Adolescent Males in Metro Atlanta's Sex Trade and Their Buyers

A Research Study by



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Executive Summary

- This study estimates the number of young males including adolescents under age 18 involved in the metro Atlanta sex trade during a 4-week period in January and February, 2015. Data collected directly from males selling sex confirm that minors are actively commercially sexually exploited in the local sex trade.
- This study identifies 334 young males up to age 22 in the metro Atlanta sex trade during the 4-week period, of whom 16.8% are adolescents under age 18.
- This study estimates that 8.6% of all males in the metro Atlanta sex trade are under age 18, a percentage similar to findings by Marcus et al. (2014) where researchers observed that approximately 10% of providers ages 16-24 in Atlantic City's sex trade were under age 18.
- This study focuses on the single largest venue for paid sex transactions: online. Additional methodologies, namely those targeting homeless and runaway youth, are necessary in order to gain a more complete estimate of the number of adolescent males who experience commercial sexual exploitation in metro Atlanta.
- Additionally we sought to collect anecdotal data from prospective buyers of young males in metro Atlanta's sex trade. To do this, we employed a silent tracking script that recorded the IP address of individuals who clicked on a specific link within a decoy ad, and then geocoded the resulting database of IP addresses. In little more than a week, individuals from 253 different IP addresses clicked on the link in our decoy ad.
- The majority of individuals who interacted with our ad for a young male came from metro Atlanta, outside of the perimeter freeway (OTP). About 1 in 6 individuals who interacted with the ad were geocoded to outside of the state of Georgia.
- Technological changes, namely the advent of app-based online services, will dramatically change the prostitution market in coming years. Not only will these changes affect how buyers connect with providers in the sex trade, but they will also force law enforcement to adopt newer, more advanced investigative techniques for identifying exploiters.



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Introduction

It is well-established through both research and victim services data that adolescent females and males across all regions of the U.S. are affected by commercial sexual exploitation. Data at the local level are hard to come by, despite that such information is crucial to coordinating a service response to the problem. In Georgia, a combination of research findings plus victim services data have enabled state leaders and advocates to understand better the magnitude and nature of the problem as it affects adolescent females, but far fewer data points exist for adolescent males (Bailey & Wade, 2014). Restorative services providers who deal specifically with commercially sexually exploited adolescents have indeed provided such services to males in Georgia, but service provision data are typically not well suited to estimating the overall incidence of the problem.

Instead, prevalence estimates are typically best accomplished by looking at the problem independent of the social institutions designed to address it. The study described in this report is a first attempt to do just that in metro Atlanta. First we developed a sampling method and interview protocol to determine the age distribution of young males in metro Atlanta's sex trade, then applied well-established probability models to estimate the total number of such young males. Next we used a decoy ad offering of a young male to determine where buyers are located in the region. The results of the study confirm that adolescent males do in fact participate actively in metro Atlanta's sex trade, and that a substantial number of prospective purchasers exist across the region.

Brief Overview of Prior Research

Empirical research – that which is derived from direct observation of the study subject – is rare on the topic of commercially sexually exploited minors (Richards & Reid, 2015). Early empirical studies offered interesting anecdotal data, but typically relied heavily on non-probability sampling designs centered on individuals' affiliations with restorative services providers (Raphael & Ashley, 2008). The reasons for this pattern in past research are plentiful, but chief among them are the practical difficulties associated with measuring illicit behavior, as well as institutional barriers that can make it challenging for academic research teams to study vulnerable youth directly.

In the earliest years of online classifieds websites, public awareness of juveniles involved in the sex trade was still very low, and these sites quickly grew into dominant advertising channels for prostitution providers. This brief period enabled researchers to develop approaches to estimating adolescents appearing on these online channels, but increased scrutiny of these websites by law enforcement, advocates, and the site operators themselves have since rendered such methods ineffective¹. As a result, the only empirical methods available today involve direct contact with individuals currently involved in the sex trade.

Some of the best research work being conducted in this area, particularly as it concerns young males in the sex trade, comes from research teams at the John Jay College of Criminal Justice (Curtis et al., 2008;

¹ This statement should not be construed as meaning that adolescents no longer appear on paid sex sections of classifieds websites. On the contrary, such sites are commonly used for searching for missing or runaway youth. According to the National Center for Missing and Exploited Children (NCMEC), "a majority of the child sex trafficking cases being reported to NCMEC now involve ads posted on backpage.com" (NCMEC, 2014).



Marcus et al., 2014). While advocates may disagree with interpretations and recommendations made by researchers, the underlying factual evidence collected in these studies is very strong. In an initial study of commercially sexually exploited minors in New York City published in 2008 (herein referred to as the New York CSEC study), researchers found that roughly half of adolescents involved in paid sex transactions were males (Curtis et al., 2008). Additional research was conducted in Atlantic City, where researchers yet again encountered male and female adolescents – comprising approximately 10% of all young individuals in the local sex trade.

