communications Division supported local law enforcement and traffic/transportation entities by augmenting selective operational processes, increasing staffing, and partnering with other inter-departmental divisions and outside agencies. The planning was successful in that operations were effective with no negative impact to individuals seeking emergency assistance with or without regard to F1 USGP activities.

APD and Travis County Sheriff's Office (TCSO) had worked out a process to help each agency to manage their respective 911 call load. In the event either agency's call volume spiked, calls would roll over to be handled by the 911 call takers of the least busy agency. Temporary title codes were created to use for call entry purposes. This process also eliminated the need to manually transfer calls received outside of normal jurisdiction boundaries. This preparation was made based on the assumption that both APD and TCSO would be inundated with calls. In reality, the call volume was much lower than expected, and APD processed only a minimal amount of calls for Travis County.

A virtual sector was created within the City's downtown area (George Sector) to better support the increased number of tourists and increases in APD's presence downtown. This also helped to better manage incidents that took place in and around the Fan Fest and entertainment district and secondary event locations associated with F1 USGP festivities.

Staffing level increases were imposed during race week in anticipation of higher call volumes and expanded support responsibilities. Scheduled vacations were suspended, overtime was utilized, and other inventive schedule changes were used to secure adequate coverage. Expanded coverage hours were attained across all work groups (Call Taking, Dispatch, and Supervision). Expanded coverage hours began on November 14, 2012 and ended on November 19, 2012. The steps resulted in a high degree of call taker availability as well as ensuring an adequate amount of support was provided to sworn patrol officers who were involved in downtown patrol operations and the heightened traffic management plan. Increased levels of supervision also helped to better manage events and provide clear communication to staff. Emergency Communications also worked closely with portions of the Highway Enforcement Command's Traffic Incident Management (TIMS) staff during expanded Highway Enforcement and Zone Wrecker hours.

Agreements were arranged with Austin 311 to route any reports of noise ordinance concerns through to the non-emergency work area through APD's shared Customer Service Request (CSR) software application during defined periods of time. Either work group had the latitude to instruct the other to utilize CSR's only in the event of heavy call volumes. This arrangement was necessary to be totally prepared for heavy call volumes; however, in practice it proved to be unnecessary due to lower than expected call volumes received.

3.3 AUSTIN FIRE DEPARTMENT (AFD)

Although ESD 11 had primary responsibility for operations at the COTA facility, AFD prepared for the possibility of a surge in emergency response activity based on the projected attendance, especially those flying into Austin. Historically, the ebb and flow of travelers through Austin-Bergstrom International Airport (ABIA) has demonstrated a parallel increase in emergency response activity. In order to accommodate the potential for increased demand, an extra engine company was placed in service for 12 hours each day on November 16th and 17th and for 24 hours beginning at noon on November 18th. The extra engine company was initially placed at AFD Station 42 (2454 Cardinal Loop) due to its close proximity to the COTA facility and ABIA. The AFD Shift Commander had the authority to move that unit to the downtown area during the evening hours, as needed. Other AFD participation included:

- One AFD command level chief officer was assigned to the Central Command post and another staffed Area Command.
- Additional inspectors were allocated for the PACE Team, nighttime inspections, downtown Fan Fest, and La Zona Rosa (named Club 88 during the Austin Grand Prix).
- Two additional AFD dispatchers were added throughout the weekend. One AFD dispatcher was dedicated to the ESD 11 territory during peak demand periods and another was assigned to Central Command post.
- Two additional AFD personnel were added to the Aircraft Rescue Fire Fighting unit from noon Wednesday, November 14th through noon Monday, November 19th for emergency response at ABIA due to the anticipated increases in aircraft volume.

Overall the AFD Operations section saw no significant increase in response activity; however, the AFD Special Events section was heavily impacted, as is normally the case with large-scale events. Citywide call volume was normal, but there was a slight increase in downtown calls. There was no degradation to emergency response time, and no incidents received a delayed response due to F1 USGP activities. Normal operations resumed at approximately 12:00 pm (noon) on Monday, November 19th, when additional staffing was discontinued. Additionally, command posts were shut down, the demand engine was removed from service, and additional staffing completed their shifts at their respective worksites. All operations returned to normal without issue. The following depicts activity for the AFD Special Events section:

Figure 6: Austin Fire Department Special Events Section Activity

	PACE TEAM		NIGHTTIME INSPECTIONS		AUSTIN FAN FEST
•	63 Inspections	•	80 bars/nightclubs inspected	•	17 structures permitted
•	2 fraternity events shut down	•	18 verbal warnings	•	108 inspections of
•	14 verbal warnings	•	2 citations issued		vendors/sponsors
•	10 written warnings issued			•	Approximately one dozen
•	3 citations issued				vehicles towed from fire
					lanes
				•	1 verbal warning
				•	3 written warnings

The following table depicts emergency response statistics for the AFD Operations sections for the immediately preceding weekend and the F1 USGP weekend as compared to the same time periods of 2011.

	CITYWIDE		DOWN	ITOWN
ACTIVITY	PRIOR WEEKEND	RACE WEEKEND	PRIOR WEEKEND	RACE WEEKEND
2011 Number of Incidents	641	683	63	71
2012 Number of Incidents	671	671	65	81
2011 Number of Units Dispatched	788	861	73	101
2012 Number of Units Dispatched	863	915	81	103
2011 Average Minutes	6.5	6.3	5.5	5.5
2012 Average Minutes	6.2	6.6	5.1	5.3
2011 Case Base *	412	441	29	44
2012 Case Base	434	432	37	44

Table I: Austin Fire Department Emergency Response Statistics

*Case base - number of incidents with valid first-in emergency response time data. Information is limited to emergency incidents where frontline apparatus arrived first and excludes low-priority incidents and law enforcement incidents.

The Incident Command System (ICS) model is standard operating procedure for AFD as well as many other City and Travis County departments. Most issues were managed at the appropriate command post level. There were no fire-related issues that escalated to Area Command. The AFD Communications Plan was modeled after the 2012 ACL Music Festival and worked well for all fire-based units. It is AFD's belief that the significant amount of early planning positively affected the exceptional outcome for the Austin Grand Prix weekend. Contacts made at Texas Motor Speedway, Montreal, and Arlington proved well worth the time and effort to learn how large-scale events in these cities impact fire department operations.

