ESTIMATING HUMAN TRAFFICKING INTO THE UNITED STATES: DEVELOPMENT OF A METHODOLOGY

FINAL PHASE TWO REPORT

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ESTIMATING HUMAN TRAFFICKING INTO THE UNITED STATES: DEVELOPMENT OF METHODS

1. INTRODUCTION

This report combines the findings from two phases of research. Phase one research created and detailed methods to estimate the number of females and males trafficked for the purposes of sexual and labor exploitation from eight countries in Central and South America (Colombia, Ecuador, El Salvador, Guatemala, Mexico, Nicaragua, Peru, and Venezuela) into the United States at the southwest border. The decision to limit the regions of interest for this study to the eight countries of origin and to one entry point into the United States was based on reported trafficking activity in the eight countries of origin, data limitations, and the need to focus the scope of work to a demonstration project.

Phase two research focused on improving the methods established during phase one research (based on feedback on phase one from Government officials and experts in the field), and applied the updated methods to estimate the number of females trafficked for the purposes of sexual exploitation from 15 countries located in Eastern Europe (Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Hungary, Macedonia, Moldova, Montenegro, Poland, Romania, Serbia, Slovakia, Slovenia, and Ukraine) trafficked to the mid-Atlantic region of the United States. We also applied the improved methods to update the phase one estimates of females trafficked for sexual exploitation from the eight countries in Central and South America. We omitted the model for females and males trafficked for labor exploitation in this phase two because of the paucity of available data (see section 2.1).

What the Research Does and Does Not Accomplish

The combined research ***does***

- Provide a conceptual framework for identifying potential data sources to estimate the number of victims at different stages in trafficking
- Develop statistical models to estimate the number of females *at risk* of being trafficked for sexual exploitation from the 22 countries. The model then estimated the number of females trafficked for sex.
- Incorporate into the estimation models the transit journey of trafficking victims from the 22 countries to arrival to the United States
- Design the estimation models such that they are highly flexible and modular so that they can evolve as the body of data expands

- Utilize open source data as inputs to the statistical model, making the model accessible to anyone interested in using it[1]
- Present preliminary estimates that illustrate the use of the statistical methods
- Illuminate gaps in data sources.

The research was ***not*** intended to generate estimates, but rather to develop transparent methods and identify the lacunae in data sources. Estimates were generated to demonstrate the functionality of the methods developed and to serve a heuristic purpose only. The combined research provides a basis for a replicable and expandable method for estimating the magnitude of trafficking. In the recommendations section we discuss specific data needed to make the method more robust and the need for further funding to make this possible.

Lessons Learned From Phase One Research

The goal of phase one research was to detail methods to estimate the number of females and males trafficked for the purposes of sexual and labor exploitation from eight countries in Central and South America (Colombia, Ecuador, El Salvador, Guatemala, Mexico, Nicaragua, Peru, and Venezuela) into the United States at the southwest border. Open source data were employed in this effort and feedback on this phase was to be used to improve methods and inform data collection for phase two. Lessons learned included that

- It was premature to develop methods for labor exploitation because of the lack of data
- It was a mistake to use the tier rating from the *Trafficking in Persons Report* as a proxy for a country's protective factors (see section 2.1)
- The Transit Zone model was too laden with assumptions to be very credible but served to illuminate some of the huge gaps in data
- The estimates of females trafficked for sexual exploitation were too high, largely because we incorporated the tier rating as a multiplier to the *at-risk* females to determine the number who were actually trafficked.

Phase two sought to incorporate these lessons and improve upon the method for estimating the number of females trafficked. We focused on developing a new measure for determining the possibility that a female who is *at-risk* for being trafficked is actually trafficked. We used this new measure to re-estimate the number of females trafficked for sexual exploitation for the eight countries in Central and South America studied in phase one (Colombia, Ecuador, El Salvador, Guatemala, Mexico, Nicaragua, Peru, and Venezuela) as well as from the 15 Eastern Europe countries in phase two.

[1] If an agency has classified data it would like to incorporate, we will share the SAS programming code used to generate estimates.

We incorporated fewer assumptions into the Transit Zone model for the 15 countries in Eastern Europe. For the eight countries in Central and South America, Transit Zone assumptions used in phase one were maintained to allow comparison between estimates created with the old and new methods.

Background and Scope of the Problem

The United States is widely regarded as a destination country for trafficking in persons, yet the exact number of human trafficking victims within the United States has remained largely undetermined since passage of the Trafficking Victims Protection Act (TVPA) in 2000. Initial estimates cited in the TVPA suggested that approximately 50,000 individuals are trafficked into the United States each year. This number was reduced to 18,000–20,000 in the U.S. Department of State's June 2003 *Trafficking in Persons Report*. In its 2005 report, the Department of State's Office to Monitor and Combat Trafficking in Persons cites 14,500–17,500 individuals annually. These shifting figures call into question the reliability of estimates and have potential consequences for the availability of resources to prevent human trafficking, prosecute traffickers, and protect and serve victims of this crime.

Due to the covert nature of the crime, accurate statistics on the nature, prevalence, and geography of human trafficking are difficult to calculate. Trafficking victims are closely guarded by their captors, many victims lack accurate immigration documentation, trafficked domestic servants remain "invisible" in private homes, and private businesses often act as a "front" for a back-end trafficking operation, which make human trafficking a particularly difficult crime to identify and count. A method to obtain valid and reliable estimates of this inherently hidden problem is critical for planning and assessing national and international interdiction and prevention initiatives.

This report is organized in seven sections. The next section presents results of a literature review and features a review of relevant prosecuted legal cases. Sections three and four describe the qualitative and quantitative methods used to develop the estimation models. Section five discusses the data used in the model while section six presents estimates from the model. Section seven provides a summary of the research, gaps in data, and recommendations. A report of the phase one findings can be found at http://www.ncjrs.gov/pdffiles1/nij/grants/215475.pdf.

2. LITERATURE REVIEW

Reported estimates of the prevalence of human trafficking worldwide, and specifically into the United States, were reviewed to assess the state of knowledge of the field. The research team reviewed published and unpublished papers, web sites of Federal agencies and nongovernmental organizations (NGOs), and prosecuted legal cases that involved acts of human trafficking. This information is presented in four parts: the prevalence of human trafficking into

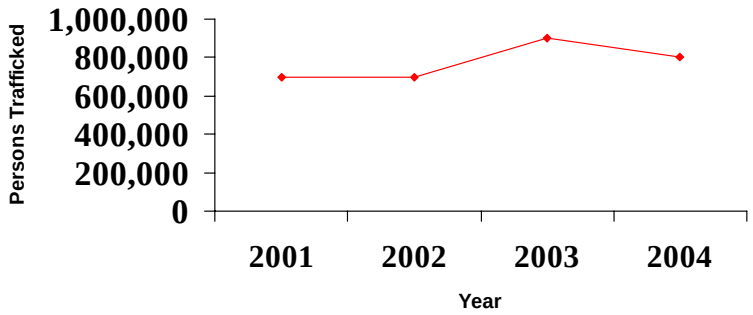
the United States, international research studies, barriers to estimating the prevalence of human trafficking, and a review of prosecuted legal cases.

2.1 Reports on the Prevalence of Human Trafficking into the United States

The *Trafficking in Persons Report*, which is published annually, shows considerable fluctuation in official yearly estimates of human trafficking into the United States. According to the 2001 *Trafficking in Persons Report*, there were between 45,000 and 50,000 persons trafficked into the United States in 2000 (reported estimates are for the previous year's activity). The 2002 report stated that 50,000 females were trafficked into the United States for sexual exploitation; the first year the estimate clearly indicated it did not include labor trafficking or adult males. In earlier reports, no distinction was made between those trafficked for sex or labor or whether these persons were men or women. In 2003, the *Trafficking in Persons Report* estimate of persons trafficked into the United States significantly dropped to between 18,000 and 20,000. The number dropped again in 2004 when the *Trafficking in Persons Report* estimated between 14,500 and 17,500 persons was trafficked into the country. Estimates were not updated in the 2005 or 2006 *Trafficking in Persons Report*.

The 2001 and 2002 *Trafficking in Persons* reports estimated worldwide trafficking to be 700,000, which increased to a range of 800,000 to 900,000 in the 2003 report then decreased to a range of 600,000–800,000 in 2004. Exhibit 1 shows that worldwide estimates of human trafficking have remained essentially constant, while U.S. estimates declined 66 percent between 2001 and 2004. International estimates were not updated in the 2005 or 2006 *Trafficking in Persons Report*.

EXHIBIT 1
***TRAFFICKING IN PERSONS REPORT* YEARLY ESTIMATES OF WORLDWIDE HUMAN TRAFFICKING**



Although the *Trafficking in Persons Report* is considered to be the most comprehensive anti-trafficking review issued by any single government (Lack and Garment, 2003), its greatest

contribution to research methods for studies on the magnitude of human trafficking is its description of data collection activities. The Federal government has employed various data collection activities to generate the estimates presented here.

Beginning in 2001, U.S. data collection methods primarily included interviews, document review, and focus groups. The Department of State requested information from 186 U.S. embassies and consulates. The embassy reports reflected discussions with host governments, local NGOs, immigration officials, police, journalists, and victims. Documents reviewed included government, press, and NGO reports. Also consulted were reports from the Department of State's Bureau of International Narcotics and Law Enforcement Affairs; the Bureau of Democracy, Human Rights, and Labor; the regional bureaus; the intelligence community; the Office of the Legal Advisor; UNICEF; United Nations High Commissioner for Refugees; International Organization for Migration; Human Rights Watch; Amnesty International; Protection Project; and the media.

In 2002, panel discussion was added to data collection activities and an electronic mail account was established to assist with collecting data. The panel was staffed from the *Trafficking in Persons Report* office, the intelligence community, and other U.S. government agencies and departments such as the Department of Justice (DOJ); Department of Health and Human Services (DHHS); Bureau of Democracy, Human Rights, and Labor; Bureau of Population, Refugees, and Migration; and Office of the Legal Advisor. The Department of State created a special e-mail account for NGOs and other organizations to report their experience with human trafficking cases.

In 2003, the Department of State added regional site visits to its data collection activities and established a Microsoft ACCESS trafficking database. The database contained reports of specific trafficking incidents, numbers of repatriated victims, estimates for victims worldwide, and victim demographics derived from analysis of information from news media, governments, NGOs, international organizations, and academic reports.

Data collection activities were further refined in 2004, yet no substantive explanation of how estimates are generated were provided. In 2004, the U.S. government reported that Monte Carlo simulation technique was used to help generate estimates (U.S. Department of Justice, 2004), but provided no further elucidation on the specifics of the model or the data employed in it. A recent GAO report calls into question U.S. government estimates, stating "The accuracy of the estimates is in doubt because of methodological weaknesses, gaps in data, and numerical discrepancies." (GAO, 2006, pg. 2) While researchers conducting studies on the magnitude of human trafficking are provided with explanations for how data are collected, they are not provided a detailed description of methods for calculating estimates.

Criticisms of the *Trafficking in Persons Report*

The *Trafficking in Persons Report* is often criticized for being politicized and biased. Comments focus on how the minimum standards are applied to countries, how the information presented in the report has been analyzed, and how tier ratings are determined (Friedrich, 2006). Critics question the tier determinations and country evaluations, contending that they are sometimes used to reward allies of the United States and punish adversaries. There are also concerns about whether or not country assessment information is complete. The assessments presented in the final *Trafficking in Persons Report* include only information that the State Department believes shows the extent to which a government satisfies standards in the TVPA. State Department officials stress that country assessments and tier determinations don't compare countries to each other, but rather compares each countries' efforts to its prior efforts (Friedrich, 2006) , and should be interpreted within that context.

To find additional estimates of the prevalence of human trafficking into the United States, the research team reviewed various literature accessible from Federal agency Web sites (e.g., Department of State, DOJ Criminal Section, and DHHS Office of Refugee Resettlement), nongovernmental Web sites (e.g., International Organization for Migration, Free the Slaves, Polaris Project, and University of Pennsylvania School of Social Work), and the United Nations. In this literature, the reported estimates generally cited the *Trafficking in Persons Report* as their source, or cited work that relied on *Trafficking in Persons Report* estimates. Therefore, the official *Trafficking in Persons Report* estimates are the only estimates currently available, and few prominent studies have added to this body of literature.

Trafficking for Labor Exploitation

There is evidence suggesting the existence of informal and abusive labor markets operating in Western Europe and other industrial countries, including the U.S. (Plant, 2002). There are few NGOs involved in labor trafficking, few detailed case studies, and until recently, there hasn't been a focus on this emerging problem (ILO, 2002). In 2001, the ILO issued a global report that drew attention to increased trafficking for labor exploitation since the break-up of the former Soviet Union (ILO, 2001). The 2005 and 2006 *Trafficking in Persons Report*s expanded its examination of trafficking for labor exploitation, separately from trafficking for sexual exploitation, but acknowledge that information is sparse (U.S. Department of State, 2005b and 2006). There are reports that deal with regional overviews (ILO, 2003; Malan 2006) and country-specific reports (Mikhail, 2004; Chinaware, 2004; Kirin, 2005; National Academy of Sciences, 2003; ILO, 2004; Institute for Public Policy, Moldova, 2003). These reports detail legal efforts, attempt to identify root causes of forced labor, provide broad overviews of demand in selected industries, and supply case studies for particular countries. The etiological nature of the literature is useful, but we did not find any consistent data collection efforts or attempts to estimate the magnitude of the problem.

2.2 International Research Studies

Trafficking research has been undertaken for most major regions of the world, with 44 percent of regional studies based in Europe, 35 percent in the Asia-Pacific area, 13 percent in Africa, 7 percent in the Americas, and 1 percent in the Middle East (Lack and Kodiak, 2005). International trafficking estimates dominate internal country estimates and only the Netherlands and Germany provide national trend estimates over several years. The data used to generate these estimates are limited to cases of trafficking in women for prostitution (Lack and Kodiak, 2005).

The Regional Clearing Point's report on victims of trafficking in South-Eastern Europe (Surtees, 2005) provides factual data on the number of victims assisted in each of the region's countries. In addition, it supplies information on each country's capacity and actions to support victims of trafficking. The report's regional focus provides aids in the understanding of the interconnectedness of trafficking in this region. Primary data are collected from service providers in each country. Data include victim profiles, recruitment information, transportation and movement, trafficking experience (forms, length of time, legal or illegal border crossings, destination, and transportation routes), and post-trafficking experiences (Surtees, 2005). This report is very informative from a descriptive standpoint, but provides no estimates on the magnitude of trafficking.

Relatively few of the international research studies describe issues related to methods and data collection techniques for this hard-to-reach population. One of the notable exceptions is research by Brunoskis and Talcum (2004) in which they used capture-recapture techniques to estimate the number of Eastern and Central Europe prostitutes in Oslo, Norway. The capture-recapture technique is used to arrive at estimates of the size of an unknown population of mobile individuals. An initial sample of the population in question is measured (with a sample survey or via observation). A second sample is taken and if the same individuals are observed on both the first and second occasions, it is assumed the actual population is not much different than the total number of observed individuals. If there is little overlap between the first and second observation points, researchers can assume there is a significant unobserved population. Statistical weights are generated to determine the size of the total population. The primary limitation to the capture-recapture technique is the assumption that all samples are independent, with each individual having the same probability of being observed. When the individuals counted during the first sampling period (capture) re-mix with their own community, they have the same probability of being re-sampled (recaptured) during the second sample period (Khan, Bunya, and Udine, 2004).

Another exception is a study by Danailova-Trainor and Belser (2006), which focused on transnational sex trafficking and employs a demand and supply model that utilized cross-country data. The authors assumed that demand is driven by the economic and political openness of a

country, the incidence of prostitution, and the price of the services provided by trafficking victims, as compared to the price performed by local providers. They suggested that openness of a country captures the extent to which it is integrated into the global economy and the extent of the permeability of its borders. They asserted that supply is driven by corruption, female unemployment, the feminization of poverty, the income differentials between the supplying and demanding country, and other destabilizing country-level factors. The authors utilized country level, open-source data such as the ratio of trade to gross domestic product (as a measure of openness) and Transparency International's corruption index as input to their method. While the method developed for our research is different, we also drew upon country level, open-source data.

Estimates for other hidden populations, such as illicit drug users, also provide a wealth of detail about methods. These studies (Rhodes, Layne, and Johnston, 1999) often rely on national data that are routinely collected by the U.S. Government and widely available to researchers. They also employ large-scale sample surveys of known drug users (Rhodes, Layne, and Johnston, 1999). These methods are less relevant for estimating human trafficking because of the paucity of human trafficking data available.

2.3 Barriers to Estimating the Prevalence of Human Trafficking

A review of the literature on measuring the prevalence of human trafficking both into the United States and worldwide reveals that researchers are faced with numerous challenges that make the generation of estimates an extremely difficult task. What follows are some of the known barriers to collecting and reporting reliable data on human trafficking. This discussion is not meant to be exhaustive.

Data Are Frequently Program-Specific and Duplicates

Human trafficking data obtained from victim service organizations are often non-comparable and contain duplicate counts. Furthermore, service organizations use varying definitions in determining who is a victim of human trafficking, report data only for those victims who have received trafficking services, and report data for varying time periods (Kangaspunta, 2003; Laczko and Gramegna, 2003). Multiple organizations may also serve and report data for the same victim. For example, if Program A offers services to Client X, then Client X also receives services from Program B, both Programs A and B will count Client X as a victim of human trafficking. If these data are then reported to a Federal agency, it is likely Client X's data will be duplicated.

