



## Motivation for the Study

**D**rug use is a major issue in the United States. Prior research has linked it to a host of social ills, including involvement in crime, destabilization and decline of neighborhoods, and family instability. In addition, drug importation represents a major threat to the political security of both the United States and source countries and impedes economic development in countries where drugs are grown in large quantities. Although studies of drug use are numerous and our understanding of local drug markets is growing, our understanding of the multimillion-dollar business of international drug smuggling is considerably less well developed.

This book examines drug smuggling from the perspective of those most in the know—experienced drug smugglers. Ironically, most of what we know about drug smuggling comes from minor players who are involved in the international drug trade. Information from interviews with individuals heavily involved in the drug trade should provide important information for crafting interdiction strategies. A major focus of this book is to understand the steps drug smugglers take in reducing their risks of being caught,

losing a load, or being ripped off. In this regard, behavioral change on the part of smugglers can take one of two major paths: They may be deterred by increased risks of being caught, or they may alter their behavior in ways that increase their costs of doing business and make the smuggling of drugs either less profitable or more susceptible to interdiction.

A better understanding of how individuals respond to increased risk is of considerable importance owing to the significance of drug use in the United States as well as the annual expenditure on drug enforcement and treatment. More than fifty agencies in the federal government are involved in drug supply-and-demand reduction strategies, and the annual budget of these agencies is approximately \$17 billion. It is estimated that when federal, state, and local expenditures are combined, the United States spends roughly \$30 billion annually on drug control efforts (Abt Associates, 1999: 4). In addition, drug smuggling has been linked in some circles to terrorism.

There are two specific goals that focus on interdiction efforts in the National Drug Control Strategy (NDCS). The first is to shield America's air, land, and sea frontiers from the drug threat. This includes a target of reducing the rate at which illegal drugs cross the transit and arrival zones by 20 percent. Strategies include the detection, disruption, deterrence, and seizure of illegal drugs in transit; the development of technology to aid in this strategy; and the improvement of relations with Caribbean and Central American nations. The second goal for reducing the supply of drugs is to achieve a 30 percent reduction in the amount of drugs shipped from producer nations and a 50 percent reduction in illicit drugs produced in the United States. Strategies to support this goal include disrupting and dismantling major smuggling organizations; arresting, prosecuting, and incarcerating leaders; supporting drug enforcement and political structures in source countries; reducing money laundering; and encouraging research. Such efforts should introduce considerable levels of risk into the drug smuggler's calculus of the cost of doing business.

To date, most knowledge of drug smuggling has come from a limited number of sources. Many of the sources are government agencies involved in the effort to increase interdiction and stem the flow of narcotics importation into the United States. At best, these data provide a limited picture of the volume of drugs smuggled each year, the methods engaged in by drug smugglers, and the perceived impact of changes in interdiction strategy on the behavior of smugglers.

This book seeks to fill that void through in-depth interviews with the most heavily involved drug smugglers incarcerated in the federal prison system. The authors were afforded access to thirty-four of the highest-level drug smugglers confined in federal institutions at the time of the study. Intensive interviews provided information on the smugglers' experiences transporting drugs into the United States, their perception of U.S. interdiction activities, their reaction to these activities, and their perception of the risks associated with smuggling drugs into the United States. The authors were fortunate to have received support from the Office of National Drug Control Policy, the U.S. Customs Service, and the U.S. Coast Guard to conduct this work.<sup>1</sup> The cooperation of these and other federal agencies (the U.S. Sentencing Commission and the Bureau of Prisons) is testament to the value placed on what we can learn from the smugglers.

The information gained through this work is particularly important given the magnitude of the problem of drug production. The volume of cocaine production in the source countries of Peru, Bolivia, and Colombia was estimated at roughly 680 metric tons in 1997 (Abt Associates, 1999: 14; United Nations, 2005). Estimates developed by Abt Associates indicate that approximately 300 metric tons of cocaine entered the United States in 1997, roughly 44 percent of the total production tonnage. While there is concern about the use of these figures as precise estimates (Rhodes, Layne, Johnston, and Hozik, 2000), they provide rough gauges against which the magnitude of cocaine importation can be understood.

## Understanding Drug Smuggling

Our work is premised on the belief that key knowledge about drug smuggling comes from those who smuggle drugs. To date, most of our understanding of drug smuggling and the impact of drug interdiction policy on smugglers comes from the perspective of those charged with the task of intercepting, arresting, and prosecuting smugglers and low-level dealers. There have been notably few studies of drug smuggling and the impact of interdiction efforts from the perspective of the people involved in the process—the drug smugglers most heavily involved.

