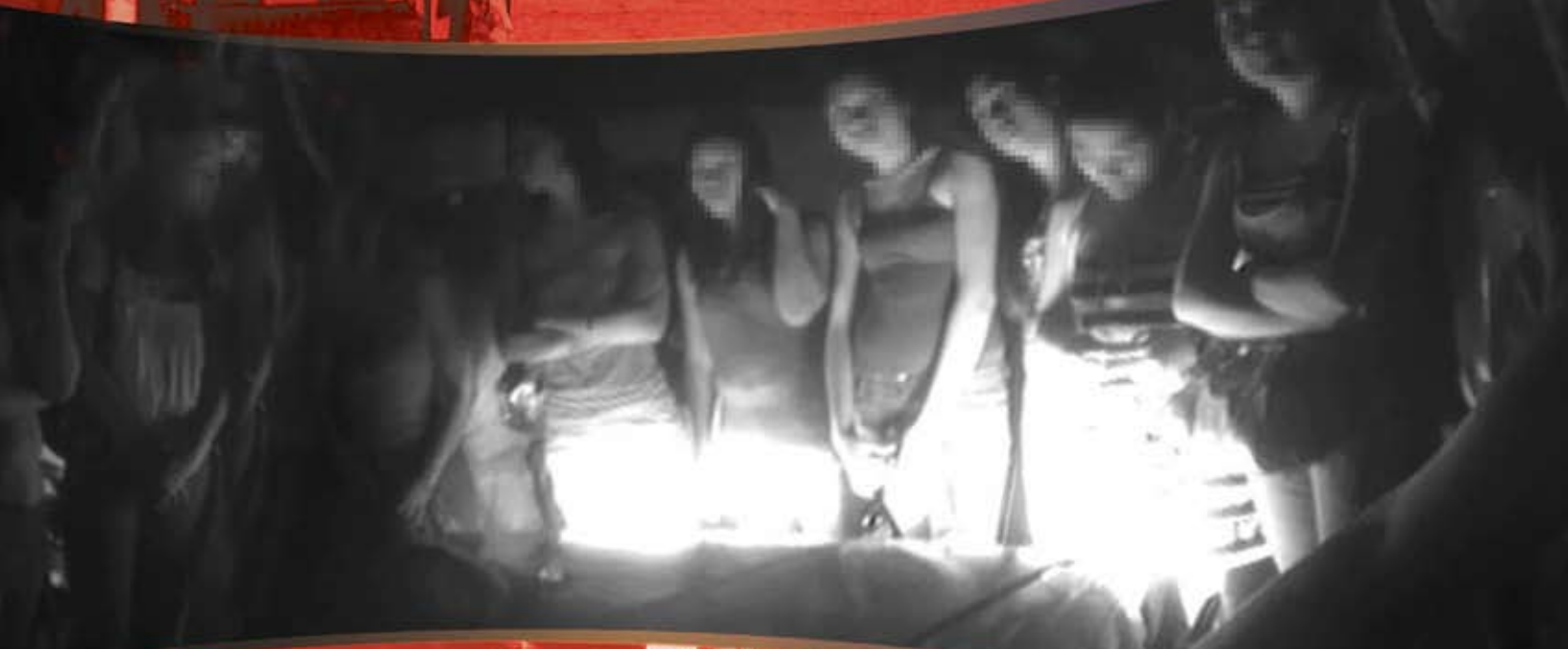
WAVE 2 ASSESSMENT FOR PROJECT LANTERN

January 28, 2009



PROJECT LANTERN.

CJA

WAVE 2 ASSESSMENT FOR PROJECT LANTERN

January 28, 2009

EDWARD R. MAGUIRE
MEGAN GANTLEY
JEFFREY B. SNIPES

P.O. BOX C
FAIRFAX, VA 22031

www.cjanalysts.com

Top cover photograph: "Main Street"

Bottom cover photograph: "Playing with Lights" by Erwin Rommel "Ice" Rumpon

Cover design by Adagio Digital Arts

Interior design by Adina Cucicov, Flamingo Designs

Contents

ACKNOWLEDGMENTS

We want to thank a number of individuals for their assistance with this project. IJM investigative staff shared their expertise and provided security services in the field, escorting us into neighborhoods where the sex trade thrives and into dangerous areas. On more than one occasion, members of the CJA team were relieved to see IJM staff blending into the shadows, looking out for their safety, sometimes in the middle of the night while they were in distressed neighborhoods surrounded by pimps and hustlers.

David Shaw has been our primary administrative point of contact at IJM. We are grateful to Dave for his patience and responsiveness.

We are grateful to our team of criminologists and police officers for their willingness to place themselves at risk, venturing into the unknown to increase the knowledge base on the sexual trafficking of minors.

We are also grateful to the many IJM employees who provided ideas and help in various portions of the study.

We want to express our appreciation to the management, staff, and residents of Marillac Hills, a shelter for girls and young women, and Haven for Women, a shelter for battered women and their children. Residents of these two facilities located on the outskirts of Manila contributed to the project by participating in two age-estimation exercises with members of the CJA team. All of them have dealt with some form of serious adversity, and we hope their futures will be brighter.

Many of the minors we found during the course of this study shared with us their hopes and dreams for a better life. During our brief time with them, we took them shopping, bought meals or ice cream sundaes for them, laughed with them, and listened to their stories. We hope the results of this study will help make a difference in the lives of these girls and others like them.

EXECUTIVE SUMMARY

This report presents the findings from a study conducted in August 2008 to examine sexual trafficking in minors in Cebu, Philippines. The study was conducted by Crime and Justice Analysts, Inc. (CJA), an independent research and evaluation firm specializing in criminology and criminal justice.

The International Justice Mission® (IJM) retained CJA to support its work in reducing the number of child sex trafficking victims by conducting a formal, scientific study collecting quantitative data that will help measure the impact of its Project Lantern initiative. The project is designed to reduce the incidence of child sex trafficking in the target area by strengthening local capacity to successfully locate, arrest, and prosecute perpetrators, thereby leading to increased expectations of criminal sanctions for violating trafficking laws.

The wave 2 study described here is the second of three waves of data collection designed to measure the availability of child sex-trafficking victims in Cebu. Wave 1 of this study was conducted in October 2006. Together, these three waves will be used by IJM and its contractors to evaluate the effectiveness of Project Lantern. IJM provided CJA with a list of eight indicators or proxies intended to measure the availability of child sex trafficking victims. During wave 2, CJA deployed a team of 11 people (including eight investigators, two data collection staff, and one security director) to the Philippines for training and data collection. The eight investigators each spent eight (and in some cases nine) nights visiting bars, brothels, massage parlors, malls, a red light district, and other locations where people seeking sex go to find prostituted or commercially exploited women and girls.

The eight investigators engaged in training on age estimation and used a number of age-confirmation processes to determine whether someone was in fact a minor. They then posed as sex tourists and sought out prostituted or commercially exploited minors. While conducting their covert observations, the investigators systematically collected data on a number of variables having to do with the people they were meeting and the places they were visiting. As they gathered the necessary data, they submitted it regularly to a centralized command center using cellular telephones (either by voice or by text). The data were entered into a master database by two data coordinators at the command center. This database, the qualitative field notes written by the investigators at the end of their shifts, and photographs and audio/visual footage taken of suspected and confirmed minors, constitute the primary data sources for the findings presented in this report.

During the course of the study, the investigators undertook 88 visits to bars, 4 visits to brothels, 10 visits to massage parlors, 8 visits (walk-throughs) to malls, 2 street encounters, 9 pimp encounters,

and 8 dates. Out of the 69 bars, 3 brothels, and 10 massage parlors visited by the investigators (some were visited multiple times), commercially exploited minors were located in 15. Altogether, the investigators observed approximately 1,335 prostituted or commercially exploited women and girls. Of these, 29 (2.2%) were confirmed as minors. Across all attempts to locate minors, it took our investigative teams, on average, 5 hours and 15 minutes to locate a minor. The report presents a more detailed look at the study's findings.

The results of the baseline (wave 1) study confirmed the presence of prostituted or commercially exploited minors in Cebu. Wave 2 of the study also confirmed the presence of prostituted or commercially exploited minors in Cebu, though in reduced numbers: 29 (2.2%) in wave 2 compared to 103 (6.6%) in wave 1. Our investigators routinely encountered token resistance to their efforts to find minors in wave 1. It took a greater amount of time for our investigators to locate minors during wave 2, suggesting that the prevalence of minors in the sex trade has decreased. As in wave 1, the investigators were unable, despite their best efforts, to locate prostituted or commercially exploited preteens; most of the minors we discovered were 16 or 17 years old. Based on our interviews with minors, we know that many enter the sex trade through different routes, although all of them are considered "trafficking victims" under Philippine law. Some appear to seek out the work out of economic necessity; several minors told us they forged their paperwork to get the job. Others fit the more conventional image of a sex trafficking victim in the sense that they were taken involuntarily from their homes, they are moved around to work in different cities depending on customer demand, and they show visible signs of maltreatment and poor living conditions.

Over the past decade, there has been an increase in the extent to which criminological interventions like Project Lantern have been subjected to independent, external evaluation to assess their effectiveness. The new emphasis on evaluation research is part of a larger movement in several disciplines toward "evidence-based" policymaking.[1] We applaud IJM and the Gates Foundation for their willingness to evaluate the effectiveness of Project Lantern. The result will be an increased understanding of sexual trafficking in minors, and hopefully an enhanced capacity to implement effective solutions.

1 Petrosino, Anthony, Robert F. Boruch, Haluk Soydan, Lorna Duggan, and Julio Sanchez-Meca (2001). "Meeting the Challenges of Evidence-Based Policy: The Campbell Collaboration," *The Annals of the American Academy of Political and Social Science*, Vol. 578, No. 1, 14-34.

I. INTRODUCTION

The International Justice Mission® (IJM) retained Crime and Justice Analysts, Inc. (CJA) to support its work in reducing the number of sex trafficking victims by conducting a formal, scientific study collecting quantitative data that will help measure the impact of a new initiative, Project Lantern. The project is designed to reduce the incidence of sex trafficking in the target area by strengthening local capacity to successfully locate, arrest, and prosecute perpetrators, thereby leading to increased expectations of criminal sanctions for violating trafficking laws. According to IJM, this should, in turn, help deter future acts and lead to a decrease in the overall level of sex trafficking. IJM is also working with local stakeholders to ensure that rescued trafficking victims receive appropriate aftercare services.

The findings reported here represent the second step in an evaluation process that IJM will execute over several years. According to IJM's evaluation methodology, the wave 1 baseline study was the first in a series of three in-country studies designed to measure the availability of child sex trafficking victims in Cebu, Philippines. The baseline study, conducted in October 2006, was conducted prior to the implementation of any training activities or other interventions by IJM in Cebu in order to establish a baseline measure of the availability of trafficking victims. The second study, described in this report, was conducted at the project midpoint. IJM opened its office in Cebu in September 2006, approximately 23 months before this study was conducted. IJM's investigative efforts in Cebu had been underway for approximately 14 months at the time of this study. A final study will be conducted at the end of the project to measure changes over the life of the project and help assess whether those changes occurred as a result of Project Lantern. This report describes the methodology used for collecting data and estimating the ages of sex trafficking victims during both waves, presents the findings for wave 2, and compares wave 1 and wave 2 findings.