All research on difficult-to-reach populations has limitations, and the aforementioned studies are no exception. Different study designs and sampling methods will describe some populations and markets better than others. In the 2008 New York City CSEC study, for instance, 61.4% of minors involved in commercial sexual exploitation described themselves as homeless, suggesting that the sampling method was probably optimized toward estimating exploitation among homeless and runaway youth.

As an economic activity, commercial sexual exploitation of minors undoubtedly takes on different forms in different markets. Markets, however, are not defined by "supply" alone, but rather by transactional relationships between "supply" (in this case, adolescents) and "demand" (in this case, sex buyers). In order to gain a complete understanding of the prevalence of commercially sexually exploited adolescents, it is critical to study all major markets independently.

The current prevalence study focuses on the largest venue for paid sex: online. From a transactional perspective, buying sex via online channels is not only the least risky (from an arrest perspective), but also provides the buyer with the maximum choice of "inventory" and "delivery options." Online a prospective buyer can browse offerings by rate and service type, as well as choose the preferred location for the transaction. Purchasing on the street sacrifices many of these opportunities, and exposes the prospective buyer to a higher likelihood of detection. In exchange it enables prospective buyers who know where to look for providers a more immediate opportunity to transact.

While the results of the current study reflect the participation of male minors in the largest professionalized sex trade in metro Atlanta, it is still unknown whether or not the professionalized sex trade itself contains the largest number of adolescent males who experience commercial sexual exploitation in the metro Atlanta. Additional research around homeless and runaway youth in the area will be necessary to determine whether or not there are more adolescent males engaged in opportunistic and survival sex – which evidence from New York suggests is very likely.



Adolescent Males in Metro Atlanta's Sex Trade

The first part of this report details a prevalence estimate study of the number of adolescent males involved in metro Atlanta's sex trade. As mentioned previously, this estimate should not be interpreted to represent 100% of juvenile males affected by commercial sexual exploitation in the area. Rather, the methodology is designed to determine how many male minors are involved in the largest channel for purchasing paid sex: online. In metro Atlanta particularly, traditional street "tracks" have long since been replaced by a thriving online market. Nevertheless, other methodologies – namely those targeting homeless and runaway youth – are necessary in order to gain a more complete estimate of the number of adolescent males who experience commercial sexual exploitation in metro Atlanta.

Choosing Among Statistical Methods

There are several probability-based statistical approaches to estimating prevalence of hard-to-reach populations from sample data. One class of methods is respondent-driven sampling, or RDS. RDS uses social network ties among research subjects (in this case, adolescents involved in commercial sexual exploitation) to determine the total number of individuals in a population from a smaller sample who participated in a research study (Heckathorn, 1997). This is the methodology used in the New York CSEC study (Curtis et al., 2008). While this methodology produces strong estimates, like all methodologies it requires that certain conditions be true in order for it to work properly. Namely, RDS requires that qualifying research participants be well known to each other (i.e., socially networked). It is highly doubtful that this assumption holds true in larger, geographically dispersed areas such as metro Atlanta, and online paid sex venues do not require participants to know one another in the way that locally-clustered street-level venues do.

In contrast to RDS is another major class of methods typically called capture-recapture. Capturerecapture is not based on social networks of prospective participants at all. First developed for estimating animal wildlife populations, capture-recapture allows researchers to determine the size of a population based on whether a member of a population has been sampled once, multiple times, or not at all over the course of an extended period of research observation (Darroch & Ratcliff, 1980; Seber, 1982, 1986, 1992). These observational data are used to estimate the size of the unknown universe based solely on probabilities calculated from the number of members observed – or "captured" – either once or multiple times during the observation period.

We can illustrate how capture-recapture works through a simple two-sample capture-recapture design to estimate the number of koi fish in a pond. Each koi fish has distinctive markings that researchers can see and record when the fish ventures close enough to the surface of the water to be observed. On any given day, only a fraction of all koi fish rise to the top of the pond surface in view of the research team. The question is, what is this fraction if we do not yet know the size of the population? To figure out the answer to this question, researchers spend one day observing as many fish as possible and recording the markings of all the fish that rise to the surface of the water. These fish have been unobtrusively "captured" by the research team recording their distinctive markings.

For the second sample, researchers return to the pond within a couple of weeks and do the exact same exercise again. After both samples are recorded, researchers figure out how many fish "captured" in sample one re-emerge to be "recaptured" in sample two. If, hypothetically, 50% of "captured" fish from



sample one are "recaptured" in sample two, then we now know the total number of fish observed in sample two represent approximately 50% of the total population of koi fish in the pond.