Researchers relying on data from government agencies risk using data that are not consistently captured across agencies and may include duplicate counts. However, some argue that program data are the best data available on this hidden crime (Laczko and Gramegna, 2003).

The Federal government is working to improve data collection activities by requiring agencies such as the Office for Victims of Crime (OVC) and the Office for Refugee Resettlement (ORR) to report data collected from their trafficking services grantees. OVC and ORR are working together to streamline data collection activities and reduce some of the error commonly found in program data. These data help inform the DOJ annual report, *Assessment of U.S. Activities to Combat Trafficking in Persons* (U.S. DOJ, 2003, U.S. DOJ, 2004; U.S. DOJ, 2005). As data collection activities improve, better quality data will be available to generate estimates.

Demand from United States Citizens Can Occur Outside of the United States

United States military personnel deployed away from home have been a consistent source of demand for sexual services (Allred, 2006). When UN peacekeepers (of which United States military personnel were a part) deployed to Bosnia-Herzegovina, brothels which may have contained trafficked women developed quickly in the areas surrounding UN compounds (Allred, 2006). Even though the numbers have declined, there still remains a large foreign contingent in Bosnia. Because of corruption in the area, peacekeepers are undeterred from visiting prostitutes (Pallen, 2003). They are the customers of a thriving sex trade in Eastern Europe (Pallen, 2003).

On a guided trip to Tijuana's prostitution area (prostitution is legal in Tijuana, but it is largely confined to the three-block red-light district), our guide reported that many of the customers are American males who cross the California border to engage in sex acts in Mexico. Border towns in Mexico have become holding points for victims of trafficking between countries of origin and destination

It is difficult to estimate the magnitude of these activities, but they should not be ignored when developing an accurate estimate of the numbers of women trafficked into the United States for sexual exploitation.

Estimates Only Include Women and Children for Sexual Exploitation

Estimates on the number of persons being trafficked often only include data on women and children who are being sexually exploited. Data on men, boys, persons who are trafficked for other work (e.g., agriculture, sweat shops, domestic work, servile marriage), and those who are trafficked within borders are excluded. Focusing only on women and children who are sexually exploited fails to account for the larger number of persons likely to be trafficked, and does not bring enough attention to helping these victims (Bales, 2005; U.S. Department of State, 2005a). For example, a study found that 10,000 men, women, and children are laboring against their will as prostitutes, farm and sweatshop laborers, and domestic workers in the United States (Tuller, 2005).

A common misconception is that males migrate and females are trafficked, yet trafficking applies to both males and females. Males often face abusive and exploitative labor conditions once in the United States, while females are identified more often as trafficking victims because of their increased vulnerability to sexual and physical abuse. The journey can be dangerous for both males and females, but because of the social role of females, they are often forced into positions that males are not. For example, *The New York Times* (Thompson and Ochoa, 2004) reported on a bleak sea voyage from Ecuador to Guatemala. While both men and women were subjected to overcrowding, poor sanitation, and little or no food, many of the women were forced to provide sexual favors to crew members.

Smuggling versus Trafficking

People who are smuggled are traveling voluntarily, whereas people who are trafficked are coerced in some way, either taken by force or deceived. Deception is the most prevalent form of trafficking, with traffickers often posing as brokers offering to find legitimate work in the United States for young females. Upon arrival, victims discover that they are expected to provide sex and often are brutalized in transit by traffickers to ensure their acquiescence.

Smugglers, by contrast, facilitate entry into the United States by providing transportation or supplying false passports. Often, both men and women are forced into some type of servitude once in the United States to pay the debt incurred in the smuggling process (Tuller, 2005). Another common misconception is that females are trafficked (or smuggled) only for the sex industry. Women are forced into servitude work that includes prostitution, domestic work, sweatshops and factories, strip clubs, and mail order brides (Bales, 2004). In contrast, servitude work for men usually involves labor only, typically in agriculture, restaurants, and the service industry (Bales, 2004).

Human Trafficking Is an Underreported Crime

Many cases of human trafficking go undiscovered and unreported, which can be attributed to the low priority many countries give to combating human trafficking (Laczko and Gramegna, 2003). Many countries have inadequate or no legislation, witnesses who are unwilling to testify, or law enforcement personnel who are not motivated or trained to investigate human trafficking cases. The United States is regarded as a leader in the area of human trafficking legislation, with the TVPA viewed as model legislation. Law enforcement personnel still need training in how to identify and investigate cases of human trafficking. Unless a crime of human trafficking is reported somewhere in the criminal justice system, it may never become part of the official record (Kelly, 2002).

Inconsistent Definition of Human Trafficking

Until recently, there has been little agreement on how to precisely define human trafficking (Richard, 1999). Prior to the 1990s, trafficking was generally viewed as a form of human smuggling and a type of illegal migration (Laczko and Gramegna, 2003; Vayrynen, 2003). Today, the United Nations Protocol to Prevent, Suppress, and Punish Trafficking in Persons has defined trafficking distinctly from smuggling. However, many practitioners in the field (e.g., law enforcement, service providers, and prosecutors) still debate the terminology for classifying people whose experience did not initially begin or end as a trafficking experience (Kangaspunta, 2003). Also, some acts of trafficking involve both sex and labor components. For example, a domestic worker who is forced into an involuntary work situation may also be made to engage in sexual conduct. Problems associated with defining someone as a victim of human trafficking, and then as a victim of sex trafficking versus labor trafficking, result in data being inconsistently recorded.

Limited Access to Traffickers

Trafficking is illegal and often associated with organized crime; therefore, gaining access to traffickers and information about routes, key persons involved, and practices is severely limited, if not impossible (Kelly, 2002). Information is supplied primarily by victims who, because of their traumatic experience (e.g., isolation, mental torture, and physical abuse), may not remember information accurately, or may not have been privy to the inner workings of the trafficking operation. Methods to adequately study traffickers (e.g., ethnographies, undercover operations) pose dangers for researchers and, as a result, are rarely undertaken (Kelly, 2002).

Reluctance to Share Data

There is reluctance on the part of agencies within countries and between countries to share trafficking data (Richard, 1999). Because the U.S. government publishes the *Trafficking in Persons Report*, ranking countries based on their efforts to combat human trafficking, some countries may have political reasons for their unwillingness to share data or to be selective in the data they choose to share. Within the United States, some law enforcement and prosecution agencies and service organizations may be reluctant to share data because of privileged

communications, victim confidentiality concerns, or an unwillingness to share sensitive strategies and practices. Some countries may simply be unwilling to share data because they do not wish to open themselves to public scrutiny over their efforts to combat trafficking.

Inability to Obtain U.S. Government Data

There are rich sources of data within U.S. government agencies (e.g., Immigration and Customs Enforcement [ICE]) that are unavailable to researchers. Obtaining these data requires a strong advocate for the research within the agency (Layne, Rhodes, and Chester, 2000) and extensive Memoranda of Understanding, which can be time-consuming to obtain. Researchers must rely instead on published reports and secondary data analysis. These data are not detailed enough, and frequently are only point estimates, to be of much use. Being able to analyze primary data from government agencies would increase the precision of research studies.

Technical and Financial Assistance Needed for Data Collection and Standardization

Organizations, especially those in developing countries, need technology and funding to develop data collection protocols, hire staff to collect the data, and establish statistical systems to store data. Furthermore, a mechanism to coordinate and standardize various indicators of human trafficking and data collection systems is needed (Laczko and Gramegna, 2003). Surveys are often used to collect local, national, and international data; therefore, to incorporate and analyze these disparate survey data, surveys need to adopt similar methods (e.g., sampling technique, common instrument development) (Ruwanpura and Pallavi, 2004).

The development of methods for research on human trafficking remains in its infancy as data on human trafficking are based primarily on overviews, commentaries, and data from service providers rather than well-designed sociological studies (Kelly, 2002). This lack of strong research is particularly problematic as policy responses to human trafficking are developing rapidly.

3. QUALITATIVE METHODS

Our approach moved from the general to the specific, starting with a literature review and input from advisors and culminating with development of a method that is illustrative of the problems inherent in modeling human trafficking. The approach included four key steps:

1. The team conducted a targeted literature review of human trafficking estimates, including existing models that have been used to estimate the prevalence of human trafficking, and human trafficking indicators (discussed in Section four).

2. The team conducted an extensive review of prosecuted trafficking cases into the United States for phase one. Information from the review of prosecuted cases was used to help identify trafficking flows and generate a preliminary list of data variables and sources for the phase one study. Given the limited utility of these reviews, prosecuted cases were not reviewed for phase two. Instead, information from the literature and input from NGOs and others working in the field provided background information for phase two.
3. The team presented this information to the Technical Advisory Group (TAG) in phase one, whose feedback was used to refine the literature review, the variables of interest, and the regions included in the study. For phase two, information related to literature to consider, variables and potential data sources, and regions of focus was obtained from Government experts and NGOs working in the field of human trafficking.
4. The team collected additional data from key stakeholder interviews in San Diego, California, and Tijuana, Mexico for phase one and from NGOs working with victims from Eastern Europe for phase two.

Using the information gathered, we developed quantitative methods for each of the 22 countries and generated preliminary estimates to test the plausibility of the methods.

3.1 Review of Prosecuted Legal Cases (Phase One Only)

To inform and lend support for the assumptions built into the estimation model, a review of published legal cases that involved acts of human trafficking was conducted. To obtain these cases, the research team searched the Internet, the LexisNexis legal database, and the DOJ Civil Rights Division Web site. Twelve cases were selected for final review, based primarily on information the case provided on trafficking routes from the countries of interest. Additionally, data on the trafficking route, type of trafficking case, identification of the victim's gender, and stakeholders involved in the investigation and prosecution of the case were reviewed.

Of the 12 cases reviewed, data were most available on Mexico, sex trafficking, and female victims. Sixteen cases identified Mexico either as a source or transit zone country, 11 cases involved sex trafficking, and 12 cases clearly identified the victims as female only. These findings support the assertion made by researchers that what is most known about human trafficking involves females and sexual exploitation. Also, these findings suggest that open source data from Mexico are more readily accessible.

Information on key stakeholders involved in a case was documented to highlight the various agencies and organizations that can, and likely do, track human trafficking data. Data from these entities would have been extremely useful when developing the study estimation model, and would be useful for researchers studying the magnitude of this crime in the future. However, because multiple stakeholders handle an individual case, efforts should be made to

ensure data are shared across agencies, data systems are compatible, human trafficking indicators are standardized, and no duplicate counts exist.

3.2 Feedback from the TAG and Government Experts

A TAG was formed for phase one to provide insight into the development of a conceptual framework for the research. TAG members were from academic institutions and leading NGOs that work on human trafficking. Throughout the course of phase one, the TAG provided the research team with information on literature related to human trafficking estimates and on research methods used for similar studies, and helped identify human trafficking indicators and possible data sources. Overall, the TAG agreed:

- An estimation model for human trafficking that produces valid and reliable estimates is timely and useful so legislation and policies can be data-driven.
- An estimation model must be publicly vetted so it can be refined based on a collective knowledge of human trafficking activity currently taking place in local communities.
- Estimation models used in migration research and other "hidden crimes" research may help inform a human trafficking estimation model, or at least demonstrate barriers to be overcome.
- Most published and unpublished literature reports that the development of human trafficking estimation models are in the infancy stage and that data needed to refine and test these models are generally not collected or accessible to the public.
- Most human trafficking estimates are reported without explanation about how the data were collected and, more importantly, analyzed.
- Barriers to the development of a human trafficking estimation model include political and ideological issues.

The TAG also provided feedback on the types of data that should be collected and possible data sources for each stage of the estimation model. Using what was learned from a review of the literature, a preliminary test of the estimation model, and feedback from the TAG, the research team made considerable attempts to collect additional data and refine assumptions for the estimation model.

For phase two we consulted a group of Government officials from the United States Department of Justice and Department of State to provide feedback on phase one methods and to help identify possible variables and data sources for phase two methods. We met several times with the group and they provided the following feedback:

- There are not enough data available to support the development of a labor estimation model.
- The tier rating in the *Trafficking in Persons Report* should not be used as a measure of protection against trafficking.
- There may be other data from which we could construct a measure of protection from trafficking, e.g., the number of trafficking NGOs, the amount of money dedicated to funding anti-trafficking activities, whether trafficking prosecutions have increased over time for each country in the analysis, and the level of funding from the Unites States to each country.

This feedback was considered in the modifications to the estimation models for phase two.

3.3 Site Visit (Phase One Only)

During phase one we collected additional data for trafficking from the selected Central and South American countries, via a site visit with the Bilateral Safety Corridor Coalition (BSCC) located in San Diego, California, and Tijuana, Mexico[2]. The team observed possible trafficking activity in "hot spots" with law enforcement officers and service providers to gain a richer understanding of the status of human trafficking in this area.

On a guided trip to Tijuana's prostitution area (prostitution is legal in Tijuana, but it is largely confined to the three-block red-light district), the research team observed that women of many nationalities (e.g., Guatemalan and Salvadoran), not just Mexican women, were prostitutes. The guide pointed out surveillance cameras in a particular area and indicated that the cameras were trained on the woman as a form of intimidation, possibly indicating the women were trafficking victims.

BSCC staff currently is working with local universities to map trafficking routes from Mexico into the United States and showed the research team their maps and explained their data collection methods[3]. BSCC staff visit suspected hot spots and conduct interviews with service providers, advocates, and law enforcement in the suspected areas to better understand the flow of trafficking. This information is recorded in detail by BSCC staff. The research team used the maps BSCC developed to inform the modeling about the possible routes trafficked females may take from their home country. This information was compared to descriptive reports of trafficking incidents reported in the *Trafficking in Persons Reports* and in limited case data available from prosecutions.

[2] Budgetary constraints for phase two research made a site visit to Eastern Europe during phase two impossible.
[3] Please contact BSCC staff directly for details.

The site visit to San Diego and Tijuana proved invaluable for obtaining additional data on the region. Observing the activity and meeting with those who are conducting studies to increase understanding of trafficking in this area "brought to life" the data retrieved from the literature. The work BSCC and others are conducting should be continued as research methods and human trafficking indicators improve to increase the volume of available data. In the interim, site visits and field observations can contribute to shaping assumptions for an estimation model. Unfortunately, resources for more intensive field research were not available for phase one or phase two of this study.

In fact, for phase two, the budget was more limited and did not allow for a similar site visit to any of the 15 countries in Eastern Europe. Additionally, the points of entry into the United States for victims from countries in Eastern Europe is not as well defined as for victims from Central and South America making site visits less useful for phase two.

4. QUANTITATIVE ESTIMATION METHODS

The following section describes the methods employed for estimating the number of females trafficked into the United States for the purpose of sexual exploitation. We limited our model to 22 countries of origin in two regions (Central and South America: Colombia, Ecuador, El Salvador, Guatemala, Mexico, Nicaragua, Peru, and Venezuela; and Eastern Europe: Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Hungary, Macedonia, Moldova, Montenegro, Poland, Romania, Serbia, Slovakia, Slovenia, and Ukraine) trafficked to entry points into the United States (the southwest border and the mid-Atlantic region). However, the model can be adapted to include victims from other countries of origin and additional entry points into the United States, as well as for destination countries other than the United States.

4.1 Trafficking Zones

Trafficking is organized into four zones or phases:

- Recruitment from the countries of origin (source countries)
- Transit journey
- Arrival at southwest border or the mid-Atlantic region of the United States
- Transport from entry points to markets within the United States.[4]

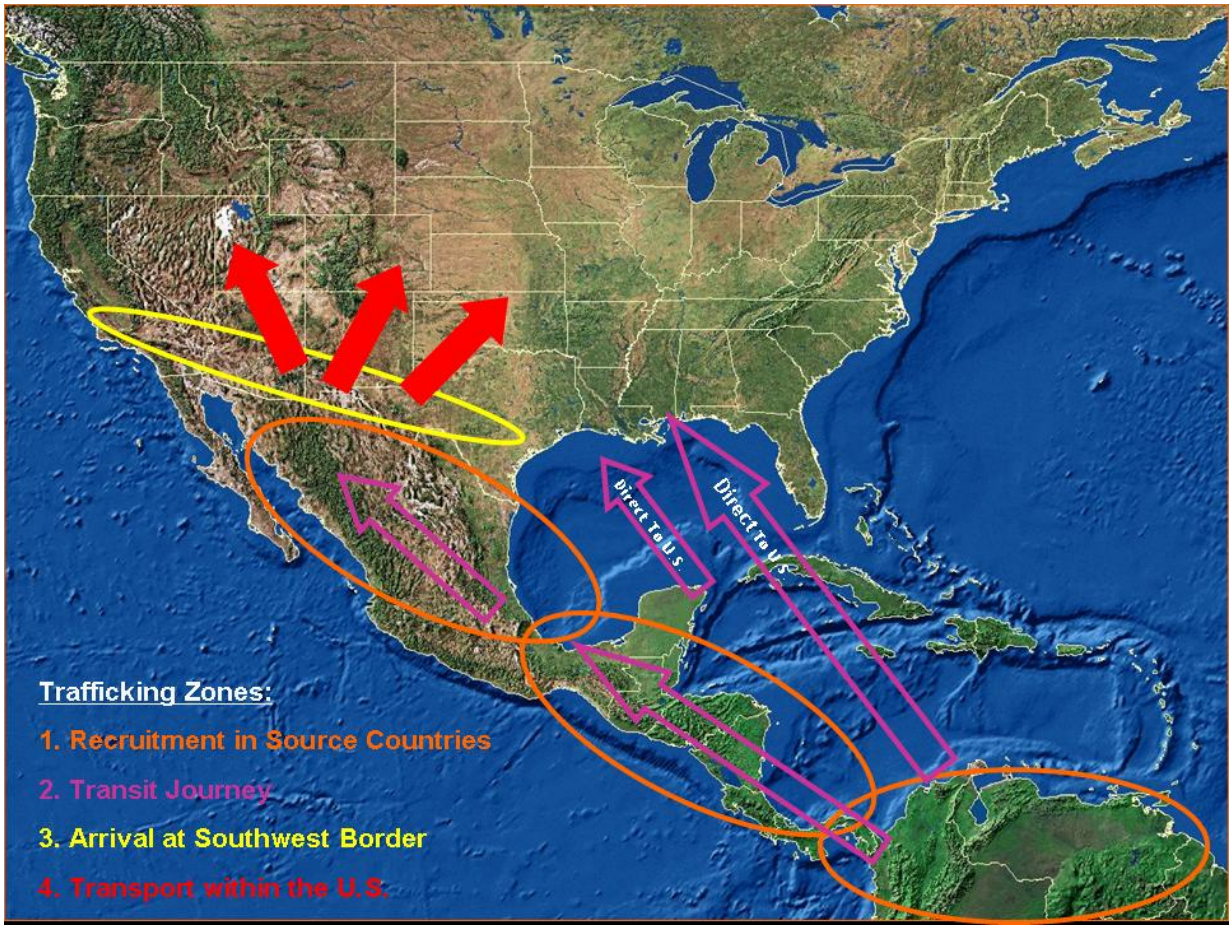
There is a separate model for each phase (Layne, Rhodes, and Johnston, 1999), as well as different data sources, assumptions, and circumstances in the specific zones. Exhibit 2 illustrates the zones for the Central and South American regions. The orange ovals in the exhibit denote source countries and the pink arrows represent the transit journey, which can involve various

[4] This phase is not considered in the current estimation model.

modes of conveyance (e.g., boat, truck, on foot) in one transit experience. Females, in particular, are held in various transit countries to serve internal sex markets and may never arrive at the southwest border United States. A transit journey may take weeks, months, or up to a year to complete.