Reuter and Haaga (1989) conducted the first notable study involving interviews with drug smugglers in 1987. They asked a total of ninety-four randomly selected inmates at five federal correctional facilities to participate.<sup>2</sup> Forty-one (42 percent) of those who were approached agreed to be interviewed, with higher than average refusal rates among black and Hispanic inmates. Despite the fact that forty-one inmates agreed to be interviewed, only thirty-two of the interviewed subjects were actual drug dealers; three of them were heroin dealers; twenty were cocaine dealers; and nine were marijuana dealers. Of the cocaine dealers, only two made purchases of more than ten kilograms, and four of the twenty were identified as importers who brought cocaine into the United States. Of the marijuana dealers, five were identified as importers, two of whom had purchased more than a ton of marijuana at their last arrest.

Interviews were conducted with English-speaking inmates exclusively, as no translator was available. In addition, interviewers took notes during the interviews rather than recording and transcribing the results. Reuter and Haaga described a variety of reasons for interview refusals, including reluctance to discuss the past, ongoing legal challenges to their incarceration, concerns over the confidentiality of the interviews, and anger at the government's treatment of them in the past. Despite these concerns, Reuter and Haaga concluded: "With a few exceptions, the information from the interviews was plausible, internally consistent, and consistent with the PSR (presentence report) information"

(728). They concluded that their study provided data with suitable internal and external validity.

The Reuter and Haaga study examined four substantive areas of interest. The first was entry into and progression up the ranks of drug smuggling. The authors were particularly interested in learning about the ease—or difficulty—of penetrating drug markets and moving up in the ranks of smuggling organizations. The second research question focused on the nature of the organization behind high-level drug dealing. Here organizational structure and process questions were assessed. The third research issue examined the need to use violence to successfully engage in drug dealing at high levels. Finally, Reuter and Haaga examined the extent to which wholesale drug markets are regional, rather than national, markets.

The drug markets these subjects described were characterized by entry and succession that was less formal, less structured, and with fewer barriers than might be suspected. Individuals were able to enter high-level drug smuggling with few roadblocks and move up the ranks with relative ease. This was true for individuals who assumed positions of trust in organizations and were responsible for handling large sums of money, drugs, or both. The pathways to involvement in smuggling generally led from low-level dealing or handling small loads to large deals. Most subjects reported that the willingness to tolerate risk was a key to being successful, and while many were involved in other forms of crime, roughly the same number worked at legitimate employment. Spanish-language ability and having family members in the business also enhanced introduction and escalation in the sales of drugs at these higher levels. In sum, there appeared to be little in the way of technical requirements, specific skills, and apprenticeships prior to ascending to higher levels of drug sales.

The second issue was the extent to which high-level drug smuggling involved an organizational structure. Reuter and Haaga reported that many subjects used the word *organization* to describe their operations, but they found little evidence that the groups of individuals involved in drug smuggling represented

formal organizations that could be compared to corporations or organized crime. Some evidence was found for hierarchical organizations, but this was not universal, and hierarchical organizations did not seem necessary to achieving success or profit at high levels of drug dealing. Few special skills were found among the dealers interviewed for the study, and there was little evidence of information sharing or coordination of efforts across the loosely federated individuals involved in drug markets. Reuter and Haaga concluded that little in the way of importing or distributing drugs, even at the highest levels, required a well-coordinated organization. Rather, high-level drug importation and distribution was a series of transactions between otherwise unconnected independent groups with little structure or permanence. These groups were described as “chains” that link one task in importation or distribution, without corresponding links with parts of the chain involved in other aspects of importation or distribution. Most chains appear to have been small and were formed to accomplish specific tasks, preventing the formation of formal organizations of an enduring or effective nature.

There was little evidence that violence was necessary for success. Indeed, Reuter and Haaga argue that violence is not a key feature of dealing at the high levels of drug markets, unlike much street-level drug dealing. Few of the subjects reported being threatened by violence, though it is worth noting that most of the subjects were recruited from low-security penal institutions, and involvement in violence could disqualify an individual from being sent to such penal institutions.