AFD's approach to planning was to plan for the worst-case scenario and hope for the best. The verdict from AFD customers is overwhelmingly positive. AFD recommends that pre-event planning be continued for future F1 USGP's with the understanding that factors such as bad weather, expanding crowds, or changes to shuttle arrangements will require adjustments to the AFD response plan. One area that requires future monitoring involves the Computer-Aided Dispatch (CAD) system. It was learned during the Austin Grand Prix weekend that the CAD system has a capacity of approximately 300 Mobile Data Terminals (MDC's). During race weekend, upwards of 340 MDC's were functioning at the peak of activity. The system did not crash, but it was monitored closely. Additionally, the staffing level for the AFD Special Events section needs to be increased because large-scale events such as the F1 USGP exceed the capacity of existing staff. The four-member staff, two of which are part-time, managed all permitting and inspections for F1 USGP related activities. And finally, an extra engine company is probably not required for future F1 USGP's.

3.4 AUSTIN/TRAVIS COUNTY EMERGENCY MEDICAL SERVICES (ATCEMS)

COTA entered into a contract with ATCEMS to provide on-site emergency medical support services. A total of 23 Paramedics were assigned to specialty teams for the internal track (racecourse, pit area, VIP areas) and another 49 personnel provided coverage for the non-track venue (grandstands, vendor areas, and parking lots). Medical carts, bicycles, motorcycles, foot teams, and three (3) strategically located ambulances were utilized. ATCEMS also staffed an Advanced Life Support (ALS) squad to supplement EMS responses within the surrounding community. ATCEMS worked with Travis County Fire Rescue, Travis County Sheriff's Office, and STAR Flight to pre-plan EMS responses within the community to ensure quality delivery of medical coverage for responses and medical transport. Seton Hospital was contracted to staff the seven (7) first aid tents on the property and the dedicated Medical Facility, and STAR Flight provided the aero-medical support.

ATCEMS also staffed personnel downtown to provide coverage for the downtown Fan Fest, the COTA concerts, and provided representatives to serve at Area Command and Central Command posts. ATCEMS believes the planning and preparation for operations were excellent, and no significant issues or concerns occurred. The following table provides a summary of ATCEMS activity for the immediately preceding weekend and the F1 USGP weekend as compared to the same time periods of 2011.

	CITY OF AUSTIN AND TRAVIS COUNTY		DOWNTOWN		
ACTIVITY	PRIOR WEEKEND	RACE WEEKEND	PRIOR WEEKEND	RACE WEEKEND	
2011 Number of Calls	1,199	1,172	104	96	
2012 Number of Calls	1,278	1,340	87	85*	
2011 Average Minutes	6.8	6.5	4.4	4.5	
2012 Average Minutes	6.7	6.4	5.3	4.8	

Table J: Austin/Travis County Emergency Medical Services Activity

*In the COA Downtown for race weekend the difference in call numbers used for response time is due to the Special Event call volume that was handled by units that were assigned and paid by the promoters to cover the event, so the special event calls were removed from the formula.

4.0 Other City Departments

4.1 AUSTIN RESOURCE RECOVERY (ARR)

Austin Resource Recovery (ARR) increased operations staffing levels by 400% for the weekend, expanded litter collection boundaries, and increased sweeping miles by 171 curb miles in response to the F1 USGP. ARR also provided staff at Area Command and the JIC throughout the weekend.

ARR expanded its service area (see figure below) to provide litter control services including street sweeping, servicing litter control containers, and picking up litter along the sidewalks. Two hundred (200) extra trash receptacles were placed in the downtown area.

Figure 7: Austin Resource Recovery Expanded Service Area

	STANDARD BOUNDARY	EXPANDED F1 BOUNDARY
North	11 th Street	Martin Luther King, Jr. Boulevard
South	Cesar Chavez Boulevard	Cesar Chavez Boulevard
East	Interstate 35	Chicon Street
West	Lamar Boulevard	Lamar Boulevard

On regular non-event weekends, ARR utilizes 14 employees in the downtown area per day. For the three-day Austin Grand Prix weekend, ARR utilized 110 employees in the expanded service area for an average of 68 employees over two shifts per day.

Waste Management, the City contracted downtown business dumpster service provider, provided four staff to monitor dumpsters and alleys 24 hours per day. Waste Management agreed to increase collection frequency to twice per day collection if warranted. During the Austin Grand Prix weekend, the contracted area experienced an increase of 2.61 tons in landfill trash and 3.75 tons in recycled materials in comparison to regular collection schedules. However, dumpsters were well maintained and did not require increased servicing. No complaints were received about overflowing dumpsters.

There was minimal impact to regular services. Staff anticipated and planned for delays due to traffic; however, no interruption in service occurred and curbside collection proceeded on schedule. In anticipation of heavy traffic, ARR closed the Household Hazardous Waste Facility on Saturday, November 17th. ARR did not receive any complaints due to the closure.

On regular weekends ARR collects 2,000 pounds of trash from servicing litter control containers and litter collection along streets and rights of way. During the Austin Grand Prix, ARR collected 3,000 pounds of trash from the expanded service area. In addition, ARR also collected 21,480 pounds of debris from the roadways through the expanded sweeping service.

ARR responded promptly to complaints received regarding debris in bicycle lanes and overflowing trashcans within the Fan Fest boundaries, shuttle parking lots, and Capital Metro bus stops. The trashcans in question were found to be the responsibility of the Fan Fest organizers, the State of Texas, and Capitol Metro; however, ARR assisted as needed. No debris was found along the bicycle lanes, and staff received praise from other users about the cleanliness of the bike lanes.

ARR believes the advanced planning and cross-coordination with various departments and jurisdictions significantly helped prepare for the Austin Grand Prix. The single, most pressing concern encountered during the Austin Grand Prix was the failure of COTA's Fan Fest waste management contractor to perform as agreed. ARR met repeatedly with COTA Fan Fest organizers prior to the Austin Grand Prix and visited on-site with litter control staff hired by the event organizer. Regardless, the COTA Fan Fest organizers did not do the following:

- Setup trash and recycling receptacles on time
- Have an adequate number of trash/recycling receptacles
- Setup trash receptacles next to recycling receptacles
- Have litter control staff regularly patrol the event area to monitor and service containers or collect litter
- Utilize a consistent, sturdy trash container
- Utilize sturdy, properly sized trash bags
- Service the trash and recycling containers located at the perimeter of the event

ARR participated in a follow-up meeting with COTA and their event organizer and the ATD-OSE to conduct an after-event review. Both COTA and their event organizer agreed that their waste management contractor did not perform up to ARR's or COTA's expectations. COTA and their event organizer will be evaluating plans for the 2013 Fan Fest and will take ARR's feedback into their consideration.