Tyldum, Tveit, and Brunovskis (2005) detail distinctions between the states that a victim can occupy in relation to the trafficking process, which are persons at risk of being trafficked, current victims of trafficking, and former victims of trafficking. Due to the paucity of data for the second two states, our model estimates the number of persons *at risk* of being trafficked in each of the 22 countries.[5]

EXHIBIT 2
TRAFFICKING ZONES: CENTRAL AND SOUTH AMERICA



[5] We explored the possibility of estimating U.S. demand for trafficking victims, but there were not enough data available (in the form of sample surveys or arrest data) to accomplish this estimate.

Source Zone Model

The model hypothesized that risk of a female being susceptible to being trafficked for sexual exploitation is comprised of country-specific and age-specific factors (see Appendix A for additional detail). Trafficking victims are vulnerable to promises of greater opportunity, higher income, and a chance to help their families. We attempted to find data that captured the various *push factors* in each source country that would help quantify the risk associated with a particular country (discussed in section 5). Push factors include disparate economic growth, breakdown of economic systems, and increase in war and armed conflict, environmental degradation, natural disasters, and family violence. For females, country-specific factors are captured in a composite measure created from the Gini Index (UNDP, 2005), Corruption Perceptions Index (CPI) (Transparency International, 2005), the Gender-related Development Index (GDI) (UNDP, 2005), and the percent of the country that is urban (U.S. Census Bureau, 2005; HIV InSite, 2005).

Age-specific risk (population data in each of the 22 countries of origin are available for 5-year age groups, or 17 age groups in all) is modeled statistically with a Weibull probability distribution (see Appendix A). The age-specific risk curve for females rises quickly and peaks at ages 15–19, with risk falling fairly quickly afterward, indicating that risk declines sharply as females marry and create families.

Calculating the number of females *at risk* for being trafficked for sexual exploitation in each of the 22 countries overstates those who are *actually* trafficked. The challenge is to determine, from the *at risk* pool, how many women are then trafficked. The multiplier we developed is based on actual versus natural population changes (see section 5.2 for details). This new measure replaces the multiplier based on a country's tier rating which was adopted for phase one modeling.

Transit Zone Model

The Transit Zone Model is the continuation of the Source Zone Model. Because a victim may journey through many transit countries, the phase one model estimated the number of victims who

- Die in each transit country
- Escape or are rescued in the transit country
- Remain in the transit country for internal use
- Are trafficked to a country other than the United States
- Proceed along to the next transit country.

For phase one Transit Zone modeling, we made assumptions about the percentage of women who incurred any one of the outcomes above, with no hard data with which to back the assumptions. We used the country narratives in the *Trafficking in Persons Report* to gain a general sense of where women where trafficked, but we made assumptions about the percentage of the total trafficking victims who went in the directions that the narratives specified (see Section 5.3 for more detail). During phase two research, which examined 15 countries in Eastern European, we did not incorporate nearly as many assumptions (see Section 5.3 for more detail). The numbers of victims who enter into the United States at the southwest border (for the eight Central and South American countries) or somewhere in the mid-Atlantic region (for the 15 Eastern European countries) is the end point of the Transit Zone Model.

4.2 Statistical Methods

After we reviewed the literature on various methods used to measure hidden populations, we used Monte Carlo (MC) simulation as the basis for estimating the risk, for each of the seventeen age groupings, of being trafficked from each of the eight countries to the southwest border of the United States. Monte Carlo methods allowed us to generate estimates without having to observe the specific process, which is particularly germane to this research because other standard methods, such as conducting sample surveys, are much more difficult with hidden populations.

Monte Carlo simulation is categorized as a sampling method because estimates are generated from probability distributions (e.g., a normal distribution, or bell-shaped curve: height follows a normal distribution) to simulate the process of sampling from an actual population. The key is choosing a distribution for the estimates that most closely matches data you already have, or best represents the current state of knowledge. For determining the risk of being trafficked for specific ages, the distribution that we obtain samples from (using MC methods) is skewed (or shifted) to the left because it is likely that younger females are at a higher risk of being trafficked than older females.

We also employed Monte Carlo simulation in the Transit Zone Model, as transit decision points were reached, to calculate the number of victims who are rescued or escape as they move through each transit country. Appendix A provides the technical detail for the models.

5. DATA SOURCES

This section discusses data sources used in the models. Exhibit 4 details data sources that we postulated would be relevant for each of the zones. To characterize country-specific risk in the source zone, we sought to create a measure of vulnerability to trafficking by collecting push factor data. To create age-specific risk in the source zone, the model needed population data by age. For the transit zone, we wanted to characterize the ease of movement through particular

countries. For the arrival points at the United States, we were seeking data that would allow us to estimate the draw to a particular arrival area and the ease of entry at that point.

If data elements were unavailable, Exhibit 3 indicates what proxy measure was utilized (see section 5.1 for a full discussion of proxy indices). The model requires *consistent* data across

EXHIBIT 3
PROPOSED DATA AND AVAILABILITY FOR EACH TRAFFICKING ZONE

Types of Variables	Source Zone	Transit Zone	Arrival at Border	Available	Proxy Measure
Demographic Indicators	Education	-	-	No	Gender-Related Development Index
	Ethnicity	-	-	No	None
	Percent Living in Urban Area	-	-	Yes	NA
	Marital Status	-	-	No	None
	Population	-	-	Yes	NA
	Religion	-	-	No	None
Economic Indicators	Earned Income	-	-	No	Gender-Related Development Index
	Unemployment	-	-	No	Gender-Related Development Index
	Consumer Price Index	-	-	Yes	NA
	Labor Force Participation	-	-	No	Gender-Related Development Index
	External Migration	-	-	No	None
	Percent Living in Urban Areas	-	-	No	None
	Unemployment Rate	-	-	No	None
	Measures of Poverty (income from public assistance, poverty threshold values)	-	-	No	Gini Index
Crime Indicators	Drug Use	Corrupt Officials	Number of Sex Establishments	No, all zones	Corruption Perception Index
	Presence of Organized Crime	Presence of Organized Crime	Presence of Organized Crime	No, all zones	Corruption Perception Index
	Human Rights Violations	Illegal Immigration	Illegal Immigration	No, all zones	None
Quality of Life	Domestic Violence	-	-	No	None
	Environmental Degradation	-	-	No	None

Note:
NA indicates not applicable
- indicates does not apply

all countries and within the 17 age categories. For example, female education in the few countries for which it is available, is aggregated into different age categories than the population data. Also some education data were available for some countries, but not all. Consistency of data is necessary to ensure an accurate assessment of risk across countries.

5.1 Source Zone Model

The source zone model incorporates two components for the estimated risk of being trafficked—country-specific and age-specific risk. To characterize country-specific risk, we created a measure of vulnerability to trafficking that included as many of the push factors for which we could gather consistent data. Ideally, the Source Zone Model would incorporate each of the indicators detailed previously in Exhibit 3 to capture country-specific risk. Ultimately, we used a combination of proxy indices and indicators for which we found explicit data (e.g., percent living in urban areas).

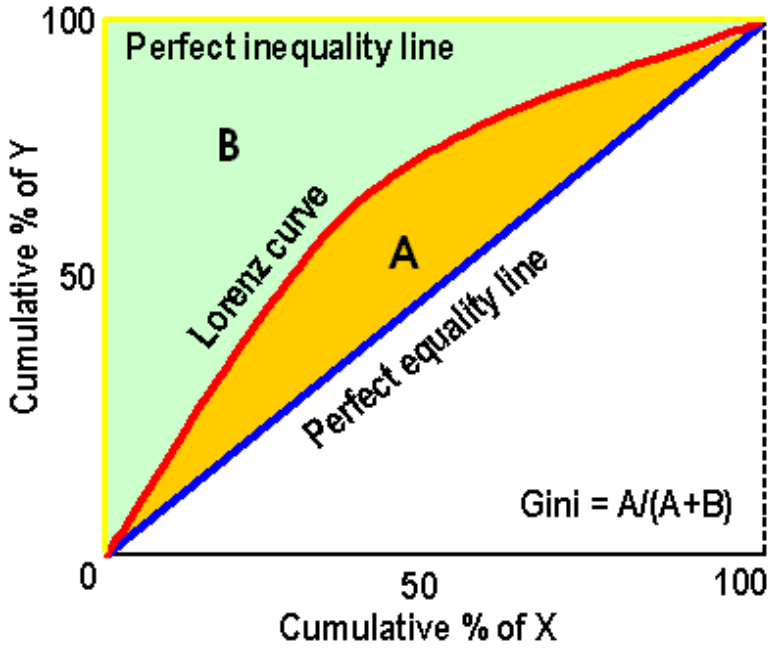
Proxy Measures

As Exhibit 3 demonstrates, much of the data were not available, either because it is not collected for all countries, or it is inconsistent between countries. We used the indices described next as proxies for some data that were unavailable.

The Gini Index

The Gini Index measures the extent to which the distribution of income (or consumption) among individuals or households within a country deviates from a perfectly equal distribution. The Gini Index is the primary economic indicator and is the difference between a Lorenz curve and a hypothetical line of absolute equality. A perfectly equal income distribution in a society would be one in which every person has the same income. The lower *n* percent of society would always have *n* percent of the income. Thus, a perfectly equal distribution can be depicted by the straight line $y = x$; this line is the line of perfect equality or the 45 degree line. A perfectly unequal distribution, by contrast, would be one in which one person has all the income and everyone else has none. In that case, the curve would be at $y = 0$ for all $x < 100$, and $y = 100$ when $x = 100$. This curve is the line of perfect inequality. Exhibit 4 shows each of these lines, a Lorenz curve, and the Gini coefficient. The Gini coefficient ranges from a minimum value of zero, when all individuals are equal, to a theoretical maximum of one in a population in which every individual except one has a size of zero.

EXHIBIT 4
GINI INDEX



Corruption Perception Index (CPI)

The CPI provides data on perceptions of corruption within countries and is the best measure of organized crime that is consistently available for all the source countries. It is a composite index that surveys business people and assessments by country analysts. Each source is considered credible and uses diverse sampling frames and different methods. The index is standardized by experts (Lambsdorff, 2005) and enhances understanding of the real levels of corruption from country to country. The scale starts at zero, which indicates a highly corrupt country, and ranges to a value of 10, which indicates a highly clean country.

Gender-Related Development Index (GDI)

The GDI adjusts the Human Development Index, which measures average achievement, to reflect the inequalities between males and females in various dimensions: a long and healthy life, as measured by life expectancy at birth; knowledge, as measured by the adult literacy rate and the combined primary, secondary, and tertiary gross enrollment rate; and a decent standard of living, as measured by earned income (UNDP, 2005). A value of one denotes complete equality and zero denotes complete inequality.

Standardization of Country-Specific Risk Indicators

Each index is drawn from a different distribution and comprises significantly different ranges, which require standardization. Without standardization, the composite index would be biased toward variables with high ranges, and meaningful changes in a value would significantly affect the composite index. We used the Linear Scaling Technique to standardize each index and created the composite index by performing a linear transformation (Salzman, 2003). We used power averaging to create a composite and employ an alpha value that gives greater weight to the index that expresses the most significant degree of risk.[6] Exhibits 5 and 6 detail the female and male indices in their published form and show the composite index is used in the source zone estimation. These exhibits report only the indices for the eight source countries and the United States; however, the standardization was performed for all countries for which data were available. Appendix B specifies the indices for all countries included in the calculation.

EXHIBIT 5
FEMALE INDICES USED TO DEFINE COUNTRY-SPECIFIC RISK

Country	CPI 0=highly corrupt, 10=highly clean	GDI 0=unequal, 1=equal	Gini 0=perfect equality, 100=perfect inequality	Percent Urban	Composite Index	Country-Specific Risk: 1-Composite Index
Colombia	4.0	0.780	57.6	63.6%	0.660	0.340
Venezuela	2.3	0.765	49.1	73.1%	0.643	0.357
Ecuador	2.5	0.751	43.7	18.0%	0.508	0.492
Peru	3.5	0.745	49.8	65.1%	0.602	0.398
El Salvador	4.2	0.715	53.2	39.5%	0.546	0.454
Guatemala	2.5	0.649	48.3	69.0%	0.572	0.458
Nicaragua	2.6	0.683	55.1	55.0%	0.570	0.430
Mexico	3.5	0.804	54.6	75.0%	0.692	0.308
United States	7.6	0.942	40.8	75.2%	0.796	0.204

[6] The formula for creating the power average is as follows:
Composite = $[1/4\ (I(1)^a + I(2)^a + I(3)^a + I(4)^a +]^{1/a}$
Where:
I(1) = index 1 (e.g., Gini Index)
I(2) = index 2
etc.
a = 4

EXHIBIT 6
MALE INDICES USED TO DEFINE COUNTRY-SPECIFIC RISK

Country	CPI 0=highly corrupt, 10=highly clean	Gini 0=perfect equality, 100=perfect inequality	Percent Urban	Male Unemployment Rate	Consumer Price Index	Composite Index	Country-Specific Risk: 1-Composite Index
Colombia	4.0	57.6	63.6%	0.106	132.46	0.582	0.418
Venezuela	2.3	49.1	73.1%	0.123	219.89	0.569	0.431
Ecuador	2.5	43.7	18.0%	0.066	171.73	0.296	0.704
Peru	3.5	49.8	65.1%	0.094	108.33	0.523	0.477
El Salvador	4.2	53.2	39.5%	0.087	112.73	0.463	0.537
Guatemala	2.5	48.3	69.0%	0.075	131.79	0.538	0.462
Nicaragua	2.6	55.1	55.0%	0.069	127.31	0.521	0.479
Mexico	3.5	54.6	75.0%	0.023	122.27	0.612	0.388
United States	7.6	40.8	75.2%	0.056	109.70	0.649	0.351

The Source Zone Model used the value of 1-composite index as the country-specific multiplier to age-specific risk (see Appendix A for details). Exhibit 7 illustrates that the country-specific risk for females is highest in Ecuador and lowest in Mexico. The mean of the country-specific risk for non-U.S. countries is 0.405 and the country-specific risk for the United States is 0.204.

EXHIBIT 7
FEMALE INDICES USED TO DEFINE COUNTRY-SPECIFIC RISK
SELECTED CENTRAL AND SOUTH AMERICAN COUNTRIES

Country	CPI 0=highly corrupt, 10=highly clean	GDI 0=unequal, 1=equal	Gini 0=perfect equality, 100=perfect inequality	Percent Urban	Composite Index	Country-Specific Risk: 1-Composite Index
Colombia	4.0	0.780	57.6	63.6%	0.660	0.340
Venezuela	2.3	0.765	49.1	73.1%	0.643	0.357
Ecuador	2.5	0.751	43.7	18.0%	0.508	0.492
Peru	3.5	0.745	49.8	65.1%	0.602	0.398
El Salvador	4.2	0.715	53.2	39.5%	0.546	0.454
Guatemala	2.5	0.649	48.3	69.0%	0.572	0.458
Nicaragua	2.6	0.683	55.1	55.0%	0.570	0.430
Mexico	3.5	0.804	54.6	75.0%	0.692	0.308
United States	7.6	0.942	40.8	75.2%	0.796	0.204

Exhibit 8 shows the composite index created to estimate country-specific risk the Eastern European countries. Females from Serbia and Montenegro are at a substantially higher risk than any other country and Albania has the second highest country-specific risk.