The final area the authors explored was the geographic boundaries of the illegal drug market. They concluded that the market was national, rather than regional, in scope. This was based on prisoners’ reports about the lack of barriers to selling in geographic markets other than those in which they traditionally operated and the experiences of a small number of dealers who managed to deal drugs at a high level in different regions of the country.

Reuter and Haaga drew several conclusions that were important in formulating our work. First, they noted that while the

subject refusal rate was a continuing concern, future interviews in higher-level security prisons and presumably with higher-level drug smugglers were likely to yield valuable information.<sup>3</sup> They also argued that the use of prison populations was important to understanding high-level drug markets. Second, they found that even at the top of these markets there was little evidence of formal organization. This finding was viewed as problematic for enforcement efforts, since increasing the risk of arrest and imprisonment was made more difficult by the relative lack of organization. Reuter and Haaga concluded that enforcement efforts that increase the “price” of high-level drug selling are likely to yield benefits. From our perspective, this conclusion is based on too few importers, too many low-level drug dealers, and lack of Spanish-speaking inmates. As a consequence, it is best viewed as a first but important step in learning about international drug smuggling.

Rockwell International (1989) conducted the second major study of high-level drug selling and smuggling based on responses of inmates. Two hundred fifty-four inmates from ten prisons (nine federal institutions and one state prison) were approached to participate in a study of drug smuggling deterrence; one hundred twelve consented to participate. The Federal Bureau of Prisons granted access to institutions with security levels of 1 through 4, though only 20 percent of the Rockwell sample was located in prisons at levels 3 and 4.<sup>4</sup> All inmates who agreed to participate were obliged to sign consent forms.<sup>5</sup>

Just over half the inmates were U.S. citizens; 14 percent were from Mexico; 17 percent were from Colombia; and 14 percent were from other nations. Subjects in their forties accounted for two-fifths of the total. As a group, the smugglers in this study had relatively few years of smuggling experience: 69 percent had smuggled for less than five years prior to their arrest.

The goal of this study was to determine deterrents (i.e., risks) to drug smuggling activities. For the purposes of the study, “deterrence is defined as that level of risk created when interdiction efforts are successful” (Rockwell International, 1989: 3). The premise behind this approach to deterrence is that when risks of

detection and apprehension for transportation and importation are increased, the costs of smuggling will be increased. The study also was premised on the belief that increasing smugglers' perceptions of the probability of apprehension and imprisonment is a key to deterrence. Increasing such perceived risks, it is theorized, will lead to increased costs and ultimately to a reduction in drug smuggling efforts.

To measure these perceptions, interview data were collected about the individual inmates' perceptions of risks to themselves and to their associates (individuals known to the inmates). Questions were posed about the potential impact on smuggling under varying levels of certainty of interdiction, imprisonment, gain, and risk. Initially, the study concluded that the concept of deterrence itself could be measured in valid ways.

Inmates in this sample reported that they believe the average risk of successful apprehension to be 30 percent, though they reported that an associate's risk of interdiction was 13.5 percent. The "tipping point"—the point at which the decision would be made to not smuggle drugs—occurred when the risk of apprehension was at 40 percent. However, caution should be used in interpreting these data, as only four data points were allowed in the questionnaire. Thus, an artificial set of decision criteria were offered to subjects, and their responses were fit into a truncated set of response alternatives that may not represent the variety or range of decisions they made. In every case, inmates indicated that their associates were more likely to smuggle at a given level of risk or reward than they were themselves. The authors concluded that the responses for associates were likely the more reliable, as individual offenders would underestimate their own probabilities and offer more realistic responses for the associates. Many of the response scenarios required subjects to calculate two sets of percentages (risk versus reward) for themselves and associates. This required both using a complicated set of decision-making criteria and thinking in strict quantitative terms. Previous work with offenders (Wright and Decker, 1994; 1997) has documented the difficulty most offenders have thinking in quantitative terms. For example, the Rockwell



study takes offenders through a four-sequence response scenario in which they are asked to determine whether they would smuggle drugs for a four-level reward scale versus a four-level risk scale. Functionally, this requires offenders to determine sixteen different risk and reward combinations, a difficult proposition.

The Rockwell study also offered several qualitative findings. First, drug smugglers who moved larger quantities of drugs reported that they could reduce the risk of apprehension through planning and care. Second, high-level smugglers told interviewers that the interdiction efforts of the U.S. government were generally well publicized and did not require much sophistication to detect. The interviews also provided a view of a typical smuggling operation. Operations consisted of one or two people who were responsible for setting up the deal, two to four people in transportation, and between four and six individuals who would offload the drugs. As the report notes, “Inmates were all to [*sic*] quick to put down the ‘Organized Crime’ theory of large criminal families and stated almost all smuggler organizations contained 10 people or less” (Rockwell International, 1989: 30). This theme is important to our own work.

