Obstructed View:

What's Blocking New Yorkers from Getting Tickets





This report was a collaborative effort prepared by the Bureau of Internet and Technology and the Research Department, with special thanks to Assistant Attorneys General Jordan Adler, Noah Stein, Aaron Chase, and Lydia Reynolds; Director of Special Projects Vanessa Ip; Researcher John Ferrara; Director of Research and Analytics Lacey Keller; Bureau of Internet and Technology Chief Kathleen McGee; Chief Economist Guy Ben-Ishai; Senior Enforcement Counsel and Special Advisor Tim Wu; and Executive Deputy Attorney General Karla G. Sanchez.

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EXECUTIVE SUMMARY

The New York Attorney General ("NYAG") regularly receives complaints from New Yorkers frustrated by their inability to purchase tickets to concerts and other events that appear to sell out within moments of the tickets' release. These consumers wonder how the same tickets can then appear moments later on StubHub or another ticket resale site, available for resale at substantial markups. In response to these complaints, NYAG has been investigating the entire industry and the process by which event tickets are distributed – from the moment a venue is booked through the sale of tickets to the public. This Report outlines the findings of our investigation.

More than 15 years ago, NYAG issued a landmark report on what it called "New York's largely underground and unexamined ticket distribution system." The report announced that it was a system that provides "access to quality seating on the basis of bribes and corruption at the expense of fans."

Since that report was written broad changes in the technology of ticketing and an overhaul of New York's ticketing laws have completely transformed the landscape, in ways both good and bad. Following the repeal of New York's "anti-scalping laws" in 2007, the once underground ticket resale economy moved partially above ground. This change has produced some benefits: online marketplaces have replaced waiting in long lines, the growth of ticket resale platforms has sometimes made it easier to sell unwanted tickets, and the last minute-minded can attend shows without interacting with potentially dishonest street scalpers.

Yet many of the problems described in 1999 have persisted and, in some cases, have grown worse. Whereas in many areas of the economy the arrival of the Internet and online sales has yielded lower prices and greater transparency, event ticketing is the great exception. The complaints NYAG receives from consumers concerning ticketing commonly cite "price gouging," "scalping," "outrageous fees" and "immediate sell-outs." As one citizen wrote, in a typical complaint: "The average fan has no chance to buy tickets at face value ... this is a disgrace." Many performers voice similar frustrations.¹

The problem is not simply that demand for prime seats exceeds supply, especially for the most indemand events. Ticketing, to put it bluntly, is a



- Eric Church, referring to scalpers

fixed game. Consider, for example, that on December 8, 2014, when tickets first went on sale for a tour by the rock band U2, a single broker purchased 1,012 tickets to one show at Madison Square Garden in a single minute, despite the ticket vendor's claim of a "4 ticket

^{1.} See, e.g., Mark Savage, "Sir Elton John: Secondary ticket prices 'disgraceful," BBC News (Dec. 16, 2015), *available at* http://www. bbc.com/news/entertainment-arts-35091230; Patrick Doyle, "Eric Church on Scalpers, Bro-Country and Blake Shelton Scandal," Rolling Stone (June 11, 2014), *available at* http://www.rollingstone.com/music/news/eric-church-on-scalpers-bro-country-and-blake-shelton-scandal-20140611.

limit." By the end of that day, the same broker and one other had together amassed more than 15,000 tickets to U2's shows across North America.

Consider that brokers sometimes resell tickets at margins that are over 1,000% of face value. Consider further that added fees on tickets regularly reach over 21% of the face price of tickets and, in some extreme cases, are actually more than the price of the ticket. Even those who intend their events to be free, like Pope Francis, find their good intent defeated by those who resell tickets for hundreds or even thousands of dollars.

Findings

A. The General Public Loses Out on Tickets to Insiders and Brokers.

New Yorkers keep asking the same question: why is it so hard to buy a ticket at face value?

1. Holds & Pre-Sales Reduce the Number of Tickets Reserved for the General Public.

Our investigation found that the majority of tickets for the most popular concerts are not reserved for the general public at least in the first instance. Rather, before a member of the public can buy a single ticket for a major entertainment event, over half of the available tickets are either put on "hold" and reserved for a variety of industry insiders including the venues, artists or promoters, or are reserved for "pre-sale" events and made available to non-public groups, such as those who carry particular credit cards.

2. Brokers Use Insider Knowledge and Often Illegal Ticket Bots to Edge Out Fans.

When tickets are released, brokers buy up as many desirable tickets as possible and resell them at a markup, often earning individual brokerages millions of dollars per year. To ensure they get the tickets in volume, many brokers illegally rely on special software – known as Ticket Bots – to purchase tickets at high speeds. As the New York Times reported, Ticketmaster has estimated that "60 percent of the most desirable tickets for some shows" that are put up for sale are purchased by Bots.² Our research confirms that at least tens of thousands of tickets per year are being acquired using this illegal software.

Brokers then mark up the price of those tickets – by an estimated 49% on average, but sometimes by more than 1,000% – yielding easy profits. In at least one circumstance, a ticket was resold at 7,000% of face value. Finally, some brokers sell "speculative tickets," meaning they sell tickets that they do not have but expect to be able to purchase after locking in a buyer. Speculative tickets are a risk for consumers and also drive up prices even before tickets are released.

NYAG's investigation identified those brokers re-selling the most tickets for New York events. Nearly all were unlicensed, and several employed illegal Ticket Bots to buy tickets. A number of specific investigations and enforcement actions are in process.

^{2.} Ben Sisario, "Concert Industry Struggles With 'Bots' That Siphon Off Tickets," N.Y. Times (May 26, 2013), *available at* http://www.nytimes.com/2013/05/27/business/media/bots-that-siphon-off-tickets-frustrate-concert-promoters.html

B. High Fees for Unclear Purposes Raise Concerns.

Another common complaint concerns the unclear and unreasonable "service fees" added to the face value of tickets, which are generally set by venue operators and ticket vendors. New York law prohibits these parties from adding fees to the prices of tickets unless they are connected to the provision of a "special service" and are "reasonable." Our examination of ticket fees set by 150 venues in New York raises concerns, revealing that unclear "convenience charges," "service fees," and "processing fees" sometimes reach outlandish levels, either as a percentage of the ticket's face value or in absolute dollar terms. On average, New York venues and their ticketing vendors charge fees averaging 21% of face values, which exceeds what other online sellers charge. Moreover, we found fees as high as \$42 attached to a ticket to see Professional Bull Riding at Madison Square Garden and \$28 to see Janet Jackson at Jones Beach Theater.

C. <u>Restraints of Trade Exist.</u>

NYAG is concerned by the growing imposition of resale price floors (i.e. "no sales below list price"), along with efforts to mandate that tickets be sold on a single "walled garden" market, as opposed to consumers having the option of buying tickets from different resale platforms. We are also interested in the degree to which excessive service charges may constitute evidence of abuse of monopoly power, especially as they relate to the resale of sports tickets.

Recommendations

In 1999, NYAG found that, despite long-standing regulation, the law "has not succeeded in eliminating the abuse it was intended to address." That remains true today, and New York remains in need of greater protections for the buying public. We therefore offer several recommendations:

A. <u>Ticket Resale Platforms Must Ensure Brokers Comply With the Law.</u>

Ticket resale platforms are in the best position to ensure that their broker customers follow the law, and they must take meaningful steps to do so. Specifically, these platforms should require that brokers provide their New York license numbers as a condition of using the resale platform, and disclose to potential customers the face value of tickets they are offering for sale, as already required by New York law.

B. Industry Players Must Increase Transparency Regarding

Ticket Allocations and Limits.

The industry must provide greater transparency into the allocation of tickets, to increase accountability and enable the public to make informed choices. Promoters of events, who know the number of seats being held, should provide that information to ticket vendors, such as Ticketmaster, to make available to the public. In addition, wherever ticket vendors claim that ticket limits are enforced, they should enforce those limits as a matter of course on a per-person basis. If such limits are not actually being enforced, ticket vendors must make that clear.

C. Ticket Vendors Must Address the Bot Epidemic.

Bot use is a major reason why New Yorkers cannot get tickets at face value. While the industry works on long-term technological solutions to this problem, steps can be taken to reduce Bot use in the near-term. NYAG has contacted Ticketmaster and another major ticket vendor, AXS, to discuss concrete reforms, such as preemptive enforcement of ticket limits, analyzing purchase data to identify ongoing Bot operations for prosecution, and investigating resellers of large volumes of tickets to popular shows, among others.

D. The Legislature Should Act.

While there is no reason the industry should wait for legislative action to implement the reforms outlined above, the Legislature should act to ensure that reform is meaningful and lasting. Specifically:

i. Mandate the industry reforms outlined above.

ii. End the ban on non-transferrable paperless tickets.

A solution that most industry participants agree is effective at reducing broker activity is the use of non-transferrable "paperless tickets." Unlike paper tickets and electronic tickets that are freely transferrable from the buyer to another person, non-transferrable paperless tickets require an event attendee to present the credit card that was used to purchase the ticket. As a result, the initial purchaser typically must be present to use the ticket. State law creates a *de facto* ban on these paperless tickets, but this rule makes New York an outlier – ours is the only state that bans the practice – and this ban should be repealed.

iii. Impose criminal penalties for Bot use.

Given that ticket resellers are making considered business decisions when they deploy Bots to acquire massive amounts of tickets near-instantaneously, the prospect of criminal prosecution may well have a deterrent effect on this conduct.

iv. Cap permissible resale markups.

Until 2007, New York capped the markup resellers could charge, and the State removed that cap in hopes of benefitting consumers. Unfortunately, competition-driven savings intended to benefit fans have instead been converted to profits for a handful of savvy middlemen using multiple employees or computers, or illegal Bots. New York should reinstitute a reasonable limit on resale markups.

THE HISTORY OF, AND POLICY BEHIND, NEW YORK'S TICKETING LAWS

New York's approach to ticketing has undergone dramatic changes over the last fifteen years. Understanding both the history and the policy goals of previous and current ticketing legislation is important to all that follows.³

1920 - 2007: The "Anti-Scalping" Era.

"The greatest evil that theatergoers in this city have to contend with is the ticket speculator," wrote a New York City magistrate in 1901. "They are practically highwaymen and hold up everybody that goes to a place of amusement."⁴ As the quote suggests, the resale of tickets for profit has long been considered an aggravation in this State. In 1922, Governor Nathan Miller declared the need for action to combat what he called "gross profiteering" by "ticket scalpers." He signed a law, widely described as an "anti-scalping law," that began the State's regulation of ticket sales for major events. It originally regulated "boxing and wrestling, relating to tickets to places of entertainment," and capped the price of resale tickets at two dollars above face value.⁵ The law maintained its basic character for seventy years, broadening in scope, and adding various provisions to ban bribes paid to venues by brokers for tickets (known as "ice"). Eventually, the two-dollar limit became a 20% or 45% price cap (depending on the size of the venue), which the law required to be printed legibly on each ticket.⁶ Over the years, the legislature periodically imposed stricter penalties on those selling tickets near venues and took steps to give the State the power to police out-of-state actors dealing in tickets to events within New York.