II. PROJECT INDICATORS

Given the hidden and illegal nature of sex trafficking, generating an accurate count of the total population of sex trafficking victims is difficult. Without having an accurate knowledge of the total size of the sex trafficking victim population, it is difficult to measure with confidence a reduction in the absolute number of people who have been trafficked for commercial sexual exploitation.[2]

Instead of coming up with measures based on enumerating the population or its various subparts, IJM chose a list of proxy indicators that measure the *availability* of child sex trafficking victims. The indicators for which CJA was responsible for collecting data are as follows:

1. Number of children trafficked for commercial sexual exploitation found in target area.
2. Elapsed time to locate a child trafficked for commercial sexual exploitation.
3. Number of attempts to locate a child trafficked for commercial sexual exploitation.
4. Number of establishments offering a child trafficked for commercial sexual exploitation.
5. Number of people not affiliated with a commercial sex establishment offering a child
6. trafficked for commercial sexual exploitation.
7. Price charged for purchasing the services of a child trafficked for commercial sexual exploitation.
8. Percentage of total attempts to procure a child trafficked for commercial sexual exploitation that results in the presumed facilitator, victim, or prostituted or commercially exploited person citing the police/law enforcement as the reason why a minor is not available for sex.[3]
9. Incidence/type of security measures at establishments taken to guard against police enforcement.

---

2 A recent compendium of research on human trafficking concluded "Perhaps the most challenging factor is that most of the populations relevant to the study of human trafficking …constitute so-called hidden populations. A hidden population is a group of individuals for whom the size and boundaries are unknown, and for whom no sampling frame exists." See G. Tyldum and A. Brunovskis (2005). "Describing the Unobserved: Methodological Challenges in Empirical Studies on Human Trafficking," p. 17 in *Data and Research on Human Trafficking: A Global Survey*, edited by F. Laczko and Elzbieta M. Godziak. New York: United Nations Publications.

3 The term "prostituted or commercially exploited women or men" is used in the Philippines to refer to commercial sex workers and is the one used by IJM's Manila office.

IJM instructed CJA to use a definition of "sex trafficking" that is consistent with Philippine law. While Project Lantern will locate and effect the rescue of both adult and child trafficking victims, for the purposes of this study, CJA was asked solely to locate minor trafficking victims. According to IJM's interpretation of Philippine law, minors—defined as persons under the age of 18—engaged in prostitution or commercial sexual exploitation are considered "trafficking victims" even if they do not meet conventional ideas about what constitutes trafficking, such as being forced against their will to engage in sex acts or being transferred involuntarily away from their home.[4] Minor trafficking victims can be identified through visual identification and verification through conversations with the minor directly or with a third party to glean information that confirms the age of the child (a later section of this report will address the reliability and validity of methods used to determine whether someone is a minor). Confirming that an adult is a trafficking victim, however, is much more difficult as it requires the adult to self-identify as a trafficking victim. The amount of effort and resources required to elicit such information from prostituted or commercially exploited adults was beyond the scope of this study and, in addition, could have increased the level of danger faced by CJA staff that went undercover to locate potential trafficking victims.

4 According to Section 3a of the Anti-Trafficking in Persons Act of 2003 or Republic Act No. 9208, the term "trafficking in persons" refers to: "the recruitment, transportation, transfer or harboring, or receipt of persons with or without the victim's consent or knowledge, within or across national borders by means of threat or use of force, or other forms of coercion, abduction, fraud, deception, abuse of power or of position, taking advantage of the vulnerability of the person, or, the giving or receiving of payments or benefits to achieve the consent of a person having control over another person for the purpose of exploitation which includes at a minimum, the exploitation or the prostitution of others or other forms of sexual exploitation, forced labor or services, slavery, servitude or the removal or sale of organs. The recruitment, transportation, transfer, harboring or receipt of a child for the purpose of exploitation shall be considered as "trafficking in persons" even if it does not involve any of the means set forth in the preceding paragraph. According to Section 3b of the same Act, the term "child" refers to: "a person below eighteen (18) years of age or one who is over eighteen (18) but is unable to fully take care of or protect himself/herself from abuse, neglect, cruelty, exploitation, or discrimination because of a physical or mental disability or condition."

III. CONDUCTING WAVE 2 OF THE STUDY

The goal in the wave 2 study was to use the same methodology as in wave 1. As we will explain shortly, while this approach facilitated more reliable comparisons of wave 1 and wave 2 study findings, it also came with some costs. This section describes the wave 2 study procedures.

The contract between CJA and IJM specified one trip to the Philippines during the wave 2 measurement period. A two-person advance team arrived in Manila on August 10 to arrange the logistics for the full team's visit.[5] This included purchasing cell phones for the team, preparing for the age verification exercise, and purchasing office equipment and supplies for the project. The remainder of the team arrived on August 11. Four members of the wave 2 team had not participated in the wave 1 study, including the two persons assigned to the data command center, the security director, and one of the field investigators.

IJM's Manila office made arrangements for the group to visit Marillac Hills and the Haven for Women, two shelter facilities for abused or neglected women and children located just outside of Manila. At the facility, ten of the eleven team members (including all field investigators) participated in a joint exercise with IJM staff intended to hone their skills in estimating the age of young Filipina women and correctly determining whether they are minors (the team's security director did not participate because he was engaged in other duties at the time). This exercise took place on August 12 and included 100 women and children ranging in age from 9 to 46, with an average age of 18.2. A detailed overview and analysis of this exercise is included in section V.

Following the age verification exercise, investigators spent an initial evening in Manila conducting practice observations before formal field investigations commenced in Cebu. They visited go-go bars and KTV bars to begin adjusting to the setting and to working with each other as partners as well as to practice scripts for getting acquainted with and determining the ages of Filipina women and girls. This initial night out also provided the command center staff with an opportunity to acquaint themselves with the trafficking problem and with the nature of the data that would eventually be submitted to them by investigators. IJM investigators and members of the CJA team who participated in the baseline study provided feedback to other team members for whom this was a new experience. Spending time in the field practicing and adjusting to the environment is vital in a study like this.

5 Appendix 1 contains brief biographies of all project participants.

On August 13, the full CJA team flew to Cebu to commence observations. The eight CJA investigators were divided into four teams of two. For several reasons, we chose to concentrate all our investigative teams on Mactan Island (including Lapu Lapu City) for the first night of observations. We also located the command center temporarily in Lapu Lapu for the first night of observations. The command center was comprised of three team members: a data manager, a research assistant, and a security specialist. The command center received phone calls and text messages from the investigative teams, entered this information into databases, tracked the current locations and statuses of the teams at all times, and was responsible for initiating security procedures in the event of security concerns. IJM investigators also routinely utilized the command center to track the locations and activities of CJA investigators. On August 14, the command center relocated to Cebu City along with two of the investigative teams. These two teams commenced observations in Cebu City and Mandaue City. The two remaining teams stayed on Mactan Island to continue observations there.

At all points during the study, the investigative teams were assigned to one of three geographic areas (Lapu Lapu, Mandaue City, and Cebu City). One team was equipped with a hidden video camera and occasionally served as a roving team either to revisit establishments in which the information collected by other teams was ambiguous or inconsistent, to remain in the vicinity of another team if there was any indication of a security risk, or to capture video recordings in cases where a team thought there was a need for an outside opinion on the ages of women or girls working in the area. The investigative teams carried out systematic observations within the areas where commercial sexual exploitation is carried out with greatest frequency, including brothels, bars, hotels, streets, and other locations. Within each of the three primary study zones, the investigative teams relied on intermediaries such as taxicab drivers, hotel staff, and other locals knowledgeable about the sex trade to refer us to locations where minor sex trafficking victims are most likely to be found. When a team finished its measurement activities within its assigned zone, it was then reassigned to assist other teams whose zones had not yet been completed.

IV. STUDY METHODOLOGY

This section outlines the methodology used during the wave 1 and wave 2 studies. It examines sampling, measurement, data collection, and data recording. The basic means by which IJM plans to evaluate the impact of Project Lantern is a simple three-wave panel design that will measure certain indicators of sex trafficking in the target area prior to any interventions implemented by IJM (wave 1), during the midst of the intervention period (wave 2), and then after interventions have been implemented (wave 3). These three waves of data will be used to assess whether or not the interventions caused any changes in sex trafficking. Other kinds of data will also be collected by IJM on an ongoing basis to account for alternative explanations and to help isolate the causal link between project activities and changes in sex trafficking that may occur in Cebu.[6]

Prior to the wave 1 baseline study, CJA and IJM explored the possibility of evaluating the impact of Project Lantern using an experimental design with measures being taken in treatment and control areas. The treatment areas would comprise Cebu City, Mandaue City, and Lapu-Lapu while the control areas would be other communities with a sex trafficking problem that would not receive any assistance from Project Lantern. Although adding control sites would have made good scientific sense, CJA and IJM decided not to use this approach for three reasons. First, IJM staff raised serious ethical concerns about locating minor sex trafficking victims and then not rescuing them. These kinds of ethical issues arise frequently in randomized experiments in which either potentially harmful treatments are administered to the treatment group or potentially helpful treatments (as in this case) are denied to the control group.[7] Second, CJA anticipated some logistical difficulties in locating and screening the additional staff necessary to carry out baseline measurements in the control site on short notice (these conversations took place shortly before we fielded the wave 1 study). Third, at the time, funding had only been set aside for two waves of measurement, a baseline measurement prior to the implementation of Project Lantern, and a final measurement after the implementation was completed (approximately four years later). As we considered options for improving the strength of the evalu-

6 At the baseline methodology workshop, project participants held a lengthy discussion about the kinds of data that IJM ought to collect on a regular basis to strengthen the evaluation. The group decided on several important variables and IJM is responsible for collecting those data. These measures will be analyzed after the wave 3 data have been collected.

7 Resnik, David B. (2002). "The Ethics of HIV Research in Developing Nations." *Bioethics*, 12(4): 286-306; Baunach, Phyllis Jo (2006). "Random Assignment in Criminal Justice Research: Some Ethical and Legal Issues" *Criminology,* 17(4): 435-444; Short, James F. Jr., Margaret A. Zahn, and David P. Farrington (2000). "Experimental Research in Criminal Justice Settings: Is There a Role for Scholarly Societies?" *Crime and Delinquency,* 46(3): 295-298.

ation design, we were faced with the choice of either adding a control site to the original two-wave study or adding an additional wave of measurement between the baseline and final measurements. CJA was concerned about the lengthy gap between these two measurement occasions. Adding another measurement occasion at the midpoint and tracking additional indicators on an ongoing basis throughout the study period was less expensive and raised fewer ethical issues for IJM than adding a control site. Experimental designs maximize what statisticians call "internal validity," which makes them an attractive option for evaluating social interventions like Project Lantern. However, they are often difficult to put in place for ethical, financial, political, and logistical reasons.[8]

Sampling

CJA and IJM agreed prior to the wave 1 baseline study that the evaluation would use a "repeated measures" or panel design that examines the same phenomenon at three separate points in time. One of the most important decisions in any repeated measures study is the selection of an appropriate sampling strategy that can be replicated at each wave. Our baseline study report reviewed several sampling options. Readers with questions are encouraged to view these sampling strategies in the baseline report.