The Institute for Defense Analysis (IDA, 1999) conducted a study examining “the effectiveness of the Frontier Shield pulse operation to deter drug trafficking in and around Puerto Rico,” assessing the balance between threshold interdiction rates and drug smuggling deterrence. This study used the Rockwell methodology of estimating deterrence as a gauge of the success of interdiction efforts. The author noted that cocaine is very cheap to grow and that most of the costs associated with cocaine trafficking are importation costs. This study hypothesized that “drug traffickers operate at the lowest cost for the perceived risk” (73). The authors argued that seizures alone are not the best measure of deterrence; rather, the behavior of traffickers themselves is the key to understanding deterrent effects.

The IDA study identified four levels of apprehension rates: (1) lethal apprehension rate, (2) personal apprehension rate, (3) apprehension rate of associates, and (4) vehicle and drug loss

rate with no apprehension. The study also differentiated among deterrence in a source zone, in a transit zone, and in a production zone. The IDA study concluded that initial interdiction efforts in major source zones or production sectors produce the greatest deterrent effects. In addition, the study found that deterring air transport of drugs was between ten and a hundred times more effective in disrupting supply levels than previous studies had established.<sup>6</sup>

The study concluded that when 2 percent of drugs that were shipped were interdicted, a threshold for deterring drug interdiction was reached. Any risk at or below that level was perceived to be part of the cost of doing business. When risks exceeded that level, authorities began to get the attention of smugglers. In contrast, arrest of associates, loss of personal property, or loss of drugs required much higher thresholds of apprehension to produce deterrent effects. The study concluded that merely seizing more drugs in the absence of arrests was unlikely to produce deterrent results, since smugglers regarded such losses as part of the cost of doing business. However, to the extent that interdiction was focused on arrest, it was likely to produce deterrent effects.

Griffith (1997) examined the role of drugs in the Caribbean more broadly and also examined the relationship of drug trafficking to political sovereignty in that region. He contended that drug smuggling and the economies that such activities create provide serious threats to the sovereignty of Caribbean nations. Griffith addressed three key questions: (1) the nature and extent of drug dealing in the Caribbean, (2) efforts to combat the problem, and (3) the implications of drug smuggling for security and sovereignty. Griffith argued that the intersection of drug smuggling and national security provides a unique opportunity to examine the role of drug smuggling. He viewed the interaction of drugs, geography, power, and politics as key to understanding the security of the region, and he defined security in a broader context, including military, political, economic, and environmental security in his consideration of the role of drugs in the Caribbean.

This is particularly important in this region because, as he argued, “drug corruption subverts political security” (710). In addition, for many of these nations, the value of drug trafficking transactions exceeds the combined value of all other exports. Such an economic imbalance creates political instability and undermines the ability of elected officials to govern.

The Caribbean is an especially important area for understanding drug smuggling because of its proximity to source and destination countries as well as its long history as a site for smuggling illegal goods and for piracy. Griffith noted that the physical and social geography of the region makes it especially conducive to drug trafficking. This region is the vortex between North and South America and sits between the major source of supply and the major source of demand for drugs. Countless islands, cays, and shielded coasts make for easy access for smugglers and provide excellent cover for storing goods, fitting ships, and offloading transshipments of drugs. The recent sovereignty of many nations in the Caribbean region makes them less capable of responding to the transshipment of drugs because of ill-developed legal systems, inadequate resources and assets, the presence of large-scale corruption, inadequate financial resources, or a combination of those factors. In addition, the economies of many of these nations do not adequately support the populace, making participation in the illegal economy attractive.

Griffith provided extensive descriptions of the nature of drug smuggling operations in the Caribbean. He interviewed government officials, individuals charged with responding to shipments of illegal drugs, and some smugglers. He described the organization of such shipping as a paradox; that is, such groups have sophisticated planning, technology, and communications, yet they themselves are not well organized vertically, and they appear to exhibit few characteristics of formal organizations such as permanence, a command structure, effective communication between ranks, and resource management.