4.2 AUSTIN WATER UTILITY (AWU)

The F1 USGP generated various types of liquid wastes and other materials. These liquid wastes included portable toilet wastes, hold-haul tanks for various comfort stations, mobile-food vendor wastewaters, and grease interceptor wastes. The Walnut Creek Waste Water Treatment Plant (WWTP) Receiving Station received approximately 120,000 gallons from United Site Services (the hauled waste service provider for the COTA facility) and 6,100 gallons of hauled portable toilet and other similar wastes from Lone Star Latrine, LLC (the hauled waste service provider for COTA off-site events) for the time period of November 16th-20th. Wastewater Transport Services, LLC reported hauling approximately 7,000 gallons of food vendor waste for off-site disposal at a facility in Houston, Texas. Liquid Environmental Services (LES) was contracted to provide the pumping, cleaning, and hauling services for the COTA facility grease interceptors.

The only significant issue involved a contractor drilling a hole through a 54" waterline shortly before the F1 USGP. This could have been extremely problematic; however, the repair was made with little to no effect on the event. The majority of time and costs for AWU were associated with having crews and equipment available during the event in case of an emergency as well as to receive waste at the Walnut Creek WWTP. AWU describes the inaugural F1 USGP experience as successful.

4.3 AUSTIN 311

Because of extensive preparations, Austin 311 was able to successfully sustain standard service levels throughout the F1 event, answering 98% of all calls within 30 seconds or less. An Emergency Activation Plan was utilized to meet the following expectations:

- Delivery of timely event related information
- Provide foreign language interpreter services as needed
- Manage event related requests for City services
- Provide ad-hoc process support for COA departmental needs
- Automate the scheduling of custom information reports for all stakeholders, and
- Provide Area Command with real-time caller information.

Austin 311 added 311 Ambassadors (call takers) for the week of the Austin Grand Prix and utilized remote agents that were on-call during the event. Austin 311 provided full-time bilingual (Spanish-speaking) Ambassadors and leveraged its contract with a language service provider to cover other foreign languages. Other Austin 311 staff was on hand at Area Command in order to report activities directly to the Austin 311 Call Center.

In advance of the Austin Grand Prix, three (3) Austin 311 employees attended COTA-provided hospitality training. The information was then used to develop and provide internal training to other Austin 311 employees. Also in advance of race weekend, Austin 311 worked closely with ATD-OSE to coordinate the creation of a custom Special Event - Service Request (SR) used to track calls from visitors and citizens related to and resulting from the F1 USGP for the six-day period of Wednesday, November 14, 2012 through Monday, November 19, 2012. As anticipated, Austin's 311 Call Center received calls specifically related to the Austin Grand Prix and logged these calls as either concerns/inquiries from residents and visitors, or complaints about particular issues. In total, Austin 311 received 342 event-related calls out of 11,092 total calls, representing 3.1% of total calls.

The SR provided the ability to capture and report on the total number of service calls, types of service calls, any duplications, and to track issues by geographic area. Additionally, data categories such as event parking, traffic, park-and-ride information, and concert information were made available to Austin 311 Ambassadors through the Customer Relations Management System. This allowed Ambassadors to use keyword searches to locate and provide callers with the most up-to-date information available.

The success of the event and the fact that most planned operations worked as intended, led to a much lower than anticipated demand on the Austin 311 Center. The Austin 311 Call Center will need to continue to be part of the planning process and have similar activation plans for all community events, planned or unplanned. Data collected by Austin 311 during the Austin Grand Prix will be analyzed to prepare more precise staffing models for future Grands Prix. Lessons learned will also be incorporated into future event process and communications planning.

4.4 PUBLIC WORKS DEPARTMENT (PWD)

The PWD focused on managing the effects that capital improvement construction projects would have on the F1 USGP activity in downtown. Working closely with ATD and EGRSO, a moratorium was established on project work in the downtown area from Wednesday, November 14th through Monday, November 19th. PWD project managers worked with contractors to adjust the project work schedule to minimize the impact to the project, while also minimizing any risks or costs to the City. PWD also created and provided a key contacts list to Area Command and Central Command posts. The key contacts list contained project names, locations, and key contacts in case issues arose in project areas. PWD's PIO team augmented the City's PIO effort by providing personnel at ABIA and Area Command.

4.5 AUSTIN CONVENTION CENTER (ACC)

The Austin Convention Center Department (ACCD) reported that attendance numbers were very low for Friday and Saturday concerts held at the Convention Center. ACCD staffed and prepared for a projected attendance of 10,000 - 12,000 for each show, but actual attendance was 2,000 - 2,500 for the Friday concert and 4,000 for Saturday's concert. Due to the low attendance on the first night, adjustments related to the set, seating, lighting, and bar locations involved considerable labor as well as labor from other vendors. In addition, many of the products purchased (specialty beer, liquor, etc.) went unsold. Regardless, those that attended enjoyed the concerts. The sound and lighting worked well for a stadium size show that was put inside a convention center venue.

4.6 FLEET SERVICES

Fleet Services provided additional support and extended service hours to support all City departments involved in the Austin Grand Prix. Fleet Service Centers expanded operational hours using partial staffing and on-call resources. Fleet also coordinated with PWD Street and Bridge Operations to stage eight additional sweepers to support ARR operations in the Central Business District. A fuel truck was on stand-by during the Austin Grand Prix weekend. Although extending service hours for the Fleet Service Centers created additional costs, the employees were able to continue normal operations when not supporting specific event requests.

4.7 AUSTIN/TRAVIS COUNTY HEALTH AND HUMAN SERVICES DEPARTMENT (HHSD)

HHSD believes that due to extensive planning and coordination with multiple City departments over six months, the Austin Grand Prix presented no major issues. Throughout the entire event, only one vendor without a permit was addressed. The Environmental Health Services Division (EHSD) successfully completed multiple temporary food and mobile food vendor inspections at the COTA facility and throughout the City. Issues presented with the temporary food areas included but were not limited to inadequate hand wash stations and lack of permit postings. The lack of permit postings significantly increased inspection times, and inspectors were at times unable to adequately identify which booth they were inspecting on their inspection reports. The larger, fixed buildings presented problems with improper wastewater disposal at the COTA facility.

