The Price of Illicit Drugs: 1981 through the Second Quarter of 2000

Office of
National Drug Control Policy

October 2001

The Price of Illicit Drugs: 1981 through the Second Quarter of 2000

Prepared for:
Office of National Drug Control Policy
Office of Programs, Budget, Research and Evaluations

under HHS contract no. 282-98-0006
task order number 23

Prepared by:
Abt Associates, Inc.
1110 Vermont Avenue, NW
Suite 610
Washington, DC 20005-3522

October 2001

NCJ 190639
PO 2965

Table of Contents

List of Figures

List of Tables

Appendix A: Statistical Methods

Appendix A: Statistical Methods: List of Figures

Appendix A: Statistical Methods: List of Tables

Appendix B: Data Adjustments: List of Tables

Appendix C: Regional Estimates: List of Tables

Acknowledgements

The authors and staff of Abt Associates, Inc., conducted and reported this joint research for ONDCP under contract 282-98-0006, Task order Number 23. The Abt Associates authors included William Rhodes, Project Director, Patrick Johnston, and Ryan Kling.

ONDCP Office of Programs, Budget, Research and Evaluation (OPBRE) sponsored this study to provide a better understanding of national-level drug prices and as a reference for additional drug research. Dr. Terry Zobeck, Chief of the OPBRE Research Branch, and Dr. Michael Cala, OPBRE Project director, provided guidance and direction for the study's progress. Feedback on the study and the report would be appreciated to improve further efforts in this area. Please send comments or questions to ONDCP@NCJRS.org, and reference this report.

Thanks to Ms.Bonnie Robinson, OPBRE program support specialist, for providing extensive editing and publishing corrections to facilitate the final printing of this report and posting of the electronic version.

Disclaimer

Information presented in this publication reflects the views of the authors and does not necessarily reflect the official policy or position of the Federal Government.

Public Domain Notice

Introduction

As policy makers assess the effectiveness of the Nation's anti-drug efforts, they should be concerned with trends in the price and purity of illicit drugs on the Nation's streets. Drug price and purity cannot tell the entire story, or even most of the story, about the success of anti-drug programs. Still, in an area of high national concern, where there are few clear indicators of program effectiveness, trends in drug prices are an essential part in understanding the Nation's drug trends.

Changes in drug price and purity may reflect the effect of supply and demand reduction programs. That reflection is imperfect, of course, because many additional factors affect drug markets. Nevertheless, as source country and interdiction programs reduce the flow of drugs to the United States, they cause supply shortages in domestic markets, with the consequence that sellers dilute their products' quality and charge higher prices for the limited supply. Even if source country and interdiction programs fail to reduce the level of drug imports, those programs increase drug prices by imposing higher business costs on producers and shippers. Like any businessman, a drug dealer will expect customers to cover at least some of those higher costs.

Some researchers claim that source country and interdiction programs have small effects on domestic prices.[1] Their reasoning is that drug producers can quickly expand production efforts, so shortages are ephemeral. Also, they argue, domestic dealers account for most distribution costs, so increasing production and foreign shipping costs could not substantially increase domestic prices. Other researchers have challenged this reasoning and claim a strong empirical relationship between domestic prices and both source zone and interdiction efforts.[2] In the judgement of the National Research Council, this issue remains unsettled.[3]

A kilogram of pure cocaine costs about $25,000 at the wholesale level. For purposes of this report, wholesale level is defined as a large street purchase. The size levels depend on the drug and are defined later in this report. This is a high price for a product that is basically agricultural, requires inexpensive chemical processing, and has minimal shipping costs absent interdiction. Consequently, source zone and

[1] Rydell, C. and Everingham, S. *Controlling Cocaine: Supply versus Demand Programs*, Drug Policy Research Center, Santa Monica, California: Rand, 1994.

[2] Crane, B., Rivolo, A. and Comfort, G. "An Empirical Examination of Counterdrug Interdiction Programs Effectiveness," paper prepared for the Institute of Defense Analysis, Washington, D.C., 1997.

[3] Manski, C., Pepper, J. and Thomas, Y. *Assessment of Two Cost Effectiveness Studies on Cocaine Control Policy*, National Academy Press, Washington, D.C., 1999.

transit zone programs almost certainly explain high wholesale prices. Although the wholesale price is only a fraction of the retail price (closer to $225,000 per pure kilogram), $25,000 is not insignificant. Moreover, this report shows that domestic dealers markup the wholesale price as they resell to their customers, accounting for some of the $200,000 difference between retail and wholesale prices. The size of that markup – and hence the relative effectiveness of interdiction and domestic law enforcement – is the principal issue of contention between those who say that interdiction is ineffective (because the markup is small) and those who say that interdiction is effective (because the markup is large). Estimates of the size of the price markup seem essential for assessing public policy.

Continuing with the cocaine illustration, the drug might pass through several distribution levels, where the principal value added is to repackage the cocaine into smaller lots. (Cocaine typically gets transformed into crack at the lowest distribution levels, but that process is also inexpensive.) Absent law enforcement, then, the cost of moving a kilogram of cocaine from the wholesale level to the retail level would seem to be much less than $200,000 – probably closer to the cost of marketing aspirin. Thus, much of the $200,000 that does not result from a markup of wholesale price is presumably a consequence of domestic law enforcement.[4] This is a second way that illicit drug prices are a reflection of anti-drug programs.

As noted, supply-based programs can only carry the Nation so far toward achieving its targets for reducing illicit drug use. The larger part has to be played by programs that inhibit youth from experimenting with drugs, encourage moderate users to stop recreational use, and provide treatment and perhaps coercion for those habituated to illicit substances. Nevertheless, supply-side programs can cause higher drug prices, and those higher drug prices can be an important complement to demand-based programs. As prices increase, some drug users would choose to reduce their consumption. They may even choose to quit using drugs, at least so long as prices remain high. Several researchers report evidence that drug users – even hardcore users – respond to higher prices by quitting or using a lower level of drugs.[5] Additional evidence is

[4] Domestic law enforcement operates on drug prices in three ways. First, domestic law enforcement seizes some of the substance, thereby reducing its supply, or at least increasing the cost of selling the product. Second, law enforcement imposes substantial risks that dealers will be captured and incarcerated. Third, because drug dealing is outlawed, contracts between buyers and sellers are unenforceable at law, and violence often substitutes as a means of enforcing deals. Dealers would seem to charge higher prices to compensate for these substantial risks.

[5] Caulkins, J. "Estimating Elasticities of Demand for Cocaine and Heroin with DUF Data," working paper, Carnegie Mellon University, August 1995. Chaloupka, F, Grossman, M. and Tauras, J. "The Demand for Cocaine and Marijuana by Youth," NBER working paper, No. 6411, 1998. Grossman, M., Chaloupka, F. and Brown, C. "The Demand for Cocaine by Young Adults: A Rational Addiction Approach," NBER working paper, No. 5713, 1996. Saffer, H. and Chaloupka, F. "The Demand for Illicit Drugs," NBER working paper, No. 5238, 1995.90

emerging that higher prices can result in lower experimentation by school-aged children, with long-term consequences for future drug use.[6] Apparently a successful supply-based program can complement a comprehensive demand-based program.

The findings described above probably seem sensible to most people. If public officials impede the production and delivery of drugs, and increase the risk of transacting illicit substances, then prices should increase as dealers attempt to recoup their costs and compensate for risk. Users should respond to those higher prices the same way they do to the price of tobacco and alcohol – they will use less. But the pressing question is the magnitude of the effect that public interventions have on prices and that those prices have on consumption. Estimating that effect is difficult for a number of reasons, including the problem of getting reliable estimates of drug prices.

By comparison, estimating the retail price of hamburger is simple. Go to several grocery stores and observe prices for a standard amount (say one pound) and quality (say 95 percent lean). There will be some variation from store to store, of course, but competition will keep the prices within a narrow range.

Illicit substances are different. Nominal prices seem to stay about the same over time and from place to place. For example, $10 and $20 bags of heroin have been typical retail transaction for years. The quality of those purchases, however, varies greatly from place to place, from time to time, and even from customer to customer. Decreases in the purity of their product, and hence increases in its price per pure gram, are the way that drug dealers charge higher prices. As a practical matter, then, useful price series must be expressed in such metrics as "price per pure gram" and "purity of a standard transaction amount" rather than nominal transaction amounts.[7]

Unfortunately, for those concerned with public policy, that quality variation is not directly observable. A bag of 5 percent pure heroin looks no different than a bag of 50 percent pure heroin. Some buyers may be sufficiently experienced to judge small changes in quality, but as a practical matter the quality of heroin and other drugs must be judged by laboratory analysis.

---

[6] Rhodes, W., Johnston, P., Han, S., McMullen, Q. and Hozik, L. "Illicit Drugs: Price Elasticity of Demand and Supply," report submitted to the National Institute of Justice by Abt Associates, February 17, 2000.

[7] The value of the dollar has generally decreased over time due to inflation. It seems reasonable to adjust estimated drug prices to account for inflation, but the size of that adjustment is arguable. We have used the consumer price index, but many hardcore drug users have an atypical market basket that is dominated by drug consumption. Some alternative price index may be more appropriate for them.

The System To Retrieve Information from Drug Evidence (STRIDE) of the Drug Enforcement Administration (DEA) provides the most comprehensive data source for laboratory analyses of drug purchases. Researchers have used STRIDE and similar data to develop price series for illicit drugs.[8] Given the large variation in prices over time, across places, between distribution levels and from sale to sale, it is no wonder that those researchers have often used sophisticated statistical procedures to identify trends in drug prices.

This report presents an analysis of drug prices commissioned by the Office of National Drug Control Policy. Based on STRIDE data from 1981 through the middle of 2000, it presents trends in the price per pure gram and the purity of cocaine, heroin and methamphetamines. It also presents trends in the price of marijuana that are unadjusted for THC content, because STRIDE does not report marijuana quality. In each case, the trends are reported for several distribution levels, which is a useful way to estimate the markup of drug prices from the wholesale to the retail level.

General Comments about the Presentation

This report presents findings with a series of graphs and tables. Those graphs and tables are based on statistical modeling that will not interest most readers. A technical presentation of that modeling appears in an appendix. This report provides both a price and purity figure, with corresponding tables, for cocaine, heroin and methamphetamine. But marijuana just has the price figures, with corresponding tables. As mentioned, marijuana's THC content – that is, its counterpart to purity – is unknown in the data. Thus, marijuana price estimates are for bulk grams, not pure grams as with the other three drugs.

For each drug, the figures show estimated prices at several hypothetical distribution levels. These hypothetical levels were set by the analysis team to enhance the reader's ability to compare prices as drugs move from wholesale to retail levels. These levels are hypothetical because, in fact, drug markets are fluid and lack fixed distribution levels. The hypothetical distribution levels vary across drugs because each drug is transacted in different amounts; for example, a single dose of cocaine is not necessarily the same as a single dose of heroin. For all four drugs, prices for the highest ("wholesale") distribution level certainly

[8] Rhodes, W., Hyatt, R. and Scheiman, P. "The Price of Cocaine, Heroin and Marijuana, 1981-1993," *Journal of Drug Issues*, 24 no. 3 (1994): 383-401. Caulkins, J. and Padman, R. "Quantity Discounts and Quality Premia for Illicit Drugs," *Journal of American Statistical Association,* 88 no. 423 (1994): 748-57. Rhodes, W., Truitt, L., Kling, R and Nelson, A. "The Domestic Monitor Program and the Heroin Signature Program: Recommendations for Changes," Cambridge, MA, Abt Associates Inc., June 30, 1998.

overstate drug prices at the U.S. border. Because imports are usually seized, not purchased, price information is seldom available for them. That is, prices at the border are almost certainly lower than the lowest prices shown in these figures.

As mentioned, illicit drugs often are transacted at fixed prices that remain constant over time. For example, crack cocaine is often sold as a $10 rock and heroin is often sold in a $20 bag, regardless of purity or volume. The size of the rock and the purity of the bag change over time, however, which means that the *standardized* price, or the price per pure gram, changes significantly over time. The figures reported here are intended to capture trends in standardized prices and are expressed in terms of price per pure gram.

In addition to the above, the report introduces an alternative way to estimate retail prices for cocaine and heroin (Statistical Appendix, section 4). At retail, cocaine and heroin are typically transacted at fixed prices of $10, $20, $40 and so on up to about $100. Using the STRIDE data, we estimated the amount of pure cocaine/heroin for each purchase conditional on the amount paid for that purchase. Then we used results from a special addendum to the Drug Use Forecasting survey to weight each dollar category by the distribution of prices that users actually pay on the street. This weighted average is a measure of pure cocaine/heroin actually purchased per dollar spent. We use the inverse of that estimate – the price per pure gram – as the estimate of retail prices.

This alternative approach to estimating retail prices provides a transitional methodology that will take advantage of data emerging from NIJ's Arrestee Drug Abuse Monitoring (ADAM) program and SAMHSA's National Household Survey on Drug Abuse (NHSDA). One problem with the current application is its reliance on purchase data from just six cities for only one year (Q3 1995 – Q2 1996). Another problem is that the addendum data are limited to cocaine and heroin purchases. ADAM data will come from at least thirty-five cities, and they will include all drugs of interest. New versions of the National Household Survey on Drug Abuse will include questions about the purchase of marijuana. Thus, this alternative approach to estimating retail price-series will improve with the expansion of ADAM and the NHSDA.

Beyond the alternative model for retail cocaine and heroin prices, there are several differences between the methods used in the current 1981-2000 report and those used in the previous 1981-1998 report. Firstly, the raw quarterly database (STRIDE 1 in Figure A1) for 2000 contained slightly different numbers of transactions than the raw quarterly database for 1998. For example, the number of transactions in the first two quarters of 1998 was 162 and 202 in the 2000 database but only 153 and 170 in the 1998 database.

Secondly, even if the raw data over the period Q1 1981 – Q2 1998 had been identical in both databases, the final data *after removing outliers*, would almost certainly be different. This is because the definition of an outlier depends on the estimated model, and a model fit to the period Q1 1981 – Q2 1998 would give slightly different parameter estimates than the same model fit to the period Q1 1981 – Q2 2000.

Thirdly, the current weighting system based on the Drug Abuse Warning Network (DAWN) was improved in the current report because Metropolitan Statistical Areas (MSAs) were more tightly defined. In this report, any town or city in an MSA (e.g. Cambridge in the Boston MSA) is now literally in that MSA, whereas in the previous report this was only approximately so.

Fourthly, the baseline for the deflator (based on the Consumer Price Index) is the first half of 2000 in the current report, and was the first half of 1998 in the previous report.

Cocaine Prices

Figure 1 reports estimated cocaine prices for purchases at each of four distribution levels:

- 0-1 pure grams
- 1-10 pure grams
- 10-100 pure grams
- more than 100 pure grams

The lowest distribution level in this figure is almost certainly a retail-level purchase, the second lowest level is probably a mixture of retail-level and middle dealer-level purchases, and the rest of the purchases are almost certainly transactions between dealers. Our new estimates for retail-level prices will be reported in a separate figure.[9]

[9] Figures 1 through 3 correspond to their counterparts in the previous price-series report, except we have combined the two highest distribution levels, which are difficult to distinguish empirically. Although we might have introduced the new retail-price series into these extent figures, continuity between this and the last price-series report seems desirable.

