

ATTACHMENT C

Economic Impact of the Arroyo Seco Music and Arts Festival on the City of Pasadena

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February 2016

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Executive Summary

Micronomics was asked to measure the economic impact on the City of Pasadena of a family-oriented music and arts festival (referred to in this report as the "Festival" or proposed "Project") that would take place at the Rose Bowl Stadium complex and parts of the Brookside Golf Course in June of each year. The proposed Festival would run for two days in the first year and three days thereafter.

It is assumed that recipients of this report have some general familiarity with the Festival concept. The report includes an Appendix which contains a summary of assumptions made in connection with the study and identifies the bases for those assumptions.

Based on my analysis, I have determined that during the first 20 years, this event would produce approximately \$385 million in overall economic benefits to Pasadena, including \$121 incremental spending by attendees, \$157 million incremental spending by event organizers, and additional indirect and induced benefits of approximately \$106 million. These figures are conservative and do not include additional benefits that could flow over time from exposure of a wide audience to the City of Pasadena and its cultural heritage. They also do not include local tax benefits from sales, occupancy, parking, etc.

Background

For purposes of this analysis,¹ the proposed Project includes a three-day music and arts festival with a likely capacity of up to 83,000 attendees daily, not including approximately 3,000 individuals who would be employed each year by the festival organizers and the Rose Bowl Operating Company (RBOC). It is anticipated that in the first year (likely June 2017), the event would be limited to a two-day, weekend Festival with approximately 40,000 attendees. Thereafter, the Festival would take place over three days, with attendance ramping up over five years to approximately 83,000 per day.

The expectation is that the annual Festival would include up to four music stages, a theatre performance stage, art displays, a limited number of carnival rides, concession stands for merchandise, food and beverage sales, and cultural programming representatives from Pasadena and the local community.

Each Festival would include site-preparation for two weeks leading up to the event. Post-event cleanup would occur within 24 hours after the event ended, and complete breakdown of event facilities would occur during the week following the event. Festival activities would take place from roughly noon until midnight each day of the Festival, with performances ending by 11pm.

¹ The Project as described herein is not intended to replicate the "worst case analysis" project description as contained in other analytical documents, most notably the environmental impact report. Instead, the description herein is framed for economic analysis purposes and sets out a conservative assumption of attendance and public exposure so that economic benefits are not overstated.

The Festival operator, Anschutz Entertainment Group (AEG) and its Goldenvoice subsidiary are among the world's leading sports and entertainment presenters. Among other things, AEG Live is the producer of the critically acclaimed Coachella Music & Arts Festival, the Stagecoach Country Music Festival in Indio, California and the New Orleans Jazz & Heritage Festival.

In preparing this report, Micronomics has relied on prior experience conducting economic impact studies for the Tournament of Roses and other iconic Los Angeles entities, including the Academy of Motion Picture Arts & Sciences (the Oscars), the Academy of Television Arts & Sciences (the Emmys), and The Recording Academy (the Grammys). We also conducted interviews with representatives of the Rose Bowl Operating Company and Goldenvoice.

Economic Impact of the Arroyo Seco Music and Arts Festival

A. Direct Spending by Attendees

Direct spending by event attendees and organizers will produce significant economic benefits for the city of Pasadena. These benefits include expenditures on food and beverages at the Festival as well as additional expenditures in Pasadena by some of the Festival attendees. Direct spending also is understood by economists to produce additional "indirect" spending by business beneficiaries, i.e. restaurants that add temporary staff or increase food purchases in anticipation of increased demand from consumers. Direct spending also produces "induced" benefits, i.e. increased spending by individuals and households that have benefited in some way from direct spending associated with an event. The concepts of indirect and induced spending are discussed further later in this report.