Over time, capture-recapture estimation methodologies have been extended successfully to various populations in social science research, including those involved in criminal activity, drug use, and highrisk health behaviors (Bloor, Leyland, Barnard, & McKeganey, 1991; Rossmo & Routledge, 1990; Smit, Toet, & van der Heijden, 1997). Furthermore, various adjustments have been made to capture-recapture estimation formulas to ensure accurate estimates in different measurement scenarios, such as with small sample sizes (Chao, 1989; Smit et al., 1997; Wilson & Collins, 1992; Yip, Chan, & Wan, 2002; Zelterman, 1988), high out-migration rates (Chao, 1987; Kendall, Nichols, & Hines, 1997), and deterrence effects associated with "being captured" (Brewer, Potterat, Muth, & Roberts Jr, 2006; Roberts & Brewer, 2006). Capture-recapture can be extended to one-sample designs as well, where instances of "capture" and "recapture" are recorded over an extended period of time (Brewer et al., 2006; Chao, 1987, 1989; Roberts & Brewer, 2006; Zelterman, 1988).

Study Design

For the current study, we use a one-sample capture-recapture study design over a 4-week period during January and February, 2015. The study ended prior to Valentine's Day weekend in order to prevent the possibility that activity during this holiday would unfairly influence study outcomes. The overarching goal was to sample, or "capture" young males who sell sex online during the study period, and then "recapture" a portion of these young males at a later time during the study period. In the end, statistical models would be applied to the patterns of capture and recapture rates to estimate the total population of young males of various ages.

The research team first studied various online sources for purchasing paid sex in metro Atlanta to determine how best to sample male individuals who sell in this market. We found consistently across various sites that prospective buyers would post ads and online profiles clearly indicating their intent to purchase. Providers obviously posted ads and online profiles to offer services as well. Sometimes these ads and profiles could be found among non-paid casual sex offerings, and sometimes they could be found in dedicating prostitution listings.

Based on what we found, we then created dozens of online ads and online profiles across major sites where similar buyer content could be found:

- We posted 20 ads on a varied rotating basis on multiple sections of Atlanta's backpage.com site. On any given day during the study period, there were at least two of our ads at the top of the listing. None of our backpage.com ads were flagged for removal by either backpage.com staff or site visitors.
- We posted the same 20 ads on a rotating basis on Atlanta's craigslist.org site. In Atlanta there are far more ads for sex with males on craigslist.org than backpage.com, and far more aggressive practices of ad flagging and removal. While many of our ads were periodically flagged (likely because they indicated an interest in paid sex), we were careful to ensure that there were always multiple ads available to site visitors on every day of the study period.



- We created multiple online dating profiles on sites where paid sex activity among males is commonplace, namely sugardaddyforme.com and manhunt.net. Other sites such as rentboy.com are for providers only, and therefore were not included in the study².
- We created multiple profiles on app-based male dating services such as Jack'd and Grindr. Appbased services are an emerging source of paid sex activity, and present research challenges (such as location-based ad listings derived from a GPS signal) that are generally not present in web-based services.

In each of these online sources, we indicated a strong preference for "dating" young males, and also indicated that we prefer paid sex. We attempted to create a variety of ad types to represent a wide array of buyers. Sometimes the buyer was in his mid-30s, sometimes his young 20s. Content varied along a number of other criteria as well. We used pictures only in online profile sites, as it was not required for classified ads. Two of the online classifieds ads we used for the study are presented below. The term "generous" is widely known to indicate paid sex:

i'm ready for young fun - 20 (atlanta)

i'm young but plenty experienced, so i know what i like. been at this for a while now, and yes i am generous. time of day doesn't really matter.

i don't get with guys older than me, sorry. like i said, i know what i like!

i'm 5'11" 7"c age 20 adventurous ddf and willing to host or visit.

Discreet gentleman looking for a regular date - 19 (atlanta)

I work long hours as a college student so I need to unwind with some fun when I get the chance. Not looking for a relationship, just a regular thing if we connect. Yes, I am very generous when I find a good guy. I'm 19 with an athletic build, DDF and use protection.

Looking for guys close to me in age. If you have a friend to bring, that can be fun too. I like top or bottom, whatever feels good.

I've told you a bit about me, so now tell me a bit about you. Will exchange pics so we know what each other looks like.

We were approached by multiple male providers through each of these online sources. We encountered adolescent males under age 18 on each site, except for manhunt.net and app-based services such as Jack'd and Grindr.

² Many of the providers who responded to our ads also had profiles on sites such as rentboy.com, so we are confident that excluding these sites from our study is not a major limitation.



The Importance of Gender Identity

Gender identity is a concept that is still new to many mainstream media sources and advocates. It is *not* the same as sexual preference. Rather, gender identity refers to the gender with which an individual identifies, regardless of the individual's biological characteristics. Why gender identity matters in the current study is that a substantial number of individuals offer paid sex in metro Atlanta under the label of "transsexual escorts" (the "ts" listing under backpage.com's "Adult" section). Currently there are approximately 50 ts ads per day on Atlanta's backpage.com site, almost exclusively trans women (individuals who are born biologically male, but who identify as or present as female). Identifying these individuals as "male" is neither necessary to the study, nor sensitive to their own identities.