Prices at each distribution level fell markedly from 1981 to about 1988, after which price decreases have been gradual and irregular.[10] For example, at the lowest distribution level reported here, the typical purchase of 350 milligrams of pure cocaine (that is, about 0.5 bulk grams at 67 percent purity) cost $400 to $460 per pure gram in 1981 and 1982. It cost $170 to $230 per pure gram in 1999 and 2000. Similarly, at the next higher distribution level, the typical purchase of 4.4 grams of pure cocaine (that is, almost 7 bulk grams at 63 percent purity) costs roughly $260 to $300 in 1981 and 1982. A purchase cost around $90 to $100 per pure gram in 1997 and 1998.

Figure 1 shows that some price increases at the wholesale level seem to cascade throughout all the lower distribution levels, perhaps suggesting that events either outside the country or at the wholesale level affect retail prices. The largest and longest lasting effect is associated with the end of 1989 and the beginning of 1990, with another sharp effect happening in the second quarter of 1992 and again in the first quarter of 1997. Prices may have spiked in the middle of 1995, but if they did, that spike only appears after a lag at the lowest distribution level.

Associating these price spikes with specific drug interdiction events is problematic. It seems likely that some interdiction events had measurable effects on cocaine prices, while others did not, and distinguishing which events had an effect and which did not is complicated by the absence of knowledge about the delay between when an event occurred and when prices changed. Notwithstanding these difficulties, Abt Associates has made substantial progress modeling the interdiction-price relationship for cocaine.[11]

The relationship between wholesale and retail prices is of considerable interest. The correlation between wholesale and retail prices is 0.46, and even though this estimate is technically inappropriate, it does correctly portray the fact that both price series tend to move together. In fact transfer function methods (which are technically more appropriate because they model various time series aspects of the data) indicate that increases in wholesale prices are associated with lagged as well as contemporaneous increases in retail prices (see section 7 of Appendix A). Specifically, we estimate that an increase in retail prices of $1 in a given month is associated with an increase in wholesale prices of $0.034 ($p = 0.001$) the

[10] Most of the decline since 1988 can be attributed to an increase in the consumer price index. Whether the CPI should be applied to illicit drug transactions, or whether an alternative price index would be better, is debatable. These price estimates use the CPI in lieu of a clear alternative.

[11] Layne M., Bruen, A., Johnston P., Rhodes W., Decker S., Townsend M., Chester C., Schaffer G., Lavin J. "Measuring the Deterrent Effect of Enforcement Operations on Drug Smuggling, 1991-1999," Abt Associates 2001.

same month, and an increase of $0.039 (p = 0.0003) the following month. Thus, to some extent at least, wholesale prices appear to have followed, rather than lead, retail prices.

This association is unlikely to be causal, and is more likely related to the fact that purchase agreements at the wholesale level are made in advance while those at the retail level do not involve prior contractual arrangements. Further, this association is merely a summary of the wholesale-retail relationship over a particular historical period, and need not hold over other time periods when price changes are less the result of, for example, changes in supply, and more the result of increased law enforcement.

Retail Cocaine Prices

As noted earlier, we developed a new methodology for estimating retail prices, and we applied that new methodology to graph a retail-level price trend. These are presented in figure 2, which shows a trend that is not much different from that shown by figure 1. Furthermore, from 1988 onward, the two trend lines seem to show similar quarterly price perturbations. Since 1995, the retail price for cocaine has ranged between $100 and $150 per pure gram. There are sharp perturbations, which appear to be correlated with interdiction events.

Figure 3 shows trends in cocaine purity when cocaine is transacted at different distribution levels. Because the lines blend together during recent years, patterns get muddled, but some conclusions are clear. At the highest distribution level, cocaine is routinely bought and sold at roughly 85 percent purity. The purity decreases at lower distribution levels, but even at those levels, cocaine is usually 70 to 80 percent pure. (This is only true after 1988, about the time when crack cocaine began to dominate the market.) Note that cocaine purity is sometimes higher at retail than at wholesale. This may result from crack cocaine being "cooked" from powder cocaine, resulting in a product of increased purity at the retail level.

While the purity of cocaine sold at the highest distribution levels remains relatively constant, cocaine shortages seem to have caused lower-level dealers to cut their product's purity. Note that those transient decreases in purity correspond to temporary increases in prices, as shown in figures 1 and 2.

Heroin Prices

Figures 4 through 6 are the heroin counterparts to figures 1 through 3. They report prices for heroin distributed at four levels:

- 0 to 0.1 pure grams
- 0.1 to 1 pure grams
- 1 to 10 pure grams
- more than 10 pure grams

Figure 4 shows that heroin prices have fallen at all distribution levels for nearly two decades. The percentage price decrease is the smallest for retail level heroin sales and is greatest for high-level heroin sales.

As reported here, prices for the lowest-level sales are estimated for a typical purchase of 40 pure milligrams (that is, about 0.3 grams of bulk heroin at 13 percent purity). Such a quantity and purity seems most suitable for injection drug use, implying that injection drug users have experienced a relatively modest decrease in heroin prices. For them, heroin cost roughly $3.00 to $3.60 per pure milligram in the early 1980s and $1.80 to $2.10 per pure milligram in the late 1990s. Put another way, these numbers suggest that a $20 bag of heroin contained about 6 pure milligrams in the early 1980s and about 10 pure milligrams in the later 1990s.

Prices at the next lowest level are estimated for a typical purchase of roughly one-third of a pure gram at almost 40 percent purity. Such a purchase would be acceptable for insuffulation, although injection drug users could also buy at this level. When purchased at this quantity and quality, heroin cost $1.90 to $2.40 per pure gram in 1981 and 1982; it cost forty to fifty cents per pure gram in the early 2000s.

Retail Heroin Prices

After applying our new methodology for estimating retail heroin prices, we graphed results in figure 5. The curve shows a startling and almost constant decrease in the price of heroin. During the early 1980s, heroin users were spending $4 to $5 per milligram; by the 2000s, they were spending closer to $0.40 per milligram.

Figure 5 shows a steep and sustained decrease in the price of heroin, in contrast to figure 4, which showed a more moderate decline and virtual leveling in prices at the lower levels. Why do these apparently different pictures occur? A change in methodology is part of the explanation, but the major reason is that the new retail price combined purchases of low-level purity (suitable for injection) with purchases of higher-level purity (suitable for insuffulation). Over time, the latter have become a larger proportion of users'

purchases, at least as reflected by STRIDE data. In the early 1980s, the STRIDE data was dominated by purchases at the injection drug use level (roughly 150 to 225 buys per quarter) and there were fewer purchases at the insuffulation level (roughly 75 to 160 purchases per quarter). By the early 1990s, the mix was nearly even (roughly 60 to 150 per quarter at the injection level and 70 to 150 per quarter at the insuffulation level). But by the end of the millennium, purchases at the level suitable for insuffulation dominated (40 to 50 per quarter for high-purity heroin and close to 25 purchases per quarter for low purity heroin). Thus, the new retail price series resembles the lowest level for the old series during the early 1980s and the next lowest level for the old series during the late 1990s. This new method gives a much clearer picture of what heroin users paid for drugs during the last twenty years.

As with cocaine, there is indication that the long term relationship between wholesale and retail prices is roughly one of a constant ratio. Unlike cocaine, the heroin price curves show no apparent high-level disruptions that can be seen throughout lower level sales. Before concluding that the heroin distribution system is inherently different from the cocaine distribution system, however, note that the heroin price series seems to suffer from greater quarter-to-quarter random variation than its cocaine counterpart. This partly results from a smaller number of heroin purchases than cocaine purchases in the STRIDE data. This random variation may mask a more systematic relationship between wholesale prices and retail prices.

As shown by figure 6, the purity of heroin has remained relatively constant when transacted in lots of 10 pure grams and more. For amounts less than 10 pure grams, dealers cut the drug before resale; however, over the last two decades heroin has been sold at increasing purity among lower level dealers, and between them and final customers. Most of the increase in the purity of heroin sold at retail seems to have happened before 1995, as the purity of heroin has remained fairly constant since then.[12] This higher level of purity is coincident with the emerging dominance of South American heroin in the United States market.[13]

[12] Heroin may be increasingly transacted at higher purity at retail despite these figures. This could happen if customers increasingly buy heroin at the 0.1 to 1 pure gram level instead of at the 0 to 0.1 pure gram level.

[13] Rhodes, W., Truitt, L., Kling, R and Nelson, A. "The Domestic Monitor Program and the Heroin Signature Program: Recommendations for Changes," Cambridge, MA, Abt Associates Inc., June 30, 1998.

Methamphetamine Prices

Figures 7 and 8 are the methamphetamine counterparts to figures 1 and 3 (cocaine) and figures 4 and 6 (heroin). They report prices for methamphetamine distributed at three levels:

- 0 to 10 pure grams
- 10 to 100 pure grams
- 100 pure grams and more

The STRIDE data provide fewer examples of methamphetamine purchases than they do of cocaine and heroin purchases. As a result, methamphetamine price series exhibit a greater sampling variation, and distinguishing trends is more difficult. However, some trends are apparent.

Figure 7 shows that methamphetamine prices have declined over the past two decades, and by roughly the same percentage for all distribution levels. In other words, price markups appear to be multiplicative for this drug.

Prices for the lowest-level sales (estimated at the typical purchase of 3 pure grams – about 7 bulk gram at 41 percent purity) were roughly $300 in the early 1980s and $160 in the late 1990s. At the next highest level of distribution (estimated at the typical purchase of 31 pure grams – about 56 bulk grams at 55 percent purity) prices were roughly $110 in the early 1980s and $70 in the late 1990s.

Figure 8 shows the average purity of methamphetamine transacted at three distribution levels. The relatively small number of data points results in considerable sampling variation from quarter to quarter, but patterns still emerge. As expected, the purity of methamphetamine was higher for higher levels of distribution. Notable is the parallel trend at different distribution levels. Generally, at all distribution levels, purity increased after 1985, fell after 1988, increased again after 1990, and then decreased again after 1995. Something of significance was surely happening in the methamphetamine market to explain these reversals in trends, but no explanations are at hand.

Marijuana Prices

As in the case of methamphetamine, there are relatively few marijuana purchases in STRIDE, so distinguishing trends is relatively difficult. Another problem is that the DEA does not test marijuana for THC content, so there is no marijuana counterpart to the pure grams reported for cocaine and heroin. The

difficulty this causes is that STRIDE data provide no basis for adjusting price changes for marijuana's quality.

Figure 9 is the counterpart to figures 1 (cocaine), 4 (heroin) and 7 (methamphetamine). This figure reports price estimates for marijuana distributed at four levels:

- 0 to 10 bulk grams
- 10 to 100 bulk grams
- 100 to 1000 bulk grams
- 1000 bulk grams and more

At the lowest distribution level, price is estimated for the typical purchase of 3.1 grams of marijuana, which might represent about six typical joints. Dividing the typical prices observed during the past few years by six suggests that a joint cost about $2.50 during the later 1990s. The same joint (ignoring quality differences) probably cost about $1.25 to $1.50 in the early 1980s.

Price at the second lowest price level is evaluated for a purchase of 35 grams, which is slightly more than an ounce. Many marijuana users buy the drug in ounce bundles, so prices estimated for this level probably represent retail level purchases, albeit relatively large ones, and certainly many sales among dealers. A purchase at the ounce level probably cost about $150 in the late 1990s. It probably cost more like $80 in the early 1980s.

Conclusions

Trends in illicit drug prices provide important information about the success of the Nation's supply-based anti-drug programs. Illicit drug prices are many magnitudes higher than would otherwise be the case were there no effective source zone, interdiction, and domestic law enforcement programs. That is good news. So, too, are the occasional spikes in drug prices that appear to result from successful source zone and interdiction programs. More disconcerting is the Nation's apparent inability to affect long-term increases in illicit drug prices, which have fallen or remained fairly constant since the early 1990s.

As the Nation moves to reduce illicit drug use, even a constant or declining trend in drug prices could be consistent with a successful supply-based program. If demand-based programs can reduce the market for illicit substances, especially by hardcore users who appear to provide most of the demand, then future drug prices could fall as suppliers seek to sell to fewer buyers. But the prevalence of hardcore drug use has not

declined much since the early 1990s, so decreased demand is an unlikely explanation of past trends. Supply-based programs have been remarkably successful at keeping illicit drug prices at very high levels, but not so successful at pushing them higher during the 1990s. Only the future will reveal whether or not new supply-based programs can build on the experience and success of old programs.

References

Box G.E., Jenkins G.M., and Reinsel G.C. (1994). Time Series Analysis, Third Edition. Prentice Hall, Englewood Cliffs, New Jersey.

Fahrmeir L. and Tutz G. (1994). Multivariate Statistical Modeling Based on Generalized Linear Models, Springer, New York.

Lawless J.F. (1982). Statistical Models and Methods for Lifetime Data. Wiley, New York.

McCullagh P. and Nelder J.A. (1989). Generalized Linear Models, Second Edition. Chapman and Hall, London.

LIST OF FIGURES

Figure 1: Estimated Cocaine Price Per Pure Gram at Four Purchase Levels

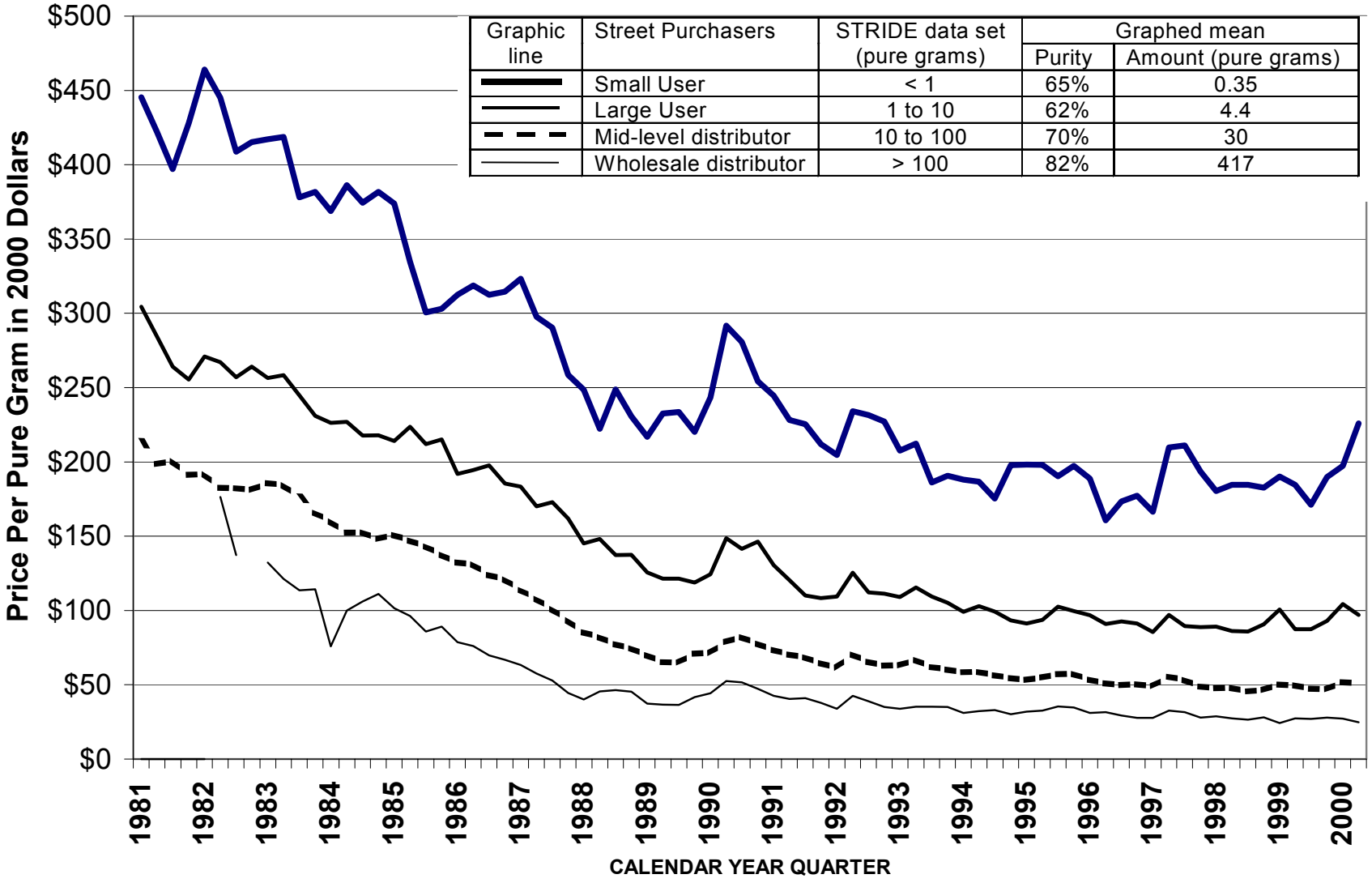


Figure 2: Comparison of Cocaine Retail Price Per Pure Gram Calculated as a Function of Amount or Based on Amount Purchased as a Function of Expenditure (Alternate Method)