Nonetheless, as NYAG's report made clear in 1999, the law was both inconsistently enforced and difficult to enforce. Underground brokers flourished, often openly flouting the law. By that year, ticket brokering had grown into a large underground economy typified by law-breaking, secret ticket holds, bribe paying, and a general state of corruption at all levels.

2007 – Present: A Regulated Industry.

In 2007, in a sweeping legal change, the New York legislature decriminalized all resale of tickets for profit, or "scalping," and adopted an approach that sought to treat ticketing as a regulated industry. With the price caps lifted, brokers were now free to operate openly and sell tickets at whatever prices consumers might pay. In the face of critics who warned that prices would rise and brokers would reap unseemly profits, the sponsors of the Bill expressed some hope that the new approach might, in fact, reduce ticket prices on the resale markets. As Assemblyman Joseph D. Morelle argued at the time, "By allowing greater competition for the resale dollar, we may actually see a decrease in secondary prices, which is ... ultimately best for the consumer."⁷

^{3.} The governing statutory provisions are found in New York Arts and Cultural Affairs Law, Article 25 ("N.Y. Arts & Cult. Aff. L.").

^{4.} Kerry Segrave, Ticket Scalping: An American History, 1850-2005 (2006), p. 55.

^{5.} N.Y. General Business Law §§ 167-69k (McKinney 1922) (repealed 1983).

^{6.} The following notice was required to be printed on tickets:

[&]quot;If the venue to which this ticket grants admission seats 6000 or fewer persons, this ticket may not be resold for more than 20% above the price printed on the face of this ticket, whereas if the venue to which this ticket grants admission seats more than 6000 person, this ticket may not be resold for more than 45% above the price printed on the face of this ticket."

^{7.} Office of Joseph D. Morelle, "Morelle Bill Establishing Free Market for Ticket Resellers Passes Assembly" (May 29, 2007), available at http://assembly.state.ny.us/mem/Joseph-D-Morelle/story/22938.

The operating premise of the 2007 law was not to completely deregulate ticket resale, but to legalize it pursuant to regulation and taxation. Pre-2007, many of the brokers operated in open violation of the law; the 2007 law introduced a revised licensing system supervised by the Secretary of State. The licensing system required, among other things, various disclosures of tickets sold, the posting of a bond to cover counterfeit tickets, and the payment of a \$5,000 annual fee.

Above all, the 2007 law represented a new and experimental approach to the ticket industry, made clear by the fact that the law regularly sunsets and is therefore subject to ongoing tinkering by the legislature. The first adjustments came in 2010, when the law underwent major changes, three of which are important here. First, for the first time, the law banned the use of ticket-buying software, or "Bots." The New York Senate commentated that such software is "used by unscrupulous speculators to purchase tickets at initial sale ahead of consumers intending to attend an event," and put enforcement duties in the hands of the Attorney General.⁸ Evident in the ban on Bots and the

What's a Bot?

A Ticket Bot is software that automates ticket-buying on platforms such as ticketmaster.com.

Automation lets the Bot (1) perform each transaction at lightning speed, and (2) perform hundreds or thousands of transactions simultaneously.

As a result, in the first moments after tickets to a top show go on sale, Bots crowd out human purchasers and can snap up most of the good seats.

legislature's commentary is the idea that ticket buying, when presented to the public as a fair contest, should in fact be fair, and not subject to manipulation by software or similar techniques. In other words, the legislature prefers that the ability to obtain tickets be based on factors like showing up at the right time or simple luck of the draw, as opposed to gaining an advantage through software that functions differently than a human could.

Second, an important 2010 legal reform addressed growing service fees imposed by primary ticket sellers and their ticket vendor agents, such as Ticketmaster or Telecharge. It mandated, for the first time, that any fees charged for "special services" must be "reasonable."⁹ Third, the law barred non-transferrable paperless tickets, as discussed in greater detail later in this Report.¹⁰ The clear tenor of the ticketing statute is to make ticket brokering into a regulated industry and continue "safeguarding the public against fraud, extortion, and similar abuses." Ticket brokers are not illegal, but must obtain a license, post bonds, disclose their activities to the Secretary of State, and avoid using prohibited Bots. Whether the new system has operated in the interests of New York citizens remains an open question of public policy.

^{8.} New York State Senate Introducer's Mem., SB No. 3840-A.

^{9.} N.Y. Arts & Cult. Aff. L. § 25.29 (as amended July 2, 2010).

^{10.} ld. § 25.30.

CURRENT LAW

New York State law prohibits engaging "in the business of reselling any tickets to a place of entertainment" within New York State without first procuring "a license.¹¹ Those who resell, offer to resell, or purchase with the intent to resell five or more tickets without a license are guilty of a misdemeanor and subject to penalties.¹² Additionally, the law requires that brokers post a \$25,000 bond with their license application to ensure compliance with the law's provisions and cover damages to their customers from any misconduct.¹³ Brokers that resell tickets online must also display a hyperlink to a copy of their licenses,¹⁴ and they must display the face value of tickets along with the resale prices.¹⁵

New York State law also makes it illegal for brokers to use Bots to bypass security measures on the websites of ticket vendors, such as Ticketmaster, or to maintain any interest in or control of such Bots.¹⁶ Anyone who violates these provisions is subject to penalties and the forfeiture of profits.¹⁷

No current federal law specifically prohibits the use of Ticket Bots, but legislation has been proposed that would do so. The Better On-line Ticket Sales Act of 2014 or the BOTS Act, supported by Senator Charles Schumer, would prohibit, as an unfair and deceptive act, the sale or use of Ticket Bots. It would also provide for criminal penalties for those who engage in this conduct.

^{11.} ld. § 25.13.

^{12.} ld. §§ 25.09(2), 25.35.

^{13.} ld. § 25.15.

^{14.} ld. § 25.19.

^{15.} ld. § 25.23.

^{16.} ld. § 25.24.

^{17.} Id.

WHO'S WHO IN THE TICKET INDUSTRY

When it comes to concerts, the key participants in the industry for tickets and their typical roles in putting on shows and setting the prices consumers pay are as follows:

Promoter

Artist

Responsible for organizing the concert tour or other event, which includes negotiating the performance contract with an artist's agent or manager and leasing all the venues where performances will occur. With the artist, establishes ticket prices. Examples of promoters are AEG, Live Nation, and Bowery Presents.

Venue Operator

Provides the facility for the event and earns a share of service charges, processing fees, or other add-ons to the ticket price. Examples of venues are Madison Square Garden, Saratoga Performing Arts Center, and the Beacon Theatre.



Ticket Vendor

Provides for the initial (or "primary market") sale and delivery of tickets, for example through a website or mobile app, and earns a share of service charges, processing fees, or other add-ons to the ticket price. Examples of ticket vendors are Ticketmaster (owned by Live Nation), AXS (owned by AEG), and Telecharge.

Broker

Buys tickets on the primary market and resells them at a markup on the secondary market.

Ticket Resale Platform

Provides a website or other platform where tickets are resold, and charges a fee on each sale. Examples of ticket resale platforms are StubHub, TicketsNow (owned by Ticketmaster), and Vivid Seats.

Public

FINDINGS

A. The General Public Loses Out on Tickets to Insiders and Brokers.

The majority of tickets for popular concerts are diverted away from the general public. First, various "hold" and "pre-sale" programs reduce the total number of tickets available to the general public. Then, of those tickets that remain, brokers use a number of methods including Bots to seize a large portion of the remaining tickets. Brokers even sell tickets that they do not actually own, known as "speculative" tickets, to fund their later purchases.

1. The Majority of Tickets for Popular Concerts Are Not Reserved

For the General Public.

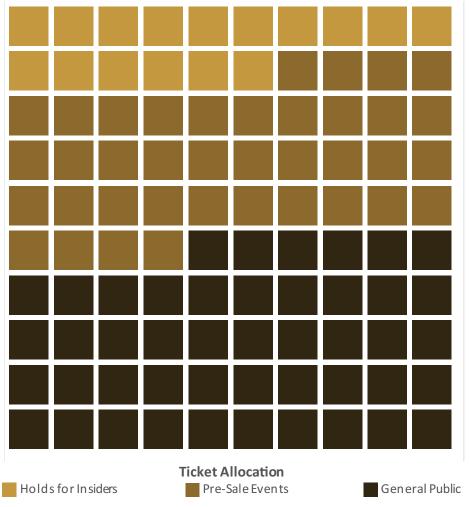
It may come as no surprise to fans that many concert tickets are never made available to the general public, but there is little information available as to where precisely those tickets actually go. To bring some light to this issue, NYAG has obtained and analyzed information regarding the allocation and distribution of tickets from the largest promoters, Live Nation and AEG, for the top-grossing shows in New York for the years 2012-2015.

NYAG found that, on average, only about 46% of tickets are reserved for the public. The remaining 54% of tickets are divided among two groups: holds (16%) and pre-sales (38%).¹⁸ Holds are tickets that are reserved for industry insiders, such as artists, agents, venues, promoters, marketing departments, record labels, and sponsors. Pre-sales make tickets available to non-public groups before they go on sale to the general public. The two most common pre-sale events are for credit card holders and members of fan clubs, but venues, promoters, or other groups may run pre-sale events as well. Brokers, as discussed below, often begin harvesting tickets at these pre-sale events and later during the general on-sale.

^{18.} The methodology for this analysis is in the Appendix.

Figure 1. Less Than Half of Tickets Are Reserved for the General Public.

Source: Live Nation/Ticketmaster (2012 – 2013) and AEG (2012 – 2015)¹⁹



Among the top grossing shows in New York, approximately 16% of all tickets were reserved through "holds" for industry insiders: artists, venues, agents, marketing departments, sponsors, promoters, and executives.²⁰ Often, venues are the biggest beneficiaries of these holds. For example, Madison Square Garden was typically allocated more than 900 tickets per concert and Barclays Center was allocated an average of 500 tickets per concert for the highest grossing concerts held at those venues.