According to estimates provided by AEG and Goldenvoice, anticipated daily attendance in Year 1 of the Festival is 40,000, of which 38,000 are assumed to live in the Los Angeles metropolitan area and 2,000 (five percent of the total) are assumed to travel from out of town. Half of these out of town visitors are expected to stay in a hotel, the others with friends or family. These figures are conservative: capacity at the Rose Bowl for this event is greater than 80,000 and the percentage of attendees from out-of-town for major events at the Rose Bowl typically exceeds five percent.²

By Year 5, with growth in the Festival's reputation, both locally and nationally, daily attendance is expected to increase to 83,000, of which 25 percent will be overnight visitors. Each attendee is expected to spend approximately \$25 per day on food and beverages. This figure is conservative: attendees at the Rose Bowl game on New Year's Day spend approximately \$35 per day where the average attendee is present for five or six hours at the event at most. This compares with as much as 12 hours on site per day for Festival attendees. It is assumed that approximately 25 percent of these daily expenditures will go to vendors from Pasadena, another conservative assumption in that at festivals like Coachella, which is held in a more remote area than Pasadena, 70 percent of onsite expenditures went to local vendors. Finally, as with attendees of the Rose Bowl game and Tournament of Roses Parade, Festival attendees can be expected to engage in

² AEG and the RBOC intend to grow the Festival over time to the maximum capacity that makes financial sense, and could result in a Festival with a total of up to 93,000 attendees (including employees).

incremental spending outside the Festival grounds. We have included in this report that portion of these expenditures which will occur in Pasadena at local restaurants, galleries, hotels, etc.

Table 1A sets forth estimates of direct spending by attendees of the Arroyo Seco Music and Arts Festival during the first year. Total food and beverage expenditures at the Festival going to Pasadena vendors are approximately \$500,000 (Table 1A, Column 5). An additional \$1.1 million will be spent by attendees offsite from the Festival in Pasadena (Table 1B, Column 5). These figures reflect a conservative assumption that approximately 50 percent of the offsite expenditures on food, beverages and shopping will occur in Pasadena, with its numerous hotels, restaurants, grocery stores, museums, entertainment opportunities and shopping. I also have assumed that six percent of lodging and related expenditures in Year 1 will occur in Pasadena. This figure is expected to increase to 12 percent in Year 20.

Total benefits to Pasadena in connection with direct spending by attendees in Year 1 are approximately \$1.6 million. This figure represents the sum of spending going to Pasadena vendors at the Festival (\$500,000) and spending off site from the Festival which was incurred in Pasadena (\$1.1 million).

**Table 1A: Total Festival Food & Beverage Expenditures with Pasadena Vendors
Year 1 of Festival (Two Days)**

Attendee Category	No. of Attendees (People)	Per-person Food & Beverage Expenditures at Festival	Total Food & Beverage Expenditures at Festival	Food & Beverage Expenditures with Pasadena Vendors
			(2) x (3)	(4) x 25%
(1)	(2)	(3)	(4)	(5)
1. Day Visitors	38,000	\$ 50.00	\$ 1,900,000	\$ 475,000
2. Overnight Visitors (Hotel/Motel)	1,000	50.00	50,000	12,500
3. Overnight Visitors (Other Lodging)	1,000	50.00	50,000	12,500
4. Total	40,000		\$ 2,000,000	\$ 500,000

**Table 1B: Total Offsite Expenditures in Pasadena
Year 1 of Festival (Two Days)**

Attendee Category	No. of Attendees (People)	Per-Person Expenditures Outside the Festival	Total Expenditures Outside the Festival	Total Offsite Expenditures in Pasadena
			(2) x (3)	(4) x 25%
(1)	(2)	(3)	(4)	(5)
1. Day Visitors	38,000	\$ 74.06	\$ 2,814,280	\$ 934,316
2. Overnight Visitors (Hotel/Motel)	1,000	403.09	403,090	99,181
3. Overnight Visitors (Other Lodging)	1,000	99.52	99,520	34,658
4. Total	40,000		\$ 3,316,890	\$ 1,068,155

After Year 1, it is anticipated that the Festival will increase to three days in length. The number of daily attendees is expected to increase in Year 2 to approximately 55,000. Average per capita daily expenditures by Festival attendees are assumed to remain unchanged (\$25), but offsite expenditures on food, beverage and shopping purchases that wind up in Pasadena are expected to constitute 50 percent of the total. With respect to lodging and other purchases, six percent are assumed to wind up in Pasadena in Year 1. This figure increases gradually to 12 percent by Year 20. Total benefits to Pasadena in connection with direct spending by attendees in Year 2 are approximately \$3.4 million. These benefits are summarized in Tables 2A and 2B.