Consistent with the sampling approach we selected in wave 1, we decided to adopt a hybrid approach that enabled us to sample different populations of prostituted or commercially exploited persons using different strategies.

1. Sampling Bars and Brothels

The investigative teams sampled establishments by approaching secondary intermediaries like bellhops or taxi drivers.[9] Our investigators learned very quickly that taxi drivers are the primary means by which sex tourists gain access to prostituted or commercially exploited persons in Cebu. In dozens

8 Lum, Cynthia, and Sue-Ming Yang (2005). "Why Do Evaluation Researchers in Crime and Justice Choose Non-Experimental Methods?" *Journal of Experimental Criminology* 1(2): 191-213; Sherman, Lawrence W. (2003). "Experimental Evidence and Governmental Administration." *The Annals of the American Academy of Political and Social Science*, Vol. 589, No. 1, 226-233; Weisburd, David, Cynthia Lum and Sue-Ming Yang (2003). "When Can We Conclude that Treatments or Programs 'Don't Work?'" *Annals of the American Academy of Political and Social Science,* 587:31-48.

9 Secondary intermediaries are those whose involvement in the sex trade is not their primary form of employment. In the majority of cases, the secondary intermediary was a cab driver. Others included a McDonald's server, street vendors, a club security guard, a private street driver, and a restaurant owner. In some instances, primary intermediaries with more direct involvement in the sex trade (like pimps, brothel owners, or Mamasans) helped steer our investigators to establishments, but this was rare.

of cab rides, our investigators did not meet a single taxi driver who was unwilling or unable to direct them to a location where they could gain access to sex in exchange for money. It became clear very quickly that taxi drivers received some sort of inducement from certain bars or brothels (typically high-end ones) to direct sex tourists there. In each of the three zones where we carried out our data collection, once we had already visited these "hot spot" locations, it became increasingly difficult to find new locations. Some cab drivers claimed that they did not know about other spots, while other drivers seemed quite content to allow us to hire them for the evening to escort us to establishments of varying type, size, and "quality." Our investigators continued hiring new intermediaries each evening, quickly letting go those who were unable to assist them in finding new locations.

Investigators informed the intermediaries that they were looking for "younger girls" or some other similarly descriptive yet vague language.[10] Once the intermediary identified an establishment within the team's zone (Lapu Lapu, Mandaue City, or Cebu City), the team then visited that establishment. If the team had already visited the establishment, they encouraged the intermediary to recommend a different establishment. Once the team visited the establishment recommended by the intermediary, they took one of two courses of action. If there were other bars or brothels in the immediate area (within a five-minute walk), the team simply went to those locations next. Several areas contained concentrations of bars with prostituted or commercially exploited persons, and this method allowed for the possibility of visiting every establishment within a concentrated area. If there were not other bars or brothels in the area, the team would approach an intermediary (either the same one or a different one) and begin the process again.[11]

We anticipated that we would visit all bars and brothels in Lapu Lapu and Mandaue City using this method, including those visited during the baseline study and any new establishments, because the total number of establishments there was suspected to be manageable. In Cebu City, we anticipated that we would only be able to visit a sample of the establishments since we would not have enough personnel or be in the field long enough to visit them all. Our plan was to continue the process of asking intermediaries to recommend new locations until we ran out of time. Based on our results from

10 CJA investigators were counseled by IJM attorneys in the Philippines not to say they were looking for "minors" because soliciting minors for sex is a criminal offense.

11 In some cases, teams would hire a taxi driver for the night, so that when they left an establishment, the cab driver was waiting outside ready to recommend another establishment and transport them there. The teams made the decision about whether to hire a taxi driver for a whole night on a case-by-case basis. In some cases, for instance, safety considerations led the team to want a cab waiting outside in case of a security concern. In other cases, such as when visiting brothels, it made sense to hire different cab drivers for visits to different brothels so the drivers would not become suspicious about why our investigators were repeatedly choosing not to hire a girl.

the wave 1 baseline study, we anticipated that this approach would produce a sample of approximately 100 bars and brothels. In the end, we made 88 visits to 69 bars and 4 visits to 3 brothels. Our impression is that we exhausted all or most establishments in Lapu Lapu and Mandaue City since we reached a saturation point in both locations where repeated attempts to discover establishments we had not previously visited were unsuccessful. We suspect that we did not visit all establishments in Cebu City, though by the final day of the study we were having difficulty finding establishments we had not previously visited. One or two additional days would probably have exhausted the Cebu City establishments (not including those in Kamagayan). In the end, we visited 24 bars and 2 brothels in Lapu Lapu, 16 bars and 0 brothels in Mandaue City, and 29 bars and 1 brothel in Cebu City. We hypothesize that the relative difficulty we faced in finding minors in wave 2 (compared with wave 1) brought us to fewer establishments than in wave 1. This was especially the case with regard to brothels.

2. Sampling Massage Parlors

In seeking out massage parlors where patrons can receive sexual services from a masseuse who is a minor, we followed a process very similar to the one we used for bars and brothels. Each team was required to approach an intermediary about finding a good location for a massage from a young girl who also provides sexual services. We made 10 visits to 10 massage parlors, including 3 in Lapu Lapu, 3 in Mandaue City, and 4 in Cebu City.

3. Sampling Escorts

Our sampling plan called for the command center to obtain phone numbers for escort services advertised in tabloid newspapers and other sources. The plan was that they would make as many calls as possible during the time they had available. However, as the command center was too busy with its other duties, a CJA investigator carried out this side project. Our investigator looked through local newspapers, magazines, and telephone books and searched the Internet to find advertisements for escort and outcall massage services (with the idea that these might be fronts for prostitution). He then rented a room in an inexpensive hotel and called the escort services from that room. We ended up having conversations with staff at 6 locations, one of which was willing to send girls aged 15 and older. We attempted to contact another 6 locations, but 4 of the numbers we tried were disconnected and another 2 calls were not answered.

4. Sampling Freelancers

We were informed by local experts in sex trafficking and prostitution that Cebu is also home to a number of prostituted persons who do not work in an establishment like a bar, a brothel, or a massage parlor. Our research suggests that freelancers work primarily in the malls and on the streets. To examine the extent to which freelancers are available in the malls, we assigned each investigative team

to walk through shopping malls separately to pose as sex tourists. We waited for prostituted women or their representatives to make some form of contact with us. Our preparatory research from the baseline study suggested that the prime time is from 4 p.m. to 8 p.m. Our investigators made 8 attempts in malls by walking from one end to the other for at least one hour attempting to make eye contact with people thought to be prostituted; these included:

- 5 visits to Ayala Mall in Cebu City
- 1 visit to Country Mall in Cebu City
- 1 visit to Gaisano Mall in Lapu Lapu
- 1 visit to Marina Mall in Lapu Lapu

In designing our sampling strategy at the outset of this study, we found it difficult to establish a formal strategy for sampling freelancers who work the streets. Instead, we relied on a convenience sample of prostituted women whom we encountered during our time in the Cebu area. During our first trip to Cebu in 2006, our two-person advance team just happened to meet six of them walking together, including one confirmed minor and one suspected minor. All investigators in wave 2 were instructed to pay attention to the possibility that freelancers may be found in some outside locations and to engage them whenever possible. In the end, we met 16 sex workers in malls and 0 in outdoor locations.

Balancing Efficiency and Reliability in Sampling

During the wave 1 study, part of the rationale for the sampling strategy we selected was that we did not have access to a list of establishments offering prostituted or sexually exploited women and girls. By the time of the wave 2 study, IJM had amassed such a list. Thus, a reasonable question was whether we would use the list in wave 2. If the list had been available at wave 1, we may have chosen to incorporate it into our overall sampling strategy. But since it was not available at wave 1, using it at wave 2 would have represented a substantial change in methodology. It may have been less *efficient* at wave 2 to proceed without using (or even seeing) the list, but it was essential to the integrity of the study. Longitudinal research methods must rely on the same data collection methods over time for the resulting findings to be considered reliable, even at the cost of efficiency.

Units of Analysis

In the jargon of social scientists, this study has three primary "units of analysis": global attempts, sub-attempts, and establishments. We will begin by explaining the two different kinds of attempts.

Attempts

When our investigators set out to locate a minor, they were initiating what we called an attempt. Because IJM asked us to track the elapsed time it took to find a minor, we divided attempts into two nested types: "global attempts" and "sub-attempts." A global attempt always contained one or more associated sub-attempts. At the start of the study, each investigator initiated his first global attempt. If he visited two bars without finding a minor and then located a minor at a third bar, then the global attempt consisted of three sub-attempts, two unsuccessful and one successful. Once a minor was located, resuming the search for additional minors meant the start of a new global attempt. Global attempts ended in only two ways: the investigator (or the team) located a minor, or the command center issued a request to cease the global attempt for administrative reasons (either because the zone was complete or because the study was over). Sub-attempts ended when the investigator reached some resolution about the presence of minors, either locating one, generating a promise for one, or failing to locate one and therefore needing to visit a new location or establishment. Let us provide a hypothetical example of global attempts and sub-attempts.

Suppose at the beginning of the study, Team 1 left their operations hotel at 2100 to visit a brothel for the first time. They would call in their departure time to the command center, signaling the launch of a new global attempt. Their visit to the brothel would also signal the beginning of the first sub-attempt within that global attempt. Suppose they went to the brothel and discovered that there were a number of prostituted or commercially exploited persons available but none of them were minors. Upon their exit, they would notify the command center of their departure time as well as other information about the brothel. Their failure to locate a minor would mean the end of the first sub-attempt, but their global attempt would continue. Upon their arrival at another establishment recommended by their cab driver (say a KTV bar), they would call in their arrival time and other descriptive information to the command center. This would launch sub-attempt 2 within global attempt 1. Suppose they locate a minor at the KTV bar. Once they achieved some form of age confirmation (the minor admitted her age, for instance, and a friend confirmed it), they would exit the establishment, call in their findings to the command center, and that would signal the end of global attempt 1 as well as the second sub-attempt within that global attempt. Once the investigators visited the next establishment, they would be opening up the first sub-attempt within a new global attempt. Dividing attempts into global attempts and sub-attempts is what allowed us to track the various kinds of indicators or proxies selected at the methodology workshop and record those measurements in databases that could be analyzed systematically.

During each sub-attempt and each global attempt, we recorded the elapsed time from the start of our search for a minor until we were able to meet one (or more) in person. Using the sub-attempt and global attempt approach, we recorded the characteristics of both unsuccessful attempts and successful attempts. These characteristics included the date and time of the attempt, the facilitator with whom the attempt was made, the steps taken by the facilitator to locate a minor, the excuses offered by the facilitator about why a minor was not available (if applicable), the duration of the attempt, and the price for having sex if the attempt was successful.

Establishments

The third unit of analysis in this study was the establishment. We systematically recorded the characteristics of each establishment we visited. What type of establishment was it? What was the nature of its security arrangements? How many minors were we able to locate there and at what cost?

Summary

The units of analysis we have described—global attempts, sub-attempts, and establishments—are all represented in a master database that serves as the primary data source for this report. This database will also serve as IJM's point of comparison for previous and subsequent waves of data collection within the larger impact evaluation of Project Lantern.