EXHIBIT 8
FEMALE INDICES USED TO DEFINE COUNTRY-SPECIFIC RISK
EASTERN EUROPEAN COUNTRIES

Country	CPI 0=highly corrupt, 10=highly clean	GDI 0=unequal, 1=equal	Gini 0=perfect equality, 100=perfect inequality	Percent Urban	Composite Index	Country-Specific Risk: 1-Composite Index
Albania	2.4	0.776	28.2	33.8%	0.523	0.477
Belarus	2.6	0.785	30.4	63.5%	0.594	0.406
Bosnia and Herzegovina	2.9	NA	26.1	44.0%	0.277	0.277
Bulgaria	4.0	0.807	31.9	63.5%	0.612	0.388
Croatia	3.4	0.837	29.0	54.0%	0.609	0.391
Hungary	5.0	0.860	24.4	58.0%	0.647	0.353
Macedonia	2.7	0.794	28.2	59.0%	0.585	0.415
Montenegro	2.8	NA	28.0	52.3%	0.630	0.630
Poland	3.4	0.856	31.6	60.1%	0.640	0.360
Romania	3.0	0.789	30.3	53.0%	0.564	0.436
Serbia	2.8	NA	28.0	52.3%	0.630	0.630
Slovakia	4.3	0.847	25.8	0.560	0.625	0.375
Slovenia	6.1	0.901	28.4	0.510	0.682	0.318
Ukraine	2.6	0.763	29.0	0.680	0.597	0.403

Population Data

We used data from the United States Bureau of the Census (2006). These data are divided into age categories by groups of five years. Exhibit 9 shows 2005 population data for the selected Central and South American countries in each of 17 age categories. Fifty percent of the female population is younger than 25 years old. Mexico has the largest population, with the population of Colombia (the next highest) being less than half of Mexico's. There are roughly 55 million females South American study countries, while 67.5 million females reside in the Central American countries.

Exhibit 10 shows 2005 population data for the Eastern European countries in each of 17 age categories. There are 36 percent fewer females in this region than the South American and Central American study region. Twenty nine percent of the female population is younger than 25 years old and 21 percent are 25 to 39 years old. Twenty eight percent of all of the females in the region reside in Ukraine.

EXHIBIT 9
FEMALE POPULATION BY AGE CATEGORIES (2005)
SELECTED CENTRAL AND SOUTH AMERICAN COUNTRIES

Age Category	Country								Total
	Colombia	Venezuela	Ecuador	Peru	El Salvador	Guatemala	Nicaragua	Mexico	
0-4	2,167,840	1,152,097	736,874	1,387,942	425,460	1,128,614	324,049	5,351,893	**12,674,769**
5-9	2,189,357	1,210,056	747,969	1,438,359	404,834	1,018,171	326,875	5,386,260	**12,721,881**
10-14	2,159,174	1,305,805	711,099	1,497,055	368,295	887,162	348,302	5,431,358	**12,708,250**
15-19	1,941,902	1,196,460	675,486	1,363,991	347,398	779,126	311,895	5,245,757	**11,862,015**
20-24	1,832,783	1,155,685	624,837	1,198,090	323,600	656,615	277,704	4,872,106	**10,941,420**
25-29	1,693,580	1,101,664	579,659	1,182,468	285,821	563,415	241,721	4,634,356	**10,282,684**
30-34	1,710,268	987,777	507,049	1,100,614	250,589	458,635	203,066	4,377,345	**9,595,343**
35-39	1,718,305	893,707	442,070	984,455	217,067	373,292	166,290	3,904,366	**8,699,552**
40-44	1,537,966	818,368	380,316	851,401	181,437	312,682	133,874	3,399,205	**7,615,249**
45-49	1,297,314	708,645	315,588	701,013	145,782	265,239	110,085	2,884,106	**6,427,772**
50-54	1,022,270	596,324	259,046	574,673	120,447	222,648	86,490	2,182,663	**5,064,561**
55-59	785,086	442,595	194,694	454,453	98,348	168,513	60,077	1,759,405	**3,963,171**
60-64	603,351	308,374	151,351	365,185	80,651	128,819	46,815	1,444,784	**3,129,330**
65-69	467,994	247,528	116,003	296,667	64,597	99,733	36,625	1,137,962	**2,467,109**
70-74	351,993	180,355	88,047	220,742	50,853	79,962	27,263	847,798	**1,847,013**
75-79	236,144	135,633	64,724	142,589	37,258	49,235	17,766	590,483	**1,273,832**
80+	175,442	146,841	82,047	109,689	38,377	35,494	12,716	682,603	**1,283,209**
Total	**21,890,769**	**12,587,914**	**6,676,859**	**13,869,386**	**3,440,814**	**7,227,355**	**2,731,613**	**54,132,450**	**122,557,160**

Source: U.S. Bureau of the Census, International Database

EXHIBIT 10
FEMALE POPULATION BY AGE CATEGORIES (2005)
15 EASTERN EUROPOEAN COUNTRIES

Age Category	Country															Total
	Albania	Belarus	Bosnia and Herzegovina	Bulgaria	Croatia	Hungary	Macedonia	Moldova	Montenegro	Poland	Romania	Serbia	Slovakia	Slovenia	Ukraine	
0-4	123,386	216,269	92,507	170,749	103,196	235,510	60,319	102,455	19,340	880,815	563,107	289,012	137,055	42,948	962,396	3,999,064
5-9	143,778	223,659	120,038	155,054	125,635	242,747	69,295	113,768	20,300	970,637	557,549	281,718	141,179	44,289	1,029,648	4,239,294
10-14	167,134	292,213	131,299	186,959	130,400	291,430	72,851	154,728	21,801	1,204,337	606,942	311,398	175,106	49,775	1,351,500	5,147,873
15-19	177,541	387,549	157,231	240,051	137,298	305,051	77,647	204,356	25,897	1,392,959	842,002	356,873	199,026	60,682	1,777,576	6,341,739
20-24	153,599	397,800	154,061	253,820	154,997	321,764	80,583	199,341	27,311	1,641,853	812,163	367,202	217,825	69,044	1,844,983	6,696,346
25-29	130,394	361,337	158,569	277,851	158,545	413,377	78,971	179,537	27,172	1,563,122	950,266	375,686	233,516	74,953	1,716,933	6,700,229
30-34	118,671	352,315	169,231	266,469	150,752	391,504	75,047	164,378	26,052	1,386,448	889,495	360,695	211,943	72,000	1,678,278	6,313,278
35-39	114,393	340,736	177,672	248,016	150,380	343,168	72,819	140,090	24,328	1,175,105	900,369	343,406	181,801	75,118	1,591,853	5,879,254
40-44	120,682	398,999	189,807	250,226	162,064	305,959	72,238	166,762	24,656	1,282,050	630,911	336,708	191,970	77,825	1,837,092	6,047,949
45-49	112,351	417,682	167,967	265,754	175,088	365,930	70,111	180,417	24,579	1,565,066	792,223	345,556	202,827	77,399	1,944,566	6,707,516
50-54	88,371	354,900	148,078	278,116	170,992	410,361	67,094	162,417	22,606	1,551,342	789,231	368,088	203,898	77,916	1,783,874	6,477,284
55-59	65,015	290,159	115,584	287,802	141,573	344,370	56,328	118,355	18,129	1,270,694	656,758	311,792	164,597	63,972	1,544,469	5,449,597
60-64	63,869	214,943	98,040	231,419	113,304	309,657	46,312	90,873	13,705	822,775	538,023	231,924	131,694	55,170	1,221,795	4,183,503
65-69	54,415	302,228	112,790	214,580	131,764	273,564	43,021	98,989	16,708	886,914	617,193	260,010	113,804	52,592	1,817,827	4,996,399
70-74	42,581	251,162	95,030	214,861	127,165	249,086	37,671	76,797	13,926	832,565	533,798	250,314	105,259	50,527	1,045,224	3,925,966
75-79	31,478	229,431	73,055	169,444	98,908	209,828	24,923	62,272	11,593	700,542	407,901	196,665	88,315	42,551	1,168,781	3,515,687
80+	36,942	200,027	85,722	152,797	104,413	227,444	18,369	49,874	12,909	724,137	353,828	166,448	95,453	45,366	958,337	3,232,066
Total	1,744,600	5,231,409	2,246,681	3,863,968	2,336,474	5,240,750	1,023,599	2,265,409	351,012	19,851,361	11,441,759	5,153,495	2,795,268	1,032,127	25,275,132	89,853,044

Proportion of At-Risk Population Who Are Trafficked

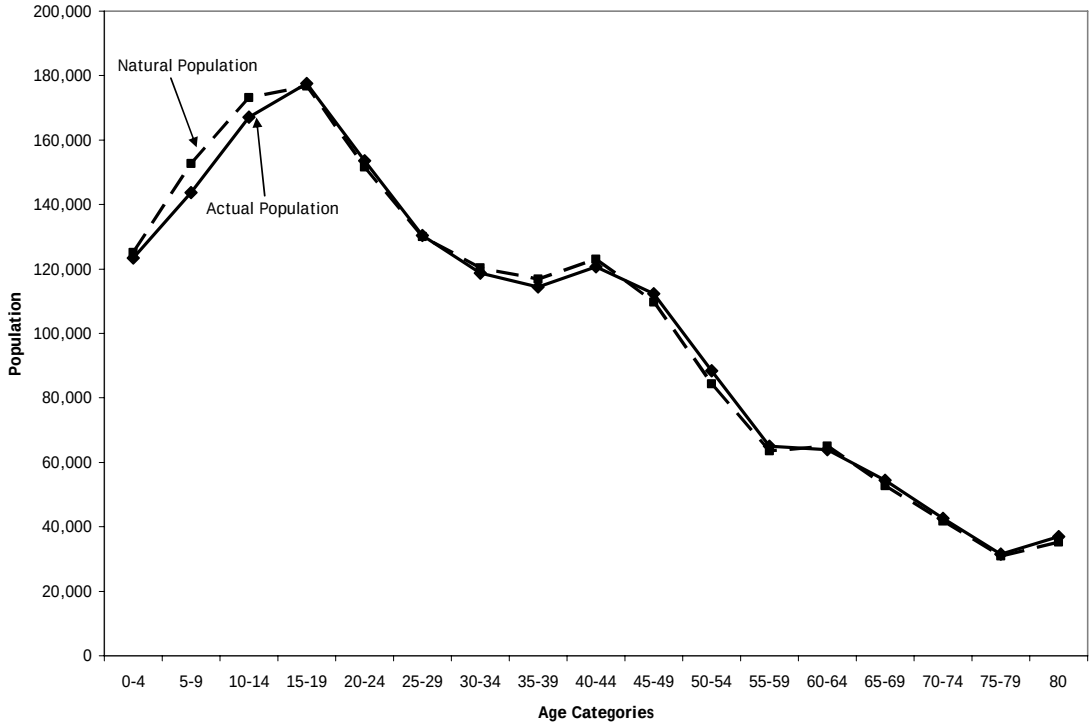
Definitive data indicating the proportion of females at risk for trafficking who are actually trafficked (trafficking multiplier) are not available. For phase one research we used each country's tier rating from the 2005 *Trafficking* in *Persons Report* (U.S. Department of State, 2006) as a proxy for the country's protective factors against trafficking. Protective factors include interventions aimed at reducing trafficking, such as public awareness campaigns, increased opportunities for economic development, aggressive prosecution of trafficking cases, and level of foreign assistance and aid.

This approach was criticized because of the perceived problems with the tier determination (see section 2.1). We convened a group of experts from various Government agencies and asked for their input in improving the trafficking multiplier. They suggested creating a trafficking multiplier comprised of various data: the number of trafficking NGOs, the amount of money dedicated to funding anti-trafficking activities, whether trafficking prosecutions have increased over time for each country in the analysis, and the level of funding from the Unites States to each country. While these would be appropriate protective measures to include in multiplier, it was not possible to obtain consistent and reliable data for these measures across all countries included in this study.

As an alternative, we developed a multiplier utilizing population changes in each of the 17 age groups for each of the 22 countries. We calculated the percent change between 2004 and 2005 population or *actual* population change. We obtained a measure for *natural* population change, or the rate at which a population is increasing (or decreasing) in a given year due to a surplus (or deficit) of births over deaths, expressed as a percentage of the base population. Natural population change is the expected change in population, holding everything constant other than births and deaths. We hypothesized that any difference between natural population change and actual population change is in some part attributable to females being trafficked (which we will refer to as *possibly* trafficked). Of course, there are other causes (e.g., migration), but the gap between natural population change and actual population change would provide the upper limit to the number of women trafficked.

Exhibit 11 presents a plot of actual and natural population changes for Albania. The actual population is less than the natural population, particularly during the prime trafficking years (5-19). The trafficking multiplier is created for each age group using the magnitude of the gap. Appendix C details the multiplier trafficking for each of the selected countries, by age group. The multiplier is extremely small for females over the age of 45 because we assume that there are other causes at work for the gap.

EXHIBIT 11
ACTUAL AND NATURAL POPULATION FOR ALBANIA



Percent of Women Trafficked for Labor versus Sex

This report distinguishes between trafficking for sex and labor, while other researchers place sex work under the rubric of labor exploitation (Bales, 2004). Because we make this differentiation, the model separates females trafficked for labor exploitation from those trafficked for sexual exploitation.

Finding estimates for the breakdown of females trafficked into the sex industry or for labor exploitation (e.g., domestic labor, sweatshops) is very difficult as there are widely varying numbers in the literature. Kangaspunta (2003) asserts that two percent of females are trafficked for the sex industry and 98 percent for labor. Bales (2004, p. 14) states that "prostitution is the sector in which the largest amount of forced labor occurs in the United States." Bales' research is based on qualitative and quantitative methods and includes a telephone survey of service providers, a survey of newspaper articles, interviews with key informants, and case studies. Based on Bales' research, we estimated 75 percent of females are trafficked for the sex industry and 25 percent for forced labor. In the model, the 25 percent of the at-risk females, who are determined to be trafficked using the trafficking multiplier, are considered to be possibly trafficked for labor and are separated from the estimates for sexual exploitation.

5.3 Transit Zone Model

In this section, we discuss the Transit Zone model. It takes different form for phase one and phase two research.

Transit Zone Model for Phase One

For phase one research we postulated that as a victim makes the journey through the transit zone, she can:

- Die in a transit country
- Escape or be rescued in a transit country
- Remain in a transit country for internal use
- Be trafficked to a country other than the United States
- Proceed to the next transit country.

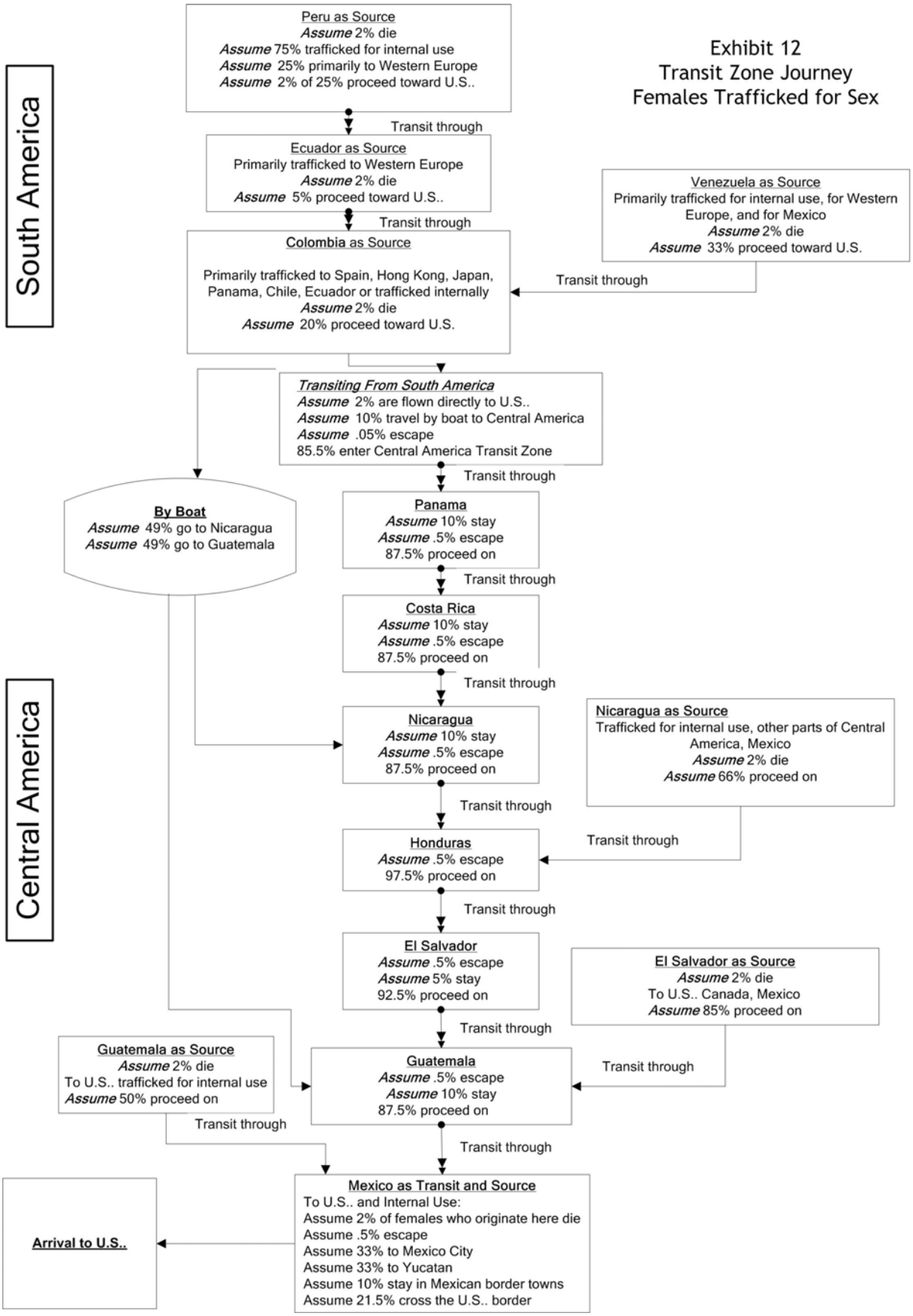
We made extensive use of country narratives in the *Trafficking in Persons Report* to assist in identifying where females are trafficked. For example, the narrative for Colombia states:

> "Colombia is a major source and transit country for women and girls trafficked for the purpose of sexual exploitation. The Colombian Government estimates that 45,000-50,000 Colombian nationals engage in prostitution overseas; many of them are trafficking victims. Most traffickers are linked to narcotics trafficking or other criminal organizations; trafficking operations include both Colombians and criminals from countries of destination. Young Colombian women and girls are principally trafficked to Spain, Japan, Hong Kong, Panama, Chile, and Ecuador. Some Colombian men are trafficked for forced labor. Internal trafficking of women and children for sexual exploitation from rural to urban areas remains a serious problem. Insurgent and paramilitary groups have forcibly conscripted and exploited as many as 14,000 children in Colombia and from bordering areas of Venezuela, Ecuador, and Panama. Victims transit Colombia from other South American countries, on their way to Europe and the United States." (U.S. Department of State, 2005, p. 84).