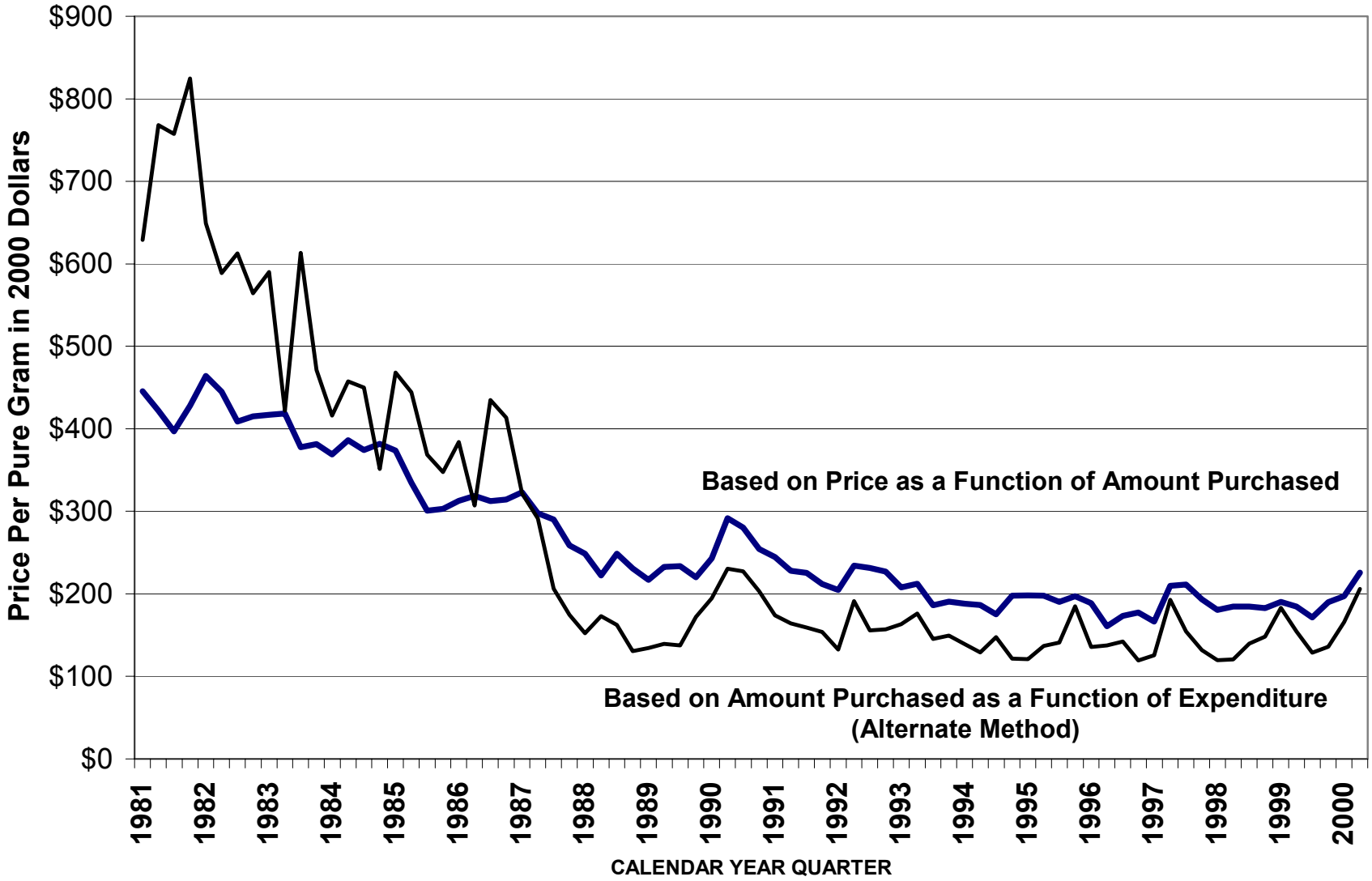


Figure 3: Estimated Cocaine Purity at Four Purchase Levels

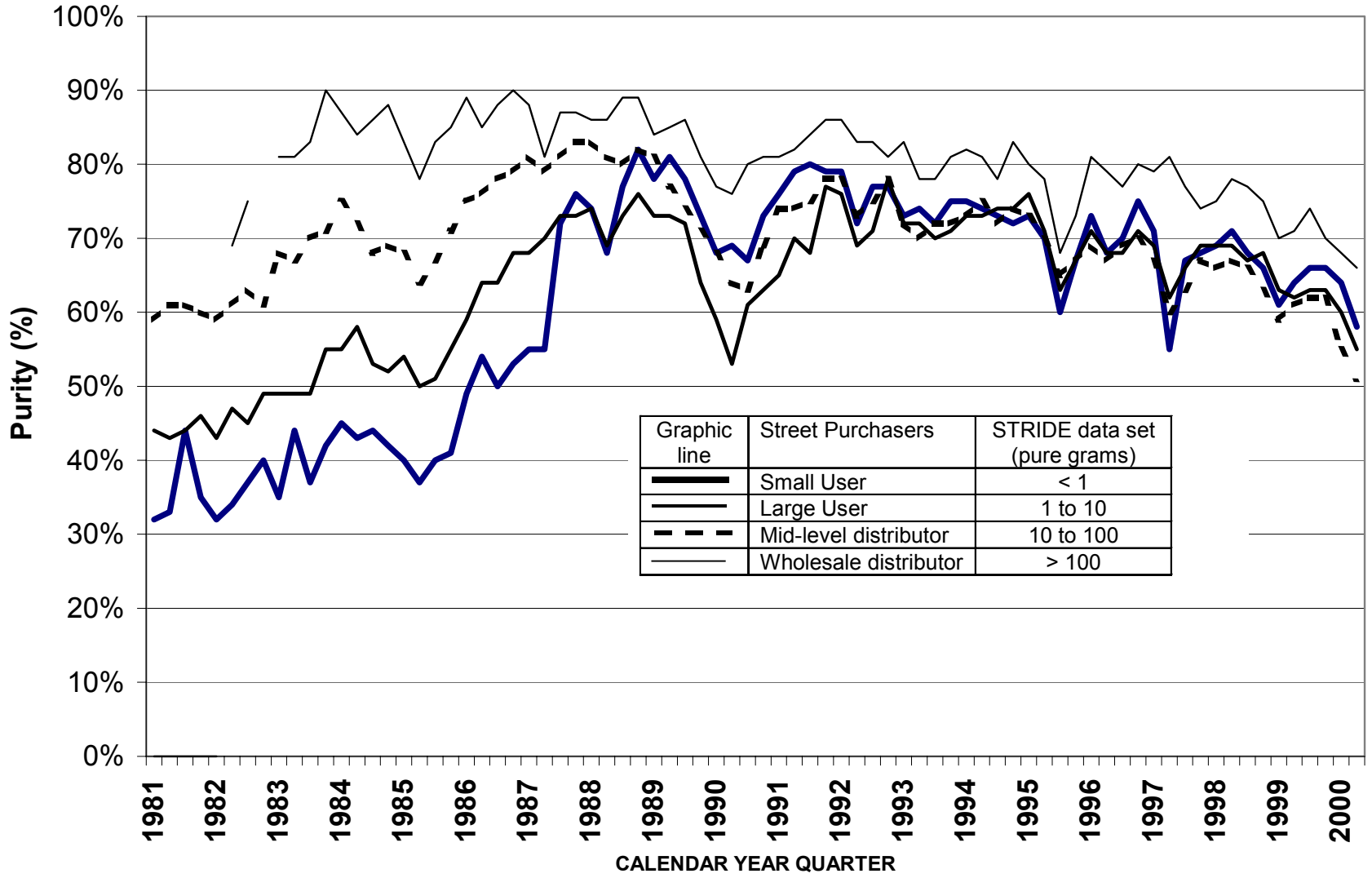


Figure 4: Estimated Heroin Price Per Pure Gram at Four Purchase Levels

Graphic line	Street Purchasers	STRIDE data set (pure grams)	Mean of STRIDE data set	
			Purity	Amount (pure grams)
	Small User	< 0.1	13%	0.04
	Large User	0.1 to 1	39%	0.34
	Mid-level distributor	1 to 10	41%	4
	Wholesale distributor	> 10	60%	49

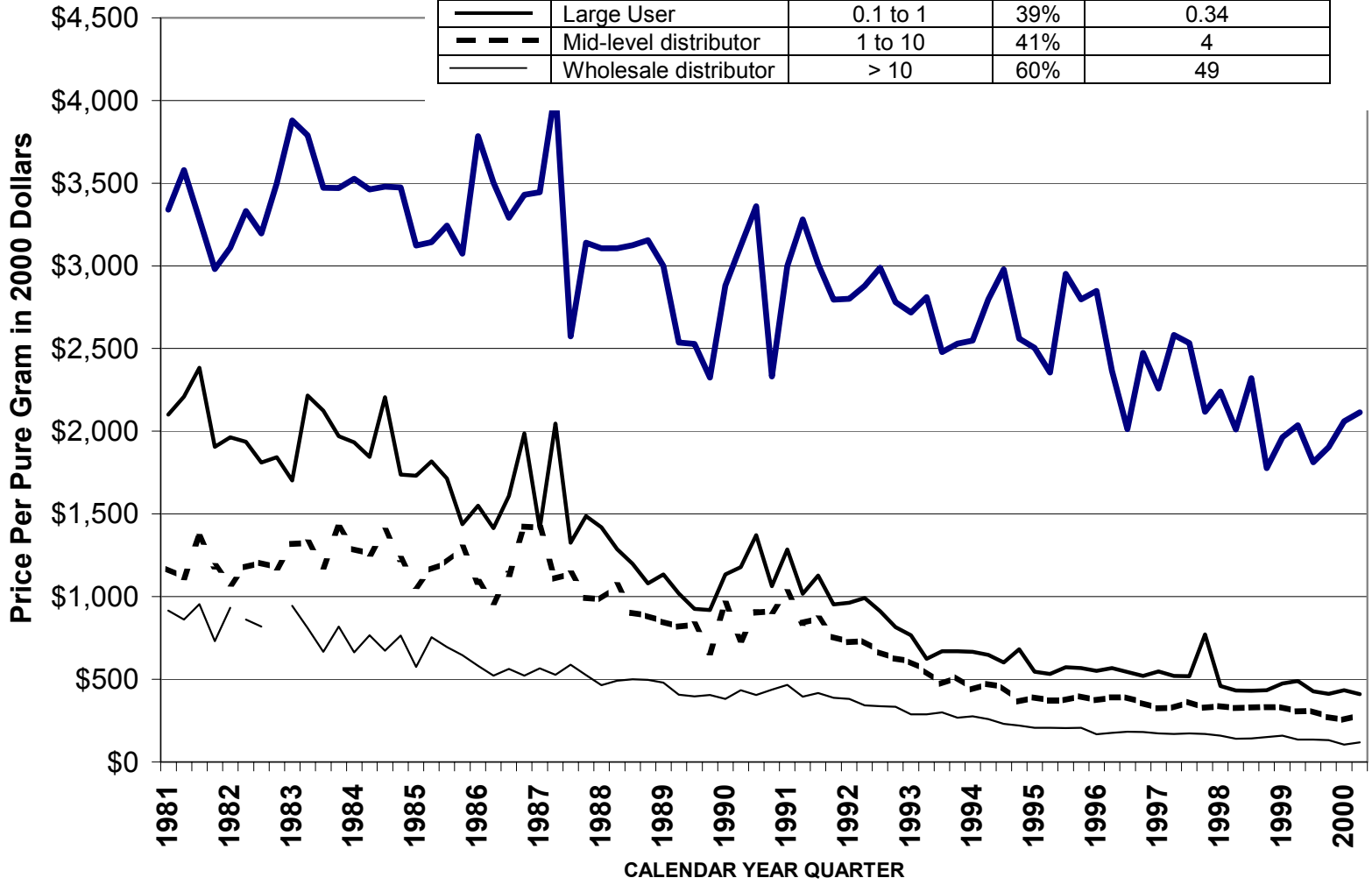


Figure 5: Comparison of Heroin Retail Price Per Pure Gram Calculated as a Function of Amount or Based on Amount Purchased as a Function of Expenditure (Alternate Method)