Griffith characterized traffickers as adaptive individuals who pay close attention to countermeasures taken by governments to

interdict drug shipments. Citing U.S. State Department reports from 1991 through 1995, he documented a decline in the volume (in kilos) of cocaine shipments of nine Caribbean countries, but he noted that these declines may have reflected the shift in transport strategies of smugglers rather than successful deterrence. Griffith estimated that the interdiction capture rate is between 15 and 25 percent of all shipments for the Caribbean.

The work of Damian Zaitch (2002) is an ambitious attempt to understand cocaine smuggling from Colombia. Zaitch's specific interest was in the smuggling of cocaine from Colombia to the Netherlands, especially the involvement of Surinamese and Dutch natives. A total of forty-four individuals involved in cocaine trafficking were interviewed between 1996 and 1999. Fieldwork was conducted in Amsterdam, the Hague, and Rotterdam in the Netherlands and Bogotá and Cali in Colombia. Zaitch identified five different roles: couriers, importers, distributors, retailers, and helpers. His findings are particularly instructive as they represent a field sample of drug smugglers. His study is couched in the theoretical tradition of studies of organized crime.

This research was ostensibly a study of organized crime, and Zaitch concluded that cocaine smuggling lacks many of the features typically associated with organized crime. Indeed, he argued that most smuggling involves small groups that are isolated from each other, that smuggling lacks vertical organization, and that "families" (individuals with familial ties or long histories of working with each other) are the primary social organizations involved in drug smuggling. Zaitch argued that "cocaine enterprises in themselves are heterogeneous and the mutating product of fragile agreements between people and flexible articulation between legal and illegal enterprises" (7285). Indeed, he described drug smuggling from Colombia to the Netherlands (Europe's second most popular country of destination) as informal, small, and decentralized. The role of family is particularly important in this context. In the end, Zaitch described drug smuggling organizations as not well organized and not resembling the model of organized crime assumed to be the case by most Americans.

According to Zaitch, drug smuggling is a very opportunistic and flexible enterprise.

Astorga (2001) used historical data to describe drug trafficking in Mexico, also exploring similarities between smuggling and organized crime operations. His work characterized drug trafficking as a dynamic enterprise that is flexible in adapting to changes in political and economic forces as well as to interdiction efforts. He characterized efforts to describe drug trafficking as highly organized or as similar to organized crime as “myths” (71) and underscored the transitions in smuggling and smugglers’ methods in response to both interdiction efforts and sociopolitical forces.

## Impact of Drug Interdiction Efforts

A limited number of studies have examined the impact of interdiction and eradication efforts on drug smuggling. This is, of course, a difficult enterprise, as it requires measuring changes in drug production, drug prices, and transit routes and costs.

Reuter, Crawford, and Cave (1988) measured the impact of increased military participation in interdiction efforts and concluded that increasing the resources available to the military for this purpose is not likely to reduce significantly the availability of cocaine. They argued that only 10 percent of the cost of cocaine comes from transportation and, consequently, that increasing these costs is unlikely to drive smugglers out of the business or substantially increase their costs of doing business. The work of Rydell and Everingham (1994) confirmed that interdiction efforts had little or no effect on reducing the level of smuggling or the cost of cocaine. Even herbicide spraying was found to have little success in reducing the availability of cocaine (General Accounting Office, 1999). Two years of far-ranging herbicide spraying of cocaine in Colombia did not result in declines in coca production; indeed, production increased 50 percent at the conclusion of the two-year period.

Because these studies measured deterrence in terms of drug production and seizures, there is concern that the impact of

interdiction may be underestimated. In an effort to address this concern, Caulkins, Crawford, and Reuter (1993) modeled a smuggler response to interdiction efforts. They concluded that in order to achieve any deterrent effect, all routes available to smugglers must be heavily disrupted. A similar study undertaken by Evidence Based Research (1995) found that increases in interdiction resources produced very small reductions in the success of interdiction efforts as measured in the number of seizures.