**Table 2A: Total Festival Food & Beverage Expenditures with Pasadena Vendors
Year 2 of Festival (Three Days)**

Attendee Category	No. of Attendees (People)	Per-person Food & Beverage Expenditures at Festival	Total Food & Beverage Expenditures at Festival (Dollars)	Total Festival Food & Beverage Expenditures with Pasadena Vendors
(1)	(2)	(3)	(4)	(5)
1. Day Visitors	49,500	\$ 75.00	\$ 3,712,500	\$ 928,125
2. Overnight Visitors (Hotel/Motel)	2,750	75.00	206,250	51,563
3. Overnight Visitors (Other Lodging)	2,750	75.00	206,250	51,563
4. Total	55,000		\$ 4,125,000	\$ 1,031,251

**Table 2B: Total Offsite Expenditures in Pasadena
Year 2 of Festival (Three Days)**

Attendee Category	No. of Attendees (People)	Per-Person Expenditures Outside the Festival	Total Expenditures Outside the Festival (Dollars)	Total Offsite Expenditures in Pasadena
(1)	(2)	(3)	(4)	(5)
1. Day Visitors	49,500	\$ 111.09	\$ 5,498,955	\$ 1,832,221
2. Overnight Visitors (Hotel/Motel)	2,750	537.45	1,477,988	366,288
3. Overnight Visitors (Other Lodging)	2,750	132.69	364,898	127,464
4. Total	55,000		\$ 7,341,841	\$ 2,325,973

Tables 3 through 5 contain similar information for the third, fourth and fifth years of the Festival. Total direct spending benefits to Pasadena in Year 3 will amount to \$4.5 million before adjusting for inflation. The non-adjusted figures for Years 4 and 5 are \$5.3 million and \$5.8 million respectively. After accounting for inflation, which is assumed to occur at a rate of one percent

per year, the respective totals for Years 3, 4, and 5 are \$4.6 million, \$5.5 million, and \$6.0 million. The sum of direct spending after inflation by Festival attendees in the first five years of the Project is approximately \$21.0 million.

**Table 3A: Total Festival Food & Beverage Expenditures with Pasadena Vendors
Year 3 of Festival**

Attendee Category	No. of Attendees	Per-person Food & Beverage Expenditures at Festival	Total Food & Beverage Expenditures at Festival	Total Festival Food & Beverage Expenditures with Pasadena Vendors
(1)	(2)	(3)	(2) x (3) (4)	(4) x 25% (5)
	(People)		(Dollars)	
1. Day Visitors	59,500	\$ 75.00	\$ 4,462,500	\$ 1,115,625
2. Overnight Visitors (Hotel/Motel)	5,250	75.00	393,750	98,438
3. Overnight Visitors (Other Lodging)	5,250	75.00	393,750	98,438
4. Total	70,000		\$ 5,250,000	\$ 1,312,501

**Table 3B: Total Offsite Expenditures in Pasadena
Year 3 of Festival (Three Days)**

Attendee Category	No. of Attendees	Per-Person Expenditures Outside the Festival	Total Expenditures Outside the Festival	Total Offsite Expenditures in Pasadena
(1)	(2)	(3)	(2) x (3) (4)	(5)
	(People)		(Dollars)	
1. Day Visitors	59,500	\$ 111.09	\$ 6,609,855	\$ 2,210,322
2. Overnight Visitors (Hotel/Motel)	5,250	537.45	2,821,613	704,287
3. Overnight Visitors (Other Lodging)	5,250	132.69	696,623	244,076
4. Total	70,000		\$ 10,128,091	\$ 3,158,685

**Table 4A: Total Food & Beverage Expenditures with Pasadena Vendors
Year 4 of Festival (Three Days)**

Attendee Category	No. of Attendees	Per-person Food & Beverage Expenditures at Festival	Total Food & Beverage Expenditures at Festival	Total Festival Food & Beverage Expenditures with Pasadena Vendors
	(People)		(Dollars)	
(1)	(2)	(3)	(2) x (3) (4)	(4) x 25% (5)
1. Day Visitors	64,000	\$ 75.00	\$ 4,800,000	\$ 1,200,000
2. Overnight Visitors (Hotel/Motel)	8,000	75.00	600,000	150,000
3. Overnight Visitors (Other Lodging)	8,000	75.00	600,000	150,000
4. Total	80,000		\$ 6,000,000	\$ 1,500,000