In preparation for this study, multiple experts who work with trans youth explained to the research team that we were highly unlikely to find adolescents selling sex as "transsexual escorts" on any online site or service. According to these experts, the reason why is that most trans youth begin to express their gender identity after the age of 18, and in particular after they leave home. Our research experience confirmed this prediction, as the youngest individual who responded to one of our ads seeking "transsexual escorts" was age 22. Therefore, we do not believe this study should be interpreted as a being adequately designed for estimating commercial sexual exploitation of juvenile trans youth.

Determining Provider Age

Over the course of the 4-week study period, we were contacted by 115 different individuals in response to our ads and online profiles seeking paid sex with young males. Of these 115 different individuals, 10 were buyers offering to pay the individual in the ad for sex – despite that the individual in the ad was clearly a buyer himself. A total of 8 of these individuals indicated that they were under age 18, and 9 were providers who did not reveal age. Note that these are raw numbers, not a population estimate. Our ads and online profiles were only several among thousands posted during the 4-week period. We later use statistical models optimized for "sparse data" to estimate overall populations.

We determined the age of each provider through follow-up communications with each individual who contacted us through our ads or online profiles. Sometimes individual providers contacted us with a lot of personal information, and sometimes nothing at all. We responded to 100% of initial contacts from all individuals. Depending on the information initially provided, the response script was a situationally-relevant version of one of the following:

- Nice pic. I might be interested. What are your stats and age? Here's a pic of me from last summer.
- Got your message. You didn't tell me anything about yourself? Stats, age, etc.? Here's a pic of me from last summer.
- Nice pic. You don't look 19 though! You can tell this generous guy your real age :) Here's a pic of me from last summer.
- Got you message. I might be interested, but I typically go younger. Do you know a younger friend who likes generous guys that might want to join in a threesome? Here's a pic of me from last summer.



The purpose of conversing with the provider was to determine (1) the authenticity of the inquiry, and (2) the age of each individual. We conversed with providers through email, SMS text messaging, and appbased messaging. Most conversations involved 4-5 total messages. As soon as age was determined, all communication from the research team ceased abruptly. We did not speak with any provider over the phone, and did not seek personally identifying information. All age data collected from providers was immediately entered into a secure database, and other information (including photos) was discarded immediately. Each message was signed "jl", and a fake email account was used that began "jasper.l@.....". The photo of "jl" was a fully-clothed younger-age white male wearing sunglasses.

The age and intent distribution of individuals who responded to one of our ads or online profiles is in table 1. We excluded from analysis any response that was an attempt to solicit online pornography, a common occurrence in online dating websites such as sugardaddyforme.com.

Intent and Age	Percent
Male Providers	91.3%
Under Age 18	7.0%
Ages 18-20	19.1%
Ages 21-22	16.5%
Ages 23+	40.9%
Unknown Age	7.8%
Male Buyers	8.7%

Table 1. Raw Data Collected on Intent and Ages of 115Individuals Who Responded to "Seeking Paid Sex" Ads

Note: These percentages do <u>not</u> represent the age distribution of the metro Atlanta male sex trade, only the individuals comprising the initial "capture" sample.

When an individual responded to a different ad or different online profile over the course of the 4-week study period, we noted that response in our "recapture" database, and did not interact with that individual at all since the individual's age and intent was already determined during the initial "capture" exchange. Capture and recapture data by age are contained in table 2.

In this table, "capture" simply represents the number of unique individuals encountered during the study whose age and intent to sell and could be established through communication. "Recapture" refers to the number of unique individuals we encountered a second time – at least one day later than the time of "capture" – during the course of the study. No individuals were "recaptured" more than two times during the study period.



Age	"Captures"	"Recaptures"
All Ages	96	21
Under Age 18	8	1
Ages 18-20	22	8
Ages 21-22	19	3
Ages 23+	47	9

Table 2. "Capture" and "Recapture" by Age of MaleProviders Who Responded to Our "Seeking Paid Sex"Ads (n=94)

Note: This n=96 includes only confirmed male providers with a known age.

With these data alone we are able to use established statistical methods to estimate the total number of young males involved in metro Atlanta's sex trade, including the number who are under age 18.

Prevalence Estimates

Two straightforward, but limited statistical equations can be used to estimate the population size of male providers by age. Both estimates use a Poisson distribution to estimate the number of members of the population based on the number of encounters in the sample. Equation values include the number of individuals "captured" (*C*), the number "captured but not recaptured" (f_1) and the number "recaptured" (f_2). The first method is Zelterman's (1988) truncated Poisson estimator:

$$\frac{C}{1 - e^{(\frac{-2f_2}{f_1})}}$$

The second method is similarly easy to compute (Chao, 1987, 1989):

$$C + \frac{f_1^2}{2f_2}$$

These two methods are optimized for sparse data, but fail to take into consideration specific conditions that are relevant to studies of human populations – namely migration in and out of the area of study, and "escalation" or "deterrence" effects that result from the study methodology itself. Therefore, they reflect the "smallest plausible" population estimates based on the observed data. A major breakthrough in this area of statistical modeling comes from a team of researchers who use capture-recapture to estimate male clients of prostitute individuals in areas across North America (Brewer et al., 2006; Brewer, Roberts, Muth, & Potterat, 2008; Roberts & Brewer, 2006). The underlying formulas for their statistical procedures are neither easy to understand nor particularly enlightening to the lay reader, but are published fully in the Journal of the Royal Statistical Society (Roberts & Brewer, 2006).