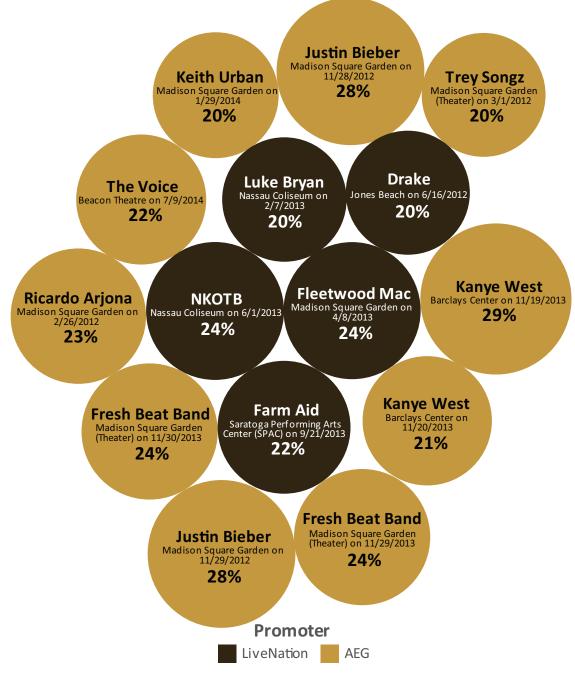
For some concerts, ticket holds account for well over 16% of the available tickets. For instance, a Kanye West show at Barclays Center held 29% of tickets for insiders, including over 2,000 tickets for the promoter and more than 500 tickets for the venue. In all, fourteen of the State's most popular shows held at least 20% of available tickets for insiders, as shown in Figure 2. Holding a large number of tickets is not necessarily a practice among all shows – the Vans Warped Tour 2013 and Barry Manilow concerts, both at the Nassau Coliseum, held 5% or less of tickets.

^{19.} The methodology for this analysis is in the Appendix.

^{20.} It is worth noting that a hold simply represents a reservation, and that in most cases a group that has been allocated tickets through a hold will not use a portion of those tickets. In these instances, the tickets are released back to the promoter, who will typically make the tickets available for sale to the public. Because the tickets are usually not released through a publicized on-sale event, tickets released in this manner are often purchased by brokers who are constantly searching for new tickets that are made available closer to the date of the event.

Figure 2. Fourteen Popular Shows Held at Least 20% of Tickets for Insiders.

Source: Live Nation/Ticketmaster (2012 – 2013) and AEG (2012 – 2015)²¹ Filtered for shows with 20% or more total capacity placed on hold



Approximately 38% of tickets to the most popular shows in New York were reserved for "presales," advance sales to select groups of fans and cardholders of major banks and financial institutions.²² These financial institutions, including American Express, Citibank, and Chase, have negotiated agreements whereby their cardholders have the opportunity to purchase tickets

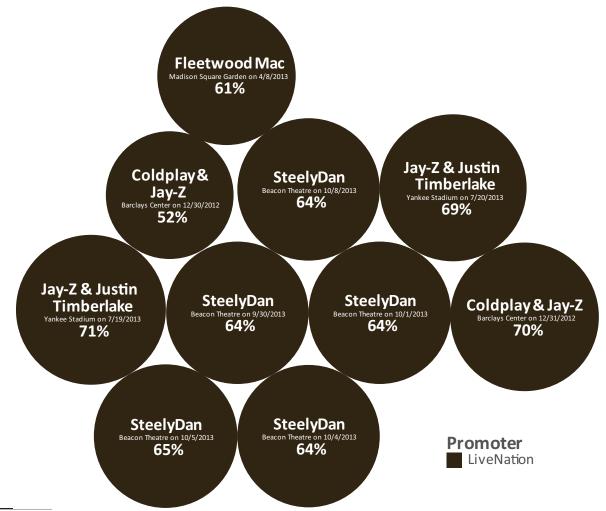
^{21.} The methodology for this analysis is in the Appendix.

^{22.} For the top shows, it is often the case that all of the tickets that are made available through the pre-sale events are sold. For less popular shows, tickets set aside for pre-sale events can go unsold. When tickets set aside for a pre-sale event are not sold, the unsold tickets are reallocated to the initial public on-sale.

before the tickets are released for sale to the general public. Importantly, fans are not necessarily the ones purchasing tickets released in pre-sale events. For popular events, brokers, realizing the advantages of pre-sale programs, purchase heavily and often use illegal Bots to maximize their yield in pre-sales, as discussed in greater detail below.²³ While the majority of pre-sale events are conducted by credit card companies, members of other groups, including fan clubs, social media websites, and specialty shopping sites also receive advance opportunities to purchase tickets.

The number of tickets reserved for pre-sale events can be quite large for some concerts. For example, for more than 30 of New York's most popular concerts, at least half of the tickets were set aside for pre-sale events. Figure 3 identifies ten shows that made more than half of the tickets available through pre-sale events where none of the tickets were explicitly reserved for fan clubs.

Figure 3. Ten Popular Shows Reserved Over 50% of Tickets Through Pre-Sales Events, None Explicitly Earmarked for Fan Clubs. Source: Live Nation/Ticketmaster (2012 – 2013)²⁴



^{23.} Even setting aside the problem of brokers, cardholder pre-sales may disadvantage many fans. They reserve tickets for holders of select credit cards, who may generally be wealthier than fans who lack those cards and the benefits that come with being a cardholder. As a result, these pre-sales give wealthier fans a better chance of getting tickets at face value, while decreasing the supply of face-value tickets available to less wealthy fans.

24. The methodology for this analysis is in the Appendix.

Holds and pre-sales can leave few tickets for the public. Indeed, for many of the top shows, less than 25% of tickets were actually released to the general public in an initial public on-sale. For example, just over 1,600 tickets (12% of all tickets) were released to the public during the initial public on-sale for a July 24, 2014 Katy Perry concert at Barclays Center. Similarly, for two Justin Bieber concerts at Madison Square Garden, on November 28, 2012 and November 29, 2012, fewer than 2,000 tickets (15% of all tickets) to each show were released to the public during the initial public on-sale.

2. Brokers & Bots Buy Tickets in Bulk, Further Crowding Out Fans.

The broker industry, while not the explicitly underground industry it was in the 20th century, remains difficult to learn about and often operates in violation of one or more State laws.

The average fan vying to purchase a ticket to a popular concert has little hope of competing against brokers, many of whom use illegal and unfair means to purchase tickets. Brokers are able to purchase large quantities of tickets to popular events by (a) employing illegal Bots, and/ or (b) exploiting their industry knowledge and relationships to get access to tickets.

a. Ticket Bots Amass Hundreds or Thousands of Tickets in an Instant.

A Ticket Bot is a software program that automates the process of searching for and buying tickets to events on ticket vendor platforms, such as Ticketmaster. Using Bots, a broker can automate the process of searching for

The New York Times

Concert Industry Struggles With 'Bots' That Siphon Off Tickets

"...According to Ticketmaster, bots have been used to buy more than 60 percent of the most desirable tickets for some shows...."

and buying tickets so that it occurs in the blink of an eye, and conduct tens, hundreds, or even thousands of lightning-fast transactions at the same time.

To successfully buy thousands of tickets, Bots must perform four different functions. These functions may be handled by one Bot or several.

First, spinner, or "drop checker," Bots constantly monitor ticketing sites to detect the release, or "drop," of tickets. Ticketmaster has stated that spinners can account for as much as 90% of the traffic to its website.²⁵

Second, Bots automate the search for and reservation of tickets that are up for sale. Here, brokers exploit the fact that most ticketing platforms "reserve" tickets for a few minutes to give the (human) customer time to complete the purchase. Brokers take advantage of this feature by conducting multiple near-instantaneous searches at the precise moment tickets are released for sale, throwing hundreds of tickets into reserve and removing them from the pool of tickets

^{25.} Ticketmaster L.L.C. v. RMG Technologies, Inc., 07-Civ.-2534 (C.D. Cal.) (Application for Entry of Default Judgment); Ben Sisario & Emily B. Hager et al., "Fair Ticketing: Fans Before Scalpers," N.Y. Times Video (May 27, 2013), *available at* http://nyti.ms/13V6sdO.

available for purchase. The broker may then review the search results and choose which seats to buy.²⁶ Figure 4 shows an example of a Bot that has searched for and reserved several groups of tickets, displaying the groups and the time remaining for the Bot-user to purchase each one.

Figure 4. Bot Displays Time Remaining to Buy Temporarily "Reserved" Tickets. Source: Ticketbots.net

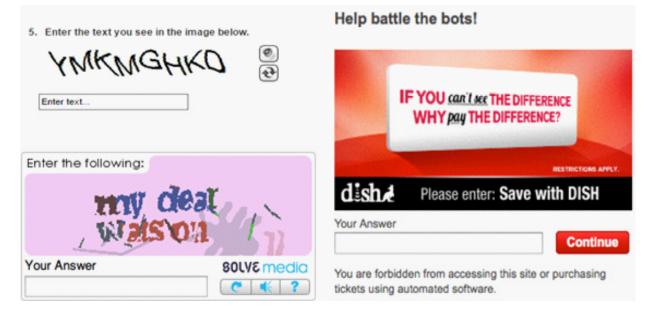
Section	Row	Seats	Qty	Price	Account	Time Remaini	Status
F7	12	8 - 9	2	US \$124.40		06:52	Ticket(s) Ready
F1	9	15 - 16	2	US \$218.20		06:20	Ticket(s) Ready
F3	www. 11 Januaria	5-6	2	US \$218.20		06:27	Ticket(s) Ready
F7	44) 13 (company)	5-6	2	US \$124.40	موارا المستحر والراب محمد محمو مراجع	04:02	Loading Shipping Methods
F7	12	6-7	2	US \$124.40	Charles and the state	07:02	Ticket(s) Ready
F7	12	4 - 5	2	US \$124.40	- Alexandra and a second	07:16	Ticket(s) Ready
F3	11	3-4	2	US \$218.20		06:33	Ticket(s) Ready

Third, Bots automate the process of purchasing tickets, using dozens or hundreds of purchaser names, addresses, and credit card numbers. The names of the "buyers" may be simply invented, or they may be borrowed from real people.

Fourth, and finally, Bots must defeat the anti-Bot security measures that most ticket-selling platforms employ. The most obvious of the ticket vendors' defensive tools that Bots must bypass is the "CAPTCHA" test ("Completely Automated Public Turing test to tell Computers and Humans Apart"). This test usually requires that a user prove she is human by reviewing text that is distorted or obscured and entering those characters into a text box.

^{26.} Some brokers use this interval to offer the temporarily reserved tickets for sale on secondary market platforms such as Stub-Hub at a given markup, and only if the resale is guickly consummated do they then actually buy the reserved tickets from the primary ticket vendor. This ability to use temporary reserve to avoid risk greatly undermines a shibboleth repeated to NYAG during our investigation, that brokers benefit the ticket industry as a whole, including artists, promoters, and venues, by taking on financial risk through up-front purchases of lots of tickets which they may be unable to resell.