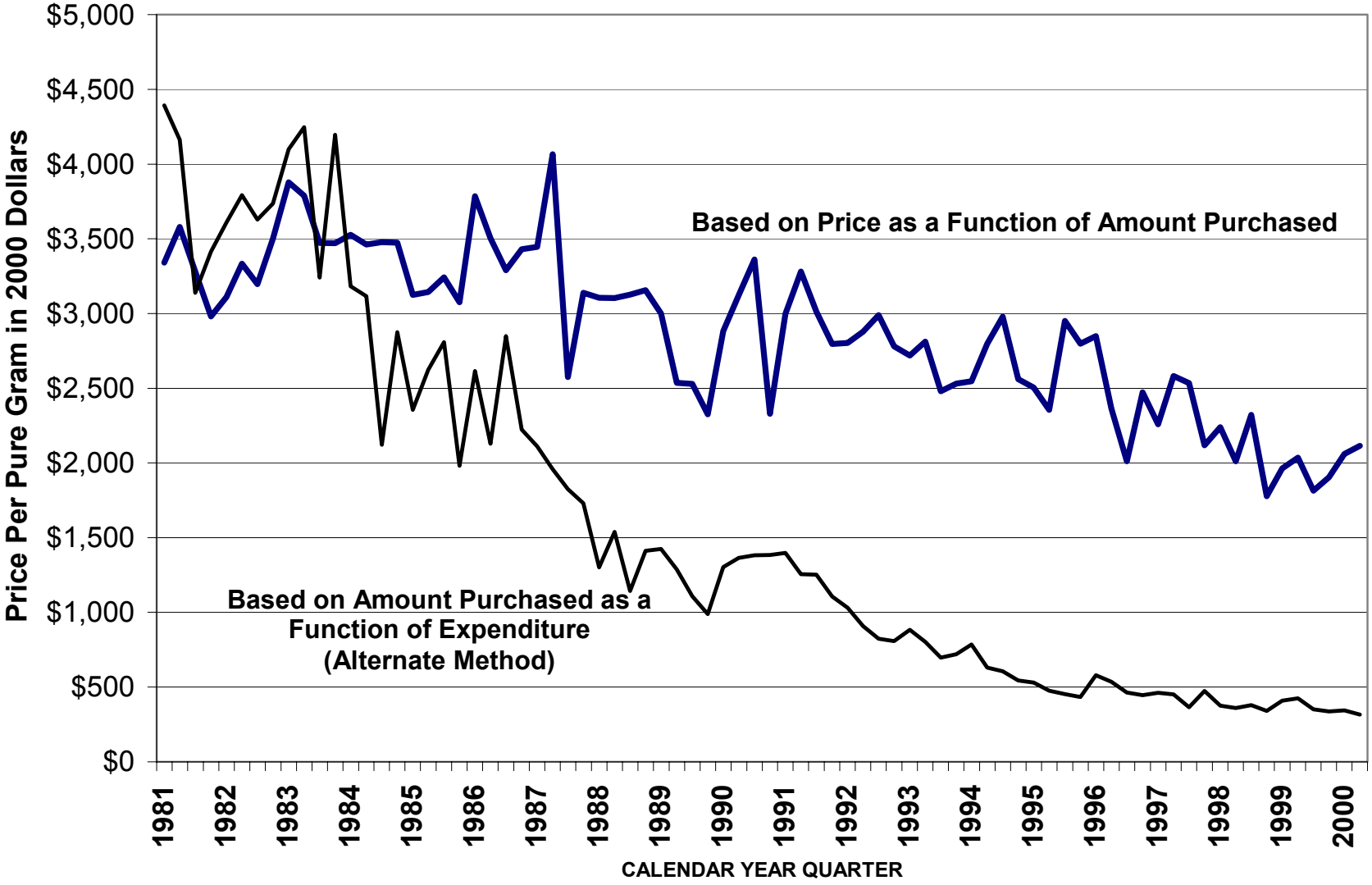


Figure 6: Estimated Heroin Purity at Four Purchase Levels

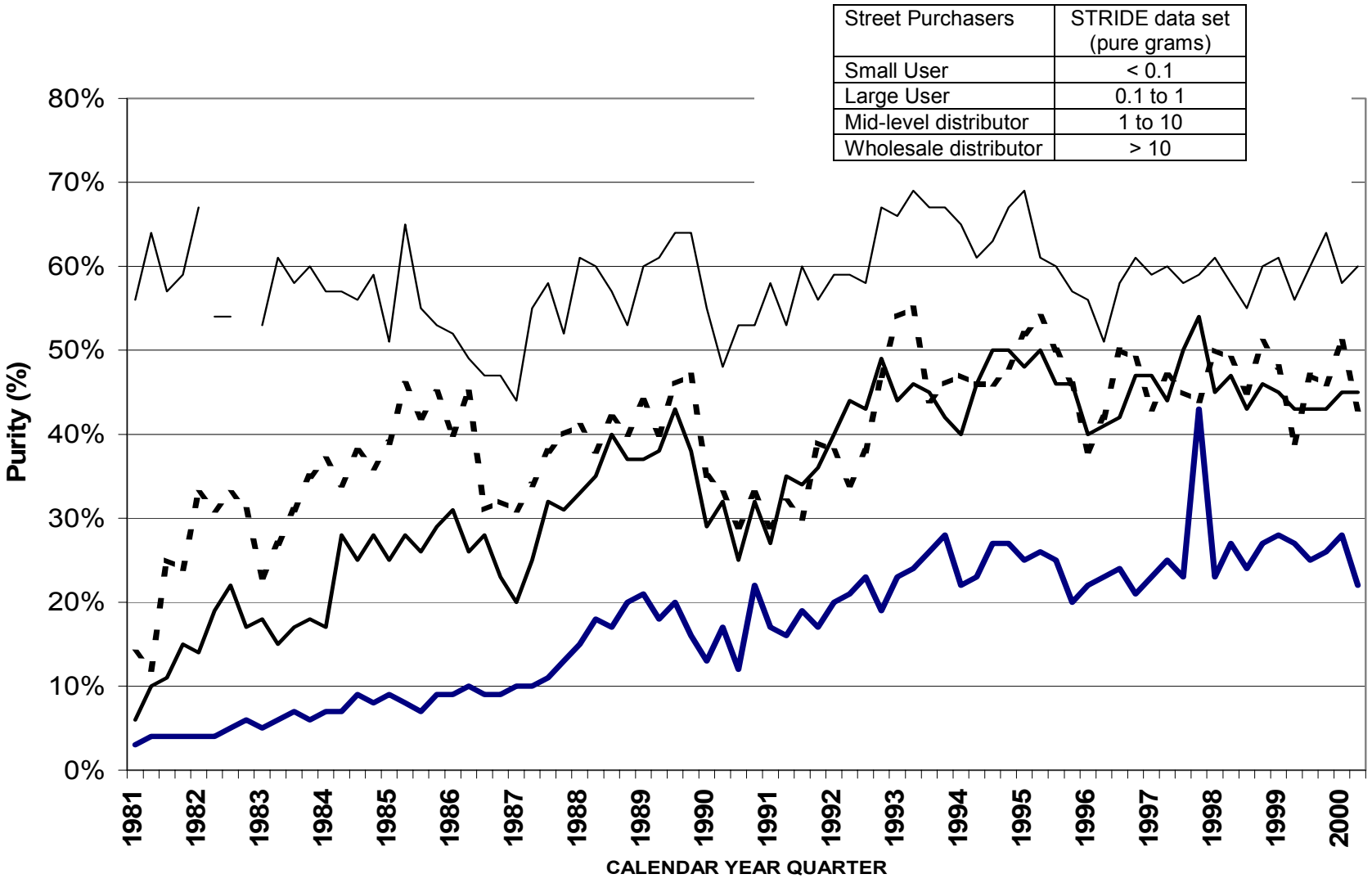


Figure 7: Estimated Methamphetamine Price Per Pure Gram at Three Purchase Levels

Street Purchasers	STRIDE data set (pure grams)	Mean of STRIDE data set	
		Purity	Amount (pure grams)
User	< 10	33%	2.89
Mid-level distributor	10 to 100	46%	31.4
Wholesale distributor	> 100	66%	302

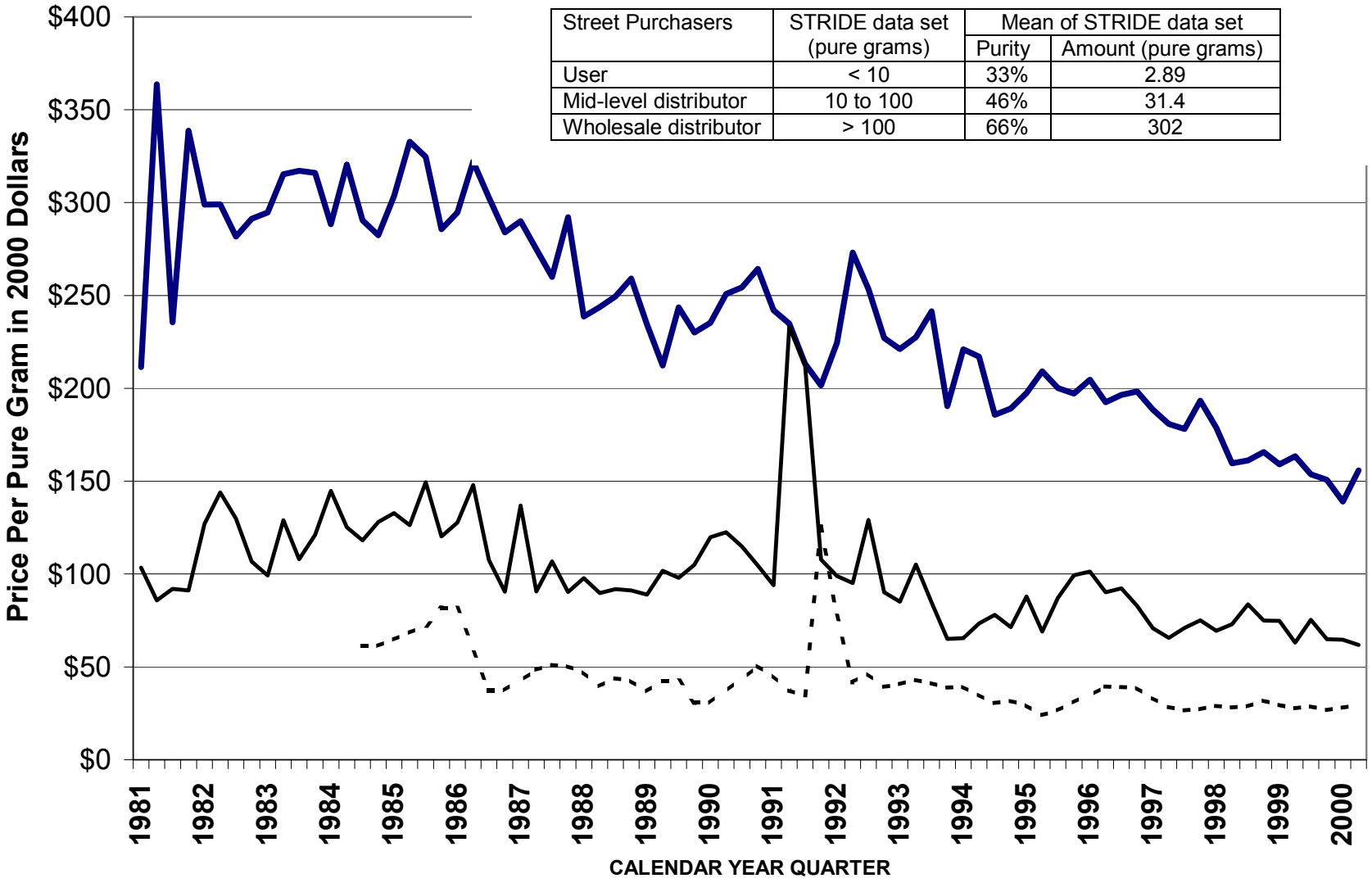


Figure 8: Estimated Methamphetamine Purity at Three Purchase Levels

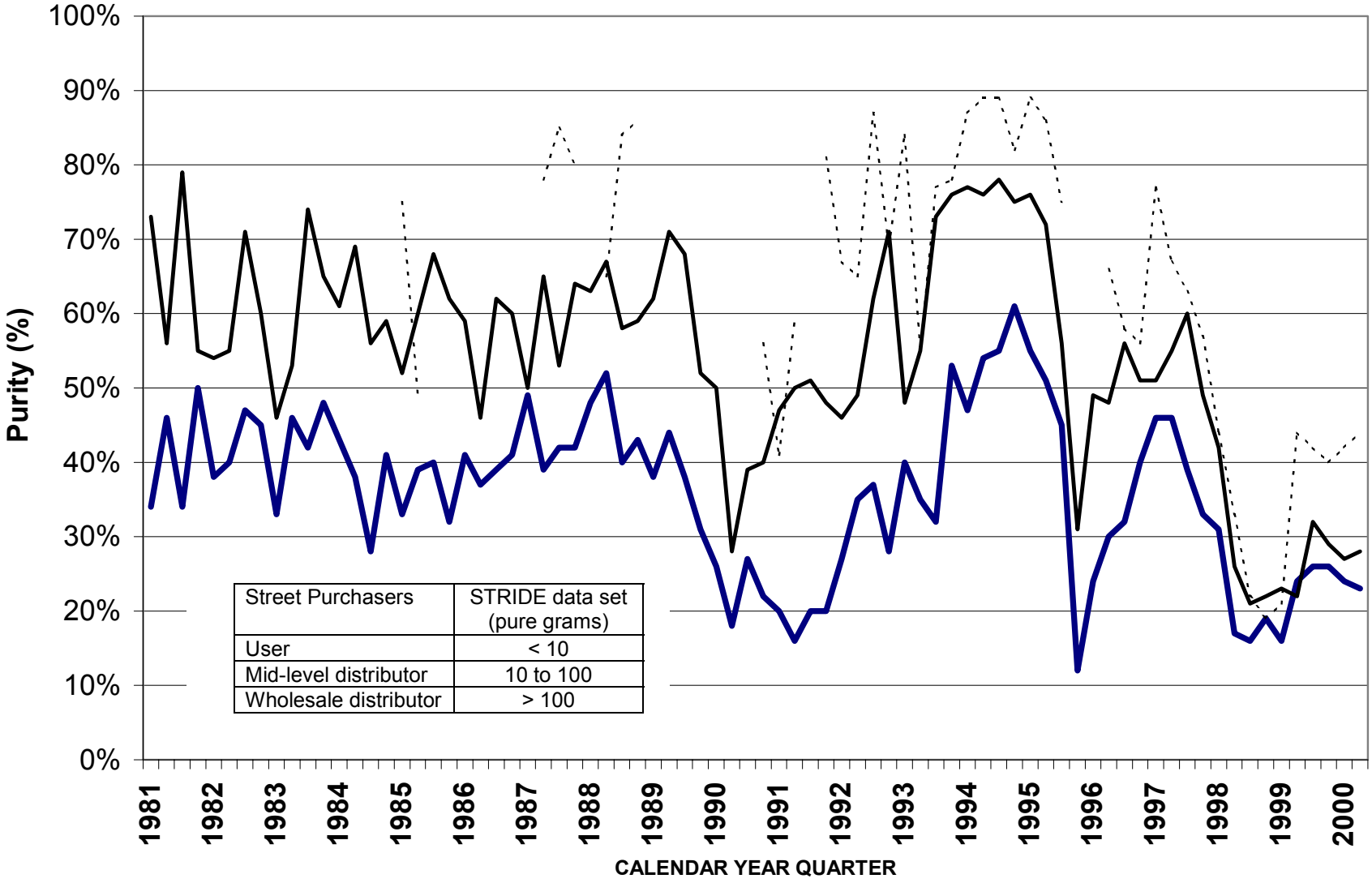
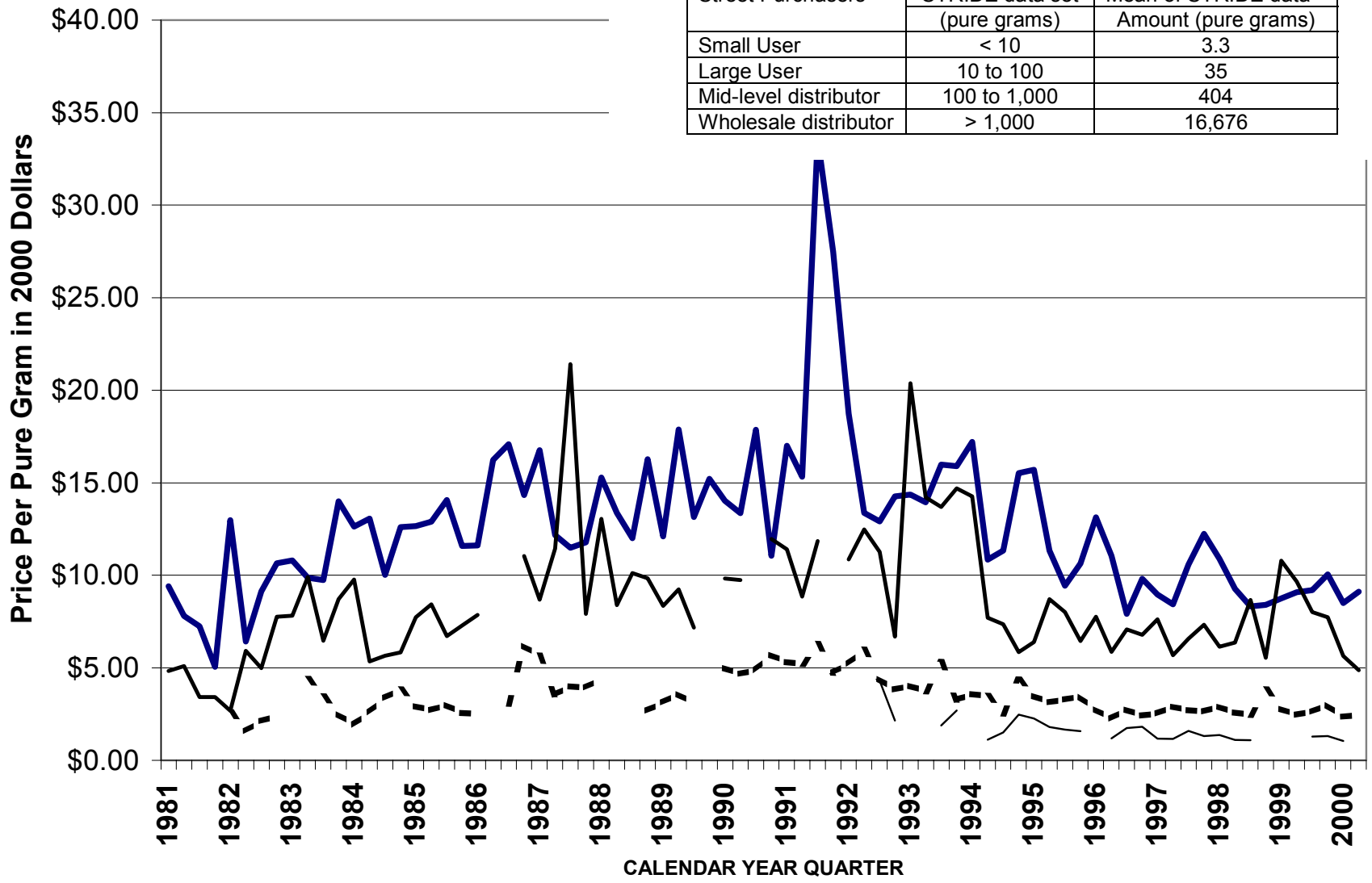