Because the 4-week period in the current study is relatively short, factoring in migration is largely irrelevant to the end result. According to the U.S. Census Bureau (*State-to-State Migration Flows: American Community Survey 1-Year Estimates*, 2013), and using the following formula: $.8365 = (1 - x)^{365}$, the daily exit probability for an adolescent male in metro Atlanta comes to .000489. Even doubling this value to approximate the increased levels of transience among young people in the sex trade does not affect calculations meaningfully in this relatively brief study period.

However, the ability of the Roberts-Brewer method to account for "escalation" or "deterrence" in the data collection methodology is critically important. For example, it is well known that arresting a buyer for attempting to pay for prostitution will result in that individual being less likely – around 70% less likely, in fact – to attempt to purchase sex again. This is a "deterrence" effect in the resulting statistical model. Our data indicate the exact opposite – the methodology inadvertently created a demonstrable "escalation" effect.

We can observe this escalation effect based on the fact that we "recaptured" 21.9% of initial "captures" (21/96 from table 2), yet none of these 21 individuals were ever "recaptured" a second time. With no escalation or deterrence effect, we should expect 21.9% of "recaptures" to be "recaptured" again (assuming the study period lasted indefinitely, which it did not). Our best explanation for this pattern comes from the study design itself: all "captures" were engaged in conversation with the research team in order to determine age, but none of our "recaptures" were engaged in such conversation because it was not necessary to determine age. That providers thought they were close to acquiring a new client seems to have made them slightly more likely to try again shortly thereafter.

Analysis of capture-recapture timing seems to back up this explanation. The average time between "capture" and "recapture" was 5.9 days. Two-thirds of "recaptures" occurred in 5 days or fewer, suggesting that that the communication process with providers might have caused a modest "egging on", or "escalation" effect, therefore making "recapture" more likely to occur than if we had not engaged the provider in any conversation. We account for this pattern by adding a small "escalation" effect into the Roberts-Brewer equation. The upper-bound limit for this "escalation" effect is obviously 21.9%, but we instead use 14% (about two-thirds of 21.9%, or the number of "recaptures" that occurred in shorter order than the mean "recapture" time of 5.89 days).

Results from the three methods are contained in table 3. In order to double-check the robustness of the estimate of males under 18, we used the Roberts-Brewer method to calculate the population estimate of the total number of male providers in the study across all ages (96 "captures", 21 "recaptures"), which solves to 648 – compared to a combined estimate of 652 when solved for each age group separately³. Therefore, we believe the resulting age-based estimates are robust, even for the comparatively small number of observed males under 18.

³ Table 3 contains the prevalence estimate values for the three age categories of young males: under 18, 18-20, and 21-22. These are the three age groups to which the study's ads and online profiles were targeted. As noted in table 2, an additional 47 providers age 23 and over also responded to ads and online profiles, of whom 9 were "recaptured" as well. A similar study designed to elicit responses from all ages of male providers would likely result in more males age 23 and over being "captured" and "recaptured." Regardless, the Roberts-Brewer method described in table 3 produces an estimate of 318 individuals in this age group alone based on the observed data. This 318 estimate, added to the 56, 148, and 130 estimates of young male providers in table 3, results in an aggregate estimate of 652 male providers. This aggregate estimate of 652 compares very favorably to the estimate of 648 derived by combining individuals of all ages into a single capture-recapture population estimate.



Age	Prevalence Estimate	Lower-Bound Range
Under Age 18	56	29-33
Ages 18-20	148	32-34
Ages 21-22	130	57-59

Table 3. Prevalence Estimates of Young Males in theMetro Atlanta Sex Trade

Note: Prevalence estimate is calculated using the Roberts-Brewer method, factoring in the 14% observed escalation effect. The lower-bound range reflects the minimum and maximum values obtained through the Zelterman (1988) and Chao (1987, 1989) methods, as well as the Roberts-Brewer method holding the escalation effect to 0%.

If we include the 318 male providers estimated for ages 23 and over, then the estimates from table 3 indicate that 8.6% of male providers in metro Atlanta's sex trade are under age 18. This percentage is similar to the finding by Marcus et al. (2014), which observed that approximately 10% of providers ages 16-24 in Atlantic City's sex trade were under age 18.

Proper interpretation of these numbers can be challenging due to the length of the study period. Based on data collected from young male providers during a 4-week study period, it is estimated that 56 adolescent males under age 18 were actively participating in metro Atlanta's sex trade, or about 8.6% of those observed in the sex trade overall, and 16.8% of young males up to age 22. It is highly doubtful that these same adolescent male individuals will remain in the sex trade for an entire year, and it is similarly implausible to suggest that each of these individuals would be actively engaged in commercial sexual exploitation each day during the study period. Rather, this estimate reflects the number of individuals engaged in "average" activity levels during the study period.