**Table 4B: Total Offsite Expenditures in Pasadena
Year 4 of Festival (3 Days)**

Attendee Category	No. of Attendees	Per-Person Expenditures Outside the Festival	Total Expenditures Outside the Festival	Total Offsite Expenditures in Pasadena
	(People)		(Dollars)	
(1)	(2)	(3)	(2) x (3) (4)	(5)
1. Day Visitors	64,000	\$ 111.09	\$ 7,109,760	\$ 2,386,046
2. Overnight Visitors (Hotel/Motel)	8,000	537.45	4,299,600	1,080,835
3. Overnight Visitors (Other Lodging)	8,000	132.69	1,061,520	373,045
4. Total	80,000		\$ 12,470,880	\$ 3,839,926

**Table 5A: Total Festival Food & Beverage Expenditures with Pasadena Vendors
Year 5 of Festival (Three Days)**

Attendee Category	No. of Attendees	Per-person Food & Beverage Expenditures at Festival	Total Food & Beverage Expenditures at Festival	Total Festival Food & Beverage Expenditures with Pasadena Vendors
	(People)		(Dollars)	
(1)	(2)	(3)	(2) x (3) (4)	(4) x 25% (5)
1. Day Visitors	62,250	\$ 75.00	\$ 4,668,750	\$ 1,167,188
2. Overnight Visitors (Hotel/Motel)	10,375	75.00	778,125	194,531
3. Overnight Visitors (Other Lodging)	10,375	75.00	778,125	194,531
4. Total	83,000		\$ 6,225,000	\$ 1,556,250

**Table 5B: Total Offsite Expenditures in Pasadena
Year 5 of Festival (3 Days)**

Attendee Category	No. of Attendees	Per-Person Expenditures Outside the Festival	Total Expenditures Outside the Festival	Total Offsite Expenditures in Pasadena
	(People)		(Dollars)	
(1)	(2)	(3)	(2) x (3) (4)	(5)
1. Day Visitors	62,250	\$ 111.09	\$ 6,915,353	\$ 2,329,125
2. Overnight Visitors (Hotel/Motel)	10,375	537.45	5,576,044	1,411,609
3. Overnight Visitors (Other Lodging)	10,375	132.69	1,376,638	485,246
4. Total	83,000		\$ 13,868,035	\$ 4,225,980

B. Direct Spending by Festival Organizers

In addition to the economic impact associated with spending by Festival attendees, the City of Pasadena also will benefit from expenditures incurred by the Goldenvoice and AEG, producers of the Project. These expenditures include rent paid to the City, onsite labor expenditures, incremental contributions by the event organizers to city services, and contributions by AEG and Goldenvoice to assist with Arroyo area improvements.

Table 6 sets forth a summary of direct spending by the event organizers after adjusting expenditures for onsite labor and city services for inflation, anticipated to occur at a rate of one percent per year. Current arrangements contemplate that the City of Pasadena would receive annual rent beginning at \$2 million in Year 1 and increasing to as much as \$8.5 million or more by Year 20. Other direct expenditures for the event organizers for on-site labor, city services and restoration fee contributions would bring total direct spending by the Project organizers over the

first five years to approximately \$26.0 million. Direct spending by the project organizers over the first 20 years of the Festival is approximately \$157 million.

Table 6: Direct Spending by Festival Organizers

Year	Rent	On-site Labor	City Services	Contribution to Restoration Fee	Total
(Dollars)					
	(1)	(2)	(3)	(4)	(5)
1	\$ 2,000,000	\$ 1,663,667	\$ 233,333	\$ 50,000	\$ 3,947,000
2	2,500,000	1,821,703	353,500	68,750	4,743,953
3	3,000,000	1,839,920	527,052	87,500	5,454,472
4	3,120,000	1,858,320	704,039	100,000	5,782,359
5	3,245,100	1,876,903	884,513	103,750	6,110,266
6	3,375,528	1,895,672	893,359	103,750	6,268,309
7	3,511,523	1,914,629	902,292	103,750	6,432,194
8	3,653,334	1,933,775	911,315	103,750	6,602,174
9	3,801,222	1,953,113	920,428	103,750	6,778,513
10	3,955,462	1,972,644	929,632	103,750	6,961,488
11	4,944,327	1,992,370	938,929	103,750	7,979,376
12	5,145,423	2,012,294	948,318	103,750	8,209,785
13	5,355,190	2,032,417	957,801	103,750	8,449,158
14	5,574,021	2,052,741	967,379	103,750	8,697,891
15	5,802,325	2,073,268	977,053	103,750	8,956,396
16	7,252,906	2,094,001	986,824	103,750	10,437,481
17	7,550,666	2,114,941	996,692	103,750	10,766,049
18	7,861,366	2,136,090	1,006,659	103,750	11,107,865
19	8,185,597	2,157,451	1,016,725	103,750	11,463,523
20	8,523,974	2,179,026	1,026,893	103,750	11,833,643
Total	\$ 98,357,964	\$ 39,574,945	\$ 17,082,736	\$ 1,966,250	\$ 156,981,895