The cooler temperatures allowed HHSD staff to work for longer periods of time without rest; however, the great distance between food booths throughout the COTA facility presented a limitation to the number of food inspections. HHSD staff working with PACE downtown and those patrolling FM 812 encountered minimal problems.

In total, HHSD conducted 36 inspections at the downtown Fan Fest and 228 inspections at the COTA facility. Additionally, HHSD issued 208 permits during the Austin Grand Prix.

4.8 COMMUNICATIONS AND TECHNOLOGY MANAGEMENT (CTM)

CTM participated in the planning leading up to the Austin Grand Prix. Staff from CTM Wireless Communications Services Division (WCSD) served as the Communications Leaders for the event and worked at the Area Command during the Austin Grand Prix weekend. Additionally, a WCSD radio technician was on-hand at the COTA facility during the race weekend to provide on-site radio repair as needed. CTM Geospatial Information Systems (GIS) staff provided mapping support to Area Command, and CTM technical support staff provided on-site support as well. And, CTM executive staff and managers were at Area Command to provide additional coordination and technical assistance for departments.

4.9 CODE COMPLIANCE

The City of Austin Code Compliance Department (CCD) had the primary responsibility for the setup and operations of the Public Assembly Code Enforcement (PACE) team during the Austin Grand Prix weekend. CCD increased staffing levels and reassigned personnel to meet the needs of the PACE team and assignments. CCD also utilized existing equipment whenever possible in an attempt to minimize costs.

A PACE command post was setup at the intersection of Fourth Street and Red River which included a mobile 10' x 45' office, dedicated wireless network, dedicated PACE dispatcher, direct land line, and central meeting area for PACE field staff. Four PACE teams were active from Thursday, November 15, 2012 through Saturday, November 17, 2012, and total team members ranged from 18 on Thursday to 25 on Saturday. Each team included representation from five City departments: Austin Police Department, Austin Fire Department Fire Marshalls, Right-of-Way Officers, Health Inspectors, and Code Enforcement Officers. And, Code Compliance Assistant Division Managers remained on call 24/7 for emergency calls.

Arrangements were made with Austin 311 for complaints received outside of normal business hours to be routed to the PACE dispatcher located at the PACE command post. This arrangement allowed the PACE team to quickly respond to complaints in addition to conducting proactive inspections.

Over the Austin Grand Prix weekend, the PACE teams patrolled the Austin area to monitor and respond to public safety concerns. The teams conducted 63 individual site inspections for potential code violations. 49 of the 63 inspections were related to F1 USGP activities. The week prior to the race weekend, four (4) Code Compliance Officers were assigned to patrol Austin to look for unpermitted events and safety violations.

In addition to F1 USGP-related activities, the PACE team also conducted inspections at University of Texas fraternity events and responded to two large tenant occupied fires at a fourplex and an apartment complex.

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5.0 Partner Agencies

5.1 TRAVIS COUNTY SHERIFF'S OFFICE (TCSO)

TCSO shared the following perceptions related to their experience.

Traffic Management:

In addition to local law enforcement agencies, traffic engineers, and traffic control organizations involved in the traffic control plan, TCSO assigned 26 officers to 50 traffic points in order to expedite traffic flow. The Texas Department of Public Safety (DPS) provided a command trailer, which was shared by multiple law enforcement agencies as a traffic command post and was set up on the parking lot at Popham Elementary in close proximity to the COTA facility and traffic routes. The Del Valle Independent School District (DVISD) issued a school holiday on Friday, November 16th to reduce the number of school buses in the area, which improved traffic flow and removed a component that would have been an issue otherwise.

Ingress traffic flow went well all three days of the event with the exception of occasional congestion as spectators stopped to ask questions. There were issues related to entrepreneurial/pop-up parking lots surrounding the COTA facility which caused pedestrian activity along the roadways. Pedestrians walking along the rights-of-way were warned not to do so, but no citations were issued. Although shuttle operations worked well for the most part, some issues were identified for correction including parking lot signage and locations of entrances/exits.

While leaving the site, spectators became confused and queuing became an issue at times requiring the need for additional staff to prevent driver frustration. The primary issues relating to egress involved the private vehicles parking at the track. Some roads were overly crowded while other available routes were underutilized. Other issues involved inconsistency in setting up traffic cones, signs, and other logistical needs on the part of the contract traffic device company.

Driver traffic patterns for accessing the Expo Center were not consistent over all three days requiring the shifting of traffic control to efficiently manage the flow. Additional signage was also needed to assist drivers parking at the Expo Center. The intersection of Loyola and FM 3177 became the most congested intersection on that route. In addition, some bus drivers were unfamiliar with the traffic route and had to be redirected by law enforcement officers.

Contraflow generally worked well with adjustments to start and end times being made jointly between law enforcement and traffic engineering groups, however, adjustments for future F1 USGP races may be required based on the lessons learned and venue design. Some last minute requests for traffic escorts posed logistical and coordination challenges.

Overall, Travis County agreed that the Austin Grand Prix was very successful. No major issues occurred, and the issues that did arise were mostly invisible and did not overly impact the attending public. The time and effort spent planning clearly paid off at the time of delivery. Most areas for improvement include only minor changes to original plans.

The following table summarizes TCSO's overall traffic management experience and the daily concerns and adjustments that occurred over the three-day F1 USGP.