Figure 5. Ticket Vendors Use Different Types of CAPTCHA.



Unfortunately, many Bot programmers have been able to bypass these forms of CAPTCHA. Over the years, Ticketmaster has repeatedly refurbished its CAPTCHA program, using different versions of CAPTCHA created by third parties such as Google and Solve Media.²⁷ While these CAPTCHAs may have stopped some Bots, more sophisticated Bot programmers quickly adapted. In many cases, they collected thousands of the new CAPTCHAs and used them to "train" their software to "read" the new CAPTCHAs through improved optical character recognition. In other instances, the Bots transmit in real-time images of the CAPTCHAs they encounter on Ticketmaster and other sites to armies of "typers," human workers in foreign countries where labor is less expensive. These typers – employed by companies such as Death by CAPTCHA, Image Typerz, and DeCaptcher – read the CAPTCHAs in real-time and type the security phrases into a text box for the Bot to use to bypass ticket vendors' defenses and use their sites.²⁸

Additionally, at various points, Ticketmaster abandoned CAPTCHAs for its mobile app on the iPhone platform, based on the premise that it could better verify identities on mobile and therefore did not need a CAPTCHA test. Our investigation of brokers reveals that some have targeted the CAPTCHA-free mobile platform by either designing Bots to mimic mobile devices or by using an arsenal of actual mobile devices to buy tickets.

^{27.} Some CAPTCHAs incorporate technology that attempts to identify Bots before an image is even shown, to present an easier test to likely humans and more difficult CAPTCHAs to suspected Bots. See, e.g., Solve Media – High Security Standards, http:// solvemedia.com/security/index.html. Many sophisticated Bot developers have bypassed these additional measures.
28. Some CAPTCHAs now do away with security phrases and use other types of puzzles. See, e.g., Google – "Introducing No CAPT-CHA reCAPTCHA," https://googleonlinesecurity.blogspot.com/2014/12/are-you-robot-introducing-no-captcha.html. It remains to be seen if these new approaches will be harder to bypass, especially for Bots that use teams of human typers.

To effectively beat out the many fans (and other Bots) attempting to search for and reserve tickets at the start of a sale, most Bots simultaneously attempt multiple connections to the ticket vendors' systems, often dozens or even hundreds at a time. These connections are often responsible for sudden massive increases in Internet requests to ticketing websites when tickets are released. To conceal that these large numbers of concurrent connections originate from a single source, most Bot users purchase hundreds or thousands of proxy IP addresses to use for each separate connection attempt. Moreover, because ticket vendors block or slow traffic connections from IP addresses that appear to be used by Bots, many Bots automatically rotate through their stores of proxy IP addresses to bypass detection and blocking. Bot users also typically register hundreds or thousands of e-mail addresses, again to conceal that a single purchaser is responsible for many concurrent transactions and to circumvent security measures designed to prevent Bots from purchasing tickets.

With these capabilities, Bots can be extremely effective for brokers. First, they can buy hundreds of tickets in moments. NYAG has identified many instances in which Bots were able to purchase hundreds of tickets within moments of the release of tickets to the general public or through a pre-sale, including the examples shown in Figure 6.

Figure 6. Bots Buy Huge Numbers of Tickets Moments After Release.

Source: NYAG Investigative Materials

1,012 tickets in **1 minute U2 2015 Tour**

Madison Square Garden

Bought by one bot on December 8, 2014, for a July 19, 2015 concert.

15,087 tickets in 1 day U2 2015 Tour Twenty Different Venues

Bought by two Bots on December 8, 2014 for twenty concerts in the same tour across North America.

520 tickets in 3 minutes Beyoncé Barclays Center

Bought by one Bot on March 4, 2013 for an August 5, 2013 concert.

522 tickets in 5 minutes One Direction Jones Beach

Bought by one Bot on April 14, 2012 for a June 28, 2013 concert.

Additionally, by being first in line, Bots can also purchase the most desirable seats to many shows. For example, NYAG reviewed a case study by one ticket vendor showing that Bots purchased more than 90% of the most desirable tickets to one show. As part of its own analysis, NYAG found that, of the 251 tickets one Bot operation purchased to a May 5, 2014 Coldplay concert at the Beacon Theatre, 148 of those tickets were in the first seven rows of the theater. This amounted to more than 60% of seats in those seven rows.

As a result of these huge advantages, Bots are able to purchase many tickets to New York events. The sources we interviewed uniformly stated that the usage of Bots has reached epidemic proportions in the ticketing industry. Indeed, NYAG found that three brokers using Ticket Bots collectively purchased more than 140,000 tickets to events in New York over a three-year period between 2012 and 2014.

Broker Profile: The One-Man Bot Broker

Revenue: \$1.4 million from events in New York (2014) Method: Bot mimicking Ticketmaster app & 1,000+ credit cards

Broker A was an illegal Bot user who represents a typical species of broker. The company is a one-man operation that opened when its proprietor was still in college. The company paid overseas programmers for sophisticated ticket-buying Bots designed to mimic the Ticketmaster iPhone app and defeat its anti-Bot defenses. To maximize its yield, and avoid ticket limits, the company obtained more than 1,000 credit cards, many of which used fictitious names, each designed to appear to Ticketmaster as a different individual.

Armed with its Bot and collection of credit cards, the company directed legions of purchase requests at popular shows; its actions are part of what led to the quick sellouts. Its harvest was put up for resale on numerous platforms, including Stub-Hub and Vivid Seats, and its own site. While it made much of its money from New York venues, the company is not licensed in New York.

Broker Profile:The Large-Scale Bot OperatorAnnual Revenue:\$42 million (2013)Method:Multiple custom bots, 10,000+ IP addresses,
500+ credit cards, dozens of P.O. boxes

Broker B was a large-scale illegal Bot user, and among the more profitable illegal brokers making money in the New York resale market. The company was unlicensed in New York, and used Bots to purchase tickets en masse for resale on secondary market platforms. On StubHub alone, it sold nearly \$31 million worth of tickets in 2013 and earned more than \$16 million in gross profits.

Our investigation reveals that the company had use of multiple Bots. Bot 1 monitored Ticketmaster's website and captured tickets at the precise moment of release. It then used highly sophisticated optical character recognition ("OCR") software to automatically "read" CAPTCHAs and bypass them to buy tickets. Bot 2 was specifically designed to defeat anti-Bot defenses on Telecharge to buy tickets to Broadway shows using armies of human typers in foreign countries to bypass CAPTCHAs. But Bot 3 was the largest source of Broker B's illicit revenue and is made and operated exclusively on Broker B's behalf by the company's partner, a young software developer, in exchange for a share of all profits earned from illegal operation. This Bot also used sophisticated OCR software to bypass CAPTCHAs, and it was highly effective at this task, obtaining hundreds of thousands of tickets and millions of dollars in illegal profits. The developer's earnings from his role in this scheme allowed him to buy a \$4 million home and a Bentley luxury vehicle.

Broker B used various tools to hide its Bot operations. Its Bots have used more than 10,000 IP addresses to bypass ticket sellers' defenses that identify buyers by their IP address. Like Broker A, Broker B uses multiple credit cards issued to made-up names. Our investigation shows that the company used over 500 American Express cards alone. Broker B also attempted to conceal his identity from ticketing companies by leasing post office boxes in several cities.

b. Even without Bots, Brokers Use Industry Knowledge and Relationships to Gain an Edge Over Fans.

Brokers who do not use Bots nevertheless have several significant advantages over the average fan based on their knowledge of the industry and relationships.

First, brokers in many instances take advantage of pre-sale events offered to holders of certain credit cards. Brokers are aware of which credit cards can be used in pre-sales and open accounts for these credit cards. Brokers also closely follow ticket release schedules and are prepared to purchase tickets at pre-sales, when the competition for tickets is often less than during a public on-sale.

In many instances, artists try to get tickets into the hands of fans by offering pre-sales to official fan clubs, for example by issuing special codes to fan clubs that allow members to log into the pre-sale on ticket vendor sites ahead of the general on-sale. Unfortunately, brokers often sign up for these fan clubs, obtain the codes, and either use them themselves or sell them to other brokers.

Second, Brokers have resources to attempt many concurrent connections. Brokers understand that it is important to try to reserve and purchase as many tickets as possible during the first moments of an on-sale. Many brokers therefore use multiple computers or mobile devices to try to connect to ticketing websites at the same time. NYAG spoke with one broker who owned 100 mobile devices and claimed to use dozens of those at a time by himself to try to purchase tickets. Some brokers employ dozens of people simply to have many humans trying to reserve and purchase tickets at the same time.

Third, many Brokers maintain direct relationships with venues and sports teams. In these cases, brokers are able to purchase tickets without competing for tickets through the ticketing website. Barclays Center, for example, has provided several brokers who own season tickets to Brooklyn Nets games with the option to purchase several hundred tickets to most other events at the venue, including all music concerts. More than 500 tickets to an Elton John concert at Barclays Center were distributed to brokers in this manner.

Broker Profile: Licensed Broker

Revenue: \$25.4 million (2013) Method: Employees buy tickets en masse

Broker C is a licensed ticket broker. In operation since the 1990s, the company has become highly profitable under the new tickets law. The company employs approximately 25 full-time employees; each employee is paid a wage to keep his or her own accounts and purchase, using his or her own American Express credit cards, as many tickets as possible for shows or events decided upon by management. The company pays its annual licensing fees to the New York Secretary of State.

Broker C is an example of the 2007 law in operation. On the one hand, the company pays its licensing fees, discloses its activities, and is in apparent compliance with most of the regulations. On the other hand, the company's sizable annual profits – \$4.8 million in gross profit in 2013 – are direct evidence of the prices that the public pays on the secondary ticket markets.

c. Ticket Limits Are Not Regularly Enforced.

The consumer may be familiar with the ticket limits that are encountered on the websites of most ticket vendors. Popular artists and their promoters typically seek to have vendors, like Ticketmaster or AXS, impose a limit on the number of tickets that any individual can purchase for any event. For concerts, a typical limit is eight tickets per purchase; more popular concerts set smaller limits. The theory behind limits is intuitive and obvious: by limiting the number of tickets any one individual can purchase, tickets will be more fairly distributed. If ticket limits were truly effective – if it were impossible for any one person to buy more than the stated number of tickets – broker activity would be greatly limited.