The report does not specify exact numbers or percentages of total victims who are sent on various routes, so it was necessary to form assumptions. Exhibit 12 details the transit zone journey for females who are trafficked for sexual exploitation from the eight Central and South American countries and outlines various scenarios for each source country.

Any statements made in Exhibit 12 that is in a source country box detailing where women are trafficked are taken directly from the *Trafficking in Persons Report* country narrative.

Exhibit 12
Transit Zone Journey
Females Trafficked for Sex



We attached a percentage value to each route. For example, in Peru, a woman is trafficked for internal use, sent to Western Europe, or proceeds toward the United States (U.S. Department of State, 2006, p. 177). We attached percentages of 75 percent for internal use, 25 percent go to Western Europe, and of these 25 percent, two percent actually go to the United States. These are sheer conjecture on our part, but the percentages can be changed in the model for differing scenarios.

The word "***Assume***" before a percentage indicates an assumption was made about percentages for these outcomes. We vetted our assumptions with the TAG and others (members of NGOs, victim providers, and law enforcement) and, absent any hard data, seemed at least plausible and within the realm of possibilities. In every transit country, we assumed that two percent of those who pass through the country die, and that a half of a percent escape or are rescued. Countries can be sources, transits, or destinations for females.

Based on feedback on phase one research, the model assumes that risk increases as a woman continues along her trafficking journey from transit country to transit country. The starting probability of dieing in the source country from which each woman was trafficked is 2 percent. The probability of dieing increases as she travels forward through multiple transit countries.

A probability for each outcome is drawn from a uniform distribution. If a woman draws a probability greater than .her probability of dieing (.02 if she is in her source country), another probability is drawn for her rescue, and so on. Multiple probabilities are drawn for each individual to simulate the vagaries of life.

In Exhibit 12, the box labeled "Mexico as Transit and Source" displays the assumption for how many females actually cross the border into the United States. Of all of the females who have been trafficked to Mexico and who originate in Mexico, in addition to those who die and escape, we assumed that 33 percent are sent to Mexico City, 33 percent are sent to the Yucatan region, 10 percent are forced to stay in Mexican border towns, and 21.5 percent cross the U.S. border.

Transit Zone Model for Phase Two

The country narrative for the 15 Eastern European countries (United States Department of State, 2006; Surtees 2005) provides information that suggests that the majority of these females are trafficked to Western Europe. Exhibit 13 reports the information detailed in the *Trafficking in Persons Report* (U.S. Department of State, 2006). There is little mention in the narratives of trafficking to the United States from Eastern Europe. As a proxy for the percentage women who are bound for the United States, we draw a random probability from a uniform

EXHIBIT 13
TRAFFICKING INFORMATION FOR 22 EASTERN EUROPEAN COUNTRIES

Country	Source Destination, or Transit	Where Victims Are Trafficked
Albania	Source	Greece and Italy, with many of them victims onward to the UK, France, Belgium, Germany and the Netherlands.
Belarus	Source	Europe, North America, Middle East, Japan, and South Korea.
Bosnia/Herzegovina	Source, transit, and destination	Victims primarily originate from Moldova, Ukraine, & Russia. Other source countries include Russia, Serbia, and Montenegro.
Bulgaria	Source, transit, and destination	Women trafficked from Romania, Moldova, Russia, Ukraine, Lebanon, and Central Asia. Trafficked through Bulgaria to Germany, France, Italy, the Netherlands, Belgium, the Czech Republic, Kosovo, and Macedonia.
Croatia	Transit, source, and destination	Female victims from Romania, Bulgaria, Bosnia/Herzegovina. Border with Western Europe means than many trafficked victims are moved to Western Europe.
Hungary	Source, transit, and destination	Women and girls trafficked from Ukraine, Moldova, Poland, the Balkans, and the P.R.C. to Austria, Germany, Spain, the Netherlands, Italy, France, Switzerland, Japan, the U.S., the U.K. Hungarian females trafficked primarily to Western and Northern Europe and to the U.S.
Macedonia	Source, transit, and destination	Moldovan victims are trafficked internally with in Macedonia. Victims originated from Moldova, Albania, and to lesser extent, Romania, and Bulgaria,. Traffickers moved victims through Moldova enroute to Serbia, Montenegro, Kosovo, Albania, and Western Europe.
Moldova	Source	Victims trafficked throughout Europe and the Middle East, increasingly to Turkey, Israel, the U.A.E., and Russia.
Montenegro		Females from within Montenegro are trafficked within the country and transnationally. Victims from within or without Serbia often trafficked through Croatia then on to Western Europe.
Poland	Source, transit, and desitnation	Polish women are trafficked to Germany, Italu, Belgium, France, the Netherlands, Japan, and Israel. Wome are trafficked from Ukraine. Moldova, Romania, and Bulgaria.
Romania	Source, transit, and desitnation	Romanian girls trafficked within country. Females from Moldova, Ukraine, and Russia are trafficked through Romania to Italy, Germany, Greece, France, Austria, and Canada.
Serbia	Source, transit, and desitnation	Serbian females are trafficked within the country and transnationally. Victims from within or without Serbia often trafficked through Croatia then on to Western Europe.
Slovakia	Transit and to lesser extent source	Victims from Moldova, Ukraine, and the Balkans are trafficked through Slovakia to the Czech Republic, Germany, France, Italy, and the Netherlands. Some women are exploited in Slovakia while in transit to Western Europe.
Slovenia	Transit, and to lesser extent source and destination.	Women and grills trafficked from Ukraine, Slovakia, Romania. Bulgaria, and Moldova.
Ukraine	Source	Primary destination countries include Turkey, Russia, and Poland. Other destinations include Czech Republic, Italy, Israel, Greece, Serbia, Montenegro, the U.K., Lithuania, and Portugal.

distribution, with an upper limit of 10%, for each country and age group, and use this as the percentage from those who are possibly trafficked and have the United States as their final destination. Exhibit 14 reports the percentages chosen for each age group, by country. The mean percentage for all countries and age groups is six-percent.

EXHIBIT 14
PERCENTAGE OF TRAFFICKED WOMEN WHO ARE SENT TO THE UNITED STATES FROM 22 EASTERN EUROPEAN COUNTRIES

	COUNTRY														
Age Category	Albania	Belarus	Bosnia and Herzegovina	Bulgaria	Croatia	Hungary	Macedonia	Moldova	Montenegro	Poland	Romania	Serbia	Slovakia	Slovenia	Ukraine
0-4	5%	9%	3%	6%	7%	7%	9%	7%	5%	10%	8%	10%	3%	2%	2%
5-9	3%	2%	4%	7%	3%	1%	1%	1%	7%	7%	5%	8%	7%	8%	1%
10-14	6%	7%	4%	2%	2%	3%	7%	6%	10%	10%	8%	9%	9%	8%	9%
15-19	6%	3%	9%	10%	7%	3%	1%	4%	1%	2%	6%	3%	9%	6%	8%
20-24	7%	2%	8%	1%	8%	7%	3%	8%	5%	6%	5%	10%	1%	4%	2%
25-29	7%	1%	3%	10%	3%	5%	5%	10%	6%	1%	10%	6%	4%	3%	6%
30-34	10%	2%	3%	8%	4%	5%	6%	7%	7%	6%	9%	8%	6%	5%	8%
35-39	4%	10%	7%	8%	9%	1%	5%	8%	7%	10%	1%	9%	3%	6%	4%
40-44	3%	5%	8%	9%	7%	7%	6%	4%	4%	1%	6%	8%	5%	1%	10%
45-49	8%	10%	6%	7%	9%	8%	6%	2%	7%	4%	4%	2%	6%	4%	2%

6. FINDINGS

The following section presents preliminary estimates for females from the 22 countries that are trafficked for sex into the United States at the southwest border and the mid-Atlantic region. The estimates are provided to check the plausibility of the method developed and should not be misconstrued as *true* estimates sanctioned by The National Institute of Justice or the authors. We urge readers not to place too much emphasis on the estimates that the model generates because the purpose of the studies was to develop transparent methods using open source data.

Recalculated Phase One Estimates

Exhibit 15A details preliminary estimates of the number and percentage of total population of females at risk of being trafficked for sex from the eight Central and South American countries, by age categories. Exhibit 15B presents the 95% confidence limits for the estimates, by country.

Exhibit 16 presents preliminary estimates of the number and percentage of total population of females from the at-risk group who are *possibly* trafficked for sex from the eight countries. Exhibit 17 details model estimates of the number of females from the eight Central and South American countries that are trafficked for sexual exploitation.

EXHIBIT 15A
FEMALES AT RISK OF BEING TRAFFICKED FOR SEX IN SOURCE ZONE FROM EIGHT CENTRAL AND SOUTH AMERICAN COUNTRIES

Age Ranges	Country								Total	% of Total Pop.
	Colombia	Venezuela	Ecuador	Peru	El Salvador	Guatemala	Nicaragua	Mexico		
0-4	187	137	78	145	47	137	36	560	1,328	0.01%
5-9	2,215	1,582	1,014	1,890	495	1,564	426	5,874	15,059	0.12%
10-14	12,917	9,733	5,878	11,433	2,715	8,104	2,637	34,060	87,476	0.69%
15-19	58,198	44,292	27,473	51,539	12,703	34,891	11,717	162,623	403,435	3.40%
20-24	47,470	36,883	21,808	39,017	10,231	25,351	9,078	130,968	320,806	2.93%
25-29	2,847	2,300	1,318	2,463	593	1,424	516	8,033	19,492	0.19%
30-34	366	251	151	307	66	154	55	932	2,283	0.02%
35-39	87	57	29	60	13	27	9	195	477	0.01%
40-44	21	13	7	14	3	7	2	38	104	0.00%
45-49	7	5	3	4	1	2	1	16	38	0.00%
50-54	1	2	1	1	0	1	0	5	12	0.00%
55-59	1	0	0	1	0	0	0	2	4	0.00%
60-64	0	0	0	0	0	0	0	1	2	0.00%
65-69	0	0	0	0	0	0	0	0	1	0.00%
70-74	0	0	0	0	0	0	0	0	0	0.00%
75-79	0	0	0	0	0	0	0	0	0	0.00%
80+	0	0	0	0	0	0	0	0	0	0.00%
Total	124,316	95,255	57,760	106,874	26,867	71,663	24,476	343,307	850,518	
% of Total Pop.	0.57%	0.76%	0.87%	0.77%	0.78%	0.99%	0.90%	0.63%	0.69%	

EXHIBIT 15B
95% CONFIDENCE INTERVALS
FEMALES AT RISK OF BEING TRAFFICKED FOR SEX IN SOURCE ZONE FROM EIGHT CENTRAL AND SOUTH AMERICAN COUNTRIES

Country	95% Confidence Intervals	
Colombia	120,212	129,413
Venezuela	91,768	102,790
Ecuador	54,789	61,908
Peru	100,459	13,780
El Salvador	23,789	28,189
Guatemala	67,712	75,389
Nicaragua	21,578	28,192
Mexico	322,459	360,578

EXHIBIT 16
FEMALES POSSIBLY TRAFFICKED FOR SEX FROM EIGHT CENTRAL AND SOUTH AMERICAN COUNTRIES

	COUNTRY									
Age Ranges	**Colombia**	**Venezuela**	**Ecuador**	**Peru**	**El Salvador**	**Guatemala**	**Nicaragua**	**Mexico**	**Total**	**% of Total Population**
0-4	24	20	17	18	5	23	7	74	**188**	**0.001%**
5-9	277	270	119	484	3	240	107	793	**2,293**	**0.018%**
10-14	18	597	407	52	6	19	235	3,609	**4,943**	**0.039%**
15-19	2,625	1,195	2,056	141	2,121	171	29	10,766	**19,104**	**0.161%**
20-24	270	1,690	1,708	3,050	35	119	3	9,331	**16,206**	**0.148%**
25-29	376	4	3	169	2	0	3	634	**1,191**	**0.012%**
30-34	64	0	0	0	0	2	0	1	**67**	**0.001%**
35-39	0	0	0	0	0	0	0	1	**1**	**0.000%**
Total	**3,654**	**3,776**	**4,310**	**3,914**	**2,172**	**574**	**384**	**25,209**	**43,993**	
% of Total Population	**0.02%**	**0.03%**	**0.06%**	**0.03%**	**0.06%**	**0.01%**	**0.01%**	**0.05%**	**0.04%**	

EXHIBIT 17
FEMALES TRAFFICKED FOR SEX ACROSS THE SOUTHWEST BORDER FROM EIGHT CENTRAL AND SOUTH AMERICAN COUNTRIES

	COUNTRY								
Age Ranges	**Columbia**	**Venezuela**	**Ecuador**	**Peru**	**El Salvador**	**Guatemala**	**Nicaragua**	**Mexico**	**Total**
0-4	1	3	0	0	1	4	1	29	39
5-9	5	16	0	0	0	54	6	292	373
10-14	71	31	1	0	2	2	25	1,469	1,601
15-19	6	58	12	0	644	32	2	4,292	5,046
20-24	7	61	10	1	14	30	0	3,658	3,781
25-29	1	0	0	0	1	0	0	275	277
30-34	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0
Total	**91**	**169**	**23**	**1**	**662**	**122**	**34**	**10,015**	**11,117**

Exhibit 17 shows that the estimates of women trafficked for sexual exploitation to the United States are much lower than figures previously reported by the authors. This is due to the new formulation of the multiplier that estimates the proportion of the at-risk females that are actually trafficked. Phase one utilized the tier multiplier to determine the number of at-risk females who were actually trafficked. There were various problems with this approach (see section 2.1). The method used in this phase is different and is population based.

Phase Two Estimates

Exhibit 18A details estimates of the number of females at risk of being trafficked in the 22 Eastern European countries. Risk peaks at ages 20-24 for Poland, while in the other countries it peaks at ages 15-19. Exhibit 18B presents the 95% confidence intervals for the estimates, by country. Exhibit 19 shows estimates of females who were *possibly* trafficked for sexual exploitation from the at-risk group. We stress the word possibly because there are no data available to explain the difference between the natural and actual population. Differences may be explained by migration, trafficking, and/or other activities. Further studies of alternative explanations are needed. Exhibit 20 reports estimates of the number of women who are trafficked to the United States from the 22 Eastern European countries. As expected, the numbers of females trafficked for sexual exploitation into the United States from the 22 Eastern European countries is much lower than women trafficked from Central and South America.