Figure 9: Estimated Marijuana Price Per Pure Gram at Four Purchase Levels

Street Purchasers	STRIDE data set (pure grams)	Mean of STRIDE data Amount (pure grams)
Small User	< 10	3.3
Large User	10 to 100	35
Mid-level distributor	100 to 1,000	404
Wholesale distributor	> 1,000	16,676



LIST OF TABLES

Table 1: Estimated Quarterly Price per Pure Gram and Purity of Cocaine at Four Purchase Levels, Calendar year quarters for 1981-2000

Period	Price (2000$/pure gram)				Purity (%)				Number of Cases			
Level* =>	1	2	3	4	1	2	3	4	1	2	3	4
1q81	445.44	304.52	213.76		32	44	59		74	167	82	2
2q81	421.90	284.11	198.56		33	43	61		86	111	75	1
3q81	397.02	264.02	200.70		44	44	61		58	119	64	0
4q81	427.98	255.48	191.20		35	46	60		63	76	39	0
1q82	464.15	270.79	191.88		32	43	59		123	165	88	2
2q82	444.98	267.11	182.56	176.38	34	47	61	69	80	157	55	4
3q82	408.78	256.91	182.27	137.28	37	45	63	75	125	208	75	3
4q82	415.24	264.11	181.08		40	49	61		116	134	75	0
1q83	417.02	256.45	185.70	132.26	35	49	68	81	146	185	113	5
2q83	418.64	258.32	184.38	121.15	44	49	67	81	91	216	122	13
3q83	377.99	244.76	176.52	113.62	37	49	70	83	93	154	147	19
4q83	381.59	231.03	165.92	114.21	42	55	71	90	150	222	198	22
1q84	368.92	226.31	160.05	75.79	45	55	75	87	180	209	212	17
2q84	386.19	226.96	152.38	99.93	43	58	72	84	137	202	236	19
3q84	374.32	217.78	152.59	106.10	44	53	68	86	135	198	232	15
4q84	381.86	217.95	148.17	111.15	42	52	69	88	151	239	249	16
1q85	373.80	214.13	150.85	101.49	40	54	68	83	201	306	246	20
2q85	334.61	223.67	147.14	96.36	37	50	64	78	251	301	295	21
3q85	300.67	211.96	143.17	85.78	40	51	67	83	258	314	364	29
4q85	303.04	215.13	137.61	89.13	41	55	71	85	219	248	379	34
1q86	312.47	191.95	132.29	78.62	49	59	75	89	200	262	426	36
2q86	318.63	194.51	131.19	76.05	54	64	76	85	234	309	392	32
3q86	312.43	197.60	124.00	69.72	50	64	78	88	231	253	359	28
4q86	314.55	185.50	121.09	66.94	53	68	79	90	178	200	390	35
1q87	323.10	183.22	113.87	63.18	55	68	81	88	182	153	364	44
2q87	297.67	170.08	107.92	57.60	55	70	79	81	189	225	533	73
3q87	290.15	172.89	101.14	52.77	72	73	81	87	217	286	567	75
4q87	258.57	161.90	93.51	44.52	76	73	83	87	235	207	497	72
1q88	248.69	145.23	85.39	40.02	74	74	83	86	243	231	502	68
2q88	222.26	148.20	82.15	45.46	68	69	81	86	328	222	476	82
3q88	248.79	137.22	77.38	46.44	77	73	80	89	348	260	538	136
4q88	230.59	137.38	74.71	45.43	82	76	82	89	338	228	488	116

*Street Purchasers: 1: Small User (less than 1 pure gram)
2: Large User (1 to 10 pure grams)
3: Mid-level Distributor (10 to 100 pure grams)
4: Wholesale Distributor (100 pure grams or more)

Source: System To Retrieve Information on Drug Evidence (STRIDE)
Prepared by: Abt Associates, Inc. 3/2/01

Table 1: Estimated Quarterly Price per Pure Gram and Purity of Cocaine at Four Purchase Levels, Calendar year quarters for 1981-2000 (continued)

Period	Price (2000$/pure gram)				Purity (%)				Number of Cases			
Level* =>	1	2	3	4	1	2	3	4	1	2	3	4
1q89	216.82	125.68	70.00	37.23	78	73	81	84	367	251	576	105
2q89	232.63	121.40	65.31	36.65	81	73	77	85	480	243	534	94
3q89	233.57	121.28	64.86	36.46	78	72	74	86	393	273	507	99
4q89	220.19	118.64	70.78	41.64	73	64	71	81	300	206	356	69
1q90	243.32	124.27	71.38	44.34	68	59	68	77	421	271	375	48
2q90	291.75	148.69	78.83	52.42	69	53	64	76	281	225	276	40
3q90	280.57	141.55	82.17	51.58	67	61	63	80	441	248	370	52
4q90	254.11	146.40	77.59	47.20	73	63	69	81	315	250	366	54
1q91	244.54	130.41	73.43	42.56	76	65	74	81	496	354	568	68
2q91	228.09	120.35	70.42	40.45	79	70	74	82	408	284	629	122
3q91	225.34	110.08	68.61	41.13	80	68	75	84	360	256	615	119
4q91	211.92	108.33	64.49	37.94	79	77	78	86	311	255	506	106
1q92	204.64	109.47	61.36	33.73	79	76	78	86	290	328	581	91
2q92	234.11	125.42	70.35	42.58	72	69	73	83	254	249	391	39
3q92	231.52	112.13	65.51	38.85	77	71	75	83	280	339	509	86
4q92	227.13	111.31	62.94	35.08	77	78	78	81	224	236	356	47
1q93	207.63	109.03	63.07	33.72	73	72	72	83	196	204	255	31
2q93	212.29	115.59	66.69	35.31	74	72	70	78	176	293	298	25
3q93	186.17	109.46	61.93	35.32	72	70	72	78	167	254	328	43
4q93	190.67	105.21	60.19	35.18	75	71	72	81	170	254	258	35
1q94	188.15	98.98	58.38	31.03	75	73	73	82	168	262	367	49
2q94	186.63	102.90	58.64	32.21	74	73	75	81	166	307	375	40
3q94	175.27	99.35	56.53	32.88	73	74	72	78	203	395	491	63
4q94	197.79	93.45	54.54	30.13	72	74	74	83	129	354	444	48
1q95	198.17	91.23	53.38	31.95	73	76	73	80	141	436	465	46
2q95	197.96	93.74	54.76	32.62	70	71	70	78	161	291	350	44
3q95	190.43	102.72	57.04	35.48	60	63	65	68	256	279	316	30
4q95	197.40	99.66	57.26	34.78	67	67	67	73	159	265	317	39
1q96	188.72	96.90	53.40	31.04	73	71	69	81	149	341	425	43
2q96	160.56	90.90	50.93	31.58	68	68	67	79	213	359	509	74
3q96	173.36	92.51	49.77	29.25	70	68	69	77	182	375	528	71
4q96	177.21	91.30	50.41	27.81	75	71	70	80	229	396	456	63

*Street Purchasers: 1: Small User (less than 1 pure gram)
2: Large User (1 to 10 pure grams)
3: Mid-level Distributor (10 to 100 pure grams)
4: Wholesale Distributor (100 pure grams or more)

Source: System To Retrieve Information on Drug Evidence (STRIDE)
Prepared by: Abt Associates, Inc. 3/2/01

Table 1: Estimated Quarterly Price per Pure Gram and Purity of Cocaine at Four Purchase Levels, Calendar year quarters for 1981-2000 (continued)

Period	Price (2000$/pure gram)				Purity (%)				Number of Cases			
Level* =>	1	2	3	4	1	2	3	4	1	2	3	4
1q97	166.44	85.45	48.99	27.79	71	69	67	79	225	451	506	47
2q97	209.66	97.07	55.46	32.55	55	62	60	81	304	397	347	31
3q97	211.16	89.39	53.28	31.69	67	66	63	77	245	449	562	61
4q97	193.33	88.81	48.83	27.98	68	69	67	74	157	341	515	56
1q98	180.51	89.02	47.75	28.89	69	69	66	75	162	426	595	46
2q98	184.57	86.21	47.91	27.26	71	69	67	78	202	405	626	74
3q98	184.60	85.74	45.58	26.53	68	67	66	77	231	422	591	71
4q98	182.68	90.69	46.60	28.08	66	68	63	75	230	414	500	60
1q99	190.05	100.69	50.24	24.15	61	63	59	70	327	498	359	23
2q99	184.67	87.46	49.61	27.30	64	62	61	71	292	446	514	34
3q99	171.22	87.34	47.27	26.92	66	63	62	74	409	507	631	90
4q99	189.78	93.07	46.97	28.00	66	63	62	70	395	491	451	31
1q00	197.36	104.37	51.71	27.22	64	60	55	68	381	578	391	34
2q00	226.03	96.97	51.18	24.85	58	55	51	66	319	531	544	33

*Street Purchasers: 1: Small User (less than 1 pure gram)
2: Large User (1 to 10 pure grams)
3: Mid-level Distributor (10 to 100 pure grams)
4: Wholesale Distributor (100 pure grams or more)

Source: System To Retrieve Information on Drug Evidence (STRIDE)
Prepared by: Abt Associates, Inc. 3/2/01

Table 2: Estimated Quarterly Price per Pure Gram and Purity of Heroin at Four Purchase Levels, Calendar year quarters for 1981-2000

Period	Price (2000$/pure gram)				Purity (%)				Number of Cases			
Level* =>	1	2	3	4	1	2	3	4	1	2	3	4
1q81	3,339.52	2,100.92	1,167.53	915.95	3	6	14	56	187	155	63	11
2q81	3,578.83	2,208.52	1,117.11	860.56	4	10	12	64	182	116	80	24
3q81	3,281.21	2,384.04	1,359.75	954.06	4	11	25	57	192	143	75	22
4q81	2,980.50	1,904.56	1,182.86	730.25	4	15	24	59	207	72	43	22
1q82	3,110.24	1,962.32	1,078.43	932.82	4	14	33	67	206	156	78	17
2q82	3,332.55	1,936.29	1,177.32	860.31	4	19	31	54	181	99	92	31
3q82	3,196.01	1,810.62	1,204.88	819.48	5	22	33	54	225	101	84	23
4q82	3,499.75	1,843.10	1,175.92	760.46	6	17	31	64	156	85	44	18
1q83	3,878.81	1,701.34	1,319.53	943.73	5	18	23	53	178	112	59	12
2q83	3,788.61	2,214.88	1,325.46	810.13	6	15	27	61	146	113	68	24
3q83	3,471.38	2,124.11	1,180.61	666.69	7	17	31	58	163	134	69	34
4q83	3,470.98	1,969.76	1,415.98	818.79	6	18	35	60	147	81	50	30
1q84	3,526.48	1,933.86	1,287.59	663.77	7	17	37	57	152	75	49	28
2q84	3,461.66	1,843.86	1,261.30	766.68	7	28	34	57	144	62	54	24
3q84	3,478.96	2,206.62	1,395.56	674.33	9	25	38	56	145	91	62	33
4q84	3,473.42	1,736.99	1,227.30	764.70	8	28	36	59	144	63	43	32
1q85	3,123.52	1,731.03	1,065.90	573.77	9	25	39	51	189	101	58	30
2q85	3,143.39	1,817.79	1,162.84	754.29	8	28	46	65	156	88	78	41
3q85	3,243.34	1,714.23	1,205.72	696.01	7	26	42	55	125	74	82	55
4q85	3,074.58	1,438.41	1,296.89	646.35	9	29	45	53	125	71	48	40
1q86	3,784.85	1,549.53	1,087.74	581.08	9	31	40	52	110	79	78	32
2q86	3,502.44	1,414.13	967.69	522.38	10	26	45	49	129	80	54	33
3q86	3,290.06	1,609.61	1,134.38	562.57	9	28	31	47	123	66	60	21
4q86	3,430.38	1,986.93	1,423.21	522.19	9	23	32	47	88	53	46	20
1q87	3,444.79	1,412.00	1,416.96	566.65	10	20	31	44	81	57	49	24
2q87	4,067.29	2,045.38	1,107.59	528.20	10	25	34	55	82	78	55	30
3q87	2,574.30	1,326.59	1,138.63	589.06	11	32	38	58	65	85	52	44
4q87	3,139.34	1,487.24	992.03	525.53	13	31	40	52	122	93	67	31
1q88	3,105.40	1,417.87	984.51	464.90	15	33	41	61	99	81	59	48
2q88	3,104.79	1,287.07	1,068.46	491.89	18	35	38	60	107	98	63	42
3q88	3,125.23	1,198.94	903.53	500.65	17	40	42	57	71	111	56	48
4q88	3,156.38	1,079.71	884.96	496.75	20	37	40	53	78	71	52	36