Our investigation suggests that in the case of some ticket vendors, including Ticketmaster, ticket limits do not always have the effect the public would expect. Ticketmaster implements ticket limits by restricting the number of tickets that can be purchased in a single transaction (a per-transaction limit). It does not, however, restrict at the time of sale the number of tickets that can be purchased by a user through multiple transactions (a per-person limit). In other words, when an artist requests an eight-ticket limit, Ticketmaster will permit a user to purchase only eight tickets in a single transaction, but then will allow the same user to make additional purchases of eight tickets each.

Ticketmaster can attempt to identify violations of the ticket limit after tickets have been sold by canceling those transactions that exceeded the limit the artist had requested. It will only undertake this review, however, if an artist specifically requests the audit. Yet many artists seem unaware of this fact. For example, a sophisticated representative of several top artists playing the largest arenas told NYAG they had been unaware that Ticketmaster required a separate auditing request to enforce limits the artist had already requested, and had therefore never made such a request. Thus, although some artists are trying to make tickets available to average fans by pricing them below market value and setting ticket limits, the lack of real-time enforcement per user at the point of purchase (or thereafter) undermines their efforts.

The main beneficiary of the unenforced ticket limits is, of course, the broker industry. As repeat players, the brokers know well that the limits are rarely enforced. Our interviews with brokers and others in the industry, and our review of ticket purchasing data, reveal that the limits, enforced or not, are easy to evade. The effect of these shortcomings in enforcement of ticket limits is exacerbated where brokers use Bots to speed up their purchases above the limits, to the detriment of ordinary members of the public. As a result, brokers have an advantage as compared to ordinary buyers, who believe the phrase "ticket limits" means what it says.

d. Brokers, With and Without Bots, Buy Up Many Tickets to New York Events.

Evidence that brokers are responsible for the purchase of large quantities of tickets can sometimes be seen in sales data that tracks the purchasing activities of entities holding multiple credit cards. For example, Figure 6 below shows American Express cardholders who purchased more than \$3 million in tickets through Ticketmaster for events in New York State and surrounding areas using their American Express cards. A single broker used 149 different American Express cards to make more than 38,000 purchases totaling over \$12 million just from 2013-2015, while other brokers racked up similarly shocking volumes of purchases, sometimes using just a handful of credit cards.

Figure 7. Twelve Brokers Each Purchased More than \$3 Million in Tickets. Source: American Express Purchases to Ticketmaster for Events in New York & Surrounding Areas (2013-2015)²⁹

\$12,251,282 through 38,366 transactions and 149 cards.
\$11,668,951 through 45,711 transactions and 87 cards.
\$6,175,235 through 16,805 transactions and 644 cards.
\$5,595,105 through 26,656 transactions and 25 cards.
\$4,625,014 through 11,680 transactions and 54 cards.
\$3,838,637 through 13,678 transactions and 170 cards.
\$3,697,400 through 11,046 transactions and 20 cards.
\$3,592,798 through 10,039 transactions and 23 cards.
\$3,361,108 through 18,776 transactions and 4 cards.
\$3,309,475 through 7,992 transactions and 289 cards.
\$3,280,623 through 8,061 transactions and 57 cards.
\$3,129,622 through 12,450 transactions and 132 cards.

^{29.} The methodology for this analysis is in the Appendix.

e. Brokers Sell Tickets at Substantial Markups.

Brokers profit by selling tickets at a substantial markup over face value. NYAG studied six ticket brokers and found they marked up their tickets an estimated 49% on average, ranging by broker from an average of 15% to 118%. Figure 8 depicts the markups charged by representative brokers for their most profitable shows.

One Direction @ Beacon Theatre \$79 \$4,635 **Custom Bot** Barbra Streisand @ Barclays Center \$1,602 \$5,336 Broker A One Direction @ Madison Square Garden \$101 \$7,244 Pearl Jam @ Barclays Center \$94 \$1,256 **Custom Bot** Eagles @ Madison Square Garden \$228 \$1,351 Broker B Ed Sheeran @ Madison Square Garden \$64 \$1,404 NHL Conf. Finals @ Madison Square Garden \$693 \$999 Bot Broker A NHL Conf. Finals @ Madison Square Garden \$570 \$1,221 Yusuf Islam/Cat Stevens @ Beacon Theatre \$250 \$1,306 Eric Clapton @ Madison Square Garden \$544 \$1,008 Bot Broker B NHL Conf. Finals @ Madison Square Garden \$443 \$1,155 Eric Clapton @ Madison Square Garden \$544 \$1,590 Stanley Cup Finals @ Madison Square Garden \$218 \$925 Non-Bot Stanley Cup Finals @ Madison Square Garden \$218\$932 Broker A U2 @ Madison Square Garden \$350 \$1,249 Barbra Streisand @ Barclays Center \$1,600 \$3,526 Non-Bot NY Rangers v. LA Kings @ Madison Square Garden \$815 \$3,650 Broker B Barbra Streisand @ Barclays Center \$1,600 \$4,400

Figure 8. Examples of Six Brokers' Markups Show Large Profits.

Source: Transactional sales data for select brokers (2011-2014)³⁰

\$0 \$1,000 \$2,000 \$3,000 \$4,000 \$5,000 \$6,000 \$7,000 \$8,000

Ticket Face Value Markup Amount

30. The methodology for this analysis is in the Appendix.

Figure 9. Brokers Charge Large Markups.³¹ Source: Source: Transactional sales data for select brokers (2011-2014)

	Avg.	Avg.	Mar	[.] kup	Highest	
Broker	Cost	Resale Price	Amount	Percent	Markup	
Custom Bot A	\$145	\$317	\$172	118%	7,154%	
Custom Bot B	\$104	\$188	\$84	81%	2,190%	
Bot A	\$100	\$137	\$37	36%	637%	
Bot B	\$105	\$137	\$3 2	30%	456%	
Non-Bot Broker A	\$78	\$101	\$23	29%	1,537%	
Non-Bot Broker B	\$111	\$128	\$17	15%	1,601%	

Our analysis also reveals that the brokers that commanded the greatest markups in the ticket resale market were those that used Ticket Bots, and, moreover, that the most sophisticated, custom Ticket Bots were associated with the highest markups. This may be because the sophisticated, custom Bots were able to purchase the most desirable seats, which could be resold for the highest prices.

f. Speculative Tickets Increase Confusion and Risk for Fans.

In early December 2015, tickets purporting to be for Bruce Springsteen's 2016 "River Tour" began appearing on secondary sites like StubHub, TicketNetwork and Vivid Seats. Some tickets were even advertised for inflated prices of as much as \$5,800 per ticket. The catch? No such tickets had yet been released. What brokers were selling were "speculative tickets," that is to say, tickets that they planned, or hoped, to buy later.

When a speculative ticket is sold, the broker then tries to purchase an actual ticket, at a lower price, to provide to the buyer. The broker pockets the difference between the price at which he pre-sold the ticket and the price at which he later bought the ticket. Speculative tickets harm both consumers and the ticket industry. In many cases, consumers are just defrauded – they do not receive the specific seats they paid for, instead receiving tickets for some other seats. In some cases, consumers receive no tickets at all. Speculative ticket sales also drive up prices for consumers and often cause widespread confusion and frustration among consumers, who wonder how tickets can appear on the resale market before tickets are even released to the public.

In 2014, singer Eric Church expressed his frustration with such ticketing: "They're taking the money, and they're not even on sale. There's no tickets on sale yet. They don't really have them – they're promising the fact that they can get them. It's a damn scam is all it is. It's the mafia." In the case of the 2016 Springsteen tour mentioned above, NYAG asked StubHub, TicketNetwork, and Vivid Seats to take down the speculative ticket listings, and they all complied. This one-time enforcement action was effective in that instance, but the problem is recurrent.

^{31.} The methodology of this study appears in the Appendix.

g. The Market Structure Is Atypical.

Another final point to keep in mind concerning this industry: the typical market structure is skewed. For one, tickets are often sold on the primary market for a face value that is below market price. Although this may sound surprising, our investigation suggests it is common and reflects various factors. For one thing, matters of goodwill and reputation in the sale of tickets are important to certain performers. That is clearest, for example, for events where the promoter has non-commercial goals – like Pope Francis, who distributed free tickets for his public appearances – or at events like the New York City Center's annual Fall for Dance Festival, which includes world-renowned performers but sells tickets for just \$15, "in keeping with the Festival's commitment to make dance accessible to everyone."³²

Even more explicitly commercial acts sometimes price their tickets below what they might charge to make them accessible to younger fans or those of ordinary incomes. The band Fugazi, active over the 1990s and early 2000s, for example, long kept its ticket prices at \$5.³³ Pearl Jam, among the most popular bands of the 1990s, set its ticket prices at or below \$20 to make it possible for young fans to attend its concerts. As the band said in prepared testimony before Congress, "Although, given our popularity, we could undoubtedly continue to sell out our concerts with ticket prices at a premium level, we have made a conscious decision that we do not want to put the price of our concerts out of the reach of many of our fans."³⁴

Sometimes a mixture of economic and non-economic motives is evident. A sports team, like the Brooklyn Nets or New York Mets, might not want to be accused of "gouging" fans, and hoping to build a loyal fan base, and so might price its tickets accordingly. Some sense of this came in 2009 when the New York Yankees experimented with much higher ticket prices and were subject to widespread criticism and unflattering media coverage. The New York Post described the Yankees' new plan as "greed-driven-and-delivered" and the prices as "insanely and obscenely high."³⁵ Eventually, in the face of both criticism and poor sales, the Yankees lowered their prices dramatically. Sometimes even a profit-maximizing performer might set prices lower than market value to guarantee a sellout and a full house for marketing purposes. Some of the promoters we spoke with argued that a public sense of high demand and ticket scarcity is necessary to create the sense of a "sellout tour" that stokes demand to attend it.

Cheaper tickets could be very beneficial to consumers, as long as they reap the benefits. The problem with this industry is that a middleman essentially takes the benefits intended for the consumer. In other words, the ticket broker or reseller, able to buy up tickets before the public gets a chance, profits from the lower priced ticket – charging the consumer a much higher price and pocketing the difference. To further complicate the industry, the entities most able to stop this practice are either powerless or not economically incentivized to stop the practice. Artists may want to avoid this from happening but have to rely on the venues to sell tickets. Venues have an interest in selling out tickets and have little incentive to put protections in place. Ticket

^{32.} Press Release, "New York City Center Announces 2015 Fall for Dance Festival" (July 29, 2015), *available at* https://www.nyci-tycenter.org/content/misc/PressRelease-FFD15a.pdf.

^{33.} John Pareles, "Review/Rock; Melodies Amid Rant, Thoughts Amid Rage," N.Y. Times (Mar. 7, 1991), *available at* http://www. nytimes.com/1991/03/07/arts/review-rock-melodies-amid-rant-thoughts-amid-rage.html.