EXHIBIT 18A
FEMALES AT RISK OF BEING TRAFFICKED FOR SEX IN SOURCE ZONE FROM 15 EASTERN EUROPEAN COUNTRIES

	COUNTRY														
Age Category	Albania	Belarus	Bosnia and Herzegovina	Bulgaria	Croatia	Hungary	Macedonia	Moldova	Montenegro	Poland	Romania	Serbia	Slovakia	Slovenia	Ukraine
0-4	14	24	6	15	10	19	6	16	3	74	56	43	12	4	98
5-9	194	269	93	176	138	247	83	187	37	1,036	711	513	148	41	1,191
10-14	1,334	2,002	618	1,235	860	1,759	513	1,460	230	7,235	4,458	3,255	1,098	271	9,147
15-19	7,097	13,190	3,645	7,845	4,498	9,039	2,720	9,500	1,367	42,134	30,847	18,843	6,263	1,625	59,927
20-24	5,306	11,672	3,068	7,156	4,400	8,227	2,458	8,036	1,248	42,880	25,707	16,813	5,921	1,595	53,751
25-29	292	693	206	501	296	691	156	469	82	2,635	1,946	1,111	410	113	3,293
30-34	34	82	29	64	36	87	19	52	10	305	237	145	49	14	445
35-39	8	20	7	13	8	17	4	10	2	53	44	28	9	3	86
40-44	2	6	2	4	2	5	1	3	1	16	10	7	3	1	25
45-49	1	3	1	1	1	2	0	1	0	7	5	3	1	0	12
50-54	0	1	0	1	0	1	0	1	0	3	2	1	0	0	4
55-59	0	0	0	0	0	0	0	0	0	2	1	1	0	0	1
60-64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
65-69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
70-74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	14,281	27,962	7,674	17,013	10,251	20,094	5,961	19,736	2,981	96,380	64,026	40,765	13,915	3,667	127,982
% of Total Population	0.82%	0.53%	0.34%	0.44%	0.44%	0.38%	0.58%	0.87%	0.85%	0.49%	0.56%	0.79%	0.50%	0.36%	0.51%

EXHIBIT 18B
95% CONFIDENCE INTERVALS
FEMALES AT RISK OF BEING TRAFFICKED FOR SEX IN SOURCE ZONE FROM 15 EASTERN EUROPEAN COUNTRIES

Country	95% Confidence Intervals	
Albania	11,780	17,340
Belarus	23,871	31,389
Bosnia and Herzegovina	6,650	9,899
Bulgaria	12,760	20,978
Croatia	8,650	13,231
Hungary	17,465	14.198
Macedonia	4,350	7,821
Moldova	16,589	22,897
Montenegro	2,050	3,896
Poland	92,734	100,080
Romania	59,731	68,070
Serbia	36,763	45,298
Slovakia	11,980	16,034
Slovenia	2,876	5,030
Ukraine	123,762	132,693

EXHIBIT 19
FEMALES POSSIBLY TRAFFICKED FOR SEX FROM 15 EASTERN EUROPEAN COUNTRIES

	COUNTRY															
Age Category	Albania	Belarus	Bosnia and Herzegovina	Bulgaria	Croatia	Hungary	Macedonia	Moldova	Montenegro	Poland	Romania	Serbia	Slovakia	Slovenia	Ukraine	Total
0-4	2	3	1	2	1	3	1	2	0	10	8	6	2	0	14	57
5-9	121	168	58	110	86	154	52	116	23	646	443	320	92	26	743	3,158
10-14	482	724	224	447	311	636	185	528	83	2,617	1,612	1,177	397	98	3,308	12,831
15-19	30	56	16	34	19	39	12	41	6	180	132	81	27	7	256	935
20-24	68	149	39	91	56	105	31	103	16	547	328	215	76	20	686	2,529
25-29	1	2	1	1	1	2	0	1	0	7	5	3	1	0	8	33
30-34	5	12	4	9	5	12	3	7	1	43	33	21	7	2	63	227
35-39	2	4	1	3	2	4	1	2	0	11	9	6	2	1	19	67
40-44	0	1	0	1	0	1	0	1	0	3	2	1	1	0	5	17
45-49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	711	1,119	343	698	482	955	285	801	131	4,065	2,574	1,829	604	155	5,102	19,854
% of Total Population	0.04%	0.02%	0.02%	0.02%	0.02%	0.02%	0.03%	0.04%	0.04%	0.02%	0.02%	0.04%	0.02%	0.01%	0.02%	0.02%

EXHIBIT 20
FEMALES TRAFFICKED FOR SEX TO THE UNITED STATES FROM 15 FROM 15 EASTERN EUROPEAN COUNTRIES

	COUNTRY															
Age Category	Albania	Belarus	Bosnia and Herzegovina	Bulgaria	Croatia	Hungary	Macedonia	Moldova	Montenegro	Poland	Romania	Serbia	Slovakia	Slovenia	Ukraine	Total
0-4	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	4
5-9	4	5	2	4	3	2	1	1	2	45	22	26	6	2	7	132
10-14	29	43	9	18	6	19	13	32	8	262	129	106	36	8	298	1,015
15-19	2	3	1	3	1	1	0	2	0	4	8	2	2	0	21	51
20-24	5	10	3	7	4	7	1	8	1	33	16	21	1	1	14	133
25-29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
30-34	0	1	0	0	0	1	0	1	0	3	3	2	0	0	5	16
35-39	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	4
40-44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
45-49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	40	64	16	33	15	30	15	44	11	348	180	159	46	11	346	1,358

7. SUMMARY AND RECOMMENDATIONS

This research developed methods to estimate human trafficking, utilizing open source data as inputs. The Source Zone Model estimates the numbers of females in the 22 countries *at risk* of being trafficked and from those at risk, the number who are then *possibly* trafficked.

The second model, the Transit Zone Model, is based on descriptions of possible journeys that victims might take from their country of origin the United States. The model provides estimates at each point in the journey. It also estimates the number of victims from the eight countries who are ultimately trafficked into the United States. We did not use extensive assumptions about routes in phase two as explained previously in the report.

The methods were developed to be flexible and reusable so it can be adapted to include victims from other countries of origin and additional entry points into the United States, as well as for destination countries other than the United States.

7.1 Summary of Source Zone Model

The Source Zone Model estimates the number of persons *at risk* of being trafficked in each of the 22 countries. The risk of being trafficked comprises country-specific factors and age-specific influences. The country-specific risk factor comprises *push factors* (indicators of a country's economic health, the quality of life for its citizens, and the level of crime). Age-specific risk considers the likelihood that being trafficked varies with age; i.e., individuals are less likely to be trafficked at age 50 than at age 20. We used Monte Carlo simulation techniques to estimate the probability, by age, of being trafficked from the 22 countries.

7.2 Summary of Transit Zone Model

The Transit Zone Model details various possible journeys to the United States for victims trafficked from the two source zones. The model provides estimates at each point in the journey and estimates the number of victims trafficked into the United States. The model takes sequential random draws from the uniform distribution to estimate the probability of each outcome in the transit zone.

7.3 Data Gaps and Other Limitations

The primary limitation of this study is lack of data, particularly data that describe push factors in the source zones. For example, there is no consistent data for quality of life and while education data for males are available, they are frequently missing for females. The model would be improved with a richer set of push factors to define the at-risk population. A more

rigorous development and collection of data representing protective factors would also enhance the model as would more information that informed movement through the Transit Zone.

The Source Zone Model is narrowly formulated and currently assumes that risk is fully described by push factors and age making it dependent on the formulation of these two functions. As more data are identified, the formulation of risk can be expanded. The Transit Zone Model is fraught with assumptions that need continued testing and validation by other researchers and practitioners working with victims of trafficking.

Finally, we identified many unrealistic assumptions among those in the field regarding what data are available to determine the prevalence of human trafficking into the United States. For example, while we obtained a lot of data source ideas from well-informed persons, upon closer inspection, we discovered that the recommended data were either inconsistent across countries or completely unavailable. Until there is more consistent and reliable data being collected across countries, sound estimates cannot be created.

7.4 Recommendations

The methods developed in this research provide a good starting point for helping countries understand their vulnerability as a source, transit, or destination point and the use of open source data as inputs makes the methods highly accessible. To capitalize on the results of this study, we recommend the following activities:

- Wide dissemination of the methods to interested parties in this field of research so it may be examined, critiqued, and improved for future use that mines untapped, rich data sources.
- Application of the model to a broader group of source, transit, and destination countries to improve the model and highlight strengths and weaknesses.
- *Consistent* and agreed upon cross-country collection of data. For this research we had to rely on the use of proxy measures (at best) because desired measures were not available.
- There needs to be emphasis placed on collecting data for transit journeys to more accurately estimate the number of victims who arrive at their final destination.

Overall, there is a need for better and more standardized data collection and tracking, as well as improved data sharing across government and non-government agencies within and outside the United States. The limited availability and access to important information (e.g., number of illegal border crossings, number of false documents recovered, number of missing persons, number of suspected trafficking operations) present challenges to verifying assumptions and refining estimates. While phase one and two of this study were able to develop transparent

methods for generating estimates of the number of persons trafficked into the United States, until better data are available, continued efforts at generating credible estimates remains premature.

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APPENDIX A: STATISTICAL METHODS

This appendix details the statistical methods used in the female and male risk models.

1. Calculating Risk in Source Zone Countries

The model estimates the population at risk for being trafficked from each of the 22 source countries. Individual risk comprises country-specific factors and age-specific risk factors. For women, the country-specific factor is captured in a composite index created from the Gini Index, CPI, and GDI. For men, the country-specific factor is captured in a composite index created from the Gini Index, CPI, and labor force indicators (unemployment rates and consumer price indicators). The age-specific risk (population data in each of the 22 countries of origin are available for 5-year age groups, 17 age groups in all) is captured in a Weibull probability distribution and is different for men and women.

1.1 General Model

The general Source Zone Model is thus specified as:

$$AtRisk_{ij} = (1-CR_i) * [(slope_{ij}/scale) * (age_j/scale)^{slope(j)-1} * e^{-(age(j)/scale) ** slope(ij)}]$$

This characterization combines country-specific risk, CR_i , with age-specific risk, as defined by the Weibull probability distribution function (pdf) in brackets. The subscript *j* refers to each of the 22 countries and the subscript *i* references each of the 17 age groups. The other terms in the equation are defined as:

$AtRisk_{ij}$ - the percentage of the female and male population at risk for being trafficked, for each $country_i$ and each $age\ group_j$.

CR_i - country-specific risk, as computed by a composite index.

$Slope_{ij}$ – the shape parameter (or slope) in the Weibull function.

Age_j - the mean value of each age category.

Scale – a parameter of the Weibull pdf that determines the spread of the distribution.

The Weibull pdf is used to model a variety of life behaviors and is described by two parameters:

- B = shape parameter (slope)
- n = scale parameter.

The shape parameter defines the slope of the curve; i.e., how steeply it rises or falls. The scale parameter has the same effect on the distribution as a change of the abscissa scale. Increasing the value of the scale parameter, while holding the shape parameter constant, has the effect of stretching out the pdf. The peak of the pdf curve will decrease with an increase in the scale parameter.

We estimate the slope of the Weibull pdf by postulating that age-specific risk resembles a lognormal distribution. To simulate the slope parameter of the Weibull function, the model randomly draws 50,000 values from a lognormal distribution, with a set mean and standard deviation, for each age category (thus, 17*50,000 unique slope values were drawn). The 50,000 random slope values for each age category were used to calculate the age risk in the Weibull function. The total risk was calculated (50,000 times per age category) as one minus the country-specific risk times the age-specific risk characterized by the Weibull function. Mean risk values for each age category were used to generate the summary tables in the Findings section.

Exhibit 17A depicts the lognormal pdf (with mean of 2.0 and standard deviation of 0.5) used to draw random slope values in the female model. The curve rises steeply and peaks at ages 12–19, with risk falling off fairly quickly after that, indicating that risk declines sharply as women age, marry, and create families. Exhibit 17B shows the estimate for the slope parameter and its 95% confidence limits.

EXHIBIT 17A
LOGNORMAL DISTRIBUTION FOR FEMALES
MEAN=2.0, STD=.5

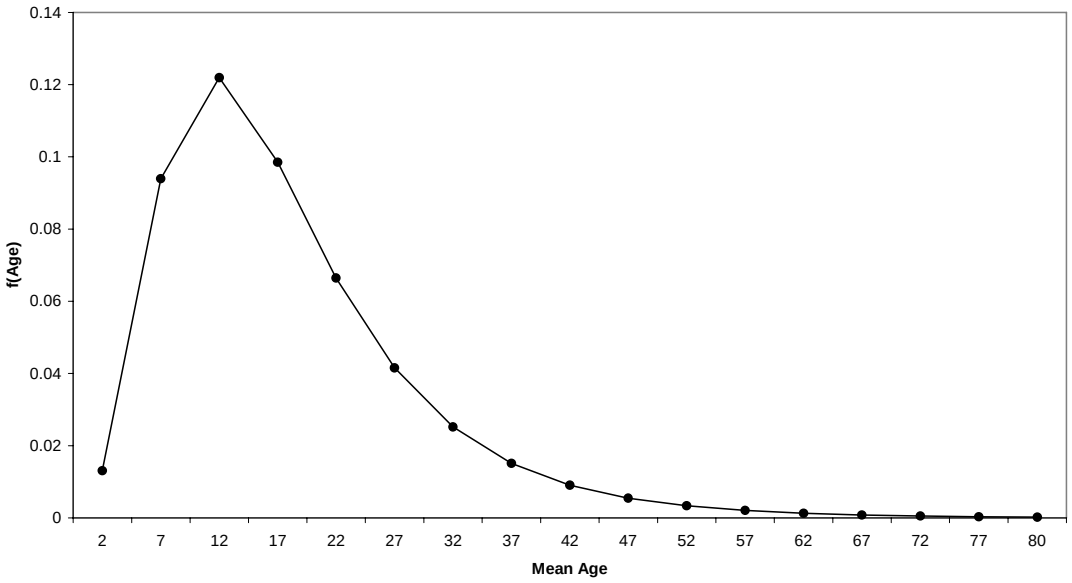

EXHIBIT 17B
ESTIMATE OF SLOPE TERM IN WEIBUL FUNCTION

Slope	95% Confidence Limits	
8.36892	8.36346	8.37439

APPENDIX B:
COMPOSITE INDICES FOR ALL COUNTRIES

EXHIBIT 18
COUNTRY-SPECIFIC RISK INDICES USED IN SOURCE ZONE MODEL

Country	CPI 0=highly corrupt, 10=highly clean	GDI 0=unequal, 1=equal	Gini 0=perfect equality, 100=perfect inequality	Proportion Urban	Composite Index
Albania	2.4	0.776	28.2	0.338	0.523
Algeria	2.8	0.706	35.3	0.406	0.466
Argentina	2.8	0.854	52.2	0.676	0.686
Armenia	2.9	0.756	37.9	0.544	0.544
Australia	8.8	0.954	35.2	0.857	0.869
Austria	8.7	0.926	30.0	0.549	0.787
Azerbaijan	2.2	0.725	36.5	0.650	0.562
Bangladesh	1.7	0.514	31.8	0.152	0.253
Belarus	2.6	0.785	30.4	0.635	0.594
Belgium	7.4	0.941	25.0	0.946	0.858
Bolivia	2.5	0.679	44.7	0.417	0.467
Bosnia and Herzegovina	2.9	NA	26.1	0.440	0.277
Botswana	5.9	0.559	63.0	0.170	0.621
Brazil	3.7	0.786	59.1	0.700	0.691
Bulgaria	4.0	0.807	31.9	0.635	0.612
Burkina Faso	3.4	0.311	48.2	0.091	0.366
Burundi	2.3	0.373	33.3	0.040	0.147
Cambodia	2.3	0.567	40.4	0.103	0.332
Canada	8.4	0.946	33.1	0.757	0.823
Chile	7.3	0.846	57.1	0.860	0.802
China	3.2	0.754	44.7	0.264	0.516
Colombia	4.0	0.780	57.6	0.636	0.660
Costa Rica	4.2	0.829	46.5	0.395	0.599
Cote d'Ivoire	1.9	0.403	45.2	0.324	0.337
Croatia	3.4	0.837	29.0	0.540	0.609

Country	CPI 0=highly corrupt, 10=highly clean	GDI 0=unequal, 1=equal	Gini 0=perfect equality, 100=perfect inequality	Proportion Urban	Composite Index
Czech Republic	4.3	0.872	25.4	0.775	0.711
Denmark	9.5	0.938	24.7	0.826	0.880
Dominican Republic	3.0	0.739	47.4	0.397	0.523
Ecuador	2.5	0.751	43.7	0.180	0.508
El Salvador	4.2	0.715	53.2	0.395	0.546
Ethiopia	2.2	0.355	30.0	0.123	0.107
Finland	9.6	0.940	26.9	0.721	0.862
France	7.5	0.935	32.7	0.730	0.781
Gambia	2.7	0.464	38.0	0.159	0.244
Germany	8.2	0.926	28.3	0.800	0.816
Ghana	3.5	0.517	30.0	0.313	0.288
Greece	4.3	0.907	35.4	0.700	0.711
Guatemala	2.5	0.649	48.3	0.690	0.572
Guyana	2.5	0.716	43.2	0.360	0.483
Hong Kong, China (SAR)	8.3	0.912	43.4	0.921	0.857
Hungary	5.0	0.860	24.4	0.589	0.647
India	2.9	0.586	32.5	0.233	0.330
Indonesia	2.2	0.691	34.3	0.350	0.443
Iran	2.9	0.719	43.0	0.470	0.503
Ireland	7.4	0.939	35.9	0.556	0.750
Israel	6.3	0.911	35.5	0.800	0.763
Italy	5.0	0.928	36.0	0.670	0.723
Jamaica	3.6	0.736	37.9	0.4141	0.499
Japan	7.3	0.937	24.9	0.759	0.785
Jordan	5.7	0.749	36.4	0.860	0.702
Kazakstan	2.6	0.759	31.3	0.570	0.551
Kenya	2.1	0.472	44.5	0.151	0.322
Korea, Rep. of	5.0	0.896	31.6	0.5725	0.674
Lao People's Rep.	3.3	0.540	37.0	0.186	0.297
Krygyzstan	2.3	0.700	29.0	0.350	0.450

Country	CPI 0=highly corrupt, 10=highly clean	GDI 0=unequal, 1=equal	Gini 0=perfect equality, 100=perfect inequality	Proportion Urban	Composite Index
Latvia	4.2	0.834	32.4	0.680	0.648
Lesotho	3.4	0.487	63.2	0.0463	0.596
Lithuania	4.8	0.851	31.9	0.670	0.660
Luxembourg	8.5	0.944	30.8	0.6786	0.808
Macedonia	2.7	0.794	28.2	0.590	0.585
Madagascar	2.8	0.483	47.5	0.163	0.366
Malawi	2.8	0.396	50.3	0.0848	0.397
Malaysia	5.1	0.791	49.2	0.342	0.580
Mali	2.9	0.323	50.5	0.1684	0.400
Mexico	3.5	0.804	54.6	0.750	0.692
Moldova	2.9	0.668	36.2	0.450	0.445
Mongolia	3.0	0.677	44.0	0.51	0.487
Montenegro	2.8	NA	28.0	0.523	.630
Mozambique	2.8	0.365	39.6	0.1318	0.236
Namibia	4.3	0.621	70.7	0.249	0.721
Nepal	2.5	0.511	36.7	0.04	0.265
Netherlands	8.6	0.939	32.6	0.884	0.863
New Zealand	9.6	0.929	36.2	0.835	0.883
Nicaragua	2.6	0.683	55.1	0.550	0.570
Niger	2.4	0.271	50.5	0.210	0.400
Nigeria	1.9	0.439	50.6	0.440	0.436
Norway	8.9	0.960	25.8	0.7017	0.838
Pakistan	2.1	0.508	33.0	0.340	0.287
Panama	3.5	0.800	56.4	0.4757	0.630
Papua New Guinea	2.3	0.518	50.9	0.1312	0.420
Paraquay	2.1	0.742	56.8	0.540	0.609
Peru	3.5	0.745	49.8	0.651	0.602
Philippines	2.5	0.755	46.1	0.480	0.543
Poland	3.4	0.856	31.6	0.601	0.640
Portugal	6.5	0.900	38.5	0.2615	0.678