A related approach examined the effect of interdiction efforts on drug prices. The premise underlying such an approach is that measuring the direct response of drug producers and transporters is difficult because such data are fraught with measurement error. An alternative approach is to measure changes in the cost of drugs. This approach argues that successful interdiction efforts increase the cost of drugs by making transporters take alternative steps, change routes, employ more lookouts, use more sophisticated technology, and tolerate more seized loads. As a consequence of increased interdiction efforts, the costs of doing business and consequently the costs of drugs will escalate. Johnston, Rhodes, Carrigan, and Moe (1999) determined that price sensitivity to interdiction efforts varied by transit zone and other factors, but that overall it was difficult to conclude that interdiction was directly related to price increases. However, Layne, Rhodes, and Chester (2000) found support for the link between interdiction efforts and the price of the drug on the street. Using data provided by the U.S. Customs Service, they estimated the increase in the cost of transporting cocaine attributable to interdiction efforts. Based on reports of investigations from Customs, the study examined the impact of enforcement personnel, aircraft, and technologies on the price of cocaine. The authors found a direct relationship between enforcement activities and the costs of transportation. Specifically, each dollar spent on Customs enforcement produced a corresponding increase of thirty-seven cents in the cost of transportation.

Riley (1993) summarized one response to this line of research by expressing skepticism that interdiction efforts achieve their goal. He argued that the combination of low production

costs, high mobility within the cocaine industry, and the ability to respond quickly to changes in enforcement policy combine to frustrate the best efforts at interdiction.

## Summary

These studies taken together provide some insights into drug smuggling organizations, methods used to transport drugs, and deterrence capabilities for drug interdiction efforts. This brief review has established several common themes, including smuggler organizational structure, smuggler intelligence, and deterrence.

First, a number of the studies (Reuter and Haaga, Rockwell, IDA, Griffith, and Zaitch) noted the lack of organizational structure that characterizes drug smuggling organizations. The observation that even high-level international drug smuggling lacks many of the characteristics of formal organizational structure is common to much research on the organization of criminal enterprises (e.g., Best and Luckenbill, 1994; Decker, Bynum, and Weisel, 1998). Ianni's (1974) description of organized crime indicated that the organizational ties between individuals in group enterprises are of short duration, involve transactions of an immediate or time-bound nature, lack permanence, and fail to create lasting commitments to a larger organization. This description is similar to what the research has found regarding drug organizations.

Key to understanding the nature of social organizations is following the flow of information (Burt, 1992; Arquilla and Ronfeldt, 1997). In networks of individuals who are loosely connected to each other, interact on a one-time basis, and know of each other through third parties, there is little permanence to the flow of information and less ability to subject information to quality control. We characterize such groups of individuals as informally based, temporally bounded, and loosely coupled. Williams argued that much of the inability of interdiction efforts to achieve better results stems from "the failure to understand fully the structure of these networks and their capacity to counter or circumvent law enforcement and military interdiction" (1998: 154).

The view that dominates current conceptualization of drug smuggling organizations describes vertically integrated structures that resemble the dominant corporate structures following World War II. However, as Burt (1992) and Williams (1998) observed, there are many cells within formal organizations—from drug smuggling, to money laundering, to terrorist groups—that have access to information and technology that allow them to operate independently, often in ways that the organizational heads do not know about, do not understand, and certainly cannot control. Williams argued that the key to understanding such groups is to view them as networks, as a series of loosely connected nodes (individuals, organizations, firms, and information-sharing tools) that are linked across and within organizations. These links are often of short duration and primarily task-specific. From this view, it is impossible to trace a straight vertical line from the bottom of an organization that houses the largest number of workers to decision makers at the top. Indeed, groups that are organized in this fashion may be incapable of developing a more formal structure, as they lack the necessary characteristics to do so.

Networks can be linked within and across organizations and between and within functions, and they can even include competitors. Many networks are self-contained units with no physical contact involving individuals in other parts of the network. The insularity of these nodes is a useful conceptual framework for understanding the drug smuggling process. Networks can cut across a variety of political, linguistic, legal, and geographic barriers in ways that formal organizations cannot. Because of their insular and self-contained nature, networks can be more difficult to penetrate and deter than are large organizations. In a large organization, it may be possible to “flip” one individual and move up—or down—the chain of command. In a series of interconnected networks, it may be impossible to move from one network to another because individuals may not know each other, may not have information about the identity of individuals in other networks, or may just represent the end of a network. Such networks are dynamic and capable of rapid change because they are based not on



an existing structure but on the transfer of information (Abt Associates, 1999). For example, when one source for the transportation of drugs is eliminated, it is an easy matter to contract with another source outside the network of the first transporter.