^{34.} Hearing of U.S. House Comm. on Gov't Ops., Subcomm. on Info., Justice, Transp., & Ag., 103d Cong. (June 30, 1994).

^{35.} Phil Mushnick, "Pricing fans out of Stadium no good for Yankees or MLB," N.Y. Post (Apr. 27, 2014), *available at* http://nypost. com/2014/04/27/pricing-fans-out-of-stadium-no-good-for-yankees-or-mlb.

vendors also have an interest in selling as many tickets as they can; they collect a fee with each ticket that is sold, a fee that is the same regardless of whether it is paid by you or a reseller.

B. High Fees for Unclear Purposes Raise Concerns

Next to sellouts, few issues seem to aggravate consumers as much as the addition of unexplained "convenience" charges or "service" fees to the prices of tickets. These fees can be of considerable cost to consumers as a percentage of a ticket's face value, or in absolute dollar terms. For example, a ticket to the Professional Bull Riding event at Madison Square Garden had \$42 in fees

attached; a ticket to see Janet Jackson at Jones Beach Theater came with a \$28 fee.

In 2010, the New York legislature amended the State's law governing ticket fees.³⁶ The statute, as it stands, bans the "I purchased a 30 dollar ticket to see A View From A Bridge. During the transaction I saw that a ten dollar fee would be added for handling. Handling what? I am using my own printer to print my own ticket!"

- Typical consumer complaint to NYAG about fees

addition of *any* fee to a ticket by a venue operator or its ticket vendor except fees that are associated with "special services" for which a "reasonable service charge" may be levied. The statute states that special services include but are not limited to such services as "sales away from the box office, credit card sales^[37] or delivery." Thus, charges added to a ticket's face value violate State law if they are either (1) mandatory, general fees, unconnected to the provision of "special services," or alternatively, when (2) such fees reach levels that are no longer "reasonable."

A ban on the charging of mandatory fees unconnected to a bona fide service is a common consumer protection measure. New York City, for example, expressly bars restaurants from adding general surcharges to the prices on menus.³⁸ Relatedly, the U.S. Department of Transportation considers it an "unfair and deceptive practice" to advertise ticket prices that do not include mandatory fees and taxes.³⁹ The New York law on ticket charges creates a similar rule by banning the charging of fees unrelated to the provision of specialized services, and also regulating the fees that are charged.

39. 14 CFR 399.84.

^{36.} N.Y. Arts & Cult. Aff. L. § 25.29.1. The Senate Sponsor Memorandum summarized the provision as follows: "requires that service charges in association with tickets sold be reasonable."

^{37.} Despite this provision, imposing a surcharge on credit card use is illegal under General Business Law § 518. ("No seller in any sales transaction may impose a surcharge on a holder who elects to use a credit card in lieu of payment by cash, check, or similar means"). See Expressions Hair Design v. Schneiderman, No. 13-4533 (2d Cir. 2015), *available at* http://law.justia.com/cases/fed-eral/appellate-courts/ca2/13-4533/13-4533-2015-09-29.html.

^{38.} New York City Rule § 5-59 provides: "A seller serving food or beverages for consumption on the premises may not add surcharges to listed prices. For example, a restaurant may not state at the bottom of its menu that a 10 percent charge or a \$1.00 charge will be added to all menu prices."

1. Fees are Charged by Ticket Vendors and Venues.

Relying on publicly available information, NYAG conducted a broad study of the fees being charged in New York State by 150 different venues and their ticket vendors.⁴⁰ The examination reveals substantial variation in what fees are charged, but it also reveals some clear patterns.

First, it is worth noting that some outlets sell their tickets themselves; these venues are often smaller and non-profit. Examples include the Lancaster Opera House and the New York City Ballet. These outlets or organizations either do not charge any mandatory fees at all, or charge a small service and/or handling fee for buying away from the ticket office that does not generally vary with the price of the ticket.

Most venues, however, sell their tickets pursuant to an exclusive contract with a ticket vendor like Ticketmaster or Tickets.com. This group includes the larger venues, such as Brooklyn's Barclays Center, Albany's Times Union Center, and Buffalo's First Niagara Center. However, smaller venues, like the Ulster Performing Arts Center in Kingston and the Stanley Center for the Arts in Utica, also use ticket vendors. Generally speaking, the venue/ticket vendor combinations charge fees and use a variety of formulas to set them, such as adding a fixed charge based on the type of ticket or charging some percentage of the total price of the tickets.

While it is ticketing vendors (mainly Ticketmaster) that bear the brunt of the complaints about fees, some venues play a central role in setting such fees and share in the money that the ticket vendors collect. Our review of long-term contracts between Ticketmaster and large venues like Barclays Center or Madison Square Garden reveals that the parties negotiate the fee amounts — including "convenience charges" or "service fees" (per ticket) and "processing fees" (per order) – that can be shared between the venue and ticket vendor.⁴¹ The venue may also ban the ticket vendor from levying other charges, such as "delivery fees" for PDFs of tickets.

Our examination of the fees charged in New York also allowed us to estimate the average fee amounts charged by the larger venues in combination with three ticket vendors for events in this State: Ticketmaster, TicketWeb, and Tickets.com. On average, combining the fees charged by these three vendors and their venue clients for 150 New York venues, we found an average surcharge of 21% of the face value of a ticket, which amounts to almost \$8 in fees on average. However, our investigation also revealed that in certain cases, ticket fees charged were surprisingly high in real dollar terms, even if they were not a large percentage of the face value of the ticket. The following chart shows examples of tickets for several events in which the fees exceeded \$25 per ticket.

^{40.} The methodology of this study appears in the Appendix.

^{41.} Ticket vendors often enter into multi-year contracts with venue operators to sell tickets to all events at the operator's facility. The terms of these contracts generally set forth the convenience charges and other fees that Ticketmaster must collect, and the portions of those fees and charges that it must deliver to the venue, as well as the portions that Ticketmaster can keep.

Figure 10. Examples of Large Fees for Select Events and Venues. *Source: Fees collected from Ticketmaster, Tickets.com & TicketWeb (2015)*

542 in fees or 21% of face value in fees or 11% of face value **\$30** \$28 **S28** in fees or 7% of face value in fees or 16% in fees or 16% of face value of face value **Professional Bull** Brooklyn Nets vs. Black Sabbath: **Radio City** Janet Jackson: **Riding: Built Ford** Christmas Phoenix Suns Unbreakable The End **Tough Series** Spectacular World Tour

2. Event Ticket Fees are Higher than Most Online Vendors.

Because Ticketmaster, TicketWeb, and Tickets.com all conduct a major portion of their business online, where costs are often lower than for brick-and-mortar retailers, we examined other online platforms that, similar to ticket vendors, interact with consumers on one side and sellers on the other side, to assess whether charging consumers large services fees separate and apart from the ticket's face value is nonetheless typical or perhaps necessary for ticketing. In this regard we examined online vendors of tickets for airplane seats, such as Expedia and Priceline, and vendors of tickets to films, like Fandango and MovieTickets.com. We also examined online platforms that sell a broader mixture of goods, like Amazon and Etsy, to see if they charge consumer fees separate and apart from the posted prices.

Our examination suggests that, among online platforms, the vendors of event tickets appear to charge fees to consumers that are higher than most other online vendors – in fact, most of the online platforms we examined charge no "general" fees to consumers for the sale of tickets or goods and post prices that already reflect the full cost to the consumer. That is true of Amazon and Etsy, and it is also typically true even of vendors of airline tickets, like Expedia and Priceline.⁴² The main exceptions are the sites that sell movie tickets, because those vendors charge consumer fees that are close in magnitude to the average fees charged in live event ticketing. Fandango, for example, charges moviegoers a "transaction fee" between 75 cents and \$2.50 per ticket, and a "convenience fee" of \$1.50 per ticket.

It is unclear what services are covered by the "convenience charges," "service fees," and "processing fees" collected by online vendors of live event tickets, and why those services warrant charging consumers fees that are higher than in most other online contexts. To the extent that ticket vendors and their venue operator clients collect these fees for anything other than the provision of "special services," they would be in violation of New York law. In addition, any of these fees that exceed a "reasonable" charge are impermissible under the law.

^{42.} Rather than collecting money through fees to the consumers, these companies collect money from sellers who use their platforms to sell to consumers. We observed no consumer fees being charged on any of these companies' websites, and indeed Expedia and Priceline state they rarely charge broker fees to consumers.

C. Restraints of Trade in Ticketing

Up to this point, the Report has focused on the sale and brokerage of tickets, which are subject to industry-specific regulation under Article 25 of New York's Arts and Cultural Affairs Law. However, under the Donnelly Act, the Attorney General is also tasked with enforcing the laws prohibiting unreasonable restraints of trade and the unlawful monopolization of markets. Pursuant to that authority, NYAG has serious concerns about several ongoing practices related to the sale and resale of tickets in New York. In particular, NYAG is concerned with the setting of price floors on ticket resale, the practices that impede consumer access to alternative ticket resale platforms, and, in particular, the combined effect of such conduct on consumers. NYAG is involved in an ongoing multi-state investigation of these issues.

1. Setting of Ticket Resale Price Floors.

Some ticket issuers – particularly sports teams, including NFL teams and the New York Yankees – have put in place "price floors." Price floors are rules designed to prevent tickets from being sold at a price below some level, usually the face value of the ticket or something close to it. For example, many NFL teams encourage or even require ticket holders to use Ticketmaster's "NFL Ticket Exchange" platform – which is frequently billed as the official resale site and the only "safe" place to buy secondary NFL tickets. However, on NFL Ticket Exchange the seller is then prohibited from setting a price below a certain level – generally the face value of the ticket. Consequently, if a season ticket holder wants to sell his or her tickets for a lower price than he or she paid, he or she may be unable to do so, or may need to use a complex procedure to do so on another platform.

NYAG's concern with price floors is twofold. First, buyers of tickets on Ticket Exchange or other sites with price floors are frequently not informed that the tickets they are buying are subject to a floor. It is therefore easy for buyers to be fooled into believing what they are paying is the market price for a ticket, when in fact the buyer is paying a price artificially inflated by a price floor. The more aggressively sports leagues and individual teams push ticket buyers and sellers to use their "official" secondary markets, the more serious this problem becomes.

More fundamentally, even when buyers are informed of price floors, the floors deprive the public of a chief benefit of the market-driven approach taken by the 2007 law: lower prices. In particular, price floors may make it impossible to obtain tickets on the team-promoted Ticket Exchange platform for below face value when demand decreases. As described above, when contemplating the legalization of ticket resale, the sponsors of the 2007 legislature repeatedly expressed the hope that legalizing profit resale might lower prices for consumers. A clear source of such savings is lower prices when demand falls. For example, near the end of an unsuccessful baseball season, the tickets to watch a team not destined for the playoffs may go down sharply, allowing fans who otherwise might not be able to afford to see a match to buy tickets for far less money.