In addition, this report relies heavily on the written field notes recorded by each team after their observations in the field.

Data Collection

Data collection took place within three zones in the greater Cebu metropolitan area: Lapu Lapu, Mandaue City, and Cebu City. All investigators carried cell phones displaying the current time, therefore enabling them to track the timing of various events. The cell phones all had text messaging capability and voice recorders. The investigators adopted various methods for retaining and recording the information they collected in the field. Some recorded their information on voice recorders attached to their cell phones; some took written notes surreptitiously in bathroom stalls or in the back seats of taxicabs; some did regular "data dumps" to the command center via text message; some sent text messages to themselves as a way of recalling the information they observed; and some called in their data to the command center over the telephone. The wide variation in the environments in which our investigators made their observations made it difficult to adopt a single standard: we allowed our investigators the freedom to record and transmit the necessary information to the command center in ways that made sense for them and their environment. For instance, while it was easy for our investigators to step outside a KTV bar and call in their data to the command center over the telephone,

this same approach would have appeared suspicious to the brothel keepers in some of the brothels we visited in isolated areas. Once the data were transmitted to the command center (in whatever format), the data were entered into databases maintained by our data manager on a laptop computer.

All investigators were also instructed to prepare written field notes at the conclusion of their observations. A common pattern was for investigative teams to return home, debrief with one another about their observations until the wee hours of the morning, and then work on their field notes together. Every team completed written field notes, and these constitute an important resource for understanding what they observed in the field.

Our data were collected primarily from passive observations of phenomena in the field as well as conversations with a variety of people associated with commercial sexual exploitation. Our investigators used a series of scripts during their conversations with intermediaries and sex workers. Some of these were "canned" scripts that we had established beforehand; other scripts were improvised in the field to fit the dynamic circumstances we encountered. Initially, CJA had considered using only canned scripts as a means of ensuring reliability across waves of data collection, but as any good cop knows, the ability to improvise based on the circumstances is crucial for gathering information. Our investigators relied primarily on three kinds of scripts: entrance scripts, midstream scripts, and exit scripts. Entrance scripts were used to communicate our wishes to secondary intermediaries and to locate establishments where minor sex trafficking victims could be found. Midstream scripts were our "cover stories" used to secure the trust and confidence of prostituted persons and intermediaries. Exit scripts were used as our excuses for leaving an establishment, not hiring a prostituted person, or not completing a sexual transaction. Within each category, we allowed our investigators considerable leeway to choose canned scripts or invent others that they viewed as most appropriate for a given situation.

V. AGE ESTIMATION

The reliability and validity of our measurement strategy rests largely on our procedures for determining who was a minor and who was an adult. In this section, we briefly discuss the scientific foundations of age estimation, the findings of the age estimation training exercise we conducted, and a brief description of the age estimation procedures used in this study.

Scientific Foundations of Age Estimation

Our baseline report reviewed the current (at the time) state of scientific knowledge on visible characteristics of aging. This review examined the accuracy of several age estimation methods, including the "Tanner stages" of physical development in children and adolescents,[12] dental and skeletal examinations, and biometric technologies. Our review of the evidence at the time of the wave 1 study concluded that existing age estimation methods were both inaccurate and unsuitable for use in the field during a data collection exercise or investigation.

Since our review of the evidence in 2006, considerable advances have been made in biometric technologies of many types. Yet even with these advances, our basic conclusion in 2006 that age estimation biometrics were not sufficiently valid or reliable still holds true today. For instance, a recent study concluded that "current age estimation performance is still not good enough for practical use."[13] While research continues on biometric technologies that can be used to estimate ages, we are not aware of any that can outperform simple human judgment. Even if such technologies were available, it is improbable to use them in an undercover setting where the investigator is posing as a customer or sex tourist.

The reason we have reviewed these various scientific methods and technologies for estimating ages is to demonstrate that there are no "industry standards" for estimating the chronological age of unknown individuals. The methods that are available have mostly been tested on Caucasian and African American populations and have unknown reliability and validity properties for Asians. In addition, they are impractical for use in an investigative setting. Because we were unable to rely on well-established field methods or technologies to help us estimate ages, it was necessary to rely on alternative methods.

---

12 Tanner, James M. (1962). *Growth at Adolescence* (2nd edition). Oxford: Blackwell.

13 Guodong, Guo, Yun Fu, Charles R. Dyer, and Thomas S. Huang (2008). "Image-Based Human Age Estimation by Manifold Learning and Locally Adjusted Robust Regression." *IEEE Transactions on Image Processing* 17(7): 1178.

Age Estimation Exercise

On August 12, 2008, CJA conducted an age estimation exercise at Marillac Hills and the Haven, a home for abused or abandoned girls and women. Ten members of the CJA team and nine IJM investigators participated in the exercise as "coders," guessing the ages of girls and women whose ages are known. Because two members of the CJA team were employed solely in the command center and not in the field, their scores are not considered in these results.[14] One hundred girls and women ranging in age from 9 to 46 (with a mean age of 18.2) participated in the exercise as research subjects.

Team members sat behind two lines of long tables in a room at the Haven, while the girls and women were led into the room, fully clothed, one at a time. Girls were presented in no particular order, based only on the pseudo-random method by which they queued up. Each participant spent approximately 20 to 30 seconds in front of the team members, as a facilitator asked them to smile so their teeth could be inspected as well as their face and body. Once each participant left the room, the team members spent a few seconds estimating her age and recording it onto sheets that were later entered into a database. Subsequently, a facilitator called out the true age of the participant.

Table 1 provides overall estimation rates for all 100 subjects, for each of the eight CJA investigators as well as each of the nine IJM investigators, along with group averages.[15] Four sets of figures are provided: the percent of perfect guesses (exact age), the percent of guesses correct within plus or minus one year, the percent of guesses correct within plus or minus two years, and the percent of correct identifications of minor or adult status. For the CJA team, the average accuracy rates were 17.8% (exact age), 45.5% (within one year), 68.8% (within two years), and 75% (status as minor/adult).[16]

---

14 We did not anticipate that these members of the team would participate in any field exercises. They were included in the age estimation training to ensure reliable estimates in the unlikely event that they would be required to engage in field operations.

15 The CJA investigators included 6 university-based criminologists (two with previous experience working as police officers), 1 retired police officer, and 1 Ph.D. student in criminology who previously served as a police officer in Korea.

16 Inter-rater reliability among the eight CJA investigators was fairly high but with room for improvement. Because the data are measured at the interval level, one measure of inter-rater reliability is the Pearson's correlation coefficient. Using this measure, reliability scores for pairs of raters ranged from a low of 0.68 to a high of 0.88, with a mean of 0.79 and a standard deviation of 0.05. One benefit of viewing reliability in a "pairwise" fashion (two team members at a time) using Pearson correlations is that it approximates our decision making in the field, where investigators were ordinarily teamed up with one or more partners. Another measure of inter-rater reliability is the intraclass correlation coefficient (ICC). The ICCs were nearly identical whether we chose one-way random effects models, two-way random effects models, or two-way mixed models; here, we report the findings from the two-way random effects models. The single-measure ICC was 0.765 and the average measure ICC

IJM averages were somewhat higher at 21.4%, 51.8%, 71.0%, and 77.6%.[17]

Table 1: Overall Estimation Rates by Team Members for Full Sample

Individual	% Correct guesses (exact age)	% Correct guesses (within 1 year of exact age)	% Correct guesses (within 2 years of exact age)	% Correct guesses (whether a minor or an adult)
CJA 1	21%	48%	70%	74%
CJA 2	16%	48%	71%	79%
CJA 3	21%	43%	64%	77%
CJA 4	21%	44%	66%	76%
CJA 5	18%	46%	70%	71%
CJA 6	15%	49%	76%	78%
CJA 7	12%	44%	67%	71%
CJA 8	18%	42%	66%	74%
CJA Team Avg.	17.8%	45.5%	68.8%	75%
IJM 1	21%	58%	74%	78%
IJM 2	23%	55%	75%	79%
IJM 3	19%	58%	78%	77%
IJM4	28%	57%	78%	78%
IJM5	13%	46%	66%	75%
IJM6	25%	51%	68%	77%
IJM7	25%	48%	63%	77%
IJM8	16%	42%	65%	81%
IJM9	23%	51%	72%	76%
IJM Team Avg.	21.4%	51.8%	71.0%	77.6%

During wave 1 of this exercise, CJA and IJM team members found that they began to refine their abilities for picking out age cues and signals with each woman or girl they assessed. Participants also found it useful to confer among themselves to share their methods for accurate age assessment. This collaboration proved to be useful, as most team members improved the accuracy of their guesses over time.

was 0.963. The single measure ICC can be thought of as a lower bound estimate of reliability in which a single investigator makes an independent estimate of age. In the field, the "true" reliability is likely to be higher than this lower bound since multiple investigators typically work together to generate age estimates using not only visual cues, but also other information derived from conversations with sex workers and intermediaries.

17 At first glance, inter-rater reliability among IJM investigators was somewhat erratic. Pearson's correlations for pairs of raters ranged from a low of 0.29 to a high of 0.89, with a mean of 0.68 and a standard deviation of 0.16. Closer examination of the data revealed that one of the investigators had low agreement with other raters across the board. The mean inter-rater reliability score for this one investigator was 0.42, compared with a mean of 0.76 for other IJM investigators (and a standard deviation of 0.07). We calculated ICCs but excluded the one investigator whose estimates agreed poorly with the others. Among the remaining investigators, the single-measure ICC was 0.735 and the average measure ICC was 0.957.

During wave 2, the conditions under which this exercise was held varied considerably from wave 1. An additional six members of the IJM staff participated in this age verification exercise, increasing the total number of raters from 13 to 19. While it would be reasonable to expect that additional participants would allow for more collaboration and increased accuracy over time, this did not happen. The room was more crowded and noisier, making the environment less conducive to focusing attention and concentration on the age estimation exercise. Investigators in wave 2 conferred with one another after every 10 estimations. Many investigators reported that the atmosphere was disruptive during these collaborations and throughout the entire exercise. As a result, the accuracy of age estimation rates during wave 2 are considerably lower than they were in wave 1. Accuracy rates for CJA and IJM investigators declined at virtually identical rates between the two waves, as depicted in Table 2. In the future, it may be useful to split investigators up into two rooms to participate in age estimations separately. Dividing the group would still allow for investigators to collaborate on age estimation techniques, while minimizing the noise and distraction that can reduce accuracy rates.

Table 2: Difference in Overall Estimation Rates between Wave 1 and 2

Team Averages	% Correct guesses (exact age)	% Correct guesses (within 1 year of exact age)	% Correct guesses (within 2 years of exact age)	% Correct guesses (whether a minor or an adult)
CJA Team Avg. – Wave 1 –	20.6%	49.8%	70.3%	85.8%
CJA Team Avg. – Wave 2 –	17.8%	45.5%	68.8%	75%
IJM Team Avg. – Wave 1 –	24%	58%	79.3%	89%
IJM Team Avg. – Wave 2 –	21.4%	51.8%	71.0%	77.6%

During wave 1, we tested the abilities of investigators to improve their accuracy rates over time based on group collaboration. Tables 3 and 4 provide the results of this same analysis for wave 2. Table 3 presents accuracy rates for the *second set of 50* girls and women, and Table 4 provides accuracy rates for the *final 25* participants. These tables do not illustrate a clear pattern of accuracy improvement for either CJA or IJM investigators. For the last half of the sample, the CJA team averaged 18% exact guesses, 47% within one year, 69.3% within two years, and 69.3% for status as minor/adult. For the final quartile of the sample, the CJA team's average figures were 20%, 42%, 63.5%, and 64%. Exact guesses and guesses within one year increased very slightly, while other percentages decreased from the final half to the final quartile.