Country	CPI 0=highly corrupt, 10=highly clean	GDI 0=unequal, 1=equal	Gini 0=perfect equality, 100=perfect inequality	Proportion Urban	Composite Index
Romania	3.0	0.789	30.3	0.530	0.564
Rwanda	3.1	0.447	28.9	0.0451	0.191
Senegal	3.2	0.449	41.3	0.343	0.308
Serbia	2.8	NA	28.0	0.523	.630
Sierra Leone	2.4	0.279	62.9	0.2762	0.589
Slovakia	4.3	0.847	25.8	0.560	0.625
Slovenia	6.1	0.901	28.4	0.510	0.682
South Africa	4.5	0.652	59.3	0.559	0.606
Spain	7.0	0.922	32.5	0.642	0.739
Sri Lanka	3.2	0.747	34.4	0.215	0.491
Swaziland	2.7	0.485	60.9	0.152	0.561
Sweden	9.2	0.947	25.0	0.831	0.873
Switzerland	9.1	0.946	33.1	0.571	0.820
Tajikistan	2.1	0.650	34.7	0.270	0.396
Tanzania	2.9	0.414	38.2	0.1329	0.226
Thailand	3.8	0.774	43.2	0.173	0.530
Trinada and Tobago	3.8	0.796	40.3	0.29	0.548
Tunisia	4.9	0.743	39.8	0.5283	0.541
Turkey	3.5	0.742	40.0	0.650	0.576
Uganda	2.5	0.502	43.0	0.079	0.314
Ukraine	2.6	0.763	29.0	0.680	0.597
United Kingdom	8.6	0.937	36.0	0.800	0.836
United States	7.6	0.942	40.8	0.752	0.796
Uruguay	5.9	0.836	44.6	0.930	0.783
Uzbekistan	2.2	0.692	26.8	0.370	0.445
Venezuela	2.3	0.765	49.1	0.7307	0.643

Country	CPI 0=highly corrupt, 10=highly clean	GDI 0=unequal, 1=equal	Gini 0=perfect equality, 100=perfect inequality	Proportion Urban	Composite Index
Vietnam	2.6	0.702	36.1	0.2011	0.446
Yemen	2.7	0.448	33.4	0.333	0.255
Zambia	2.6	0.383	52.6	0.399	0.449
Zimbabwe	2.6	0.493	56.8	0.168	0.501

Note:

NA indicates not available (the creation of the composite index was adjusted appropriately)

Sources:

1. United Nations Development Program. 2005. Human Development Report.
2. Transparency International. 2005.
3. U.S. Bureau of the Census, International Database
4. International Labour Organization
5. HIV InSite. 2005. Center for HIV Information, University of California San Francisco, http://hivinsite.ucsf.edu/InSite

APPENDIX C:
TRAFFICKING MULTIPLIERS

EXHIBIT 19
TRAFFICKING MULTIPLIERS FOR ALL SELECTED COUNTRIES

Country	Age Range	Actual 2004 Pop	Actual 2005 Pop	% Change 2004-2005	Natural Growth Pop	Natural-Actual	Ratio Natrual to Actual	Trafficking Multiplier
Albania	0-4	123,893	123,386	-0.41%	125,132	1,746	1.0142	0.1415
	5-9	151,229	143,778	-4.93%	152,741	8,963	1.0623	0.6234
	10-14	171,464	167,134	-2.53%	173,179	6,045	1.0362	0.3617
	15-19	175,031	177,541	1.43%	176,781	-760	0.9957	0.0043
	20-24	150,138	153,599	2.31%	151,639	-1,960	0.9872	0.0128
	25-29	128,775	130,394	1.26%	130,063	-331	0.9975	0.0025
	30-34	119,153	118,671	-0.40%	120,345	1,674	1.0141	0.1410
	35-39	115,703	114,393	-1.13%	116,860	2,467	1.0216	0.2157
	40-44	121,813	120,682	-0.93%	123,031	2,349	1.0195	0.1947
	45-49	108,680	112,351	3.38%	109,767	-2,584	0.9770	0.0230
Belarus	0-4	217,869	216,269	-0.73%	216,780	511	1.0024	0.0236
	5-9	229,543	223,659	-2.56%	228,395	4,736	1.0212	0.2118
	10-14	312,593	292,213	-6.52%	311,030	18,817	1.0644	0.6439
	15-19	398,052	387,549	-2.64%	396,062	8,513	1.0220	0.2197
	20-24	390,980	397,800	1.74%	389,025	-8,775	0.9779	0.0221
	25-29	357,928	361,337	0.95%	356,138	-5,199	0.9856	0.1439
	30-34	348,875	352,315	0.99%	347,131	-5,184	0.9853	0.1472
	35-39	347,433	340,736	-1.93%	345,696	4,960	1.0146	0.1456
	40-44	413,197	398,999	-3.44%	411,131	12,132	1.0304	0.3041
	45-49	410,025	417,682	1.87%	407,975	-9,707	0.9768	0.0232
Bosnia & Herzegovina	0-4	94,238	92,507	-1.84%	94,332	1,825	1.0197	0.1973
	5-9	120,037	120,038	0.00%	120,157	119	1.0010	0.0099
	10-14	136,473	131,299	-3.79%	136,609	5,310	1.0404	0.4045
	15-19	153,087	157,231	2.71%	153,240	-3,991	0.9746	0.0254
	20-24	152,107	154,061	1.28%	152,259	-1,802	0.9883	0.0117
	25-29	157,169	158,569	0.89%	157,326	-1,243	0.9922	0.0784
	30-34	167,272	169,231	1.17%	167,439	-1,792	0.9894	0.0106
	35-39	179,697	177,672	-1.13%	179,877	2,205	1.0124	0.1241
	40-44	183,174	189,807	3.62%	183,357	-6,450	0.9660	0.0340
	45-49	162,050	167,967	3.65%	162,212	-5,755	0.9657	0.0343
Bulgaria	0-4	171,103	170,749	-0.21%	169,905	-844	0.9951	0.0494
	5-9	156,208	155,054	-0.74%	155,115	61	1.0004	0.0039
	10-14	199,545	186,959	-6.31%	198,148	11,189	1.0598	0.5985
	15-19	245,672	240,051	-2.29%	243,952	3,901	1.0163	0.1625
	20-24	259,455	253,820	-2.17%	257,639	3,819	1.0150	0.1505
	25-29	284,103	277,851	-2.20%	282,114	4,263	1.0153	0.1534
	30-34	263,570	266,469	1.10%	261,725	-4,744	0.9822	0.0178
	35-39	243,974	248,016	1.66%	242,266	-5,750	0.9768	0.0232
	40-44	255,747	250,226	-2.16%	253,957	3,731	1.0149	0.1491
	45-49	270,768	265,754	-1.85%	268,873	3,119	1.0117	0.1174
Croatia	0-4	104,434	103,196	-1.19%	104,225	1,029	1.0100	0.0997
	5-9	129,875	125,635	-3.26%	129,615	3,980	1.0317	0.3168
	10-14	129,978	130,400	0.32%	129,718	-682	0.9948	0.0523
	15-19	141,055	137,298	-2.66%	140,773	3,475	1.0253	0.2531
	20-24	156,944	154,997	-1.24%	156,630	1,633	1.0105	0.1054
	25-29	156,777	158,545	1.13%	156,463	-2,082	0.9869	0.0131
	30-34	148,203	150,752	1.72%	147,907	-2,845	0.9811	0.0189
	35-39	153,249	150,380	-1.87%	152,943	2,563	1.0170	0.1704
	40-44	165,027	162,064	-1.80%	164,697	2,633	1.0162	0.1625
	45-49	177,084	175,088	-1.13%	176,730	1,642	1.0094	0.0938

Country	Age Range	Actual 2004 Pop	Actual 2005 Pop	% Change 2004-2005	Natural Growth Pop	Natural-Actual	Ratio Natrual to Actual	Trafficking Multiplier
Hungary	0-4	234,610	235,510	0.38%	233,906	-1,604	0.9932	0.0681
	5-9	251,357	242,747	-3.43%	250,603	7,856	1.0324	0.3236
	10-14	296,720	291,430	-1.78%	295,830	4,400	1.0151	0.1510
	15-19	305,612	305,051	-0.18%	304,695	-356	0.9988	0.0117
	20-24	334,150	321,764	-3.71%	333,148	11,384	1.0354	0.3538
	25-29	430,543	413,377	-3.99%	429,251	15,874	1.0384	0.3840
	30-34	371,049	391,504	5.51%	369,936	-21,568	0.9449	0.0551
	35-39	332,607	343,168	3.18%	331,609	-11,559	0.9663	0.0337
	40-44	311,939	305,959	-1.92%	311,003	5,044	1.0165	0.1649
	45-49	390,744	365,930	-6.35%	389,572	23,642	1.0646	0.6461
Macedonia	0-4	62,034	60,319	-2.76%	62,220	1,901	1.0315	0.3152
	5-9	71,307	69,295	-2.82%	71,521	2,226	1.0321	0.3212
	10-14	72,740	72,851	0.15%	72,958	107	1.0015	0.0147
	15-19	78,549	77,647	-1.15%	78,785	1,138	1.0147	0.1465
	20-24	80,751	80,583	-0.21%	80,993	410	1.0051	0.0509
	25-29	78,746	78,971	0.29%	78,982	11	1.0001	0.0014
	30-34	74,187	75,047	1.16%	74,410	-637	0.9915	0.0085
	35-39	73,524	72,819	-0.96%	73,745	926	1.0127	0.1271
	40-44	71,868	72,238	0.51%	72,084	-154	0.9979	0.0214
	45-49	69,668	70,111	0.64%	69,877	-234	0.9967	0.0334
Moldova	0-4	101,594	102,455	0.85%	101,594	-861	0.9916	0.0840
	5-9	121,027	113,768	-6.00%	121,027	7,259	1.0638	0.6381
	10-14	163,876	154,728	-5.58%	163,876	9,148	1.0591	0.5912
	15-19	210,540	204,356	-2.94%	210,540	6,184	1.0303	0.3026
	20-24	194,260	199,341	2.62%	194,260	-5,081	0.9745	0.0255
	25-29	178,247	179,537	0.72%	178,247	-1,290	0.9928	0.0719
	30-34	156,638	164,378	4.94%	156,638	-7,740	0.9529	0.0471
	35-39	143,250	140,090	-2.21%	143,250	3,160	1.0226	0.2256
	40-44	175,632	166,762	-5.05%	175,632	8,870	1.0532	0.5319
	45-49	176,551	180,417	2.19%	176,551	-3,866	0.9786	0.0214
Montenegro	0-4	19,898	19,340	-2.80%	19,958	618	1.0319	0.3194
	5-9	20,854	20,300	-2.66%	20,917	617	1.0304	0.3037
	10-14	23,039	21,801	-5.37%	23,108	1,307	1.0600	0.5996
	15-19	26,803	25,897	-3.38%	26,883	986	1.0381	0.3809
	20-24	27,852	27,311	-1.94%	27,936	625	1.0229	0.2287
	25-29	27,394	27,172	-0.81%	27,476	304	1.0112	0.1119
	30-34	26,032	26,052	0.08%	26,110	58	1.0022	0.0223
	35-39	24,602	24,328	-1.11%	24,676	348	1.0143	0.1430
	40-44	25,131	24,656	-1.89%	25,206	550	1.0223	0.2232
	45-49	24,622	24,579	-0.17%	24,696	117	1.0048	0.0475
Poland	0-4	884,835	880,815	-0.45%	884,835	4,020	1.0046	0.0456
	5-9	1,007,123	970,637	-3.62%	1,007,123	36,486	1.0376	0.3759
	10-14	1,249,326	1,204,337	-3.60%	1,249,326	44,989	1.0374	0.3736
	15-19	1,457,029	1,392,959	-4.40%	1,457,029	64,070	1.0460	0.4600
	20-24	1,639,572	1,641,853	0.14%	1,639,572	-2,281	0.9986	0.0139
	25-29	1,538,810	1,563,122	1.58%	1,538,810	-24,312	0.9844	0.0156
	30-34	1,335,168	1,386,448	3.84%	1,335,168	-51,280	0.9630	0.0370
	35-39	1,176,512	1,175,105	-0.12%	1,176,512	1,407	1.0012	0.0120
	40-44	1,335,895	1,282,050	-4.03%	1,335,895	53,845	1.0420	0.4200
	45-49	1,596,393	1,565,066	-1.96%	1,596,393	31,327	1.0200	0.2002

Country	Age Range	Actual 2004 Pop	Actual 2005 Pop	% Change 2004-2005	Natural Growth Pop	Natural-Actual	Ratio Natrual to Actual	Trafficking Multiplier
Romania	0-4	562,216	563,107	0.16%	561,654	-1,453	0.9974	0.0258
	5-9	560,085	557,549	-0.45%	559,525	1,976	1.0035	0.0354
	10-14	648,445	606,942	-6.40%	647,797	40,855	1.0673	0.6731
	15-19	849,328	842,002	-0.86%	848,479	6,477	1.0077	0.0769
	20-24	835,737	812,163	-2.82%	834,901	22,738	1.0280	0.2800
	25-29	959,597	950,266	-0.97%	958,637	8,371	1.0088	0.0881
	30-34	886,030	889,495	0.39%	885,144	-4,351	0.9951	0.0489
	35-39	831,016	900,369	8.35%	830,185	-70,184	0.9220	0.0780
	40-44	658,869	630,911	-4.24%	658,210	27,299	1.0433	0.4327
	45-49	818,015	792,223	-3.15%	817,197	24,974	1.0315	0.3152
Serbia	0-4	285,988	289,012	1.06%	286,560	-2,452	0.9915	0.0085
	5-9	286,308	281,718	-1.60%	286,881	5,163	1.0183	0.1833
	10-14	320,508	311,398	-2.84%	321,149	9,751	1.0313	0.3131
	15-19	361,654	356,873	-1.32%	362,377	5,504	1.0154	0.1542
	20-24	368,894	367,202	-0.46%	369,632	2,430	1.0066	0.0662
	25-29	376,123	375,686	-0.12%	376,875	1,189	1.0032	0.0317
	30-34	355,766	360,695	1.39%	356,478	-4,217	0.9883	0.0117
	35-39	340,296	343,406	0.91%	340,977	-2,429	0.9929	0.0707
	40-44	340,822	336,708	-1.21%	341,504	4,796	1.0142	0.1424
	45-49	351,222	345,556	-1.61%	351,924	6,368	1.0184	0.1843
Slovakia	0-4	136,317	137,055	0.54%	136,453	-602	0.9956	0.0439
	5-9	145,028	141,179	-2.65%	145,173	3,994	1.0283	0.2829
	10-14	181,828	175,106	-3.70%	182,010	6,904	1.0394	0.3943
	15-19	204,024	199,026	-2.45%	204,228	5,202	1.0261	0.2614
	20-24	221,412	217,825	-1.62%	221,633	3,808	1.0175	0.1748
	25-29	233,407	233,516	0.05%	233,640	124	1.0005	0.0053
	30-34	202,624	211,943	4.60%	202,827	-9,116	0.9570	0.0430
	35-39	183,468	181,801	-0.91%	183,651	1,850	1.0102	0.1018
	40-44	192,106	191,970	-0.07%	192,298	328	1.0017	0.0171
	45-49	207,001	202,827	-2.02%	207,208	4,381	1.0216	0.2160
Slovenia	0-4	42,917	42,948	0.07%	42,874	-74	0.9983	0.0172
	5-9	45,076	44,289	-1.75%	45,031	742	1.0168	0.1675
	10-14	51,442	49,775	-3.24%	51,391	1,616	1.0325	0.3246
	15-19	62,388	60,682	-2.73%	62,326	1,644	1.0271	0.2709
	20-24	70,975	69,044	-2.72%	70,904	1,860	1.0269	0.2694
	25-29	74,474	74,953	0.64%	74,400	-553	0.9926	0.0738
	30-34	71,345	72,000	0.92%	71,274	-726	0.9899	0.1009
	35-39	76,821	75,118	-2.22%	76,744	1,626	1.0216	0.2165
	40-44	77,354	77,825	0.61%	77,277	-548	0.9930	0.0705
	45-49	78,135	77,399	-0.94%	78,057	658	1.0085	0.0850
Ukraine	0-4	941,456	962,396	2.22%	934,866	-27,530	0.9714	0.0286
	5-9	1,086,383	1,029,648	-5.22%	1,078,778	49,130	1.0477	0.4772
	10-14	1,433,437	1,351,500	-5.72%	1,423,403	71,903	1.0532	0.5320
	15-19	1,833,817	1,777,576	-3.07%	1,820,980	43,404	1.0244	0.2442
	20-24	1,827,651	1,844,983	0.95%	1,814,857	-30,126	0.9837	0.1633
	25-29	1,703,898	1,716,933	0.77%	1,691,971	-24,962	0.9855	0.1454
	30-34	1,664,794	1,678,278	0.81%	1,653,140	-25,138	0.9850	0.1498
	35-39	1,598,547	1,591,853	-0.42%	1,587,357	-4,496	0.9972	0.0282
	40-44	1,925,878	1,837,092	-4.61%	1,912,397	75,305	1.0410	0.4099
	45-49	1,901,502	1,944,566	2.26%	1,888,191	-56,375	0.9710	0.0290