C. Indirect and Induced Spending

Economists and others have long recognized that a given change in economic activity produces benefits in excess of the initial stimulus. These benefits, which often are referred to as “multiplier effects,” reflect secondary impacts and additional spending by beneficiaries of the initial stimulus. With respect to the Arroyo Seco Music and Arts Festival, these beneficiaries will include businesses, such as hotels and restaurants, which will increase spending on food and labor as expenditures by their customers increase. Beneficiaries also will include individual recipients of direct expenditures by Festival attendees and organizers. In the language of economic multipliers, expenditures by businesses receiving revenue from Festival attendees or organizers are referred to as “indirect” expenditures or benefits. Expenditures by individuals receiving income directly or indirectly from Project attendees or organizers are referred to as “induced” expenditures or benefits.

In the 1970s and 1980s, policymakers, academics and U.S. government representatives recognized the need to develop a tool to provide information on the total economic impacts on particular sectors or regions of the economy resulting from various changes or inputs. This tool ultimately became known as IMPLAN, an acronym for "impact analysis and planning." IMPLAN was developed originally at the University of Minnesota and has been in widespread use for decades. I have made use of the IMPLAN model to calculate the indirect and induced economic impacts associated with expenditures identified in Tables 1 through 6.

Table 7 sets forth a summary of direct, indirect and induced impacts on the City of Pasadena Total for Years 1 through 20. Figures shown in Columns 1, 2 and 3 of Table 7 represent direct spending by Festival attendees (Table 7, Column 1) and the Festival organizers (Table 7, Column 2). These figures are calculated by taking the expenditures shown in Tables 1 through 5 and adjusting for inflation of one percent per year, and adding in (inflation-adjusted) figures shown in Table 6. Figures shown in Columns 4 and 5 of Table 7 are derived by applying the IMPLAN model to the direct spending figures shown in Columns 1 and 2 in order to calculate indirect and induced spending.

According to figures shown in Table 7, the economic impact on the City of Pasadena associated with direct spending by Festival attendees is approximately \$122 million (Table 7, Column 1). The economic impact on Pasadena of direct spending by the event organizers is \$157 million, (Table 7, Column 2). Accordingly, the total economic impact on the City of Pasadena of direct spending by event attendees and organizers is approximately \$279 million (Table 7, Column 3). The total economic impact on the City of Pasadena, including indirect and induced impacts, is approximately \$385 million (Table 7, Column 6).

These figures are conservative in that they are likely to understate the ultimate impact on Pasadena should the festival become established in a way similar to other iconic events that occur annually in the Los Angeles Metropolitan area. This could produce additional benefits to local businesses in Pasadena throughout the year from individuals initially exposed to the area through the Festival.

Table 7: Summary of Economic Impact of Arroyo Seco Music and Arts Festival on Pasadena