Table 3: Overall Estimation Rates by Team Members for Final 50 Participants

Individual	% Correct guesses (exact age)	% Correct guesses (within 1 year of exact age)	% Correct guesses (within 2 years of exact age)	% Correct guesses (whether a minor or an adult)
CJA 1	24%	48%	70%	64%
CJA 2	20%	62%	78%	76%
CJA 3	26%	46%	64%	78%
CJA 4	22%	46%	66%	74%
CJA 5	14%	42%	64%	60%
CJA 6	14%	46%	76%	72%
CJA 7	10%	48%	74%	66%
CJA 8	14%	38%	62%	64%
CJA Team Avg.	18.0%	47.0%	69.3%	69.3%
IJM 1	16%	56%	76%	70%
IJM 2	24%	62%	76%	76%
IJM 3	14%	60%	80%	70%
IJM4	20%	52%	78%	68%
IJM5	8%	42%	64%	70%
IJM6	24%	54%	72%	74%
IJM7	22%	42%	52%	70%
IJM8	22%	46%	60%	80%
IJM9	22%	54%	76%	68%
IJM Team Avg.	19.1%	52.0%	70.4%	71.8%

Table 4: Overall Estimation Rates by Team Members for Final 25 Participants

Individual	% Correct guesses (exact age)	% Correct guesses (within 1 year of exact age)	% Correct guesses (within 2 years of exact age)	% Correct guesses (whether a minor or an adult)
CJA 1	24%	36%	64%	52%
CJA 2	24%	56%	72%	80%
CJA 3	32%	52%	64%	80%
CJA 4	24%	40%	64%	72%
CJA 5	16%	40%	48%	56%
CJA 6	12%	36%	64%	60%
CJA 7	16%	48%	72%	60%
CJA 8	12%	28%	60%	52%
CJA Team Avg.	20.0%	42.0%	63.5%	64.0%
IJM 1	16%	48%	72%	72%
IJM 2	20%	56%	72%	72%
IJM 3	8%	52%	68%	60%
IJM4	20%	44%	68%	68%
IJM5	4%	48%	68%	64%
IJM6	16%	56%	76%	76%
IJM7	36%	68%	72%	76%
IJM8	12%	44%	56%	72%
IJM9	28%	48%	60%	64%
IJM Team Avg.	17.8%	51.6%	68%	69.3%

To test our assumption that the atmosphere of the room was at least partially responsible for the changes in accuracy rates between the two waves, we compare investigators' first 25 guesses with their last 25 guesses. We believe that the environment of the room caused participants to become more distracted over time, having a negative impact on their accuracy rates. It might seem reasonable to conclude that the environment in which our age estimations would take place in the field was equally (or perhaps more) distracting. However, field teams benefited from the presence of two circumstances that were not available during the age estimation exercise. First, investigative teams in the field were almost always able to confer privately about their age estimates as part of the confirmation process. Second, field teams benefited from being able to spend much longer than 20–30 seconds talking to and observing most of the subjects they attempted to confirm. Even when suspected minors were present but unavailable for some reason, we still attempted to spend time with them whenever possible. For instance, much to the chagrin of other male customers, in some cases our investigative teams "borrowed" or "stole" suspected minors away from other customers to engage in a confirmation process with them (in spite of the obvious safety risk this practice entailed). We believe the conditions in the field were much more conducive to accurate confirmations than conditions in the age estimation exercise. Nonetheless, the exercise was

very useful for enabling both the IJM and CJA teams to observe the physical characteristics that seem to be associated with age and minor versus adult status.[18]

Table 5 illustrates accuracy rates for the *first* 25 guesses. In comparison with Table 3, we see that both CJA and IJM investigative teams achieved higher accuracy rates at the *beginning* of the exercise than at the end. During the first 25 guesses, CJA and IJM investigators made correct guesses on adult and minor status 82% and 82.7% of the time, respectively. During the final 25 guesses, the CJA team guessed correctly on adult or minor status only 64% of the time, with IJM investigators at 69.3%. Unlike our findings in wave 1, we find that accuracy rates in wave 2 actually decreased over time.

Table 5: Overall Estimation Rates by Team Members for First 25 Participants

Individual	% Correct guesses (exact age)	% Correct guesses (within 1 year of exact age)	% Correct guesses (within 2 years of exact age)	% Correct guesses (whether a minor or an adult)
CJA 1	12%	44%	72%	80%
CJA 2	12%	36%	68%	84%
CJA 3	24%	56%	72%	80%
CJA 4	16%	36%	64%	76%
CJA 5	24%	56%	84%	92%
CJA 6	16%	56%	84%	84%
CJA 7	16%	36%	60%	76%
CJA 8	36%	44%	76%	84%
CJA Team Avg.	19.5%	45.5%	72.5%	82%
IJM 1	20%	52%	76%	84%
IJM 2	16%	40%	76%	84%
IJM 3	24%	52%	68%	88%
IJM4	44%	68%	80%	84%
IJM5	20%	52%	64%	84%
IJM6	36%	56%	72%	80%
IJM7	36%	60%	84%	80%
IJM8	16%	40%	76%	80%
IJM9	24%	40%	64%	80%
IJM Team Avg.	26.2%	51.1%	73.3%	82.7%

18 IJM reviewers asked CJA to examine the relationship between investigator performance during the age verification exercise and later productivity in confirming minors during the field observations. We used two measures of performance during the age estimation exercise: the mean square error in raw age estimations and the proportion of correct guesses about minor status. Productivity in confirming minors was measured using the number of successful sub-attempts in which the investigator participated. We examined three types of correlations: one parametric (Pearson's *r)* and two non-parametric *(*Spearman's ρ and Kendall's τ). Of the six resulting correlation coefficients, none were significant. Performance in the age estimation exercise was unrelated to productivity in the field.

To ensure that we did not rely solely on investigators' abilities to guess age based on visual cues, we coupled this estimation strategy with a number of other age verification strategies.

Age Confirmation Procedures

The research on age estimation in a clinical setting suggests that the best approach is a dental x-ray to measure dental age, an x-ray of the left hand to measure bone or skeletal age, and a thorough exam by a physician familiar with the age group being studied. Obviously, these clinical methods are not feasible in a field study like this one. We investigated the possible use of passive biometric technologies that could be used in the field but were unable to locate any with a sufficient scientific basis. Because there are not currently any clearly reliable methods for estimating age in a field setting (as opposed to a clinical setting), we chose to rely first and foremost on the judgment of our investigators. The age verification exercise we conducted established some of the parameters for determining the accuracy of our estimates.[19] That exercise was only a simulation, of course. In some ways it provided advantages we did not have in the field (such as good lighting and clothing chosen by the participants),[20] while in other ways it was easier to estimate ages in the field.[21]

Our age verification procedure was based on the idea of multiple forms of confirmation. Our investigative teams used a combination of their scripts and their judgment to estimate the number of minors in an establishment or other settings. The first method was simply visual observation: investigative partners would routinely observe all of the commercially exploited persons in an establishment or other setting and each arrive at an independent estimate of the number of minors, discussing any

19 We attempted to gather information from participants in the age estimation exercise about how they made their judgments. We found that there was not a clearly defined set of physical features or cues that people used in developing their age estimates. Most had difficulty describing their decision making process in detail. They described it as having emerged quickly based on a totality of the circumstances. The process appeared to resemble what people normally think of as intuition but what Malcolm Gladwell has more recently described as "rapid cognition." See M. Gladwell (2006). *Blink: The Power of Thinking Without Thinking*. London: Penguin.

20 The lighting in the field was often suboptimal, either because our investigators were in dark bars or outside locations at night. Participants in the exercise wore their own clothing, which sometimes contained clues about their age (for instance, a picture of a teddy bear on a girl's shirt might indicate that she is younger than she looks). While some girls in the field wore their own clothing, many of them wore outfits or costumes selected by bar staff.

21 Three factors presumably made it easier to estimate a girl's age in the field through observations alone. First, our investigators usually had as much time as they needed to view the girls in the field than they had during the exercise, in which they were able to view the girls for no more than 20 or 30 seconds. Second, the girls in the field often wore much less clothing, making it easier to view body parts that might provide indications of their age. Third, investigators in the field were often able to engage underage suspects and their colleagues in conversation, helping to establish whether their initial visual assessment was correct.

discrepancies and usually hatching a quick plan for confirming their suspicions. They would then build rapport with prostituted individuals or their primary intermediaries, using scripts or improvised conversational techniques to gather data on age and other matters. They would work through any perceived dishonesty, attempting to use either trust or trickery to get a girl to reveal the truth not only about her own age but about the ages of others as well.

Our investigators were unanimous in their assessment, based on their experiences in the field, that minors are coached to lie about their ages, saying they are 18 or older. On several occasions, we found girls within the same establishment reporting the same birthdate (month, day, and year), clearly an indicator of age coaching. Our investigators used several methods to work through this problem. The most common was simply trust building, establishing a human connection, getting a girl to trust that we were "safe."

In most establishments, our investigators would each talk to at least one person privately to ensure a minimum of two additional data points, often talking to more than one person each. The goal was for the investigators to have several pieces of information available to them during their deliberations about the number of minors they observed: information from their own separate observations, information from a primary intermediary (Mamasan,[22] brothel owner, or pimp), and information from multiple prostituted persons in an establishment. In most instances, these multiple forms of confirmation were sufficient for reaching a common estimate of the number of minors. In those cases where the primary investigative team was either unable to gather the necessary information or gathered conflicting information, the command center sent another team in to do a revisit. Our approach of generating multiple points of confirmation usually provided us with sufficient information to make informed judgments about age.

22 A "Mamasan" is a woman who is in charge of the prostituted or commercially exploited girls. She typically provides their housing and food, schedules their work, and disciplines them. We spoke with dozens of Mamasans and we also spoke with the girls about their Mamasans. In most instances, the girls told us the Mamasan is a good resource for them, providing them with food and shelter. In some instances, the girls clearly feared the Mamasan and viewed her as mean, unfair, or ruthless.

VI. FINDINGS

The primary focus of the baseline study was to collect data on eight indicators selected by IJM as proxies for the availability of child sex trafficking victims. This section reviews the study's findings on each of these eight indicators. Summary data on these indicators, including how they compare to wave 1 findings, are listed in tabular form in Appendix 2 (summary of establishment data) and Appendix 3 (summary of data on attempts).

Indicator 1: Number of children trafficked for commercial sexual exploitation found in target area

There were a total of 20 minor trafficking victims found in establishments and 9 found not in establishments (for a total of 29).[23] Our investigators discovered minors in 15 establishments; we made a total of 19 visits (including revisits to some establishments) to the 15 establishments where a total of 20 minors were discovered. Overall, we found 1,335 commercial sex workers, of which 1,282 were in establishments and 53 were in non-establishments. Thus, 1.6% of sex workers found in establishments were confirmed minors, and 2.2% of the total number of sex workers found were minors.