*Street Purchasers: 1: Small User (less than 0.1 pure gram)
2: Large User (0.1 to 1 pure grams)
3: Mid-level Distributor (1 to 10 pure grams)
4: Wholesale Distributor (10 pure grams or more)

Source: System To Retrieve Information on Drug Evidence (STRIDE)
Prepared by: Abt Associates, Inc. 3/2/01

Table 2: Estimated Quarterly Price per Pure Gram and Purity of Heroin at Four Purchase Levels, Calendar year quarters for 1981-2000 (continued)

Period	Price (2000$/pure gram)				Purity (%)				Number of Cases			
Level* =>	1	2	3	4	1	2	3	4	1	2	3	4
1q89	2,999.54	1,133.04	848.80	481.30	21	37	44	60	53	71	44	42
2q89	2,535.45	1,018.84	817.00	406.05	18	38	40	61	72	54	56	48
3q89	2,528.20	926.15	830.66	396.46	20	43	46	64	75	84	65	76
4q89	2,324.53	918.19	664.77	404.92	16	38	47	64	68	52	42	64
1q90	2,881.14	1,133.99	956.31	380.69	13	29	35	55	107	83	57	45
2q90	3,121.93	1,177.31	740.33	435.00	17	32	33	48	116	83	102	41
3q90	3,360.83	1,370.26	903.34	405.45	12	25	29	53	93	72	68	29
4q90	2,330.16	1,063.61	912.43	437.50	22	32	33	53	74	86	65	26
1q91	2,998.94	1,285.22	1,026.02	465.93	17	27	29	58	150	122	62	26
2q91	3,280.84	1,018.47	839.95	394.21	16	35	32	53	142	146	74	41
3q91	3,012.46	1,128.17	866.95	416.68	19	34	30	60	121	109	85	36
4q91	2,795.15	951.88	756.37	388.19	17	36	39	56	60	70	31	27
1q92	2,801.91	962.23	725.38	380.70	20	40	38	59	81	106	73	43
2q92	2,878.66	991.69	732.05	342.29	21	44	34	59	78	92	60	50
3q92	2,989.42	912.96	664.27	336.08	23	43	38	58	61	101	70	55
4q92	2,780.54	816.48	625.56	333.76	19	49	47	67	85	85	27	43
1q93	2,718.13	765.47	607.45	288.20	23	44	54	66	96	138	42	51
2q93	2,811.68	624.34	550.48	288.55	24	46	55	69	107	125	56	46
3q93	2,478.64	671.36	472.16	299.38	26	45	44	67	86	166	71	87
4q93	2,530.02	669.96	513.69	269.08	28	42	46	67	56	119	62	37
1q94	2,546.99	665.61	438.85	276.21	22	40	47	65	86	163	85	51
2q94	2,798.22	649.08	472.03	260.31	23	46	46	61	70	175	88	62
3q94	2,978.76	601.91	454.71	232.16	27	50	46	63	68	183	85	74
4q94	2,559.55	682.15	365.55	220.46	27	50	48	67	58	167	75	50
1q95	2,504.57	546.16	390.36	205.83	25	48	52	69	74	173	81	82
2q95	2,355.19	533.02	373.60	208.26	26	50	54	61	72	200	79	69
3q95	2,950.64	573.27	374.24	204.19	25	46	50	60	66	212	91	104
4q95	2,797.12	568.80	396.95	207.48	20	46	46	57	57	168	74	49
1q96	2,849.29	549.96	374.02	168.11	22	40	38	56	79	214	102	50
2q96	2,364.66	568.30	389.67	177.17	23	41	42	51	97	198	126	66
3q96	2,011.30	544.71	392.36	182.78	24	42	50	58	62	188	84	71
4q96	2,472.67	521.48	357.18	181.58	21	47	49	61	81	170	82	63

*Street Purchasers: 1: Small User (less than 0.1 pure gram)
2: Large User (0.1 to 1 pure grams)
3: Mid-level Distributor (1 to 10 pure grams)
4: Wholesale Distributor (10 pure grams or more)

Source: System To Retrieve Information on Drug Evidence (STRIDE)
Prepared by: Abt Associates, Inc. 3/2/01

Table 2: Estimated Quarterly Price per Pure Gram and Purity of Heroin at Four Purchase Levels, Calendar year quarters for 1981-2000 (continued)

Period	Price (2000$/pure gram)				Purity (%)				Number of Cases			
Level* =>	1	2	3	4	1	2	3	4	1	2	3	4
1q97	2,258.45	547.79	325.56	173.98	23	47	43	59	102	233	79	69
2q97	2,580.95	520.54	327.86	169.15	25	44	47	60	87	215	95	82
3q97	2,533.12	519.12	363.98	173.88	23	50	45	58	67	220	90	88
4q97	2,117.80	771.16	327.39	168.52	43	54	44	59	14	44	80	66
1q98	2,239.23	459.53	338.91	158.40	23	45	50	61	81	321	112	92
2q98	2,011.01	432.03	326.42	140.28	27	47	49	58	55	223	151	129
3q98	2,320.66	430.70	329.78	142.54	24	43	45	55	54	172	116	88
4q98	1,777.00	434.78	330.73	151.28	27	46	51	60	65	211	80	81
1q99	1,963.31	474.10	331.74	159.31	28	45	48	61	102	239	131	99
2q99	2,035.82	489.09	305.55	135.85	27	43	39	56	86	252	166	72
3q99	1,813.67	427.92	308.04	136.68	25	43	47	60	98	242	136	103
4q99	1,904.30	412.77	272.56	131.51	26	43	46	64	64	185	83	71
1q00	2,061.23	435.14	254.84	105.14	28	45	51	58	69	242	117	74
2q00	2,114.49	411.02	282.83	119.16	22	45	43	60	45	224	121	107

*Street Purchasers:
1: Small User (less than 0.1 pure gram)
2: Large User (0.1 to 1 pure grams)
3: Mid-level Distributor (1 to 10 pure grams)
4: Wholesale Distributor (10 pure grams or more)

Source: System To Retrieve Information on Drug Evidence (STRIDE)
Prepared by: Abt Associates, Inc. 3/2/01

Table 3: Estimated Quarterly Price per Pure Gram and Purity of Methamphetamine at Three Purchase Levels, Calendar year quarters for 1981-2000

Period	Price (2000$/pure gram)			Purity (%)			Number of Cases		
Level* =>	1	2	3	1	2	3	1	2	3
1q81	211.39	103.41		34	73		48	5	0
2q81	363.72	85.85		46	56		23	7	1
3q81	235.47	91.94		34	79		24	4	1
4q81	338.73	91.10		50	55		15	4	0
1q82	298.75	126.98		38	54		60	17	1
2q82	299.01	143.94		40	55		35	13	0
3q82	281.59	129.75		47	71		40	12	1
4q82	291.31	106.65		45	60		43	11	0
1q83	294.68	99.19		33	46		47	11	2
2q83	315.25	129.02		46	53		56	9	1
3q83	317.08	107.91		42	74		37	12	1
4q83	315.85	121.02		48	65		35	13	2
1q84	288.40	144.75		43	61		69	15	2
2q84	320.59	125.20		38	69		64	37	2
3q84	290.40	118.00	61.37	28	56	61	43	17	4
4q84	282.34	127.97		41	59		76	23	2
1q85	303.40	132.72	64.66	33	52	75	83	32	4
2q85	332.66	126.23	72.15	39	60	49	35	20	4
3q85	324.56	149.42		40	68		48	17	1
4q85	285.50	120.12	81.72	32	62	40	60	22	3
1q86	294.76	127.72		41	59		90	15	1
2q86	321.98	147.85		37	46		70	17	1
3q86	302.65	107.55	37.36	39	62	74	61	14	4
4q86	283.98	90.41		41	60		41	11	1
1q87	289.87	136.78		49	50		41	17	1
2q87	274.88	90.60	48.42	39	65	78	48	15	4
3q87	259.92	106.82	53.58	42	53	85	30	14	5
4q87	292.10	90.31	47.21	42	64	80	67	9	3
1q88	238.68	97.80		48	63		89	31	2
2q88	243.71	89.71	39.55	52	67	65	75	24	6
3q88	249.52	91.81	48.12	40	58	84	55	25	3
4q88	259.09	91.06	36.87	43	59	86	37	29	5

*Street Purchasers: 1: User (less than 10 pure gram)
2: Mid-level Distributor (10 to 100 pure grams)
3: Wholesale Distributor (100 pure grams or more)

Source: System To Retrieve Information on Drug Evidence (STRIDE)
Prepared by: Abt Associates, Inc. 3/2/01

Table 3: Estimated Quarterly Price per Pure Gram and Purity of Methamphetamine at Three Purchase Levels, Calendar year quarters for 1981-2000 (continued)

Period	Price (2000$/pure gram)			Purity (%)			Number of Cases		
Level* =>	1	2	3	1	2	3	1	2	3
1q89	234.45	88.83		38	62		62	28	2
2q89	212.23	101.72	42.56	44	71	63	38	18	3
3q89	243.53	97.93		38	68		38	15	0
4q89	229.94	104.86	30.60	31	52	93	48	10	3
1q90	235.18	119.79		26	50		58	8	2
2q90	250.79	122.58		18	28		57	12	1
3q90	254.35	114.77		27	39		46	12	1
4q90	264.23	104.51	50.61	22	40	56	32	10	4
1q91	241.97	93.92	39.84	20	47	41	51	11	6
2q91	234.79	232.92	34.53	16	50	59	37	20	4
3q91	213.18	212.83		20	51		33	12	1
4q91	201.41	107.82	125.49	20	48	81	37	12	4
1q92	224.45	98.99	29.51	27	46	67	40	16	3
2q92	273.10	95.11	53.79	35	49	65	45	20	10
3q92	253.35	129.17	38.72	37	62	87	46	27	10
4q92	226.96	90.19	39.66	28	71	69	45	19	6
1q93	221.07	84.99	41.77	40	48	84	47	14	5
2q93	227.36	105.09	44.00	35	55	55	39	17	3
3q93	241.40	84.59	38.50	32	73	77	46	29	6
4q93	190.34	65.04	39.06	53	76	78	43	25	9
1q94	220.91	65.42	39.45	47	77	87	44	27	21
2q94	217.03	73.37	30.40	54	76	89	48	48	20
3q94	185.70	78.05	30.41	55	78	89	50	48	15
4q94	189.08	71.42	33.02	61	75	82	52	43	20
1q95	197.30	88.00	25.70	55	76	89	82	58	21
2q95	209.13	69.07	22.18	51	72	86	63	100	28
3q95	200.09	87.21	30.67	45	56	75	93	48	12
4q95	197.06	99.30		12	31		88	24	1
1q96	204.63	101.27		24	49		71	32	1
2q96	192.42	90.24	39.33	30	48	66	87	57	11
3q96	196.36	92.20	38.79	32	56	58	49	47	25
4q96	198.33	82.83	38.55	40	51	56	76	79	29

*Street Purchasers: 1: User (less than 10 pure gram)
2: Mid-level Distributor (10 to 100 pure grams)
3: Wholesale Distributor (100 pure grams or more)

Source: System To Retrieve Information on Drug Evidence (STRIDE)
Prepared by: Abt Associates, Inc. 3/2/01

Table 3: Estimated Quarterly Price per Pure Gram and Purity of Methamphetamine at Three Purchase Levels, Calendar year quarters for 1981-2000 (continued)

Period	Price (2000$/pure gram)			Purity (%)			Number of Cases		
Level* =>	1	2	3	1	2	3	1	2	3
1q97	188.52	70.92	27.95	46	51	77	84	105	21
2q97	180.74	65.57	28.77	46	55	67	96	103	27
3q97	178.00	70.94	24.51	39	60	63	108	112	27
4q97	193.19	75.05	29.74	33	49	57	149	118	27
1q98	178.75	69.41	28.40	31	42	44	172	116	31
2q98	159.57	72.89	27.73	17	26	33	215	67	4
3q98	161.20	83.77	29.50	16	21	22	189	85	12
4q98	165.63	74.90	34.00	19	22	19	173	110	5
1q99	158.94	74.70	25.17	16	23	21	173	99	12
2q99	163.38	63.11	30.15	24	22	44	146	107	9
3q99	153.58	75.31	27.10	26	32	42	168	165	18
4q99	150.76	64.92	26.35	26	29	40	152	110	19
1q00	138.99	64.61	29.54	24	27	42	164	151	20
2q00	155.72	61.78	29.03	23	28	44	184	144	15

*Street Purchasers: 1: User (less than 10 pure gram)
2: Mid-level Distributor (10 to 100 pure grams)
3: Wholesale Distributor (100 pure grams or more)

Source: System To Retrieve Information on Drug Evidence (STRIDE)
Prepared by: Abt Associates, Inc. 3/2/01

Table 4: Estimated Quarterly Price per Pure Gram of Marijuana at Four Purchase Levels, Calendar year quarters for 1981-2000

Period	Price (2000$/pure gram)				Number of Cases			
Level* =>	1	2	3	4	1	2	3	4
1q81	9.41	4.84	1.79		22	24	3	1
2q81	7.80	5.10			41	7	2	0
3q81	7.25	3.42	1.79	0.56	49	13	9	4
4q81	5.04	3.42			38	11	1	1
1q82	12.98	2.67	2.59		15	14	5	2
2q82	6.42	5.92	1.58		18	12	3	0
3q82	9.13	4.98	2.12	2.91	13	8	7	4
4q82	10.65	7.76	2.38	0.09	17	4	9	11
1q83	10.81	7.82			12	10	2	1
2q83	9.87	9.91	4.38		28	13	5	0
3q83	9.73	6.47	3.45		17	8	8	0
4q83	14.00	8.70	2.49	2.15	11	18	15	3
1q84	12.64	9.77	1.94		19	9	4	1
2q84	13.06	5.35	2.60	4.25	41	10	6	3
3q84	10.01	5.65	3.36		22	9	5	1
4q84	12.60	5.83	3.81		19	13	5	2
1q85	12.66	7.73	2.93	2.37	27	13	10	3
2q85	12.90	8.43	2.72		26	9	17	1
3q85	14.06	6.71	2.99	1.84	17	4	3	3
4q85	11.59	7.28	2.56		11	6	8	1
1q86	11.62	7.86	2.50		9	4	6	0
2q86	16.22				11	2	2	1
3q86	17.08		3.04		13	2	3	0
4q86	14.33	11.03	6.18		14	4	4	1
1q87	16.76	8.67	5.65		30	3	10	1
2q87	12.17	11.44	3.54		21	3	25	1
3q87	11.49	21.41	4.00		9	7	7	2
4q87	11.77	7.91	3.93		4	5	3	0
1q88	15.28	13.04	4.41		17	3	8	2
2q88	13.37	8.38			12	14	2	1
3q88	12.00	10.12			10	12	2	0
4q88	16.28	9.84	2.69		6	16	7	1

*Street Purchasers: 1: Small User (less than 10 pure gram)
2: Large User (10 to 100 pure grams)
3: Mid-level Distributor (100 to 1000 pure grams or more)
4. Wholesale Distributor (more than 1000 pure grams or more)

Source: System To Retrieve Information on Drug Evidence (STRIDE)
Prepared by: Abt Associates, Inc. 3/2/01

Table 4: Estimated Quarterly Price per Pure Gram of Marijuana at Four Purchase Levels, Calendar year quarters for 1981-2000 (continued)