Country	Age Range	Actual 2004 Pop	Actual 2005 Pop	% Change 2004-2005	Natural Growth Pop	Natural-Actual	Trafficking Multiplier
Colombia	0-4	2,172,698	2,167,840	-0.22%	2,205,288	37,448	0.1727
	5-9	2,193,753	2,189,357	-0.20%	2,226,659	37,302	0.1704
	10-14	2,123,226	2,159,174	1.69%	2,155,074	-4,100	0.0019
	15-19	1,925,276	1,941,902	0.86%	1,954,155	12,253	0.0631
	20-24	1,791,595	1,832,783	2.30%	1,818,469	-14,314	0.0078
	25-29	1,698,603	1,693,580	-0.30%	1,724,082	30,502	0.1801
	30-34	1,722,866	1,710,268	-0.73%	1,748,709	38,441	0.2248
	35-39	1,692,710	1,718,305	1.51%	1,718,101	-204	0.0001
	40-44	1,495,538	1,537,966	2.84%	1,517,971	-19,995	0.0130
	45-49	1,249,420	1,297,314	3.83%	1,268,161	-29,153	0.0225
Venezuela	0-4	1,160,154	1,152,097	-0.69%	1,176,396	24,299	0.2109
	5-9	1,227,003	1,210,056	-1.38%	1,244,181	34,125	0.2820
	10-14	1,300,587	1,305,805	0.40%	1,318,795	12,990	0.0995
	15-19	1,185,320	1,196,460	0.94%	1,201,914	5,454	0.0456
	20-24	1,148,378	1,155,685	0.64%	1,164,455	8,770	0.0759
	25-29	1,083,191	1,101,664	1.71%	1,098,356	-3,308	0.0030
	30-34	967,261	987,777	2.12%	980,803	-6,974	0.0071
	35-39	879,682	893,707	1.59%	891,998	-1,709	0.0019
	40-44	800,587	818,368	2.22%	811,795	-6,573	0.0080
	45-49	689,303	708,645	2.81%	698,953	-9,692	0.0137
Ecuador	0-4	743,783	736,874	-0.93%	754,940	18,066	0.2452
	5-9	748,417	747,969	-0.06%	759,643	11,674	0.1561
	10-14	707,156	711,099	0.56%	717,763	6,664	0.0937
	15-19	671,918	675,486	0.53%	681,997	6,511	0.0964
	20-24	622,063	624,837	0.45%	631,394	6,557	0.1049
	25-29	572,876	579,659	1.18%	581,469	1,810	0.0031
	30-34	499,630	507,049	1.48%	507,124	75	0.0001
	35-39	434,741	442,070	1.69%	441,262	-808	0.0018
	40-44	371,260	380,316	2.44%	376,829	-3,487	0.0092
	45-49	306,945	315,588	2.82%	311,549	-4,039	0.0128
Peru	0-4	1,391,715	1,387,942	-0.27%	1,416,766	28,824	0.2077
	5-9	1,468,877	1,438,359	-2.08%	1,495,317	56,958	0.3960
	10-14	1,479,988	1,497,055	1.15%	1,506,628	9,573	0.0064
	15-19	1,334,585	1,363,991	2.20%	1,358,608	-5,383	0.0039
	20-24	1,190,464	1,198,090	0.64%	1,211,892	13,802	0.1152
	25-29	1,173,543	1,182,468	0.76%	1,194,667	12,199	0.1032
	30-34	1,082,304	1,100,614	1.69%	1,101,785	1,171	0.0011
	35-39	963,395	984,455	2.19%	980,736	-3,719	0.0038
	40-44	824,026	851,401	3.32%	838,858	-12,543	0.0147
	45-49	678,533	701,013	3.31%	690,747	-10,266	0.0146

Country	Age Range	Actual 2004 Pop	Actual 2005 Pop	% Change 2004-2005	Natural Growth Pop	Natural-Actual	Trafficking Multiplier
El Salvador	0-4	423,150	425,460	0.55%	432,036	6,576	0.1546
	5-9	400,774	404,834	1.01%	409,190	4,356	0.0108
	10-14	361,826	368,295	1.79%	369,424	1,129	0.0031
	15-19	347,606	347,398	-0.06%	354,906	7,508	0.2161
	20-24	318,415	323,600	1.63%	325,102	1,502	0.0046
	25-29	280,842	285,821	1.77%	286,740	919	0.0032
	30-34	244,489	250,589	2.49%	249,623	-966	0.0039
	35-39	211,916	217,067	2.43%	216,366	-701	0.0032
	40-44	173,968	181,437	4.29%	177,621	-3,816	0.0210
	45-49	141,462	145,782	3.05%	144,433	-1,349	0.0093
Guatemala	0-4	860,462	860,620	0.02%	881,974	21,354	0.2481
	5-9	854,578	855,016	0.05%	875,942	20,926	0.2447
	10-14	795,041	811,302	2.05%	814,917	3,615	0.0045
	15-19	682,482	705,367	3.35%	699,544	-5,823	0.0083
	20-24	553,407	571,801	3.32%	567,242	-4,559	0.0080
	25-29	458,245	470,054	2.58%	469,701	-353	0.0008
	30-34	362,562	380,945	5.07%	371,626	-9,319	0.0245
	35-39	288,839	293,926	1.76%	296,060	2,134	0.0073
	40-44	264,969	269,065	1.55%	271,593	2,528	0.0094
	45-49	234,420	239,165	2.02%	240,281	1,116	0.0047
Nicaragua	0-4	324,442	324,049	-0.12%	330,931	6,882	0.2124
	5-9	331,400	326,875	-1.37%	338,028	11,153	0.3412
	10-14	345,676	348,302	0.76%	352,590	4,288	0.1231
	15-19	304,565	311,895	2.41%	310,656	-1,239	0.0040
	20-24	272,149	277,704	2.04%	277,592	-46,457	0.0004
	25-29	235,000	241,721	2.86%	239,700	-87,175	0.0084
	30-34	195,687	203,066	3.77%	199,601	-148,701	0.0171
	35-39	159,793	166,290	4.07%	162,989	-148,906	0.0199
	40-44	129,018	133,874	3.76%	131,598	-146,106	0.0170
	45-49	106,440	110,085	3.42%	108,569	-133,152	0.0138
Mexico	0-4	5,384,600	5,351,893	-0.61%	5,470,754	5,434,129	0.2221
	5-9	5,417,300	5,386,260	-0.57%	5,503,977	5,476,714	0.2186
	10-14	5,426,652	5,421,358	-0.10%	5,513,478	5,495,712	0.1699
	15-19	5,217,725	5,245,757	0.54%	5,301,209	5,288,493	0.1057
	20-24	4,850,099	4,872,106	0.45%	4,927,701	55,595	0.1141
	25-29	4,620,403	4,634,356	0.30%	4,694,329	59,973	0.1294
	30-34	4,311,827	4,377,345	1.52%	4,380,816	3,471	0.0008
	35-39	3,815,920	3,904,366	2.32%	3,876,975	-27,391	0.0070
	40-44	3,316,291	3,399,205	2.50%	3,369,352	-29,853	0.0088
	45-49	2,761,520	2,884,106	4.44%	2,805,704	-78,402	0.0272

APPENDIX D: TRAFFICKING VICTIMS PROTECTION ACT— MINIMUM STANDARDS FOR THE ELIMINATION OF TRAFFICKING IN PERSONS

TRAFFICKING VICTIMS PROTECTION ACT OF 2000, DIV. A OF PUB. L. NO. 106-386, § 108, AS AMENDED.

(A) MINIMUM STANDARDS

FOR PURPOSES OF THIS CHAPTER, THE MINIMUM STANDARDS FOR THE ELIMINATION OF TRAFFICKING APPLICABLE TO THE GOVERNMENT OF A COUNTRY OF ORIGIN, TRANSIT, OR DESTINATION FOR A SIGNIFICANT NUMBER OF VICTIMS OF SEVERE FORMS OF TRAFFICKING ARE THE FOLLOWING:

(1) THE GOVERNMENT OF THE COUNTRY SHOULD PROHIBIT SEVERE FORMS OF TRAFFICKING IN PERSONS AND PUNISH ACTS OF SUCH TRAFFICKING.

(2) FOR THE KNOWING COMMISSION OF ANY ACT OF SEX TRAFFICKING INVOLVING FORCE, FRAUD, COERCION, OR IN WHICH THE VICTIM OF SEX TRAFFICKING IS A CHILD INCAPABLE OF GIVING MEANINGFUL CONSENT, OR OF TRAFFICKING WHICH INCLUDES RAPE OR KIDNAPPING OR WHICH CAUSES A DEATH, THE GOVERNMENT OF THE COUNTRY SHOULD PRESCRIBE PUNISHMENT COMMENSURATE WITH THAT FOR GRAVE CRIMES, SUCH AS FORCIBLE SEXUAL ASSAULT.

(3) FOR THE KNOWING COMMISSION OF ANY ACT OF A SEVERE FORM OF TRAFFICKING IN PERSONS, THE GOVERNMENT OF THE COUNTRY SHOULD PRESCRIBE PUNISHMENT THAT IS SUFFICIENTLY STRINGENT TO DETER AND THAT ADEQUATELY REFLECTS THE HEINOUS NATURE OF THE OFFENSE.

(4) THE GOVERNMENT OF THE COUNTRY SHOULD MAKE SERIOUS AND SUSTAINED EFFORTS TO ELIMINATE SEVERE FORMS OF TRAFFICKING IN PERSONS.

(B) CRITERIA

IN DETERMINATIONS UNDER SUBSECTION (A)(4) OF THIS SECTION, THE FOLLOWING FACTORS SHOULD BE CONSIDERED AS INDICIA OF SERIOUS AND SUSTAINED EFFORTS TO ELIMINATE SEVERE FORMS OF TRAFFICKING IN PERSONS:

(1) WHETHER THE GOVERNMENT OF THE COUNTRY VIGOROUSLY INVESTIGATES AND PROSECUTES ACTS OF SEVERE FORMS OF TRAFFICKING IN PERSONS, AND CONVICTS AND SENTENCES PERSONS RESPONSIBLE FOR SUCH ACTS, THAT TAKE PLACE WHOLLY OR PARTLY WITHIN THE TERRITORY OF THE COUNTRY. AFTER REASONABLE REQUESTS FROM THE DEPARTMENT OF STATE FOR DATA REGARDING INVESTIGATIONS, PROSECUTIONS, CONVICTIONS, AND

SENTENCES, A GOVERNMENT, WHICH DOES NOT PROVIDE SUCH DATA, CONSISTENT WITH THE CAPACITY OF SUCH GOVERNMENT TO OBTAIN SUCH DATA, SHALL BE PRESUMED NOT TO HAVE VIGOROUSLY INVESTIGATED, PROSECUTED, CONVICTED OR SENTENCED SUCH ACTS. DURING THE PERIODS PRIOR TO THE ANNUAL REPORT SUBMITTED ON JUNE 1, 2004, AND ON JUNE 1, 2005, AND THE PERIODS AFTERWARDS UNTIL SEPTEMBER 30 OF EACH SUCH YEAR, THE SECRETARY OF STATE MAY DISREGARD THE PRESUMPTION CONTAINED IN THE PRECEDING SENTENCE IF THE GOVERNMENT HAS PROVIDED SOME DATA TO THE DEPARTMENT OF STATE REGARDING SUCH ACTS AND THE SECRETARY HAS DETERMINED THAT THE GOVERNMENT IS MAKING A GOOD FAITH EFFORT TO COLLECT SUCH DATA.

(2) WHETHER THE GOVERNMENT OF THE COUNTRY PROTECTS VICTIMS OF SEVERE FORMS OF TRAFFICKING IN PERSONS AND ENCOURAGES THEIR ASSISTANCE IN THE INVESTIGATION AND PROSECUTION OF SUCH TRAFFICKING, INCLUDING

> PROVISIONS FOR LEGAL ALTERNATIVES TO THEIR REMOVAL TO COUNTRIES IN WHICH THEY WOULD FACE RETRIBUTION
> OR HARDSHIP, AND ENSURES THAT VICTIMS ARE NOT INAPPROPRIATELY INCARCERATED, FINED, OR OTHERWISE
> PENALIZED SOLELY FOR UNLAWFUL ACTS AS A DIRECT RESULT OF BEING TRAFFICKED.

(3) WHETHER THE GOVERNMENT OF THE COUNTRY HAS ADOPTED MEASURES TO PREVENT SEVERE FORMS OF TRAFFICKING IN PERSONS, SUCH AS MEASURES TO INFORM AND EDUCATE THE PUBLIC, INCLUDING POTENTIAL VICTIMS, ABOUT THE CAUSES AND CONSEQUENCES OF SEVERE FORMS OF TRAFFICKING IN PERSONS.

(4) WHETHER THE GOVERNMENT OF THE COUNTRY COOPERATES WITH OTHER GOVERNMENTS IN THE INVESTIGATION AND PROSECUTION OF SEVERE FORMS OF TRAFFICKING IN PERSONS.

(5) WHETHER THE GOVERNMENT OF THE COUNTRY EXTRADITES PERSONS CHARGED WITH ACTS OF SEVERE FORMS OF TRAFFICKING IN PERSONS ON SUBSTANTIALLY THE SAME TERMS AND TO SUBSTANTIALLY THE SAME EXTENT AS PERSONS CHARGED WITH OTHER SERIOUS CRIMES (OR, TO THE EXTENT SUCH EXTRADITION WOULD BE INCONSISTENT WITH THE LAWS OF SUCH COUNTRY OR WITH INTERNATIONAL AGREEMENTS TO WHICH THE COUNTRY IS A PARTY, WHETHER THE GOVERNMENT IS TAKING ALL APPROPRIATE MEASURES TO MODIFY OR REPLACE SUCH LAWS AND TREATIES SO AS TO PERMIT SUCH EXTRADITION).

(6) WHETHER THE GOVERNMENT OF THE COUNTRY MONITORS IMMIGRATION AND EMIGRATION PATTERNS FOR EVIDENCE OF SEVERE FORMS OF TRAFFICKING IN PERSONS AND WHETHER LAW ENFORCEMENT AGENCIES OF THE COUNTRY RESPOND TO ANY SUCH EVIDENCE IN A MANNER THAT IS CONSISTENT WITH THE VIGOROUS INVESTIGATION AND PROSECUTION OF ACTS OF SUCH TRAFFICKING, AS WELL AS WITH THE PROTECTION OF HUMAN RIGHTS

OF VICTIMS AND THE INTERNATIONALLY RECOGNIZED HUMAN RIGHT TO LEAVE ANY COUNTRY, INCLUDING ONE'S OWN, AND TO RETURN TO ONE'S OWN COUNTRY.

(7) WHETHER THE GOVERNMENT OF THE COUNTRY VIGOROUSLY INVESTIGATES, PROSECUTES, CONVICTS, AND SENTENCES PUBLIC OFFICIALS WHO PARTICIPATE IN OR FACILITATE SEVERE FORMS OF TRAFFICKING IN PERSONS, AND TAKES ALL APPROPRIATE MEASURES AGAINST OFFICIALS WHO CONDONE SUCH TRAFFICKING. AFTER REASONABLE REQUESTS FROM THE DEPARTMENT OF STATE FOR DATA REGARDING SUCH INVESTIGATIONS, PROSECUTIONS, CONVICTIONS, AND SENTENCES, A GOVERNMENT WHICH DOES NOT PROVIDE SUCH DATA CONSISTENT WITH ITS RESOURCES SHALL BE PRESUMED NOT TO HAVE VIGOROUSLY INVESTIGATED, PROSECUTED, CONVICTED, OR SENTENCED SUCH ACTS. DURING THE PERIODS PRIOR TO THE ANNUAL REPORT SUBMITTED ON JUNE 1, 2004, AND ON JUNE 1, 2005, AND THE PERIODS AFTERWARDS UNTIL SEPTEMBER 30 OF EACH SUCH YEAR, THE SECRETARY OF STATE MAY DISREGARD THE PRESUMPTION CONTAINED IN THE PRECEDING SENTENCE IF THE GOVERNMENT HAS PROVIDED SOME DATA TO THE DEPARTMENT OF STATE REGARDING SUCH ACTS AND THE SECRETARY HAS DETERMINED THAT THE GOVERNMENT IS MAKING A GOOD FAITH EFFORT TO COLLECT SUCH DATA.

(8) WHETHER THE PERCENTAGE OF VICTIMS OF SEVERE FORMS OF TRAFFICKING IN THE COUNTRY THAT ARE NON-CITIZENS OF SUCH COUNTRIES IS INSIGNIFICANT.

(9) WHETHER THE GOVERNMENT OF THE COUNTRY, CONSISTENT WITH THE CAPACITY OF SUCH GOVERNMENT, SYSTEMATICALLY MONITORS ITS EFFORTS TO SATISFY THE CRITERIA DESCRIBED IN PARAGRAPHS (1) THROUGH (8) AND MAKES AVAILABLE PUBLICLY A PERIODIC ASSESSMENT OF SUCH EFFORTS.

(10)WHETHER THE GOVERNMENT OF THE COUNTRY ACHIEVES APPRECIABLE PROGRESS IN ELIMINATING SEVERE FORMS OF TRAFFICKING WHEN COMPARED TO THE ASSESSMENT IN THE PREVIOUS YEAR.