Williams (1998) noted the comparative advantage of such networks over more formal organizations. In a sense, such networks are not trapped by their structure and history and can adapt to environmental changes more quickly. In part, some of the virtue of this form of organization reflects the ideal characteristics provided by “loosely coupled” organizations (Perrow, 1999), in which networks often come together to accomplish a single purpose and may disband or reconnect in the future. Such networks can respond to losses or threats more quickly and efficiently than can organizations that are more tightly coupled and must “re-grow” connections or functions that may be impaired by arrest, conviction, or seizure of assets or by changes in the nature or level of interdiction. Evidence of this can be seen in the rapid transition from the dominance of the Medellin cartel, to the Cali cartels, and to the current offices that independently operate the drug trade in Colombia (DEA, 1997). In such networks, it is likely that individuals involved in a particular function do not know individuals in another function, making penetrating the networks and gathering intelligence about them all the more complicated. A report by *Observatoire Geopolitique* (1998) confirmed the trend toward further decentralization of larger networks of drug smuggling organizations into smaller units and the increasing presence of “short networks,” small, self-contained groups linked only by function and need. It is not simply that organizations are getting smaller and more insular but that they are linked only by function, information, and immediate need with little permanent structure and durability of functional integration. This shift in smuggler organizations to small networks certainly changes traditional enforcement strategies that rely on infiltrating organizations at the lower level in an effort to investigate and eventually arrest major players.

Second, there is evidence that the dynamic nature of drug smuggling networks and the ease with which smugglers learn of

U.S. interdiction activities enable smugglers to avoid detection by changing their routes, methods, or tactics. There is ample evidence that both sophisticated and unsophisticated surveillance strategies—ranging from expensive global positioning systems on the one extreme to simple lookouts on the other—are employed by smugglers. Clearly, the presence of such counterintelligence on the part of drug smugglers represents one of the largest challenges to interdiction efforts.

Finally, the literature supports the notion some drug smuggling is deterred, but there is less agreement on how to measure the amount. One of the dilemmas in deterrence research is that it poses the question, “What would have happened if some event was not present?” Measuring what would have happened in the absence of intervention is difficult. It is useful to think of the deterrence that results from an intervention as operating on a continuum. At one end of the continuum, it is useful to imagine the level of smuggling in the absence of any interdiction effort. Here, drug smugglers would be free to move their supplies as they pleased, limited only by climate, market, and competition. The other end of the continuum would be perfect deterrence, where the level and sophistication of interdiction efforts would successfully deter all efforts to transport drugs. Such a system would have to combine certainty of detection and arrest with certainty of conviction and appropriately severe penalties. Implicit in such a calculus is the notion that the costs would exceed the benefits of smuggling (e.g., cash, thrills, relationships) by enough to prevent anyone from taking part in smuggling.

Of course, we know that perfect deterrence does not exist but that interdiction efforts do produce some level of deterrence. The presence of strong demand for drugs in the United States creates powerful incentives for smuggling. The margin of profit adds to the attractiveness of drug smuggling as well, as perhaps does the lack of competing economic and employment alternatives. So deterrence operates to stop some fraction of the drugs that begin a journey to the United States. The questions that arise include how much deterrence is present, what aspects of the

deterrence effort are most effective, and what steps smugglers take to reduce the risks of losing their payload, being captured, and being punished. Those questions provide part of the framework for the current study. The body of literature suggests that these questions would best be answered by the individuals who are the targets of interventions and are not deterred.

As these studies also point out, understanding the context in which an intervention is expected to be effective is important. Therefore, our study is also devoted to understanding the nature of smuggling networks, the methods used to transport drugs into the United States, and the roles of various players in the process. This information helps interpret individual perceptions of risk, the way smuggling operations are organized to mitigate risk, and the way an individual's role in the operation influences the degree of responsibility or decision-making authority that person has over the operation.

It seems remarkable that there have been so few studies of drug smuggling and drug smuggling interdiction efforts. Drug interdiction is regarded as a key to U.S. foreign policy and national security. It is also a huge expense for federal, state, and local governments.

This book builds on previous work to examine the issue of drug smuggling deterrence from the perspective of convicted drug smugglers housed in federal prisons. This is important for several reasons. The problem of drug use in the United States continues to be important. The demand for illegal drugs remains at extremely high levels, as high as the demand in any other nation in the world. As noted above, interdiction is a costly enterprise, and information that could more effectively deploy personnel or assets would be useful in more efficiently using resources. Lastly, the information from this study should also help inform the overall drug strategy, as it should shed light on one of the least understood, yet most important aspects of the illegal drug business—smuggling.