Overall, NYAG believes there is little to say in favor of price floors: They tend to expose the public to the full costs of the new ticket economy, while depriving the public of the benefits.

Ticket Resale Platforms.

The problems that come with price floors are exacerbated by efforts to push consumers to the resale platforms that maintain them and practices that impede consumer use of platforms that do not. NYAG is therefore greatly concerned with other forms of restraints imposed on the resale of tickets, particularly when those restraints impede or complicate consumer access to resale ticket platforms that do not enforce price floors. Examples of such practices include delayed delivery of PDF versions of resold tickets, and policies that place season ticket holders at risk of cancellation of their ticket subscriptions when they sell on unofficial resale platforms.

The consumer harm caused by price floors is directly related to the success of the efforts to pressure consumers to use only the primary seller's (usually Ticketmaster's) platform. That is because platforms that use price floors are at a natural competitive disadvantage compared to those that do not, and so if consumers engage in comparison shopping, they will gravitate to the platforms with a more open market. However, to the extent that the combination of practices such as PDF-delays and cancellation threats pressure consumers into using the platforms that incorporate a price floor, consumers will be harmed. This is particularly true given the inadequate disclosure of the existence of these price floors. Without knowing that better prices could be available elsewhere, it is harder for consumers to benefit from the competitive market.

RECOMMENDATIONS

The State regards ticketing and ticket resale as "a matter affected with the public interest."⁴³ Unfortunately, if one of the purposes of the 2007 law – which repealed the ban on "scalping" – was to reduce ticket prices, or make tickets more available to "ordinary" fans, it has not been successful. While there have been some positive developments, the basic reality described in the 1999 Report remains the same. If nine decades of experience have taught anything, it is that the incredible demand for desirable tickets can be exploited even in the face of determined efforts to get tickets in the hands of the public. The long history of ticket "scalping," the challenges inherent in enforcement, and the incentives and profits available may make some think it is impossible to fix ticketing. Nonetheless, the situation is not hopeless.

There are several concrete steps industry participants can take to make the system fairer and more transparent. In light of the findings in this Report, we believe that the legislature should hold hearings on the subject of ticketing in New York to challenge key members of this industry to put forth how they might help more tickets get into the hands of "ordinary" fans. However, if solutions are not implemented soon, the best and cheapest tickets will continue to go to the resellers and consumers will continue to ask why they cannot get tickets.

A. Ticket Resale Platforms Must Ensure Brokers Comply With the Law.

Ticket resale platforms such as StubHub, TicketsNow, TicketNetwork and Vivid Seats are the major vehicles through which tickets are sold on the secondary market. They are thus in the best position to effect change in the industry. There are several steps these companies should take to contribute to the success of this market.

First, each ticket resale platform should ensure that professional resellers comply with New York State's licensing provisions by requiring that the resellers provide their ticket reseller license number as a condition of using the platform. In most cases, by examining the volume of resale business a reseller conducts, resale platforms can easily distinguish professional resellers – who engage in the business of ticket resale and are required to obtain a license – from fans that are simply reselling tickets purchased for their own personal use – who are not required to have a license.

Second, each ticket resale platform should enable professional resellers to disclose the face value of the tickets they resell, which is required of resellers by New York State law.⁴⁴. It is currently impossible for well-meaning resellers to disclose the face value of tickets on most resale platforms. Secondary market platforms have the capability, however, of adding functionality to their websites and apps to facilitate brokers' compliance with the law, for example, by enabling resellers to provide face value information when posting a ticket for sale. They should do so.

^{43.} N.Y. Arts & Cult. Aff. L.§ 25.01. 44. Id. § 25.23.

B. Industry Players Must Increase Transparency Regarding Ticket Allocations and Limits.

The precise manner in which tickets are distributed – to industry insiders through holds, to nonpublic groups through pre-sales, and to the general public through public on-sales – is rarely, if ever, disclosed to the public. This information vacuum allows various players in the industry to avoid their share of responsibility for the current problems the industry faces. It also breeds mistrust from consumers, who feel like the system is fixed against them.

To address these issues, industry players must publicly disclose the allocation of tickets through holds, pre-sale events, and public on-sales. This requires that many players, including promoters and ticket vendors, work together to effectively distribute information to the public.

In addition, wherever ticket vendors claim that ticket limits are enforced, they should enforce those limits as a matter of course on a per-person basis. If such limits are not actually being enforced on a per-person basis, ticket vendors must disclose that information.

C. Ticket Vendors Must Address the Bot Epidemic.

Although NYAG has taken steps to stop many of the largest operations from using Bots to purchase tickets to events in New York, we recognize that other brokers may take their place. A longer-term solution must include improvements in Bot detection and prevention methods. While the industry works on long-term technological solutions, steps can be taken to reduce Bot use in the near term. Towards that end, NYAG has analyzed the information and material gathered through its investigation. Based on this analysis, we have compiled several recommendations for enhancing Bot detection systems.

NYAG has contacted two of the largest ticketing companies, Ticketmaster and AXS, to discuss our concerns with Bots and ticket limits, and suggested concrete reforms to their operations that, we believe, will substantially reduce the activities of illegal brokers and make the sale of tickets fairer. Some of the suggestions included preemptively enforcing ticket limits, analyzing purchase data to identify ongoing Bot operations, and investigating resellers regularly offering large numbers of tickets to popular shows, among others.

D. The Legislature Should Act.

To curb abuses in the industry and create a more equitable process for fans to obtain tickets, the legislature should take the following actions:

i. Mandate the industry reforms outlined above.

In many cases, industry players do not have an incentive to reform. To ensure that the steps described above are implemented in a meaningful and lasting way, the legislature should mandate them.

ii. End the ban on non-transferrable paperless tickets.

"Paperless tickets" are non-transferrable event tickets that are designed to avoid resale by brokers. Their defining feature is their non-transferrable nature, not the fact that they are electronic, because many events offer tickets as PDFs or in other electronic form that the buyer can sell or give to another person to use to attend the event. Non-transferrable paperless tickets bear some resemblance to airline tickets, requiring the presentation of identification and the credit card used to buy the ticket at the entrance to the venue. As such, it is harder for paperless tickets to be transferred or resold, given the need to present the purchasing credit card. Advocates of non-transferrable paperless tickets, including Ticketmaster and many prominent performers such as Bruce Springsteen and Miley Cyrus, have argued that they are an important and effective "anti-scalping" measure because increasing the difficulty of transferring tickets makes it harder for brokers to resell tickets for profit.

In 2010, New York amended its ticketing law to bar the issuance of non-transferrable paperless tickets *unless* consumers are provided with an opt-out, that is, the option of another easily transferable ticketing format at no extra cost. The law is a *de facto* ban, given that the option allows brokers to request resalable tickets, and therefore erodes the purported function of the non-transferrable paperless ticket. As such, the change was widely reported as a ban, and appears to be understood that way, at least by some performers. For example, in September of 2014, popular musician Cat Stevens (now known as Yusuf Islam) canceled a show in New York City on account of the ban. "I have been a longtime supporter of paperless tickets to my shows worldwide and avoiding scalpers," he said. "Unfortunately NY has a state law that requires all tickets sold for shows in NYC to be paper, enabling them to be bought and sold at inflated prices."

NYAG believes that New York's ban on non-transferrable paperless tickets – the only one in the nation – should be reconsidered and repealed. It is true that paperless tickets have met with some resistance; they can sometimes be inconvenient to consumers and venues (for example, if the credit card is forgotten, or if someone wants to give a ticket as a gift). That may be why, nationwide, the use of such tickets has been limited to those acts that regularly can expect to sell out. At the same time, paperless tickets appear to be one of the few measures to have any clear effect in reducing the excessive prices charged on the secondary markets and increasing the odds of fans buying tickets at face value. At least one major artist's representative and one ticketing vendor reported seeing the use of non-transferrable paperless tickets for the most desirable seats greatly reduce resale of tickets for those seats. Allowing these types of tickets would therefore make it more difficult for brokers to continue hoarding tickets and demanding exorbitant markups from fans. Moreover, such a change would not require artists, promoters or venues to use paperless tickets, but would merely give them the option to use them.

It is true that paperless ticketing is not a completely foolproof countermeasure. Brokers wishing to resell such tickets can do so, but must then hire people to go to the concert and physically walk fans through the gate at a show (assuming the ID provision is unenforced), or alternatively, buy tickets with a prepaid "gift" credit card that is physically mailed to the consumer. Nonetheless, our conversations with promoters of performers who use paperless tickets and others lead us to believe that paperless tickets can effectively limit the ability of brokers to resell at great multiples on secondary markets. That may explain why, despite still representing a small percentage of total ticket sales, a number of high-profile bands now use non-transferrable paperless ticketing outside of New York, including Bruce Springsteen,

Radiohead, Iron Maiden, Cat Stevens, Paramore, Widespread Panic and Metallica.

NYAG supports repeal of the *de facto* paperless ticket ban, but a repeal raises several concerns. Among the most important concerns raised against allowing non-transferrable paperless tickets when the legislature passed the ban in 2010 was that they might serve a dual purpose; they might not merely reduce broker markups, but also become a means by which Ticketmaster might leverage its market power over primary ticketing for given events into the domination of secondary sales as well. This concern follows because, in some implementations of paperless ticketing, tickets would not be completely non-transferrable. Instead, tickets would be non-transferrable unless the ticket was resold through Ticketmaster's own Ticket Exchange resale platform. When Ticketmaster is the "exclusive" resale platform, the potential for extending its market power is obvious.

Nonetheless, the potential for abuse does not justify a complete ban on paperless tickets. When repealing the law, the legislature should consider safeguards that would permit nontransferrable paperless ticketing while mitigating competitive concerns.

iii. Impose criminal penalties for Bot use.

There is consensus in the ticket industry that Ticket Bots have no place in a fair and equitable ticket market. Current law prohibits the usage of Bots and imposes civil sanctions for violations. However, the prospect of criminal prosecution may well have a greater deterrent effect. Passage of the BOTS Act by Congress and the criminal penalties that it would impose for the use or sale of bots could also act as a deterrent.

iv. Cap permissible resale markups.

Until 2007, ticketing laws capped the price of tickets sold on the secondary market. At first, for certain events, it was capped at two dollars above face value. Eventually, the two-dollar limit became a 20% or 45% price cap (depending on the size of the venue). In 2007, the caps were lifted. Unfortunately, given the complexities of the market and the skewed incentives that exist, under the current legal regime brokers will continue to use whatever means they can, legal or illegal, to obtain tickets. New York should therefore reinstitute a reasonable limit on resale markups. Reinstating caps on markups would still allow brokers a role in the market but would also ensure that any price markups be reasonable.