Figure 8: TCSO Traffic Management Experience

	FRIDAY, NOVEMBER 16 TH		SATURDAY, NOVEMBER 17 TH		SUNDAY, NOVEMBER 18 TH
•	Traffic Staging Area operational at 5:00am; all units in place by 6:00am	•	Traffic Staging Area operational at 5:00am; all units in place by 6:00am	•	Traffic Staging Area operational at 5:00am; all units in place by 6:00am
•	Expo Center needed more parking staff	•	Contraflow started at 2:45pm Last minute request for escort	•	Expo Center gates were not open at 6:00am
•	Gate #2/Expo Center needed traffic control	•	posed a logistical challenge Gate #2 at Expo was added as	•	All traffic flowed to the Expo Center and the event with
•	APD assisted with traffic control at Loyola Lane & FM	•	traffic control point Motorcycle officers increased	•	minimal delays Contraflow started at 1:00pm
	3177	•	from 6 to 8	•	Last minute escorts caused a
•	All traffic points had vehicles stopping asking for direction	•	There were early backups on FM 969 and FM 3177		reduction of Motor Units by 50%
•	Freelance parking caused pedestrian traffic on FM 812	•	Protesters at SH 130 and FM 812 on grass area	•	The race ended shortly before 2:00pm
•	Contraflow started too soon (noon); contraflow reset for 3:00pm			•	Elroy Road by parking lots (L, M, N, and P) was congested and required additional
•	Not enough one-way signs on				personnel All roadways surrounding the
•	McAngus Travis County Emergency Order did not cover pedestrian traffic on FM 812			•	venue cleared in 2 hours and 15 minutes
•	Slow getting traffic control signs and cones in place				
•	Needed to check credentials at Emma Browning and Burleson to allow for better flow at SH 130 and Elroy Road				
•	Parking Lot Q needed more parking personnel				
•	The parking lot on Kellam Road was used for performers parking which created problems during contraflow				
•	Traffic flow was steady throughout the day with minor delays				
•	Adjustments were made and contingency plans were prepared for Saturday				

Below are TCSO recommendations for traffic management for the 2013 F1 USGP.

Figure 9: Travis County Sheriff's Office Recommendations for Traffic Management

RECOMMENDATIONS

- Follow original operations plan
- Start the planning/hiring process at least 6 months out
- 6:00am to 6:00pm for traffic points other than
 Expo Center
- Expo Center open from 5:30am to 7:00pm
- Two helicopter flights per day from Traffic Command post
- Seek Friday Del Valle ISD holiday
- Use Popham Elementary as Traffic Command post
- Reduce traffic control points
- Use same radio channel assignments
- Add additional personnel to Lots L, M, N, and P
- Add Gate #2 traffic control at Expo Center

- Add FM 3177/Loyola Lane traffic control at Expo Center
- Add back up motorcycle units
- Forecast VIP/Special Escorts prior to event
- Post signs along FM 812 Eastbound from Elroy @ FM 812 and direct traffic into Austin via Peterson Road to SH 130 (for Lots L, M, N, and P)
- Add entry to parking Lot L or M or both
- Address pedestrian traffic on FM 812
- Reverse contraflow on Friday/Saturday at 2:45pm and Sunday at 1:00pm
- Increase parking staff at Expo Center (minimum of 30-40)
- All signs, cones, etc. should be in place by 6:00am
- Designate COTA helicopter as primary law enforcement helicopter for the event with the FAA

Interior Security:

TCSO provided interior security in an off-duty capacity and utilized several outside agencies ranging from federal, state, county, city and other regional partners. The crowds were large but well behaved. No major issues or injuries occurred. Some issues that were encountered involved the difficulty in briefing of personnel due to the sheer volume of officers and lack of an indoor briefing facility, after-hours protection of property, confusion regarding access to secure areas, spectators congregating on pedestrian bridge to watch race, time required to respond to incidents because of the size of the COTA facility, crowded conditions, non-credentialed officers on site, and volume and markings on all-terrain vehicles (ATV's).

Logistics:

TCSO assessed the logistical needs for this event from a public safety perspective and offered the following comments:

- The triple wide trailer used by COTA as its Command Center was adequate, but a permanent Command Center is needed that is fully equipped with projectors/screens, designated area for video and telephone conferences, and a public address system.
- Additional lighting is needed for the base camp area.

- There was a mixture of rental/private ATV's and similar-type carts that did not have proper credentialing which created a potential for security concerns.
- Temporary generators worked well, but should not be considered a permanent solution.
- Dust abatement is needed for parking lots and near helicopter landing pads.
- Internal shuttles require improvement.
- There were support trailers calling for fuel and water during the event; this should occur at night or off times with dedicated service providers available.
- Social media was a huge challenge. Monitoring became overwhelming and dealing with independent local social media posts from agencies not participating in the JIC had the potential for mixed-messaging.

Travis County road and bridge engineers have suggested the following capital improvements for the area to support future Grands Prix.

Figure 10: Travis County Recommendations for Capital Improvements Near the COTA Facility

RECOMMENDATIONS

- Add pedestrian and bicycle infrastructure on FM 812 near the COTA facility
- Add pedestrian and bicycle infrastructure on Elroy Road (from McAngus to COTA Boulevard)
 and the east side of Kellam Road
- Repave and restripe Elroy Road from FM 973 to McAngus Road to allow for bicycle lanes
- Make improvements to the intersection of SH 130 and FM 812 to allow for more pavement and capacity through that intersection with contraflow operations in mind
- Widen Elroy Road as it approaches FM 812 to allow for a southbound right turn lane
- Make improvements to the intersection of the signalized intersection of Ross Road and Pearce
 Lane to allow for transition of the end of contraflow in order to reduce the limits of contraflow along Pearce Lane (e.g. Kellam Road to Ross Road)

- Make improvements to the Exposition Center to allow for improved shuttle operations, parking, and future camping
 - Possible long-range improvements in anticipation of future development would include the following:
 - Widen Elroy Road from McAngus to COTA Boulevard from 2 lanes to 3 lanes with bicycle lanes
 - Pursue "Maha Loop" from FM 812 to SH 71 as listed in the 2035 financially-constrained plan
 Widen FM 812 by two additional lanes from US 183 to Elroy Road
 - Remove the "S" curve on FM 812 near FM 973
 - Widen Pearce Lane from 2 to 3 lanes with bicycle lanes from FM 973 to Kellam Road

5.2 CAPITAL METRO

Capital Metro extended its rail and bus service to accommodate the thousands of visitors that needed to move around the City. Ridership on MetroRail, which ran extended service on Saturday, and for the first time ever, service on Sunday, surged during the Austin Grand Prix weekend. Extra trains and buses were put into service to handle overflow crowds at some rail stations ensuring a ride for anyone who wanted to get back and forth from the downtown area.