Period	Price (2000$/pure gram)				Number of Cases			
Level* =>	1	2	3	4	1	2	3	4
1q89	12.09	8.35	3.13	2.13	14	6	15	3
2q89	17.88	9.24	3.57		9	6	5	1
3q89	13.15	7.18	3.09	1.90	10	4	4	4
4q89	15.21				12	2	1	1
1q90	14.02	9.83	4.99	3.34	8	9	13	3
2q90	13.35	9.73	4.67		10	4	10	1
3q90	17.87		4.87		9	1	3	0
4q90	11.05	11.96	5.70	2.41	14	12	19	4
1q91	17.00	11.40	5.31		14	29	26	2
2q91	15.32	8.85	5.21		16	9	9	1
3q91	33.61	11.85	6.28		5	5	5	0
4q91	27.48		4.74	2.76	5	1	20	10
1q92	18.73	10.86	5.22		12	7	21	0
2q92	13.36	12.48	5.98		18	12	21	1
3q92	12.92	11.26	4.41	4.31	25	6	25	8
4q92	14.27	6.69	3.83	2.14	14	7	20	5
1q93	14.36	20.37	4.02		25	4	13	1
2q93	13.95	14.21	3.74		27	8	13	2
3q93	15.98	13.70	5.30	1.88	42	11	10	3
4q93	15.89	14.70	3.27	2.69	29	9	10	3
1q94	17.20	14.26	3.57		14	6	17	1
2q94	10.85	7.71	3.47	1.11	21	4	22	4
3q94	11.34	7.35	2.52	1.51	9	6	10	3
4q94	15.52	5.84	4.35	2.46	15	20	8	5
1q95	15.69	6.40	3.48	2.27	15	15	8	11
2q95	11.34	8.70	3.14	1.80	9	8	22	12
3q95	9.43	8.01	3.28	1.66	13	3	13	8
4q95	10.63	6.45	3.45	1.58	43	17	14	4
1q96	13.12	7.76	2.76		24	16	23	0
2q96	11.04	5.86	2.25	1.18	22	10	19	4
3q96	7.91	7.07	2.74	1.75	16	13	19	5
4q96	9.81	6.78	2.42	1.81	13	6	11	3

*Street Purchasers: 1: Small User (less than 10 pure gram)
2: Large User (10 to 100 pure grams)
3: Mid-level Distributor (100 to 1000 pure grams or more)
4. Wholesale Distributor (more than 1000 pure grams or more)

Source: System To Retrieve Information on Drug Evidence (STRIDE)
Prepared by: Abt Associates, Inc. 3/2/01

Table 4: Estimated Quarterly Price per Pure Gram of Marijuana at Four Purchase Levels, Calendar year quarters for 1981-2000 (continued)

Period	Price (2000$/pure gram)				Number of Cases			
Level* =>	1	2	3	4	1	2	3	4
1q97	8.95	7.62	2.53	1.17	46	17	23	5
2q97	8.42	5.68	2.90	1.15	39	26	28	5
3q97	10.58	6.57	2.71	1.59	26	15	30	5
4q97	12.24	7.32	2.65	1.31	19	6	14	5
1q98	10.89	6.14	2.90	1.36	13	13	22	5
2q98	9.27	6.36	2.58	1.10	36	12	33	5
3q98	8.32	8.66	2.46	1.08	24	6	23	3
4q98	8.40	5.53	3.81		25	9	17	1
1q99	8.76	10.78	2.78		32	7	19	2
2q99	9.08	9.66	2.46		61	10	23	1
3q99	9.19	8.01	2.62	1.29	97	11	20	5
4q99	10.05	7.74	2.99	1.31	24	10	18	3
1q00	8.50	5.64	2.36	1.05	28	11	26	4
2q00	9.11	4.88	2.47		23	3	24	2

*Street Purchasers: 1: Small User (less than 10 pure gram)
2: Large User (10 to 100 pure grams)
3: Mid-level Distributor (100 to 1000 pure grams or more)
4. Wholesale Distributor (more than 1000 pure grams or more)

Source: System To Retrieve Information on Drug Evidence (STRIDE)
Prepared by: Abt Associates, Inc. 3/2/01

Table 5: Estimated Quarterly Price per Pure Gram and Purity of Cocaine and Heroin at the Retail Level, Calculated via an Alternate Method, Calendar year quarters for 1981-2000

	Cocaine		Heroin	
Period	Price (2000$/pure gram)	Number of Cases	Price (2000$/pure gram)	Number of Cases
1q81	$629.01	44	$4,393.59	119
2q81	$768.09	46	$4,161.85	113
3q81	$757.64	43	$3,139.11	129
4q81	$824.71	37	$3,413.77	179
1q82	$649.06	62	$3,608.91	151
2q82	$588.81	41	$3,791.17	134
3q82	$612.61	63	$3,627.96	162
4q82	$564.51	78	$3,735.34	110
1q83	$590.13	84	$4,099.33	135
2q83	$422.04	56	$4,246.44	126
3q83	$613.30	65	$3,241.02	127
4q83	$471.59	103	$4,195.04	129
1q84	$415.97	114	$3,183.67	123
2q84	$457.35	96	$3,115.09	123
3q84	$450.09	104	$2,121.08	115
4q84	$351.32	112	$2,875.79	120
1q85	$468.11	141	$2,355.26	161
2q85	$444.31	176	$2,624.18	132
3q85	$368.51	228	$2,808.98	91
4q85	$347.48	184	$1,981.28	118
1q86	$384.09	195	$2,614.36	92
2q86	$307.17	212	$2,128.05	131
3q86	$434.73	279	$2,849.18	145
4q86	$413.61	222	$2,223.29	90
1q87	$321.91	189	$2,112.26	76
2q87	$291.53	203	$1,958.08	66
3q87	$206.21	241	$1,824.25	95
4q87	$174.50	251	$1,729.75	128
1q88	$152.33	259	$1,301.38	97
2q88	$173.08	368	$1,537.55	120
3q88	$162.41	386	$1,142.14	89
4q88	$130.44	387	$1,411.66	79

Source: System To Retrieve Information on Drug Evidence (STRIDE)
Prepared by: Abt Associates, Inc. 3/2/01

Table 5: Estimated Quarterly Price per Pure Gram and Purity of Cocaine and Heroin at the Retail Level, Calculated via an Alternate Method, Calendar year quarters for 1981-2000 (continued)

	Cocaine		Heroin	
Period	Price (2000$/pure gram)	Number of Cases	Price (2000$/pure gram)	Number of Cases
1q89	$134.28	380	$1,423.70	74
2q89	$139.46	539	$1,287.47	96
3q89	$137.32	421	$1,107.34	114
4q89	$171.93	336	$988.37	101
1q90	$194.62	466	$1,303.08	141
2q90	$230.43	285	$1,365.12	136
3q90	$227.42	486	$1,381.45	82
4q90	$203.32	351	$1,383.05	131
1q91	$174.18	544	$1,398.07	158
2q91	$164.20	482	$1,256.15	141
3q91	$159.20	443	$1,250.61	123
4q91	$153.86	371	$1,105.77	76
1q92	$132.54	355	$1,030.63	85
2q92	$191.21	305	$907.76	81
3q92	$155.91	317	$821.80	86
4q92	$157.04	225	$808.04	103
1q93	$163.35	232	$883.15	127
2q93	$175.99	230	$803.21	156
3q93	$145.47	216	$697.54	140
4q93	$149.37	226	$719.99	93
1q94	$139.10	199	$784.64	161
2q94	$129.18	195	$630.35	150
3q94	$147.43	272	$605.74	157
4q94	$121.60	155	$544.55	136
1q95	$120.96	167	$530.15	173
2q95	$136.73	194	$475.27	176
3q95	$141.07	266	$454.10	160
4q95	$185.18	205	$434.00	147
1q96	$135.58	174	$578.16	182
2q96	$137.26	238	$535.74	185
3q96	$142.23	209	$463.54	168
4q96	$119.14	259	$445.37	145

Source: System To Retrieve Information on Drug Evidence (STRIDE)
Prepared by: Abt Associates, Inc. 3/2/01

Table 5: Estimated Quarterly Price per Pure Gram and Purity of Cocaine and Heroin at the Retail Level, Calculated via an Alternate Method, Calendar year quarters for 1981-2000 (continued)

	Cocaine		Heroin	
Period	Price (2000$/pure gram)	Number of Cases	Price (2000$/pure gram)	Number of Cases
1q97	$125.47	252	$461.70	211
2q97	$192.69	274	$452.24	168
3q97	$154.44	259	$364.96	193
4q97	$131.80	167	$472.55	25
1q98	$119.63	196	$376.65	284
2q98	$120.56	245	$359.96	203
3q98	$139.74	261	$379.62	155
4q98	$147.97	260	$340.06	200
1q99	$183.12	360	$409.51	228
2q99	$154.39	334	$424.73	226
3q99	$128.76	489	$350.56	229
4q99	$135.81	371	$337.02	171
1q00	$165.64	362	$345.20	210
2q00	$205.82	304	$316.24	167

Source: System To Retrieve Information on Drug Evidence (STRIDE)
Prepared by: Abt Associates, Inc. 3/2/01

Table 6: Estimated Annual Price per Pure Gram and Purity of Cocaine at Four Purchase Levels, Calendar years for 1981-2000

Period	Price (2000$/pure gram)				Purity				Number of Cases			
Level* =>	1	2	3	4	1	2	3	4	1	2	3	4
1981	$423.09	$277.03	$201.06	$125.43	36%	44%	60%	73%	281	473	260	3
1982	$433.29	$264.73	$184.45	$153.95	36%	46%	61%	79%	444	664	293	9
1983	$398.81	$247.64	$178.13	$120.31	39%	50%	69%	84%	480	777	580	59
1984	$377.82	$222.25	$153.30	$98.24	44%	55%	71%	86%	603	848	929	67
1985	$328.03	$216.23	$144.69	$93.19	40%	52%	67%	82%	929	1169	1284	104
1986	$314.52	$192.39	$127.14	$72.83	51%	64%	77%	88%	843	1024	1567	131
1987	$292.37	$172.02	$104.11	$54.52	64%	71%	81%	86%	823	871	1961	264
1988	$237.58	$142.01	$79.91	$44.34	75%	73%	81%	88%	1257	941	2004	402
1989	$225.80	$121.75	$67.74	$38.00	78%	71%	76%	84%	1540	973	1973	367
1990	$267.44	$140.23	$77.49	$48.88	69%	59%	66%	78%	1458	994	1387	194
1991	$227.47	$117.29	$69.24	$40.52	78%	70%	75%	83%	1575	1149	2318	415
1992	$224.35	$114.58	$65.04	$37.56	76%	74%	76%	83%	1048	1152	1837	263
1993	$199.19	$109.82	$62.97	$34.88	74%	71%	72%	80%	709	1005	1139	134
1994	$186.96	$98.67	$57.02	$31.56	73%	74%	73%	81%	666	1318	1677	200
1995	$195.99	$96.83	$55.61	$33.71	67%	69%	69%	75%	717	1271	1448	159
1996	$174.96	$92.90	$51.12	$29.92	72%	70%	69%	79%	773	1471	1918	251
1997	$195.15	$90.18	$51.64	$30.00	65%	66%	64%	78%	931	1638	1930	195
1998	$183.09	$87.91	$46.96	$27.69	68%	68%	66%	76%	825	1667	2312	251
1999	$183.93	$92.14	$48.52	$26.59	64%	63%	61%	71%	1423	1942	1955	178
2000	$211.70	$100.67	$51.45	$26.03	61%	58%	53%	67%	700	1109	935	67

*Street Purchasers: 1: Small User (less than 1 pure gram)
2: Large User (1 to 10 pure grams)
3: Mid-level Distributor (10 to 100 pure grams)
4: Wholesale Distributor (100 pure grams or more)

Source: System To Retrieve Information on Drug Evidence (STRIDE) Prepared by: Abt Associates, Inc. 3/2/01

Table 7: Estimated Annual Price per Pure Gram and Purity of Heroin at Four Purchase Levels, Calendar years for 1981-2000

Period	Price (2000$/pure gram)				Purity				Number of Cases			
Level* =>	1	2	3	4	1	2	3	4	1	2	3	4
1981	$3,295.01	$2,149.51	$1,206.81	$865.21	4%	10%	19%	59%	768	486	261	79
1982	$3,284.64	$1,888.08	$1,159.14	$843.27	5%	18%	32%	60%	768	441	298	89
1983	$3,652.45	$2,002.52	$1,310.40	$809.83	6%	17%	29%	58%	634	440	246	100
1984	$3,485.13	$1,930.33	$1,292.94	$717.37	8%	25%	36%	57%	585	291	208	117
1985	$3,146.21	$1,675.37	$1,182.83	$667.60	8%	27%	43%	56%	595	334	266	166
1986	$3,501.93	$1,640.05	$1,153.26	$547.05	9%	27%	37%	49%	450	278	238	106
1987	$3,306.43	$1,567.80	$1,163.80	$552.36	11%	27%	36%	52%	350	313	223	129
1988	$3,122.95	$1,245.90	$960.37	$488.55	17%	36%	40%	58%	355	361	230	174
1989	$2,596.93	$999.05	$790.31	$422.18	19%	39%	44%	62%	268	261	207	230
1990	$2,923.51	$1,186.29	$878.10	$414.66	16%	30%	32%	52%	390	324	292	141
1991	$3,021.84	$1,095.94	$872.32	$416.25	17%	33%	32%	57%	473	447	252	130
1992	$2,862.63	$920.84	$686.81	$348.21	21%	44%	39%	61%	305	384	230	191
1993	$2,634.62	$682.78	$535.94	$286.30	25%	44%	50%	67%	345	548	231	221
1994	$2,720.88	$649.69	$432.78	$247.29	25%	46%	47%	64%	282	688	333	237
1995	$2,651.88	$555.31	$383.79	$206.44	24%	48%	51%	62%	269	753	325	304
1996	$2,424.48	$546.11	$378.31	$177.41	23%	43%	45%	56%	319	770	394	250
1997	$2,372.58	$589.65	$336.20	$171.38	28%	49%	45%	59%	270	712	344	305
1998	$2,086.98	$439.26	$331.46	$148.12	25%	45%	49%	58%	255	927	459	390
1999	$1,929.28	$450.97	$304.47	$140.83	27%	43%	45%	60%	350	918	516	345
2000	$2,087.86	$423.08	$268.84	$112.15	25%	45%	47%	59%	114	466	238	181

*Street Purchasers: 1: Small User (less than 0.1 pure gram)
2: Large User (0.1 to 1 pure grams)
3: Mid-level Distributor (1 to 10 pure grams)
4: Wholesale Distributor (10 pure grams or more)

Source: System To Retrieve Information on Drug Evidence (STRIDE) Prepared by: Abt Associates, Inc. 3/2/01

Table 8: Estimated Annual Price per Pure Gram and Purity of Methamphetamine at Three Purchase Levels, Calendar years for 1981-2000