Buyers of Adolescent Males

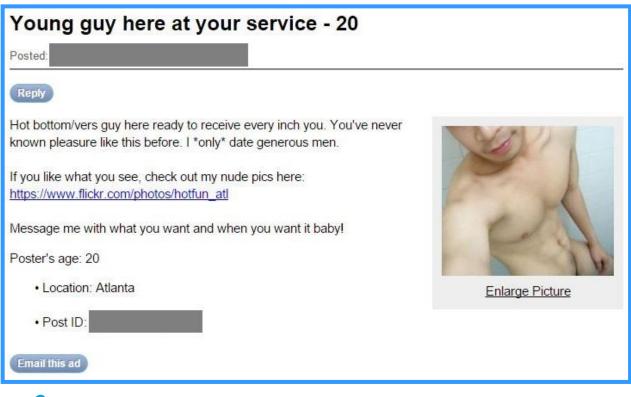
The second portion of the study sought to describe the geographic distribution of buyers of young and adolescent males in metro Atlanta. All markets are demand-driven, including the prostitution market. In order to understand why "supply" can be found in different locations and at different levels, it is best to study the location and intensity of "demand."

While this study is not intended to produce a prevalence estimate of demand for paid sex with adolescent males, a simple twist of the previous methodology enabled the research team gain valuable insights on where buyers are located in metro Atlanta.

Methodology

We sought to collect anecdotal data from prospective buyers of young males in metro Atlanta's sex trade, which typically requires waiting for interested purchasers to respond to decoy solicitations. Instead of collecting data this way, we sought to collect information from prospective buyers *before* an indication of interest. The rationale was simple: obviously many more people would view and consider a solicitation offer than who would actually reach out to potentially transact. Our goal was to reach this larger population instead of the few who choose to respond to a single ad.

To do this, we employed a silent tracking script that would record the IP address of any individual who clicked on a specific link. We could then geocode (assign GIS coordinates to) each IP address through publicly-available online sources to determine where the "clicks" originated. The backpage.com ad below shows the resulting advertisement as seen by the end user.



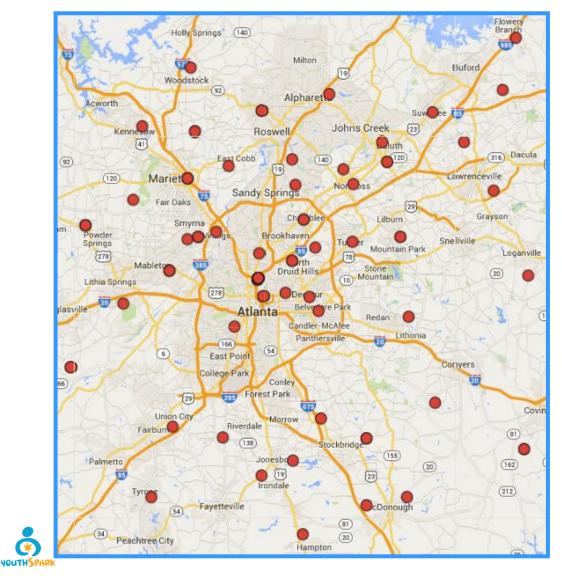


The URL in the ad copy appears to direct to flickr.com, a photo sharing service. However, the link actually directs to a web server that records the IP address of the individual who clicked the link. This process is not only legal, but in fact IP addresses are collected by every major website and commonly used for visitor analysis. In this case, however, the research team used a deceptive technique to encourage as many ad viewers as possible to click through.

When someone clicked the link, that person would encounter a blank page with a "404 not found" error message. There were no nude pictures on the page. The ad shown above was the only ad employed in the study, and a close variant of the ad was also published to Atlanta's craigslist.org site. However, the craigslist version of the ad was flagged for removal after two days, likely because a user recognized the deceptive link technique. The Atlanta backpage.com version of the ad was never flagged for removal.

Results

The ad was moved to the top of the backpage.com listings every day for 10 days during the study period. During this period, users from 253 different IP addresses clicked on the link in the ad, either from the backpage.com version of the ad, or from the craigslist.org version. A total of 56% of these IP addresses could be geocoded using legal, publicly available tools. The distribution of geocoded IP addresses in metro Atlanta is shown in the figure below.



There were also geocoded IP addresses in Georgia from outside of metro Atlanta. A zoomed-out version of metro Atlanta shows individuals interacted with the ad originating in Macon, August, and as far south as Statesboro.