The free Downtown Loop circulator bus was very popular and had especially heavy ridership before and after each race day as well as during evening festivities in the downtown core. The MetroAirport service ran at 15-minute intervals between the airport and downtown from November 15th-19th. The Austin Convention and Visitors Bureau, Austin Hotel and Lodging Association, Community Impact Newspaper, Austin Convention Center, New Flyer, and Herzog



sponsored a large part of the additional cost related to expanded service. In addition to the expanded service efforts, COTA contracted with Capital Metro for the provision of 75 of the 450 buses for shuttle service on Saturday and Sunday, which were paid by COTA.

Capital Metro recruited over 100 volunteers to assist at rail platforms, bus stops, and around the downtown shuttle site during the weekend. The volunteers included many Capital Metro staff, Metro Ambassador volunteers, a Capital Metro board member and representatives from Capital Metro contractors LeFleur, First Transit, and McDonald Transit. Some volunteers worked late into the night on rail platforms and other areas to ensure people got back home safely.

Capital Metro also provided extensive outreach and customer service via social media answering questions and providing up-to-the-minute service updates or arrivals/departures of buses and trains. Another aspect of Capital Metro's mobility planning included a demonstration of its first mobile ticketing app. The mobile app provides access to maps, schedules and detours, as well as the ability to buy fares and use smartphones as transit passes. Highlights of Capital Metro activity are as follows:

MetroRail

- Friday- 67% increase in regular ridership (5,500 vs. 3,300 trips)
- Saturday 435% increase in ridership (6,300 vs. 1,200 trips) becoming the second highest Saturday recorded since March 19, 2012 when 7,300 trips occurred during South-by-Southwest
- Sunday 1,900 trips

Fixed Bus Routes

- F1 USGP 3-day weekend topped ACL weekend by 5.8%
- MetroAirport increased overall ridership by 23% over typical 3-day weekend
 - Over 3,300 ridership
 - 26% increase on Friday
 - 34% increase on Saturday

Downtown Loop

- Estimated 8,700 ridership over three days
- Six circulator buses traveled a combined 1,600 miles over the Austin Grand Prix weekend on their three-mile loop around downtown Austin

Other

- Overall website traffic increased 55% from the previous weekend (157,000 visits vs. 243,000 visits)
- Over 25,000 people visited the special F1 section on the Capital Metro website
- The Capital Metro website's trip planner saw a 30% increase in use
- Volunteers handed out 15,000 Capital Metro maps and 6,000 City brochures November 16th-18th
- The GO Line experienced a 19% increase in call volume from November 15th-19th
- Mobile ticketing application was downloaded approximately 4,000 times between October 28th and November 21st

5.3 COTA RECYCLING PROGRAM

On February 18, 2013, COTA released the following information regarding the success of their recycling program. Excerpts from the report are as follows:

- Over the three-day Grand Prix event, COTA was able to divert 19.8% of the total waste generated through composting and recycling programs and by donating surplus food items to a local nonprofit agency.
- The total weight of diverted materials is equal to 47 Formula 1 racecars.
- In one area of the 350-acre facility, where both recycling programs and a pilot composting program were in effect, Grand Prix fans and vendors collectively diverted 64% of the waste generated in their section that otherwise may have gone to local landfills.
- The commitment to resource recovery began by offering containers to all on-site food vendors, caterers and food trailers to capture organic waste generated at the time food was prepared and before it was served at the racetrack. That organic material was taken to Texas Disposal Systems (TDS) facilities in Creedmoor, Texas, where it was broken down into consumer-grade compost to be sold at TDS' Garden-Ville garden centers.



- COTA was also able to divert excess food that was not sold or used during the Formula 1 event through a food rescue program. In total, Sodexo donated 4.7 tons of food to Capital Area Food Bank.
- COTA Diversion Program by the Numbers:
 - 162.3 tons of total waste was collected at the COTA facility during the three-day event
 - An additional 4.7 tons of food was rescued and sent to the Capital Area Food Bank
 - Combined, on-site waste plus food rescue amounted to 167.0 tons of materials diverted as follows:
 - 134.0 tons went to the landfill (80.2 percent)
 - 24.3 tons were recycled (14.6 percent)
 - 4.0 tons were composted (2.4 percent)
 - 4.7 tons of surplus food was rescued (2.8 percent)
 - 19.8% of potential waste product was recovered and diverted from the landfill

COTA reported that food and beverage vendors used recyclable or compostable/biodegradable cups and dishes with the exception for items that could be washed and reused, such as plates made of recycled glass, silverware, and the collectible souvenir cups that were available for purchase and are not intended for disposal. Non-bleached paper napkins were made from 60%, post-consumer recycled content. [This page left blank intentionally.]

6.0 Conclusion

The F1 USGP marked Austin's first event of this magnitude, and it brought unfamiliar challenges and a long list of "unknowns". As had been communicated throughout the planning process and documented in this report, the City of Austin was well prepared and overly prepared, in some cases. Although City departments used measures to limit the overtime costs to the City, a large-scale event such as the F1 USGP requires appropriate staffing levels to respond to unforeseen circumstances.

The experience gained by the City and its partners will allow all agencies to refine planning processes and staffing levels for future Grands Prix. However, City departments will always remain committed to being fully prepared to address any contingency necessary in order to ensure public safety and well being of residents and visitors alike.

Although much of the "heavy lifting" with regard to planning was accomplished during the 2012 planning cycle, continued planning and coordination is necessary to address nuances that will be unique to each future Grand Prix. As an example, from news accounts, it appears that the 2013 F1 USGP will overlap with a UT football game played in Austin against Oklahoma State University. If either of the event dates do not change, it is likely that State parking garages used on Saturday will not be available for the downtown shuttle; that Austin hotel occupancy will be at capacity forcing more visitors to drive in to the city from outside hotels; and, the transportation plan will need to



be modified to account for the simultaneous occurrence of these two large events.

A single point of contact should continue to be assigned, not only for future Grands Prix, but also for other large-scale events. Most recently, in February 2013, this was done for the 2013 South-by-Southwest Festival. Because the two most critical components involve Public Safety and Traffic/Transportation, a representative from either of these two areas should be considered as the single point of contact.

Additionally, City department staffing levels and budgets continue to be stressed with the growth of existing large-scale events and will be further stretched with the advent of new events associated with the COTA facility. The City departments involved in the planning and support of the F1 USGP are extremely proud and relieved that the event was triumphant.