Indicator 2: Elapsed time to locate a child trafficked for commercial sexual exploitation

Of the 24 global attempts ending successfully, the total time to find a minor (which includes the total number of minutes in each of the sub-attempts for that global attempt) was 7,552 minutes (125.9 hours). That is an average of 314.7 minutes per attempt (approximately 5 hours and 15 minutes), with a minimum of 31 minutes and a maximum of 1,069 minutes.[24] We were not able to detect any

23 One of the concerns typically raised in studies like this one is double counting. While we cannot be certain that there was not some double counting, we have two reasons to believe it unlikely. First, the four investigative teams were assigned to three zones. Although the teams sometimes covered the same zone, their movements were coordinated closely by the command center. Command center staff would likely have detected double counting if it occurred. Second, the teams were in regular contact with one another, sharing the details of their work nearly every day. If we were counting the same people, we believe it would have become evident during these meetings and telephone conversations. Although we cannot guarantee there was no double counting, we believe there were sufficient safeguards in place to prevent it.

24 Note that the total amount of time for all 116 sub-attempts was 8,395 minutes (139.88 hours); however, this includes global attempts that were terminated without success (for example, time ran out without finding a minor). Note also that there are two possible ways of interpreting the time of a global attempt. One way would be to begin the clock at the start of the first sub-attempt and compute the hours transpiring until successfully finding a minor. The problem with this approach is that between sub-attempts, there was much time spent not attempting to find a minor (e.g., sleeping, team meetings, traveling from location to location, etc.). For this reason, we decided to operationalize total time to find a minor as comprising the total time in each sub-attempt leading up to a successful attempt.

temporal patterns in these elapsed times (there were no significant changes in elapsed times as the study progressed).

Indicator 3: Number of attempts to locate a child trafficked for commercial sexual exploitation

Of the 116 sub-attempts in this study, 24 (20.7%) of them ended successfully when one of our investigators located a minor sex trafficking victim in person. The average number of attempts to locate a minor sex trafficking victim before meeting one (or more) in person was 4.04. Of the 116 total sub-attempts made by the team, our investigators were promised a total of 22 minors.

Indicator 4: Number of establishments offering a child trafficked for commercial sexual exploitation

Total number of bars/brothels/massage parlors (establishments): 82. Of these, 9 promised minors, and 15 had confirmed minors. Nineteen either promised minors or had confirmed minors. Of the 20 total confirmed minors found in establishments, 18 were found in bars, 2 were found in brothels, and 0 were found in massage parlors.

Indicator 5: Number of people not affiliated with commercial sex establishments offering a child trafficked for commercial sexual exploitation

Four pimps not affiliated with establishments made promises of 9 minors.[25] No taxi drivers promised or provided minors directly. When taxi drivers were involved in supplying minor sex workers, they operated as secondary intermediaries who went through either pimps or establishments.

25 During the revisions of the wave 1 report, IJM asked whether we could produce an estimate of the percentage of the total number of unaffiliated persons who offered minors out the total unaffiliated persons we approached. Because we did not plan to produce such an estimate, it would be difficult to do so with any degree of precision. In some environments, such as in the back seat of a taxicab or standing outside a club located in a safe area, it was easy to capture and record data. However, many of our conversations with primary and secondary intermediaries, particularly those that took place outdoors in distressed areas like Kamagayan, occurred in a chaotic, potentially dangerous environment in which our investigators were surrounded by pimps, street hustlers, and assorted other characters. In such an environment, it was difficult to capture and record data in a way that did not jeopardize our safety. Our data collection protocol required our investigators to commit several facts to short-term memory until it was safe to transmit those facts to the command center. This made it difficult to record data systematically that were not on our data collection protocol, though we attempted to do so in our field notes.

Indicator 6: Price charged for purchasing the services of a child trafficked for commercial sexual exploitation

There were a total of 21 sets of minors (one or more, with the same price attached to each) located, and of these, pricing information was available for 20. For the 21st set, the price was simply described as "negotiable." Price is measured as maximum ("bar fine" plus girl), although in some cases, the price is missing a negotiable extra fee or tip for the girl.[26] The minimum was P700, the maximum was P5500, and the average was P2603. The nature of the service that a customer could expect varied somewhat across these transactions. Typically, however, the price included taking the girl away for the whole night and performing manual sex acts and intercourse. Oral sex was typically described as being solely at the discretion of the girl. Nearly everybody we spoke with was adamant that anal sex was out of the question.[27] We did not systematically record prices for what the locals referred to as "short time" transactions (taking the girl away for approximately two hours). We also did not systematically record prices for hiring girls to sit with us in private VIP rooms in bars. In higher-class establishments, renting a VIP room was typically a moneymaking scheme for both the girl and the bar; sexual services were not routinely offered to customers in those settings. In lower-class establishments, renting a private room did tend to come with the expectation of sexual services. For example, during the wave 1 study, our investigator paid to bring a girl into a private room (essentially a small, dark, dirty closet). Once inside, the girl immediately attempted to perform oral sex on him. The nature of this transaction suggested that customers who rented a private room at this bar could routinely expect oral sex.

Indicator 7: Percent of total attempts to procure a child trafficked for commercial sexual exploitation that results in the presumed facilitator, victim, or prostituted or commercially exploited adult citing the police/law enforcement as the reason why a minor is unavailable

Of the 116 sub-attempts, data on mentions of laws or law enforcement is available for 106 cases. Of those 106 cases, 6.6% of intermediaries mentioned law enforcement, 10.4% mentioned laws,

---

26 A bar fine is the price for removing a prostituted girl from a bar. We were quoted prices using two different types of bar fines: one type in which the money paid to the bar is split with the girl, and another type in which the money paid to the bar is for the bar only and the customer needs to negotiate the remainder of the price with the girl. In both cases, tipping is expected on top of the bar fine.

27 We did not systematically track prices for "short time" sexual encounters or for specific sex acts. We systematically tracked prices for the modal type of sexual transaction in the Cebu area, which involved taking a girl away for the whole night and having manual sexual contact and/or intercourse with her. Depending on the personal preferences or style of the girl, this transaction may or may not include oral sex. Our understanding is that girls would typically provide oral sex as part of their efforts to secure a larger gratuity from the customer, but this is just our collective impression based on our conversations with the girls, not the result of systematic data collection and analysis.

3.8% of sex workers mentioned law enforcement, and 9.4% of sex workers mentioned laws. In one incident, our investigator asked a sex worker at a bar about finding younger girls. She acted surprised and answered, "Huh, *Echegaray*!" Leo Echegaray was the first man given the death penalty in the Philippines for raping a minor.[28]

Indicator 8: Incidence/type of security measures at establishments taken to guard against police enforcement

There were 82 establishments visited, and 19 were revisited for a total of 102 establishment visits. The following distributions of security procedures include all 102 rather than 82, because an establishment may have varying security measures on multiple visits. Of the 94 visits with available data, on average there were 0.93 doormen per establishment, including 27 with no doormen, 50 with one, 15 with two, 1 with three, and 1 with four. Of the 91 visits with available data, an average of only 0.55 doormen armed with a firearm were observed, including 50 with no armed doormen, 34 with one, 6 with two, 0 with three, and 1 with four. Our investigators were frisked or patted down in only two of the 93 visits for which data were available. Our investigators were only searched electronically (with a handheld metal detector, for instance) in one of the 90 visits for which data were available.

28 See http://news.bbc.co.uk/2/hi/asia-pacific/272980.stm

VII. WAVE 1 AND 2 COMPARISONS

So far in this report, we have discussed the context of the baseline (wave 1) and wave 2 studies and presented a variety of quantitative results on eight indicators of sexual trafficking of minors in the Cebu metropolitan area for wave 2. In this section, we present comparisons of wave 1 and wave 2 findings. Appendix 2 (summary of establishment data) and Appendix 3 (summary of data on attempts) provide tabular results of findings from wave 1 and wave 2.

Indicator 1: Number of children trafficked for commercial sexual exploitation found in target area

CJA investigators found substantially fewer minors in wave 2 than in wave 1. Investigators located 103 minors in wave 1, compared to 29 in wave 2. During the wave 1 study, eight CJA field investigators made 84 visits to bars, 12 visits to brothels, 19 visits to massage parlors, and 16 visits (walk-throughs) to malls. During wave 2, eight CJA field investigators made 88 visits to bars, 4 visits to brothels, 10 visits to massage parlors, and 8 visits (walk throughs) to malls.[29] Across the board, whether by zone or establishment type, there were fewer minors in wave 2.

Eighty-eight (85.4%) minors in wave 1 were located in an establishment, compared to 20 (69.0%) in wave 2. Of the total number of sex workers found in establishments, 6.6% in wave 1 were confirmed as minors, compared to 1.6% in wave 2. Thirty-five establishments employed minors in wave 1, compared to 15 in wave 2. All of these numbers suggest a decrease in the number of available minors in bars, brothels, and massage parlors.

Indicator 2: Elapsed time to locate a child trafficked for commercial sexual exploitation

CJA investigators ended 53 global attempts successfully in wave 1, compared with only 24 in wave 2. In wave 1, it took investigators approximately 1 hour and 50 minutes per attempt, compared to 5 hours and 15 minutes in wave 2. In both waves, we found no significant changes in elapsed time from the beginning to the end of the study period.

29 It might be tempting to view the decrease in the number of visits or in the number of establishments visited as the reason we found fewer minors. However, the causal order in this argument is backwards. During wave 2, we spent much more time chasing false leads, working our way through various attempts by intermediaries to pass off adults as minors (a case of supply—albeit counterfeit or false supply—rising to meet demand), and failing in our efforts to find minors. The total time spent in the field, including all global attempts, was greater in wave 2 than in wave 1.

Indicator 3: Number of attempts to locate a child trafficked for commercial sexual exploitation

During wave 1, 33.3% of sub-attempts ended successfully when one of our investigators located a minor sex trafficking victim, compared to 20.7% of attempts in wave 2. Because minors were located with less frequency in wave 2, the average number of sub-attempts before finding a minor increased from 2.57 to 4.04 from wave 1 to wave 2. Minors were also promised more often in wave 1 (56 promised) than in wave 2 (22 promised).

Indicator 4: Number of establishments offering a child trafficked for commercial sexual exploitation

Of the 94 establishments visited in wave 1, 18 (19.1%) promised minors and 35 (37.2%) had confirmed minors. In wave 2, 82 establishments were visited, 9 (11.0%) of which promised minors and 15 (18.3%) of which had confirmed minors. The number of establishments that either promised minors or had confirmed minors decreased between the waves from 41 to 19. Of the 88 total confirmed minors found in establishments in wave 1, 82 (93.2%) were found in bars, 6 (6.8%) were found in brothels, and 0 (0%) were found in massage parlors. During wave 2, 20 confirmed minors were found in establishments. Eighteen of them (90%) were found in bars, 2 (10%) were found in brothels, and 0 (0%) were found in massage parlors.