APPENDIX – METHODOLOGY FOR NYAG ANALYSES

Holds & Pre-Sales Analysis

NYAG analyzed ticket allocation data for the highest grossing concerts in New York produced by AEG, Live Nation, and Ticketmaster. NYAG's analysis aggregated the data into four main categories: holds, pre-sales, general on-sales, and other on-sales.

<u>AEG</u>

AEG produced ticket allocation data for the highest grossing concerts between January 1, 2012 and April 30, 2015 for which AEG served as the promoter at the following venues: Barclays Center, Beacon Theatre, Madison Square Garden, Nassau Coliseum, Nikon at Jones Beach Theater, Saratoga Performing Arts Center, The Theater at Madison Square Garden, Yankee Stadium, and Icahn Stadium.

Data concerning the following concerts were excluded from the analysis due to observed data inconsistencies:

- American Idol 2012 at Nassau Coliseum on August 22, 2012
- Carrie Underwood Fall 2012 at Nassau Coliseum on November 30, 2012
- Dane Cook at Beacon Theatre on September 14, 2013
- Enrique Iglesias at Madison Square Garden on September 25, 2014
- Enrique Iglesias Nassau Coliseum on September 14, 2014

• Fresh Beat Band (Both Shows) at The Theater at Madison Square Garden on January 17, 2015

- Fresh Beat Band at The Theater at Madison Square Garden on November 29, 2013
- George Lopez at Beacon Theatre on April 25, 2014
- Jennifer Nettles at Beacon Theatre on March 5, 2014
- Justin Bieber at Barclays Center on August 2, 2013
- Kanye West at Madison Square Garden on November 23, 2013
- Kanye West at Madison Square Garden on November 24, 2013
- Mindless Behavior (Both Shows) at Beacon Theatre on July 13, 2013
- Nashville at Beacon Theatre on April 29, 2015
- Nashville at Beacon Theatre on April 30, 2015
- Nick Cave & The Bad Seeds at Beacon Theatre on March 28, 2012
- Nick Cave & The Bad Seeds at Beacon Theatre on March 29, 2012
- Nick Cave & The Bad Seeds at Beacon Theatre on March 30, 2012
- Pentatonix at The Theater at Madison Square Garden on March 18, 2015
- R. Kelly at The Theater at Madison Square Garden on November 21, 2012
- Sytycd at Beacon Theatre on October 30, 2014
- The Who Performing Quadrophenia at Madison Square Garden on November 14, 2012
- The Who Performing Quadrophenia at Barclays Center on December 5, 2012
- Trey Songz at The Theater at Madison Square Garden on December 5, 2012

For 42 of the remaining concerts, the ticket allocation data for each concert were aggregated in the following way:

• Total Tickets: The total number of tickets that were made available through a hold, presale, or general on-sale event. This figure was calculated by subtracting the Production Holds figure from the Starting Capacity figure. AEG defines Starting Capacity as: "...the total number of tickets to be offered for sale as of the day before the first pre-sale. Additional tickets may be subsequently released for sale." AEG defines Production Holds as: "... the number of tickets held back from sale due to production elements that create obstructed views or eliminate physical seating. Tickets are often periodically released before the show typically for general public purchase from this total."

• Total Holds: The total number of tickets placed on hold for an event. Calculated by aggregating the following AEG categories: "artist holds," "agent," "venue," "suite relos" ("seats provided to venue's suite holders due to obstruction of suites") "AEG," "sponsor," "label," and "marketing." Tickets in the Production Holds group were not included.

• Total Pre-Sale: The total number of tickets made available through pre-sales events. Calculated by aggregating the following AEG categories: "Chase," "Amex," "Citi," "Fan Club," "Fan Club / Gilt," and "Venue Club."

• Total Other On-Sale: The total number of tickets made available through the following ticket groups: "ADA," "VIP Packages / Platinum," and "VIP Packages."

• Total General On-Sale: The total number of tickets made available to the general public. Calculated by subtracting Total Holds, Total Pre-Sale, and Total Other On-Sale from Total Tickets.

Due to differences in the production of data, for two Katy Perry concerts at Barclays Center on July 24, 2014 and July 25, 2014 the ticket allocation data for each concert were aggregated in the following way:

• Total Tickets: The total number of tickets that were made available through a hold, presale, or general on-sale event. Used the sum of Total Holds, Total Pre-Sale, Total Other On-Sale, and Total General On-Sale, as defined below.

• Total Holds: The total number of tickets placed on hold for an event. Calculated by aggregating the following AEG categories: "Artist and Supporting Acts," "AEG," "CAA 'MGMT,"" "Label," "Charity," "Marketing Comps," "Reviewer Comps," and "Sponsor."

• Total Pre-Sale: The total number of tickets made available through pre-sales events. Calculated by aggregating the following AEG categories: "Citibank Pre-Sale," "Facebook," "AMX BluHold," "Venue Club + Nets Basketball," "VIP Pack 1-5," "Platinum," and "Flex Hold." AEG described Flex Hold as follows: "these are seats not yet priced. Once price is determined they are released for sale during the pre-sale or general on sale."

• Total Other On-Sale: The total number of tickets made available through the AEG category "220° Sell" and "Flex Hold 2". AEG describes 220° Sell as follows: "these are seats past the 180 degree full view sell line. Typically sold as 'side view,' they are opened once the full view inventory is depleted."

• Total General On-Sale: The total number of tickets made available to the general public. Uses the AEG category: "Estimate Of Total Opens Available For General On Sale," which is described as follows: "This Is Inventory Held Back From The Pre-Sale To Be Sold Only at the general on sale."

Live Nation/Ticketmaster

Live Nation and Ticketmaster produced ticket allocation data for the highest grossing concerts between January 1, 2012 and December 31, 2013 for which Live Nation served as the promoter at the following venues: Barclays Center, Beacon Theatre, Madison Square Garden, Nassau Coliseum, Nikon at Jones Beach Theater, Saratoga Performing Arts Center, the Theater at Madison Square Garden, Yankee Stadium, and Icahn Stadium. NYAG analyzed the data that was produced as described below.

Live Nation also produced ticket allocation data for the highest grossing concerts between December 10, 2013 and August 31, 2015 for which Live Nation served as the promoter for the following venues: Barclays Center, Beacon Theatre, Madison Square Garden, Nassau Coliseum, Nikon at Jones Beach Theater, Saratoga Performing Arts Center, the Theater at Madison Square Garden, Yankee Stadium, and Icahn Stadium. The data produced by Live Nation, however, did not contain sufficient information to use in the NYAG's analysis.

Data concerning the following concerts were excluded from the analysis due to observed data inconsistencies:

- Eagles at Madison Square Garden on November 8, 2013
- Eagles at Madison Square Garden on November 9, 2013
- Eagles at Madison Square Garden on November 11, 2013
- Macklemore at Madison Square Garden Theatre on November 13, 2013
- Macklemore at Madison Square Garden Theatre on November 14, 2013
- Macklemore at Madison Square Garden Theatre on November 15, 2013

For the remaining 32 concerts, the ticket allocation data for each concert were aggreggated in the following way:s

• Total Tickets: The total number of tickets that were made available through a hold, pre-sale or general on-sale event. Calculated by subtracting all ticket groups identified as a production hold, such as "Rearview," "Production Kills," and "Production Holds," from the "Total Tickets Available" figure.

• Total Holds: The total number of tickets placed on hold for an event. Calculated by aggregating the following groups and others: "Artist(s)," "Management," "Support Act," "Venue," "Tour Sponsor," "Label," "Live Nation," "Sponsor," "Marketing," "Promotion," "Tour Hold," "Artist Agent," and "Live Nation Touring." Ticket groups identified as a production hold, such as "Rearview," "Production Kills," and "Production Holds," were not included.

• Total Pre-Sale: The total number of tickets made available through pre-sales events. Calculated by aggregating the following groups and others: "Fan Club OnSale," "Fan Club Presale," "LN/ Facebook," "Venue Presale," "Artist Presale," "VIP1-2 Presale," "LN & Venue Presale," "Live Nation Presale," "Season Tickets," "Chase Presale," "Mastercard OnSale," "Citi Preferred," "AMEX PreSale," "AMEX Postsale," and "CitiCard Postsale."

• Total Other On-Sale: The total number of tickets made available through the following ticket groups and others: "VIP Packages," "Platinum," and "ADA Seating."

• General On-Sale: The total number of tickets made available to the general public. Calculated by aggregating the following groups: "Public Onsale," "Public Protect Opens," "SRO-Opens Sell Last," "Dress," and "Café Sell Last."

Analysis of Brokers Using American Express Data

American Express produced information on all transactions through a Ticketmaster merchant account for New York State and surrounding areas for the period of April 1, 2013 to March 1, 2015. NYAG aggregated the individual transactions for each primary account holder to calculate, for each account holder, the total number of transactions, the total cost of these transactions, and the total number of unique cards used. NYAG then identified those account holders that had completed purchases totaling more than \$3 million.

Broker Markup Analysis

NYAG analyzed transactional sales data for events in New York produced by six ticket brokers to estimate the margins they typically obtained in connection with their resale of tickets. The data cover sales by these six brokers made from 2010 to 2014 and include over 90,000 transactions. All reported transactions for which a sales price and cost per ticket that exceeded one dollar were identified in the data were included in the analysis. The analysis estimated a markup for each transaction, which is defined as the ratio between the net revenue earned by the sale of an individual ticket and its cost. The average broker markups were then calculated across all transactions and weighted by each transaction's face value.

Fees Analysis

NYAG conducted a study of ticket fees in an effort to estimate the typical fee amount charged by ticket vendors for entertainment tickets. The study reflected fees typically charged by these ticket vendors as of October/November 2015. The study did not include every ticket sold by ticket vendors in the State, but rather relied on information displayed on Ticketmaster, Tickets.com, and TicketWeb's websites in connection with the sale of tickets for events in popular venues. In particular, the study collected fee information and ticket prices for 150 New York venues listed by the three ticket vendors on their websites. For each venue, fee information was collected for up to three randomly chosen events and, for each event, information was collected for every ticket category (e.g., orchestra, mezzanine). In total, a sample consisting of 859 different tickets was created for venues explicitly listed or promoted by ticket sellers. Fee information included any costs associated with an online sale and delivery of a ticket separate from its face value. These costs may include service fees, credit card fees, facility fees, and/or any other fees associated with the online sale and delivery of an event ticket.