City efforts paid off with the added recognition of what can be accomplished through concerted effort with partner agencies. COTA, Travis County, Capital Metro, regional partners, and every level of State and Federal government agencies jointly share the credit for success. Travis County is to be commended for their leadership and management of operations at the COTA facility. The fortitude, cooperation, and willingness of all agencies to go the extra mile to ensure success were phenomenal and greatly appreciated. A critical evaluation granted with 20/20 hindsight tends to identify and perhaps magnify areas needed for improvement. However, overall, the inaugural F1 USGP weekend should be considered a great success. Austin frequently ranks among the "Best Places" to do many things; someday "Best Place to Attend Racing Events" may be added to this list.

The final pages of this report present perspectives from various City departments as to "What Worked Well" and "Recommendations for Improvement."

The last page of this report is a compendium of enhancements to operations that can be applied to other large-scale events.

Figure 11: Perspective from Joint City, Travis County, and COTA After Action Review

_	gure 11: Perspective from Joint City, Travis Cou	
V	VHAT WORKED WELL	RECOMMENDATIONS FOR IMPROVEMENT
Pla	nning/Communications	Planning/Communications
•	Situation reports and incident briefings	Ensure PIO radios are programmed correctly
•	Helicopter video feeds from APD and DPS aircraft	• Schedule conference calls so they don't conflict with
•	Regional traffic management at Area Command	other Command post briefings or meetings
•	Video monitoring of shuttle operations	Improve communications, including video, between
•	Vidyo - visual communication technology between	Area Command and all incident command posts
	Downtown, COTA and Area Command	Improve access to traffic signal cameras
•	Pre-incident bio-surveillance planning	Allow events to automatically refresh in Web EOC
•	Cross collaboration between all agencies	• Allow events posted to the statewide COTA board to automatically post to the F1 - COTA events board
•	Early identification of key players	Area Command Operations/Facilities/Equipment
•	Tracking of overtime costs	Establish three (3) eight (8) hours shifts in the EOC
•	Downtown circulator bus route	
•	GIS ERT map request form was pre-made and worked	all incident command posts
	well Level of advanced planning	• Allow Web EOC to be used for sign-in at the EOC
•	Face-to-face coordination at Area Command	Make phone lists for the EOC available on Web EOC
•	Leadership	• Assist with the development of a special events SOP
	ea Command Operations/Facilities/Equipment	Increase ICS training for City personnel serving in
•	The use of the ICS model	Logistics
•	Web EOC allowed hospitals to monitor activities	Public Messaging
	throughout the weekend	Post real-time events and status on social media
•	On-site technical support for Web EOC and briefings	Determine placement of JIC in Room 317 vs. Room
	on how to use equipment at the EOC	320B based on the event
•	Incident Command	Improve communications with the state SOC
•	On-site CTM support	Clarify when to post social media updates on Web EOC
•	Viewing non-significant events per department	Other
•	Having a JIC in one room worked well for	Award a certificate of appreciation from the
	communication flow	Mayor/County Judge/City Manager to those who
•	Presence of National Weather Service	worked this event
•	CERT Volunteers	
	<u>blic Messaging</u>	
•	Self-combined JIC and activating the JIC prior to activating the EOC	
•	PIO's using radios, PIO interaction on Web EOC	
	ATD pamphlet, and PIO monitoring of social media	
	Radio communications from the COTA facility	
•	Establishing the JIC and mandatory participation of	
•	all PIO's Having an Austin 311 representative in the JIC	
-	having an Austin of Frepresentative in the site	

• Posting important phone numbers on the whiteboard in the JIC

Figure 12: Perspective from Office of Homeland Security and Emergency Management

WHAT WORKED WELL	RECOMMENDATIONS FOR IMPROVEMENT
 The Incident Command System model City, Travis County, and State face-to-face coordination at Area Command Regional Traffic Management Video feeds from APD and DPS helicopter-mounted cameras The Greater Austin-Travis County Regional Radio System 	 Conference calls among Command posts need to be better-timed to ensure that they do not conflict with internal briefings or calls Review of staffing rotation as some agencies rotated staff frequently, which provided a challenge to maintain operational continuity Systematic review of the appropriate operational structure and staffing for each major event at the COTA site Establishment of an expanded Command post facility at or near the COTA site to facilitate better response to emergencies that are near the track but not on COTA property A shared, well-designed, and permanent helicopter video system for daily traffic management and emergency response management

Figure 13: Perspective from Austin Fire Department

V	VHAT WORKED WELL	F	RECOMMENDATIONS FOR IMPROVEMENT
•	Shuttle transport ran well	•	Continue with pre-planning for future events
•	Pre-event planning with ESD 11 Visits and contacts with other cities to research	•	Determine the MDC capacity the CAD system can manage at any given time
	how large-scale events impacted their fire departments	•	The staffing level for the AFD Special Events section needs to be increased
•	The ICS model was well-planned, and there was a fully staffed command operation	•	A demand engine company is probably not necessary
•	Most issues were managed at the appropriate command post level	•	Command post staffing should remain the same Command post staffing should be for three
•	The AFD Communications Plan worked well		eight-hour shifts per 24-hour period and not two twelve-hour shifts

Figure 14: Perspective from Austin Police Department

WHAT WORKED WELL	RECOMMENDATIONS FOR IMPROVEMENT
 Placement of APD personnel for traffic and pedestrian control Queuing design for the downtown shuttle for the majority of the three day period Coordination and information flow between COTA and the Area Command Traffic management and coordination Availability of APD resources Incident Command System Communications plan Planning and preparation 	 APD management of downtown shuttle bus area intersections Increase Emergency Planning and Response staff at APD Review scheduling for Area Command and Central Command assignments for APD Commanders Review personnel requirements targeting a smaller activation with standby resources available, if needed Restrict alternate scheduling to coincide with actual event rather than the full week Resolve minor issues related to the ICS and increase Web EOC training Improve APD departmental communication and coordination of resources Explore the possibility of using APD overtime funds to eliminate the major impact to productivity for all the adjusted work hours during this inaugural year Better utilize the SharePoint site for dissemination of final plans and information related to the event Review capacity for the CAD MDC structure Increase staffing for AFD Special Events unit to handle the large number of permits and inspections Reconsider the activation of a demand engine company Change command post staffing from 12-hour shifts to 8-hour shifts Review need for additional staffing at Communications and ARFF Utilize more APD translators at the downtown shuttle location