Indicator 5: Number of people not affiliated with commercial sex establishments offering a child trafficked for commercial sexual exploitation

Throughout both waves of this study, investigators made contact with persons not affiliated with establishments in an effort to locate minors. During wave 1, six people not affiliated with establishments made promises of minors. These included pimps, streetwalkers, and taxi drivers. In wave 2, four pimps not affiliated with establishments made promises of 9 minors. No taxi drivers or streetwalkers promised or provided minors directly in wave 2, though taxi drivers did serve as secondary intermediaries for pimps and establishments.

Indicator 6: Price charged for purchasing the services of a child trafficked for commercial sexual exploitation

We found 54 sets of minors (one or more, with the same price attached to each) in wave 1, 21 sets in wave 2. In both waves, we measured price as maximum ("bar fine" plus girl), although in some cases the price is missing a negotiable extra fee or tip for the girl. During wave 1, we found the range of prices to be P500–P6000, with an average of P3010. In wave 2, the range was P700–P5500, with an average of P2603. These prices included taking the girl away for the entire evening. The prices appear to have decreased to some extent, but this decrease may have as much to do with the mix of intermediaries and establishments in wave 2 as with an actual decrease. Our suspicion is that price has not changed significantly.

Indicator 7: Percent of total attempts to procure a child trafficked for commercial sexual exploitation that results in the presumed facilitator, victim, or prostituted or commercially exploited adult citing the police/law enforcement as the reason why a minor is unavailable

Of the 159 total attempts to find a minor (sub-attempts) in wave 1, either the prostituted or commercially exploited person or the intermediary mentioned either laws or law enforcement activities prohibiting or targeting people who have sex with minors in 17.6% of attempts. In wave 2, out of 116 sub-attempts, this number increased to 19.8%. In addition to this small increase in the number of people citing laws or law enforcement, we also noted (anecdotally) an increasing level of incredulity over our interest in minors. Thus, even when people did not mention laws or law enforcement explicitly, the collective judgment of the research team was that in wave 2, people displayed more pronounced reactions (including subtleties like facial expressions, gestures, tones of voice, etc.) than in wave 1 in response to our interest in finding minors.

Indicator 8: Incidence/type of security measures at establishments taken to guard against police enforcement

CJA investigators made 115 total visits to establishments in wave 1 and 102 visits in wave 2 (both these figures include revisits). On average, there were 1.17 doormen per establishment in wave 1, compared to 0.93 in wave 2. An average of only 0.38 doormen per visit in wave 1 were armed with a firearm. This number increased slightly in wave 2 to 0.55. During wave 1 and 2, investigators were patted down infrequently, at 3 and 2 establishments respectively. While no investigators were searched electronically in wave 1, a single investigator in wave 2 was subjected to such a search. The comparison of security data from wave 1 to wave 2 does not illustrate a clear change in the security practices of establishments.

Overall Comparisons

The results of this study provide clear evidence that the availability of sexually trafficked and commercially exploited minors decreased substantially between October 2006 (wave 1) and August 2008 (wave 2). Overwhelmingly, investigators in wave 2 found it much more difficult and time consuming to locate sexually exploited minors than they did two years ago. Not only did it take more time and more attempts to locate minors, but in the end, investigators found only about one-fourth as many minors in wave 2 as in wave 1. Other patterns were less pronounced or more ambiguous. For instance, there was not a significant increase in the price charged for commercially exploited minors, as we might have expected from a decreased supply (in fact, there was a slight decrease in price from wave 1 to wave 2). Minors (with the exception of virgins, for whom we were quoted a price by one pimp of 35,000 pesos) appear to be charged out at approximately the same rate as adults. There was also not a substantial increase in the frequency with which laws and law enforcement were mentioned

by sex workers or intermediaries when we inquired about finding minors. However, as we reported earlier, our investigators did note (anecdotally) an increased level of incredulity in response to our interest in minors. Furthermore, security practices at establishments do not appear to have become dramatically more stringent.

One possibility might be that the market for sexually trafficked and commercially exploited minors has changed patterns, becoming more covert and available only to those with the knowledge or resources to find what they are looking for. This is a common result when police crack down on illegal commodities or markets. If this is the case, we were unable to find any evidence supporting it. Our Korean investigator tried hard to find specialized markets aimed at sex tourists from Korea and Japan but was unable to do so. One of our investigative teams encountered a group of Korean sex tourists together with a much larger group of sex workers, but none of them were minors. On Internet chat rooms and in conversations with sex tourists at bars or in the mall, we heard about tourism companies bringing Korean and Japanese sex tourists to the area, but our study design was not well suited to investigate this much more private or hidden market. We conclude with some measure of confidence that the publicly available market in sexually trafficked or commercially exploited minors has decreased dramatically from wave 1 to wave 2. We are unable to make any inferences about more private or specialized markets to which we were unable to gain access.

We are unable to state with equal confidence what caused the changes we observed. In order for a multiwave study like this one to draw inferences about cause and effect, two ingredients are essential. First, the study must measure, control for, and eliminate alternative explanations. For instance, if we want to isolate the impact of Project Lantern on the sexual trade in minors in the Cebu metropolitan area, it is vital to account for all the other factors that might have generated the decrease. During the baseline methodology meeting held prior to the wave 1 study, participants agreed on a number of causal indicators that IJM would measure over time. Tracking these indicators over time is a vital supplement to the measures reported in this study and will enable both CJA and IJM to make much more confident inferences about the impacts of Project Lantern. Second, the study must be able to measure the dosage and fidelity of the intervention. Dosage refers to the intensity or quantity of the intervention. In Project Lantern, measures of dosage might include the number of minors rescued, the number of traffickers arrested and convicted, or the number of raids carried out (disaggregated by area, establishment, and other factors). Fidelity is the extent to which the actual intervention resembles the planned intervention.

The full evaluation of Project Lantern's effectiveness will be completed after the wave 3 data have been collected. For that evaluation to conclude that Project Lantern is effective, three pieces of evidence

will be necessary: (1) evidence that the supply of trafficking victims has decreased during the project period, (2) evidence that alternative explanations did not produce the decrease, and (3) evidence that Project Lantern was implemented with sufficient dosage and fidelity to have caused the change. We currently lack the evidence to make these inferences, though the results presented in this report are certainly encouraging.

VIII. CONCLUDING REMARKS

Here we share some final observations on sex trafficking in Cebu, as well as some ideas about the methodology and logistics for carrying out studies like this one.

Prior to the wave 1 study, CJA knew very little about the commercial sex industry and the characteristics of sex trafficking in Cebu. We attended some training and information sessions with experienced investigators. We read websites devoted to sex tourism. We read field notes prepared by investigators who had conducted reconnaissance of sex tourism in Cebu. Other than those distant forms of preparation, our investigators had very little experience in studying sex trafficking and no experience in examining it in the field. By wave 2, our team was more experienced and we had learned a variety of lessons from the wave 1 study. While we found it somewhat easy to find minors during the wave 1 study, it was much more difficult in wave 2. It is important to highlight that by wave 2, our team was more experienced and knowledgeable and therefore might have been biased toward finding more, not fewer, minors. Taken in this context, the results of this study are even more striking.

During both measurement occasions, locating minors took some persistence. Our experience in wave 1 suggested that people linked closely to the sex trade in Cebu had been trained or coached to tell sex tourists that minors are unavailable. Our investigators found intermediaries routinely trying to talk them into being with 18 or 19 year old girls. That pattern persisted in wave 2. Although they often did not mention laws or law enforcement explicitly, there appeared to be a common subtext that being with minors was risky. It was here that our investigators' efforts to build rapport, build trust, and improvise seemed to bear fruit. In some cases, where it seemed like the intermediary might have some kind of moral objection, it meant taking the conversation in a serious direction, such as discussing our wish to find a young wife and give her a good life in the United States. In other cases where it seemed the intermediary had no moral objection, it might mean relying on some kind of (unfortunate) male bonding ritual over the pleasures of being with a young girl. In many cases, the initial resistance to connecting us with minors almost seemed like token resistance. The core of this study turned out to be pushing past people's initial resistance to connecting us with minors.

Wave 2 presented the additional challenge of intermediaries trying to pass off adults (or adult sex workers passing themselves off) as minors in an effort to meet our demand in the face of reduced supply. This phenomenon was not one of the indicators we tracked formally in our database, but the team's collective judgment was that this form of deception was more pronounced at wave 2 than at wave 1. While on some occasions we might not have been able to detect this form of deception, in many cases we were. Through a series of informal ploys or scripts, we sought to uncover the truth about their ages.

The findings of our study confirm much of what we read and learned before we carried out the baseline data collection. There was one important difference. In Wave 1, we anticipated being able to find preteens rather easily. Once on the ground in Cebu, despite our best efforts, we were unable to find them. Even when we talked about finding a young girl to take care of, to give a better life, we were unable to find very young girls. Most of the minors we discovered were 16–17 years old. This was also our experience during the wave 2 study period. While we were offered a young virgin by one pimp, the amount of time it would take for the pimp to deliver her (from several days up to a week) led us to suspect that traffickers might kidnap or otherwise procure a new girl to meet our demand, so we turned down the offer.

We also found substantial differences in the nature of prostitution and commercial sexual exploitation according to the type of establishment and its location. The high-end karaoke bars are clean and well kept; they charge higher prices for drinks and for bar fines. The girls typically described to us living conditions that satisfied them at some basic level. They lived with and enjoyed the friendship of the other girls, were fed by the Mamasan, attended health screenings by the local government on a regular basis, and by and large appeared healthy. Some of the minors in these locations told us they had submitted false identification paperwork to the bar in order to get the job. While some fit the conventional image of trafficking victims, in the sense of having been taken away from their home involuntarily, many in the high-end establishments appear to have sought out this kind of work due to economic necessity.

The low-end bars and brothels, such as those located in and around Kamagayan, were very different. Many of the girls had brown or rotting teeth, were wearing old and worn clothing, and showed visible signs of poor health and living in poor conditions (dried skin, greasy hair, brown or broken teeth, etc.). These girls more clearly fit the conventional image of trafficking victims.

Methodology and Logistics

Our experience in the baseline and wave 2 study also provided a number of lessons about how to carry out studies like this in the future. First, we would have benefited from having either one additional investigative team or a little bit more time in the field (probably about two days). We came close to exhausting the population of establishments in Lapu Lapu and Mandaue City, but we needed more time in Cebu City and particularly in Kamagayan. Kamagayan is so small and concentrated that it presents particular challenges that would really require a longer-term study using methods suited to its unique characteristics.

Second, the status of most of our investigators as westerners was mostly an asset because it assuaged fears about whether we were police officers and allowed us to break through people's resistance about the availability of minors for sex. At the same time, we heard several times that white people were starting to be involved in enforcement actions against bars and brothels. Girls from establishments at different levels, including a Kamagayan brothel and a mid-scale Cebu City bar, both told us that the police are sending white people in to do stings on bars and brothels. If this perception continues to grow, it will cause challenges for the researchers carrying out the wave 3 study.

It might also have been useful to have one additional team consisting solely of two Filipino investigators. This would be particularly useful in Kamagayan and other distressed areas, as well as in the bars catering primarily to Filipinos. We went to those places anyway, and in some cases we were successful in finding minors, but it would have been useful to have a Filipino team in place with us to help us figure out what we might have missed. We suspect, for instance, that prices for purchasing sexual services in some areas are probably greater for western sex tourists than for Filipinos.