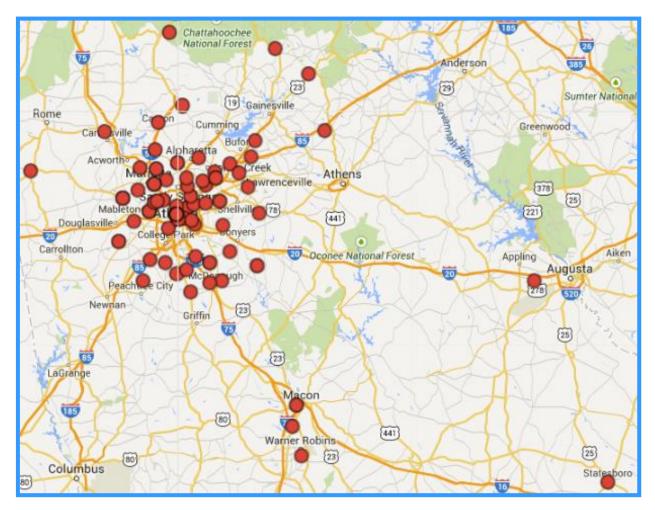


Table 4 at right shows the percentage of Georgia individuals – as measured by IP address – who come from inside and outside of metro Atlanta, as we as from inside and outside of the perimeter freeway – a handy way to approximate individuals from the region's urban core.

More than 7 in 10 individuals who interacted with the ad came from OTP metro Atlanta. While the geocoding process of IP addresses can be imprecise without a court order, and IP addresses are imprecise determinations of individuals, the overall pattern of results is very clear. **Table 4.** Distribution of Individuals in Georgia WhoInteracted with the Atlanta Decoy Ad (n=117)

Region	Percent	
Georgia, Outside Metro Atlanta	11.1%	
Metro Atlanta	88.9%	
Inside the Perimeter (ITP)	11.1%	
Outside the Perimeter (OTP)	77.8%	

Note: 44% of all individuals who interacted with the ad had IP addresses that could not be geocoded, and are therefore not included in the n=117 in this table.



Not all individuals who interacted with the ad were geocoded to Georgia, however. The image below shows 100% of geocoded IP addresses. There were no IP addresses geocoded to countries outside of the U.S. It is unclear why an address from outside of metro Atlanta – let alone outside of Georgia – would register in the study. One possible explanation is sex tourism, while another is local residents planning a transaction for when they return from travel. Surely at least some of the points outside of Georgia are the result of inaccurate geocoding or spoofed IP addresses, but it is difficult to imagine that this could explain all – or even most – of the out-of-state clicks.

Lastly, it is possible that individuals from outside of Georgia are engaging in a form of "voyeuristic" behavior, perusing online paid sex ads for the pornographic value of the images typically contained therein. If this is the case, though, it should be noted that an individual from outside of Georgia would first need to navigate to the Atlanta backpage.com listings – which are on a separate site altogether from listings in other metro areas – in order to have discovered our ad. And on the listing page showing our ad alongside many others, there is no indication that our ad contains a link for nude photos. An individual would first need to click on our ad based on the title and photo alone, and only then discover the link for "nude pics."



The full geographic distribution can be found in table 5. About 1 in 6 individuals who interacted with the ad were geocoded to outside of the state of Georgia. The furthest geocoded IP address traced to the state of Hawaii.



Region	Percent
Outside of Georgia	17.0%
Georgia	83.0%
Metro Atlanta	73.8%
Outside Metro Atlanta	9.2%

Table 5. Distribution of All Individuals Who Interacted withthe Atlanta Decoy Ad (n=141)

Note: 44% of all individuals who interacted with the ad had IP addresses that could not be geocoded, and are therefore not included in the n=141 in this table.

It is important to keep in mind that these percentages are still anecdotal in nature because of the study design, and are furthermore volatile due to the relatively small sample size of n=141. Additional

anecdotal information comes from prospective buyers who sent a message in response to the decoy ad. Men commonly referred to themselves as "respectful" and "polite," as shown in the buyer response featured at right. Other prospective purchasers sent more involved messages, such as below. All buyer messages are presented without edit, except for removing the name of

Hey man. Im a masc guy looking for a younger chill guy to invite over for a massage, shower, and maybe to just lay in bed with. Respectful and polite here.

the male featured in the decoy ad, as well as any information that could possibly be used to identify the sender. The research team did not engage in any back-and-forth communication with individuals who responded to this decoy ad. **Be advised the message below contains adult language.**

Dear [NAME OF MALE],

I will tell you something other's won't tell you. Most of the men who will respond to your ad, could give a rats ass about you, outside sex. As life goes on, you too will discover that it was all meaningless and then self loathing will set in.

If you, truly want a "father figure" with actual love that elevates you to where you are no longer subservient to others and you want success. I'm your man. The true goal of a daddy is not to fuck the boy until there is nothing left then toss him aside, the true goal of a daddy is to teach the son what love really is by proving it and mentoring that boy to where he is safe, successful, and finally, for the first time in his young life becomes to know what love truly is.

I am a man, I don't need to abuse boys, use boys, and cast them out. I am a real man. 100% man. I cowboy up in hard times, and I am loving, passionate, and understanding always. It takes strength to be a man, that strength I have.

If you and I were in a relationship, giving you the most pleasure and happiness possible would be my goal, not to simply fuck you like an inanimate object, then discard you when another pretty boy comes along.