Year	Direct Impact			Indirect Impact	Induced Impact	Total Economic Impact
	Spending by Attendees	Spending by Organizers	Total Direct Impact			
(Dollars)						
	(1)	(2)	(1)+(2) (3)	(4)	(5)	(3)+(4)+(5) (6)
1	\$ 1,568,154	\$ 3,947,000	\$ 5,515,154	\$ 1,674,983	\$ 1,132,179	\$ 8,322,316
2	3,390,796	4,743,953	8,134,749	2,255,163	1,576,294	11,966,206
3	4,561,056	5,454,472	10,015,528	2,636,524	1,862,605	14,514,657
4	5,501,731	5,782,359	11,284,090	2,827,931	2,015,856	16,127,877
5	6,017,011	6,110,266	12,127,277	2,943,159	2,101,325	17,171,761
6	6,097,862	6,268,309	12,366,171	2,946,836	2,102,049	17,415,056
7	6,179,728	6,432,194	12,611,922	2,951,120	2,103,154	17,666,196
8	6,262,621	6,602,174	12,864,795	2,956,024	2,104,645	17,925,464
9	6,346,554	6,778,513	13,125,067	2,961,559	2,106,533	18,183,159
10	6,431,540	6,961,488	13,393,028	2,967,739	2,108,823	18,469,590
11	6,517,591	7,979,376	14,496,967	3,205,779	2,256,914	19,959,660
12	6,604,720	8,209,785	14,814,505	3,217,685	2,262,803	20,294,993
13	6,692,939	8,449,158	15,142,097	3,230,380	2,269,187	20,641,664
14	6,782,263	8,697,891	15,480,154	3,243,681	2,276,076	21,000,111
15	6,872,703	8,956,396	15,829,099	3,302,761	2,315,851	21,447,711
16	6,964,274	10,437,481	17,401,755	3,675,356	2,553,604	23,630,715
17	7,056,990	10,766,049	17,823,039	3,747,136	2,602,243	24,172,418
18	7,150,863	11,107,865	18,258,728	3,821,045	2,652,271	24,732,044
19	7,245,908	11,463,523	18,709,431	3,897,157	2,703,738	25,310,326
20	7,342,139	11,833,643	19,175,782	3,975,548	2,756,688	25,908,018
Total	\$ 121,587,443	\$ 156,981,895	\$ 278,569,338	\$ 62,437,766	\$ 43,862,838	\$ 384,869,942

APPENDIX: ARROYO SECO MUSIC AND ARTS FESTIVAL
SUMMARY OF ASSUMPTIONS

General:

- Festival will occur annually for 20 years.
- Festival will run for two days in the first year and three days in all other years.

Attendee Spending:

- Number of attendees and percentage of overnight visitors will grow over the first five years of the Festival (AEG estimates):
 - Year 1: 40,000 attendees, 5% of whom will be overnight visitors.
 - Year 2: 55,000 attendees, 10% of whom will be overnight visitors.
 - Year 3: 70,000 attendees, 15% of whom will be overnight visitors.
 - Year 4: 80,000 attendees, 20% of whom will be overnight visitors.
 - Years 5 to 20: 83,000 attendees, 25% of whom will be overnight visitors.
- Each attendee is expected to spend \$25 per day in food and beverages at the Festival (AEG estimate). Of these expenditures, 25% are anticipated to go to Pasadena vendors (Information provided by Darryl Dunn, RBOC estimate).
- Assumptions regarding day visitors:
 - Attendees will engage in spending outside the event over the same number of days as the length of the festival (Micronomics assumption).
 - Attendee spending pattern will match spending patterns of day visitors to the Tournament of Roses, i.e. \$62.03 per day ("Volume & Spending Impacts, 2013 Tournament of Roses Parade and Bowl Attendees," Los Angeles Tourism & Convention Board, revised September 23, 2013 ("Tournament of Roses Survey Report"))).
- Assumptions regarding overnight visitors:
 - Approximately half of the overnight visitors will stay in a hotel or motel, while the other half will stay in other lodging. This is based on behavior of Tournament of Roses overnight visitors (Tournament of Roses Survey Report).
 - Overnight visitors will engage in spending outside the event over the same number of days as the length of the festival plus one additional day (Micronomics assumption).
 - The spending pattern of visitors staying in a hotel/motel will match the spending pattern of Tournament of Roses visitors who stayed in a hotel/motel, i.e. average

daily expenditures of \$159.36 based on total spending of \$525.90 over the course of average stays of 3.3 days (Tournament of Roses Survey Report).