Third, in wave 1, we underestimated the effect that fatigue and jet lag would have on the team's performance. Our investigators had difficulty recording their field notes at the end of their shifts without falling asleep or experiencing memory problems, and our command center personnel had difficulty remaining awake across the wide range of hours that the investigative teams worked. We took several steps in wave 2 to deal with this problem, providing a day off for our team midway through the study, adding an additional staff member to the command center, and more generally remaining alert to excessive fatigue. We still experienced some problems in keeping up with our field notes by the end of the study, with a pronounced decrease in the quality of the field notes from the first day to the last. But overall, fatigue exacted much less of a toll in wave 2 than it did in wave 1.

Fourth, in both wave 1 and wave 2, we purchased telephones for every team member. In wave 1, we bought inexpensive phones with insufficient memory and few extra features. As a result, we were unable to take photographs or video recordings, maintain voice recordings useful for filling in details in the field notes, or surreptitiously record conversations in the field. In wave 2, we purchased better telephones with cameras, voice recorders, and extra memory. In wave 2, the phones served a vital role, enabling us to capture audio and video recordings easily. We cannot emphasize strongly enough the utility of having full-featured cell phones for investigators in a study like this. The voice recorder enables the investigator to take brief breaks and update his notes. At the end of the evening, these accumulated notes make the job of writing field notes and checking data quality much easier. The voice recorder also enables the investigators to record conversations with intermediaries or sex workers in the field. Having a telephone with a camera for still shots and brief video footage is also useful.

Overall, we are confident that in spite of numerous methodological and logistical challenges, the data we collected constitute an accurate picture of prostitution and commercial sexual exploitation in Cebu. Our investigators were surprised at the extent to which their separate attempts to explore prostitution and sex trafficking resulted in a consistent overall understanding of the problem. We applaud IJM for its willingness to expose their interventions to the scrutiny of an independent evaluation and we encourage other reformers interested in reducing human sex trafficking to do the same. The result will be an increased understanding of the problem and hopefully an enhanced capacity to implement effective solutions.

APPENDIX 1: PROJECT TEAM

Project Director

Edward R. Maguire is Associate Professor of Justice, Law, and Society in the School of Public Affairs at American University. He received his Ph.D. in Criminal Justice from the State University of New York at Albany in 1997. He has held previous positions at George Mason University, the University of Nebraska, the U.S. Department of Justice, and the United Nations. Professor Maguire's professional interests cover a wide range of criminal justice topics, but most of his work focuses on police organizations, violent crime, or measurement. Over the past four years, he led a team of American scholars and law enforcement professionals in diagnosing the causes of a violent crime outbreak in Trinidad and Tobago. Ed served as project director and a field investigator for waves 1 and 2 of this study.

Field Investigators

Robert J. Apostolos Jr. retired in 2006 as a Commander from the San Diego County Sheriff's Department with experience in running detention centers; building new patrol stations; overseeing patrol operations; supervising special investigations, juvenile investigations, and child abuse investigations; and leading several regional communications and technical procurement projects. He served as an onsite advisor to the Trinidad and Tobago Police Service, providing mentoring on crime reduction strategies and using problem-solving and crime prevention methodologies. As an adjunct professor and instructor, he taught criminal justice courses at San Diego State and National University and policing and custody procedures at various police academies. Finally, in 2004, he retired as a Major from the Army Reserves with tours of service in Vietnam and Desert Storm. Bob served as a field investigator for wave 2 of this study.

Melchor de Guzman is an expert on Philippine policing and crime studies. He has written several articles about the Philippine National Police and community policing. He received his Ph. D. in Criminal Justice from the University of Cincinnati. Dr. de Guzman has also been a lecturer in the National Police College of the Philippines and a former director of Command College (East Tennessee). Currently, Dr. de Guzman is an assistant professor at the College at Brockport, State University of New York teaching research methods, criminal justice organization, and policing courses. Melchor served as a field investigator for waves 1 and 2 of this study.

Kyung Jhi was born in 1969 in Busan, Korea. He graduated from the National Police University in 1992. He was a Police Officer for 13 years (from 1992–2004) in Korea. He also obtained a master's degree in Criminal Justice at Michigan State University in 1999. Currently, he is studying in the doctoral program in Criminal Justice at Sam Houston State University. He is married, and he and his wife have a daughter and a son. Kyung served as a field investigator for wave 2 of this study.

Charles Katz is the Director of the Center for Violence Prevention and Community Safety and is an Associate Professor in the School of Criminology and Criminal Justice at Arizona State University. His research involves collaborating with agencies to increase their organizational capacity to respond strategically to crime. Chuck served as a field investigator for waves 1 and 2 of this study.

Joseph B. Kuhns is Assistant Professor of Criminal Justice and teaches courses in policing, drugs and crime, and research methods. Prior to arriving at UNCC, Dr. Kuhns served as a Senior Policy Analyst at the U.S. Department of Justice, Office of Community Oriented Policing Services. He has worked on dozens of research and evaluation projects that focused on violent crime, soliciting and engaging in prostitution, community policing in small cities/towns, managing the growth of police agencies, and drug and violent crime relationships. Joe served as director of the command center for wave 1 of this study and as a field investigator in wave 2.

Jeffrey B. Snipes received his Ph.D. in criminal justice from the State University of New York at Albany and his J.D. from Stanford Law School. In addition to working at the COPS Office, Department of Justice, he has taught at Florida State University and Seattle University and currently is Associate Professor and Chair of the Department of Criminal Justice Studies at San Francisco State University. His research interests include theoretical criminology, civil rights litigation, and police behavior. He has been heavily involved in recent transformation efforts with the Trinidad and Tobago Police Service and occasionally practices law in California. Jeff served as a field investigator for waves 1 and 2 of this study.

William Wells is an associate professor in the College of Criminal Justice at Sam Houston State University. His research interests have led him to examine the relationship between guns, crime, and criminal justice responses aimed at reducing gun-related problems. In addition, he has studied a variety of reforms in policing, including community policing, policing hotspots of crime, and police responses to the mentally ill. Since 2007, he has been working with a team of researchers who provide technical assistance to the Trinidad and Tobago Police Service on several crime reduction initiatives. Bill served as a field investigator for waves 1 and 2.

Other Staff

Stephanie A. Ainsworth has a B.S. in Administration of Justice from George Mason University. She is a second year master's student in the Justice, Law and Crime Policy graduate program at George Mason. She spent time as an intern with the Crime Analysis Unit of the City of Alexandria Police Department in Alexandria, VA. Most recently, she worked as a research assistant with a team of scholars who worked with the Ministry of National Security in Trinidad and Tobago to diagnose the causes of an outbreak of violent crime in that country. Stephanie served as data manager for wave 2 of the project.

Thomas C. Berger has a B.S. in Sociology from Juniata College in Huntingdon, Pennsylvania. He served as a U.S. Sky Marshall and Supervisory Customs Patrol Officer from 1973-1983. He then spent 22 years as a Special Agent with the U.S. DEA. While in the DEA, he served in foreign assignments in Chile and as country attaché in Honduras. He currently serves as a consultant supporting the National Drug Intelligence Center. Tom served as security director for wave 2 of the project.

Megan Gantley is Director of Operations for Crime and Justice Analysts, Inc. She previously served as a research professor in the Administration of Justice Department at George Mason University, where she managed a police reform project in the Caribbean island nation of Trinidad and Tobago. In 2007, she completed her M.A. in Conflict Analysis and Resolution at George Mason University. Megan served as a data analyst for wave 2 of this study as well as a coauthor on the final report.

Ajima Olaghere received a B.A. in Sociology from Colby College in Waterville, ME. She is a second year graduate student at George Mason University pursuing a M.A. in Justice, Law, and Crime Policy. She interned with the U.S. Sentencing Commission, the Vera Institute for Justice, and the Commission on Safety and Abuse in America's Prisons, and she currently volunteers with The Sentencing Project in Washington, D.C. Her interests include penal and sentencing policy. Ajima served as a research assistant for wave 2 of the project.

APPENDIX 2: SUMMARY OF WAVE 1 AND 2 ESTABLISHMENT DATA

Variable	Wave 1	Wave 2
Total number of visits	115	102
Bars	84	88
Brothels	12	4
Massage parlors	19	10
Total establishments visited	94	82
Bars	66	69
Brothels	11	3
Massage parlors	16	10
Number of establishments with confirmed minors	35	15
Total confirmed minors (in establishments only)	88	20
Average number of confirmed minors at establishments with minors	2.5	1.7
Average # sex workers		
Bars	22.6	25.5
Brothels	17.8	N/A[30]
Massage parlors	5.3	18.3
Average # suspected to be minor		
Bars	2.0	1.24
Brothels	2.2	1.5
Massage parlors	0.11	0.38
Average # confirmed minors		
Bars	0.98	0.34
Brothels	0.50	1.5
Massage parlors	0	0

30 Data on total sex workers were only available for one of the brothels; therefore, the "average" is not meaningful.

Variable	Wave 1	Wave 2
Security Measures		
Doormen per establishment	1.17	0.93
# visits with no doormen	41.7%	28.7%
# visits with one doorman	30.4%	53.2%
# visits with two or more doormen	27.8%	18.2%
# visits with armed doormen	34.8%	45.1%
# visits where field workers were frisked	2.6%	2.2%
# visits where field workers were searched electronically	0%	1.1%

APPENDIX 3:
SUMMARY OF WAVE 1 AND 2 DATA ON ATTEMPTS

Description of Variable	Wave 1	Wave 2
Number of global attempts to find minor sex workers	66	28
Number terminated administratively	13	4
Number ending in locating a confirmed minor	53	24
Total time spent during successful attempts	116.5 hours	125.9 hours
Average minutes per attempt (time to locate a minor)	113	314.7
Minimum minutes per attempt	13	31
Maximum minutes per attempt	342	1,069
Number of sub-attempts to find minor sex workers	159	116
Average number of sub-attempts per successful global attempt	2.57	4.04
Minors promised during sub-attempts	56	22
Minors confirmed in establishments	88	20
Minors confirmed outside of establishments	15	9
Total confirmed minors	103	29
Total sex workers found in establishments	1,493	1,282
Total sex workers found outside of establishments	57	53
Total sex workers found	1,550	1,335
Average price, including bar fine (if any) and price for sex worker	P 3010	P 2603
Range of prices for minor sex workers	P 500–P 6000	P 700–P 5500
Percentage of sub-attempts in which either a sex worker or an intermediary mentioned either law enforcement or laws against sex with minors	17.6%	19.8%

ABOUT CJA

CJA is a consulting firm based in Northern Virginia near Washington, DC. The firm provides training, technical assistance, research, evaluation, and other services related to crime prevention and criminal justice. CJA's services are provided by a network of scholars and professionals with backgrounds primarily in social science, policing, law, and forensics. CJA specializes in using cutting-edge analysis and collaborative strategies to improve the capacity of organizations and governments for reducing crime and enhancing justice.

CJA CRIME & JUSTICE ANALYSTS
INNOVATIONS IN CRIME PREVENTION

Crime and Justice Analysts, Inc.
P.O. Box C
Fairfax, VA 22031
USA

www.cjanalysts.com