[CONTINUED ON FOLLOWING PAGE]



[CONTINUED FROM PREVIOUS PAGE]

You must decide what is best for [NAME OF MALE]. If no one else gives a fuck about [NAME OF MALE], then [NAME OF MALE] has to do this as well. Even if it takes changing your zip code, thus people do all the time.

Sex is never a substitute for love, it can't. Sex barely speaks the language of love. You must decide, what is it you want truly. Loving arms around you, or some man crawling off of you, promising to call (when it's convenient for him).

My goal would be to elevate you, see to it that you are financially independent, I would take your talents and abilities and magnify them so you would never be indebted to, or controlled by any one. I would see to it, that you are safe, loved and happy.

This is not merely some romantic notion, it's logic. The young operate on emotion, the older utilize logic and sweeten it with emotion.

So, [NAME OF BOY], you are cute, but so are thousands of other boys. What you have, that lasts, is heart, soul and spirit. I for one, would love to have a son like you. Fathers and sons don't divorce, they don't stop loving each other. That's logic and reality, anything less, is a weak substitute that will only leave alone and in pain again.

So [NAME OF BOY], if you like what you've read thus far, and want to get to know me, I'm more than willing to go that extra mile so you become successful, but even more, that you know what love is. It is the most powerful force in the universe, even if you as yet are not acquainted with it.

I am [BUYER HEIGHT], [BUYER WEIGHT], masculine, brown hair, hazel eyes, cut, D&D free, sane, intelligent and most of all loving. I'm no ones fool, nor are you. I think we'd be a wonderful match, even with our collective human faults.

I'm enclosing my picture, it is what it is. I am whom I am. Nothing more, nothing less and I expect you to be you. So, if you truly want something real and substantial, I'm here and willing to give it a try.

So, my cell number is, [BUYER PHONE NUMBER], I live in [CITY], Tennessee, near Knoxville and have my own home which you are welcome to come to any time. I do text, but prefer human conversation, it's always best.

I hope to hear from you, even though there is a small distance between us, we're only miles and hours apart right now. That can change.

Sincerely and respectfully,

[NAME OF PROSPECTIVE BUYER]

WARNING

DISTURBING ILLUSTRATIONS ON THE FOLLOWING PAGE



Other prospective buyers sent pornographic images in response to the ad, typically of their own genitalia. Many photos, however, were simply headshots of the prospective buyer. The research team also received several pornographic cartoons depicting older men engaged in sex with younger males. Two of these images are included below, with depictions of genitalia censored. A reverse image search on Google showed that the pornographic cartoon images originated on websites dedicated to illustrations of "father-son" sex. Several prospective buyers referred to themselves in messages as "daddy."







Conclusions and Recommendations

The results of this study clearly demonstrate that adolescent males are commercially sexually exploited in the metro Atlanta sex trade, and that prospective buyers of young males are plentiful in and around the region. Consistent with other scientifically-rigorous estimate methodologies, we found that approximately 1 in 10 young males in the sex trade were minors under age 18. Finding these minors is not particularly challenging, but it would require some work on the part of a prospective buyer to identify an adolescent without any referral from other sources.

The online marketplace for paid sex is diversifying rapidly. Online classifieds sites still appear to be the primary drivers of the market, but niche websites that cater to specific sexual preferences are also emerging in popularity, as well as app-based online services. These app-based services, which are obviously optimized for mobile-first computing experiences, change the process of finding and communicating with providers dramatically. We suspect that in the next two to three years, app-based services will fundamentally change the behavior of providers, buyers, and law enforcement focusing on prostitution activity.

The extent to which online venues will force changes to systems responses for commercially sexually exploited youth is also critically important. With street-level activity, local law enforcement and child welfare jurisdictions are highly relevant for systems response. The data in this study suggest that coordinated responses at the state – and even federal – levels are required to address the issue. For example, one adolescent sold online for sex in a Georgia county could easily be purchased by buyers from multiple other counties, while pornographic images of that child could foreseeably be viewed by individuals from across the U.S. Young males from as far away as Knoxville, Tennessee offered to "take a bus" to meet the buyer in our decoy ads. These challenges are far from insurmountable, but they do require additional levels of agency coordination across jurisdictions.

Additional research needs to be conducted to document incidence of commercially sexually exploited males among homeless and runaway youth. Several robust prior studies document that this occurs in other regions, but no such investigation has been conducted in metro Atlanta. It is distinctly possible that many, if not most of the males who participate in street-level sex selling and survival sex are excluded from the study because their exploitation is more opportunistic in nature.

Additional research also needs to be conducted to determine the unique service needs of males involved in commercial sexual exploitation. This should include determining how youth come to be involved in the sex trade, what their experiences in the sex trade are like, and how this can be prevented and addressed effectively.

Finally, it is vitally important to understand the buyers of young males in metro Atlanta. As with all markets, the only real changes in the prostitution market of metro Atlanta will be the result of changes in demand for paid sex.



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