Figure 15: Perspective from Travis County Sheriff's Office

WHAT WORKED WELL	RECOMMENDATIONS FOR IMPROVEMENT
Planning and preparation	Review staffing levels
 Cross coordination across departments/ jurisdictions Technology 	 Improve credentialing process and define process to handle non-credentialed or non- assigned law enforcement officer on premises
 Cameras mounted on the observation tower Web EOC 	 Improve ICS process/procedures, such as resource tracking, delegation of duties
 Helicopter video feeds Vidyo video conferencing system 	 Develop improved plan for pedestrians on roadway/entrepreneurial parking
Incident Command System	 Improve security/organization at bus depots
Dignitary protection	Review signage requirements
	 Adjust contraflow usage and times for optimal results
	Increase parking staff at Expo Center
	 Review security requirements and develop job descriptions
	 Proper definition of dignitary or VIP designation and procedures involved
	 Review usage of ATV-type vehicles and improve signage/credentialing process
	• Clarify roles of law enforcement, security staff,

Figure 16: Perspective from Austin Transportation Department Office of Special Events

WHAT WORKED WELL	RECOMMENDATIONS FOR IMPROVEMENT
Planning and preparation	Downtown Fan Fest
MapsTransportation pamphlet	• Ensure all contractor information is available to City staff to remediate pop-up issues
	 Revisit days/hours of operation for downtown festival
	 Improve control/coordination of special event subcontractors
	 Revise and formalize Special Event permit procedures
	 Limit or consolidate the number of Fan Fest activities into a cohesive footprint

and risk management staff

Figure 17: Perspective from Austin Transportation Department

WHAT WORKED WELL	RECOMMENDATIONS FOR IMPROVEMENT
 Advanced planning Cross coordination with various City departments and jurisdictions 	 Field complaints through Austin 311 rather than the EOC Continue to base staffing levels on expected turnout Plan for events to be held at the track in 2013 which will be within the City limits; this may impact street sweeping and litter control closer to the track site Possibly eliminate the overnight shift at the EOC Possibly eliminate staffing needed at the EOC after the Sunday race Engage Capitol Metro, UT, and the State to clarify and cement responsibilities for trash container maintenance Finalize amendments to the Special Events Ordinance, including clarifying deadlines for Temporary Use Permit applications Obtain and utilize more utility vehicles for ARR crews to improve access to closed off areas Evaluate setting up kiosks for trash, recycling and organics for future events Re-visit how ARR employees are selected to work events and how shifts are assigned

Figure 18: Perspective from Austin Resource Recovery

Figure 19: Perspective from Austin Water Utility

WHAT WORKED WELL F	RECOMMENDATIONS FOR IMPROVEMENT
 Planning and preparation Coordination across departments and jurisdictions 	Investigate the potential for charging waste transporters an after-hour fee Investigate the feasibility of having COTA build a hauled waste disposal facility at the track Review staff requirements to reduce overtime and under-utilization of crew Identify back-up septic receiving stations Improve communication with the Pipeline on- call crew, COTA and the septic haulers. Inspect infrastructure that connects to AWU systems and secure manholes immediately prior to large-scale event Determine the feasibility of allowing utility vehicles to use emergency traffic lanes Prohibit construction on transmission mains near the event immediately prior to an event

Figure	20:	Perspective	from	Austin	Convention	and	Visitors Bure	au
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WHAT WORKED WELL	RECOMMENDATIONS FOR IMPROVEMENT
 media coverage Beautiful facility, track design and versatility Transit plan was well executed; shuttle ran smoothly Volunteers were plentiful, friendly and well trained to offer Texas hospitality Fan Fest seemed well-attended and looked great FanVision was very popular especially among VIP guests Information/welcome centers at hotels were well received and utilized Ease of access to the track for those with parking passes Hospitality buildings were great with good service Nice clean restrooms Literature was readily available and helpful Turn 1 suite positioning offered one of the best perspectives 	 Consider a major visitor information kiosk at the track with maps, attraction and restaurant information Improve the collaboration and cooperation for all information provided to visitors; the multiple brochures, maps or apps/tools from various sources with varying levels of information proved confusing for some visitors Improve cell phone coverage at the track; making timely postings to social media accounts was difficult Provide additional training for out of state shuttle/sedan drivers perhaps including GPS/maps/dry run/street closure information Improve information for transportation of disabled guests and improve signage Add shuttle for South cluster hotels Create a bus only lane for shuttles/mass trans lot Increase staffing at COTA call center during peak transit hours and ensure call center has the most updated information Suggest hotels consider additional services - such as shuttle from outlying hotels to shuttle drop locations Increase staffing of hotel welcome/info center for peak hours (very early mornings and post-race)

Figure 21: Enhancements to Operations Used During the Austin Grand Prix That Can be Applied to Future Large-Scale Events

Incident Command System modelHSEM as the lead and all City Departments4Bluetooth readers for traffic monitoringATD6Pan-Tilt-Zoom cameras for traffic monitoringATD, APD7Downtown and Expo Center shuttle busesATD, APD7Portable microphones to monitor helicoptersABIA8Single point of contact for large-scale eventsTransportation or Public Safety10Austin 311 special event service requestAustin 31110Pre-event business surveyEGRSO13Business awareness campaignEGRSO14Business preparedness workshopsEGRSO14Video feeds from helicopter-mounted camerasATD, APD, DPS21Owntown parking garage mapsATD-OSE23Downtown transportation pocket guideATD-OSE23Downtown transportation pocket guideATD-OSE23Downtown transportation pocket guideABIA25ABIA Fourth Security CheckpointABIA26ABIA Fourth Security CheckpointABIA25ABIA Fourth Security CheckpointABIA26ABIA VolunteersABIA26ABIA VolunteersABIA26ABIA Fourth Security CheckpointABIA26ABIA Fourth Security CheckpointABIA26ABIA Fourth Security CheckpointABIA26ABIA Prior Permission Required SystemABIA26ABIA Prior Permission Required SystemABIA26ABIA VolunteersABIA26 <td< th=""><th>ENHANCEMENTS TO OPERATIONS</th><th>DEPARTMENT(S)</th><th>PAGE REFERENCE</th></td<>	ENHANCEMENTS TO OPERATIONS	DEPARTMENT(S)	PAGE REFERENCE
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	Capital Metro Downtown Loop	Capital Metro	48
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