- The spending pattern of visitors staying in other lodging will match the spending pattern of Tournament of Roses visitors who stayed in other lodging, i.e. average daily expenditures of \$58.17 based on total spending of \$290.86 over the course of average stays of 5 days (Tournament of Roses Survey Report).
- Only a portion of total expenditures by visitors outside the event (offsite spending) is assumed to take place in Pasadena:
 - The percentage of food, beverage, and shopping expenditures that occur in Pasadena is assumed to be 50% (Micronomics estimate).
 - The percentage of lodging and other expenditures that occur in Pasadena is assumed to be 6% in year 1 and increase each year until reaching 12% in year 20. This reflects an expectation that the number of hotel rooms in Pasadena will increase over time and the experience in Coachella (Micronomics estimates; *Goldenvoice, LLC Coachella Valley Concert Series Economic Impact Analysis (EIA)*, Development Management Group, Inc., October 11, 2012; Tournament of Roses Survey Report).
- An annual inflation rate of one percent is applied to all attendee spending in years 2 to 20.

Organizer Spending:

- Rent reflects the average annual minimum rent payable from AEG over the next 20 years (Information provided by Darryl Dunn, RBOC).
- Assumptions regarding labor costs:
 - There will be 14 days of preparation work before the Festival, and 7 days of work after the Festival (AEG estimate).
 - There will be 100 employees on first day of preparation, ramping up to a peak of about 3,000 during the Festival, and ramping down to 100 employees on the last day of work after the Festival (AEG estimate; *Rose Bowl Music and Arts Festival Initial Study*, May 8, 2015).
 - During the period of peak employment, labor costs are estimated to be \$350,000 per day, which works out to \$116.67 per employee; this figure is applied to the anticipated number of employees per day (AEG estimate).
 - The assumption is that 40 percent of organizer spending on labor will go to Pasadena residents (Information provided by Darryl Dunn, RBOC).
 - An annual inflation rate of one percent is applied to labor expenditures in years 2 to 20.
- Assumptions regarding spending on city services:

- AEG estimates that \$350,000 will be spent on city services for a “small” three-day event. This figure is used in year one, pro-rated to reflect the fact that the event will run for two days in the first year.
- AEG estimates that \$850,000 will be spent on a “large” three-day event. The assumption is that spending for city services will ramp up from year 1 to \$850,000 in year 5.
- An annual inflation rate of one percent is applied to city services expenditures in years 2 to 20.
- \$1.25 per attendee will be contributed by the project organizers to assist with Arroyo Seco area improvements (AEG estimate).

IMPLAN Study Area:

- The City of Pasadena is used by Micronomics as the study area for purposes of the IMPLAN model in connection with the calculation of indirect and induced spending.
- The U.S. Postal Service website lists all zip codes entirely or partially included in the City of Pasadena.
- All of these zip codes are included in the IMPLAN model except 91108, which exists mostly outside of Pasadena, and seven others that are not included in the IMPLAN software.
- There are 19 zip codes included in the IMPLAN model: 91101, 91102, 91103, 91104, 91105, 91106, 91107, 91109, 91110, 91114, 91115, 91116, 91117, 91118, 91121, 91124, 91125, 91182, and 91188.
- IMPLAN data specific to these zip codes were used to calculate indirect and induced expenditures.

About the Author

Roy Weinstein is an economist and Managing Director at Micronomics, an economic research and consulting firm based in Los Angeles, California. Mr. Weinstein has been involved with economic research and consulting since 1969. Among other things, he has been commissioned by the Tournament of Roses to determine the economic impact of the Rose Bowl Parade and Game on Los Angeles County. He also was asked by the Academy of Motion Picture Arts and Sciences to calculate the economic impact of the Oscars, and has been engaged to conduct similar studies for the Grammys, the Emmys, the NBA All Star Game, the X-Games, and the Special Olympics World Summer Games. Mr. Weinstein's areas of expertise include industrial organization, statistics, econometrics and the calculation of economic damages. He has published articles relating to economics in numerous professional journals and is a frequent speaker before professional association and trade groups. Mr. Weinstein received a Bachelor of Business Administration Degree *cum laude* with honors in economics from City College New York and a Master of Arts Degree in economics from the University of Chicago. He is the first recipient of the Career Achievement Award for professional success from the Business and Economics Alumni Society of the Baruch School at City College New York.

About Micronomics

Micronomics is an economic research and consulting firm located in Los Angeles, California. Founded in 1988, it specializes in the collection, tabulation and analysis of various types of economic, financial and statistical data. Areas of expertise include industrial organization, antitrust, the valuation of intellectual property and the calculation of economic damages. Clients include publicly and privately held businesses and government agencies. Industry experience includes sports and entertainment, banking and financial services, pharmaceuticals, telecommunications, and computer hardware and software.