Period	Price (2000$/pure gram)			Purity			Number of Cases		
Level* =>	1	2	3	1	2	3	1	2	3
1981	$287.33	$93.07	$37.03	41%	66%	64%	110	20	2
1982	$292.66	$126.83	$70.06	43%	60%	43%	178	53	2
1983	$310.72	$114.28	$65.57	43%	60%	73%	175	45	6
1984	$295.43	$128.98	$78.62	38%	61%	60%	252	92	10
1985	$311.53	$132.12	$63.34	36%	60%	65%	226	91	12
1986	$300.84	$118.38	$58.29	40%	57%	65%	262	57	7
1987	$279.19	$106.13	$52.81	43%	58%	84%	186	55	13
1988	$247.75	$92.59	$37.22	46%	62%	80%	256	109	16
1989	$230.04	$98.34	$32.91	38%	63%	84%	186	71	8
1990	$251.14	$115.41	$43.92	23%	39%	42%	193	42	8
1991	$222.84	$161.87	$157.39	19%	49%	68%	158	55	15
1992	$244.46	$103.36	$40.42	32%	57%	72%	176	82	29
1993	$220.04	$84.93	$40.83	40%	63%	73%	175	85	23
1994	$203.18	$72.06	$33.32	54%	76%	87%	194	166	76
1995	$200.90	$85.89	$34.37	41%	59%	73%	326	230	62
1996	$197.94	$91.64	$41.84	32%	51%	62%	283	215	66
1997	$185.11	$70.62	$27.74	41%	54%	66%	437	438	102
1998	$166.29	$75.24	$29.91	21%	28%	29%	749	378	52
1999	$156.66	$69.51	$27.19	23%	26%	36%	639	481	58
2000	$147.36	$63.20	$29.28	24%	27%	43%	348	295	35

*Street Purchasers: 1: User (less than 10 pure gram)
2: Mid-level Distributor (10 to 100 pure grams)
4: Wholesale Distributor (100 pure grams or more)

Source: System To Retrieve Information on Drug Evidence (STRIDE) Prepared by: Abt Associates, Inc. 3/2/01

Table 9: Estimated Annual Price per Pure Gram of Marijuana at Four Purchase Levels, Calendar years for 1981-2000

Period	Price (2000$/pure gram)				Number of Cases			
Level* =>	1	2	3	4	1	2	3	4
1981	$7.37	$4.19	$6.78	$0.91	150	55	15	6
1982	$9.80	$5.33	$2.17	$1.29	63	38	24	17
1983	$11.10	$8.23	$3.66	$1.08	68	49	30	4
1984	$12.08	$6.65	$2.93	$2.86	101	41	20	7
1985	$12.80	$7.54	$2.80	$1.83	81	32	38	8
1986	$14.81	$8.40	$3.32	$1.08	47	12	15	2
1987	$13.05	$12.36	$4.28	$2.56	64	18	45	4
1988	$14.23	$10.34	$3.79	$2.08	45	45	19	4
1989	$14.58	$15.59	$3.67	$2.05	45	18	25	9
1990	$14.07	$8.85	$5.06	$1.92	41	26	45	8
1991	$23.35	$16.88	$5.39	$4.06	40	44	60	13
1992	$14.82	$10.32	$4.86	$3.25	69	32	87	14
1993	$15.05	$15.75	$4.08	$2.01	123	32	46	9
1994	$13.73	$8.79	$3.48	$1.79	59	36	57	13
1995	$11.77	$7.39	$3.34	$1.83	80	43	57	35
1996	$10.47	$6.87	$2.54	$1.58	75	45	72	12
1997	$10.05	$6.80	$2.70	$1.30	130	64	95	20
1998	$9.22	$6.67	$2.94	$1.23	98	40	95	14
1999	$9.27	$9.05	$2.71	$1.14	214	38	80	11
2000	$8.80	$5.26	$2.41	$0.97	51	14	50	6

*Street Purchasers: 1: Small User (less than 10 pure gram)
2: Large User (10 to 100 pure grams)
3: Mid-level Distributor (100 to 1000 pure grams)
4: Wholesale Distributor (1000 pure grams or more)

Source: System To Retrieve Information on Drug Evidence (STRIDE) Prepared by: Abt Associates, Inc. 3/2/01

Appendix A: Statistical Methods

1. The STRIDE Data

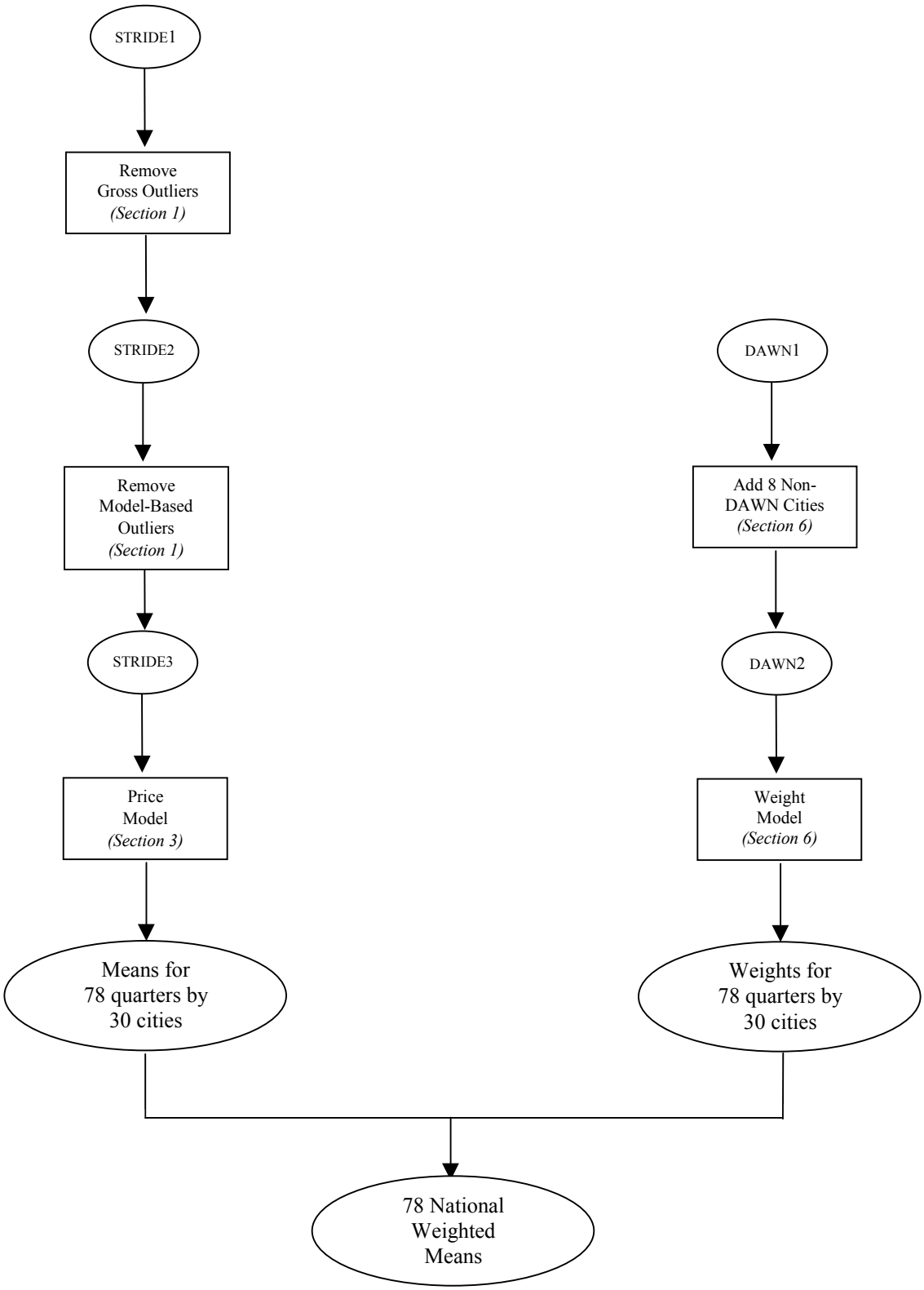
The analysis reported here is based on the System To Retrieve Information from Drug Evidence (STRIDE) database, which contains data on illicit drug purchases from the first quarter 1981 through the second quarter 2000. Over this period, the DEA recorded the price, weight, purity, location and date of 122,288 transactions consisting of cocaine (78,407), heroin (30,350), methamphetamine (9,694), and marijuana (3,837). This appendix describes how the original STRIDE data set was cleaned, modeled, and weighted. An overview of the entire process for the price data is shown in the flow chart on the following page. The flow chart for the purity data (not shown) is identical except that the third left-side square box reads "Purity Model (*section 5*)" rather than "Price Model (*section 3*)".

The STRIDE database contained many purchases that a researcher familiar with the illicit drug market would deem incorrect. These were removed under the guidance of Dr. Dana Hunt, a substance abuse expert at Abt Associates. Table A1 lists the criteria for deletion. Purchases with extremely low purities were deleted because it seemed likely that the buyer was deceived (e.g. a user would not knowingly purchase cocaine with purity less than 10%). In cases with inordinately high prices per bulk gram (e.g. greater than $3,000 for cocaine), inordinately low prices (e.g. less than $3 for cocaine), or inordinately low bulk amounts (e.g. less than one tenth of a gram for cocaine), the data itself is highly suspect. Again, the idea is that a user would not knowingly purchase one bulk gram of cocaine for more than $3,000, and so on.

Table A1. Criteria for Deleting Data Point by Drug

Drug	Dollars per bulk gram	Purity	Nominal price ($)	Bulk grams	
Cocaine	> 3,000	< 0.1	< 3	< 0.1	
Heroin	>10,000	< 0.02	< 3	< 0.1	
Methamphetamine	> 3,000	< 0.1	< 3	< 0.1	
Marijuana	> 100	-	< 0.1	< 0.2	

Figure A1. Flow Chart for STRIDE and DAWN Data



In addition to the above gross discrepancies, many prices were found to be reasonable at some transaction size and purity, yet were unreasonable given the actual amount and purity of the purchase at hand. For example, $100 per pure gram of heroin is not an unreasonable price for a purchase of one pure kilo, but it is extremely low for a purchase of one tenth of a pure gram. Purchases with excessively large residual prices were deleted, the residual price being the difference between the observed price and predicted price (given the amount, purity, city and quarter) obtained from the price model described below.

In order to gauge the size of a residual it is necessary to know the distribution of residuals. For normal linear models, standardized residuals (residuals divided by their standard errors) follow a standard normal distribution and the probability of a large residual is easily calculated. For generalized linear models, the deviance residuals can be used in a similar way (McCullagh and Nelder, 1989, pp. 37-40).

We set the probability of deleting good data to 0.002 and deleted purchases with prices outside this threshold. Experiments with simulated data indicate that further iteration improves our ability to detect outliers. This occurs because the distribution of deviance residuals in the first iteration is artificially dispersed because of the presence of inordinately extreme residuals which will be absent from the second iteration. We iterated until no further outliers could be detected, typically performing five to ten iterations.

Table A2 summarizes the effect of our successive approaches to outlier deletion. The first row gives the initial size of the STRIDE sample, STRIDE1. The second row shows the effect of removing gross outliers by the criteria listed in Table A1, thus creating STRIDE2. The third row shows the effect of further outlier removal by model-based methods, thus creating STRIDE3. The second row has 0 to 3 percent less data than the first row, and the third row has 4 to 5 percent less data than the second row.

The effect of removing gross outliers and extreme residuals depended on the drug and distribution level, but some general patterns emerged. The removal of gross outliers dramatically reduced the mean price per pure gram and mean price per gram. Excluding Level 4 marijuana, the effect of

the subsequent removal of extreme residuals was to decrease mean prices by a further 3% on average, although the effect was occasionally in the opposite direction (mean prices for Level 4 cocaine, Level 4 heroin, Level 3 methamphetamine, and Level 1 marijuana increased by 15%, 21%, 5%, and 6% respectively).

Table A2. The Effect of Outlier Deletion on STRIDE Sample Size

	Cocaine	Heroin	Meth.	Marijuana
Initial STRIDE sample (STRIDE1)	78,407	30,350	9,694	3,837
Sample after removing gross outliers (STRIDE2)	77,071	29,406	9,662	3,749
Sample after removing extreme residuals (STRIDE3)	73,901	27,963	9,171	3,557

The effect of outlier removal on parameter estimates associated with log(amount), log(purity), and the ratio of Q2 2000 prices to Q1 1981 prices was varied. For some drugs and distribution levels, the magnitude of the parameter estimates increased and for others they decreased. In no case was a statistically significant change in sign observed, and except for the ratio of Q2 2000 to Q1 1981 marijuana prices, all parameters were negative with or without the inclusion of extreme residuals. Also, there was a tendency for the parameter associated with log(amount), denoted by β in section 3, and the parameter associated with log(purity), denoted by γ in section 3, to offset each other in the sense that β increased when γ decreased, and conversely.

The effect of the removal of extreme residuals on parameter estimates associated with log(amount), log(purity), and the ratio of Q2 2000 prices to Q1 1981 prices (these are denoted here by β, γ and τ) was varied. For some drugs and distribution levels, the magnitude of the parameter estimates increased and for others they decreased. In no case was a statistically significant change in sign observed; except for τ in the case of marijuana, all parameters were negative with or

without the inclusion of extreme residuals. Also, there was a tendency for β and γ to offset each other in the sense that β increased when γ decreased, and conversely.

The alternative method of estimating cocaine and heroin retail prices (described in section 4) yields far fewer outliers partly because outcomes (pure grams) are not divided by purities that are sometimes implausibly small. In addition, the outliers that are flagged are more easily assessed by experts because the market is better understood in terms of the amount obtained for a nominal dollar amount. These are important advantages of the alternative method, the results for which are as follows. Firstly, gross outliers (cocaine: nominal prices $\leq$ \$1, bulk grams $\leq$ 0.05 grams or bulk grams > 5 grams; heroin: nominal prices $\leq$ \$1, bulk grams $\leq$ 0.04 grams or more than 5 grams for heroin) excluded 2.7% of the cocaine data and 2.4% of the heroin data. Secondly, model-based outliers exclude an additional 0.2% of the remaining cocaine data and 0.4% of the remaining heroin data. Consultation with Dr. Dana Hunt opinion confirms that these additional purchases were unreasonable given the market for these drugs.

2. Variables

To model the purchase price as a function of amount purchased, we standardized both price and amount. Except for marijuana, *amount* was expressed in pure grams and *price* was expressed in 2000 dollars per pure gram (Table 14 gives the Consumer Price Index using the first half of 2000 as a reference point). In the case of marijuana, the purity (THC content) was absent from the STRIDE database, so we expressed amount and price in terms of bulk grams and current dollars per bulk gram.

Other variables thought to affect purchase price were *purity* (0 to 1), *time* (78 quarters from Q1 1981 to Q2 2000), *city* (29 large U.S. cities and the Rest of U.S.), and *distribution level* (several levels defined in terms of standardized amount). The 29 cities were: Atlanta, Baltimore, Boston, Buffalo, Chicago, Cleveland, Dallas, Denver, Detroit, Houston, Kansas City, Los Angeles, Miami, Milwaukee, Minneapolis, New Orleans, New York, Newark, Philadelphia, Phoenix, Pittsburgh, Portland, San Antonio, San Diego, San Francisco, Seattle, St. Louis, Tampa and Washington DC.

From the viewpoint of the model, the Rest of U.S. is just another "city", and at times we use the shorthand "30 cities" for "the 29 large U.S. cities and the Rest of U.S.".

The distribution level has no precise definition, but the intention was to distinguish purchases that were predominantly retail (Level 1) from those involving dealers (Level 2 and above). The levels, inclusive of the upper limit, were as follows: cocaine (0-1, 1-10, 10-100, >100 pure grams); heroin (0-0.1, 0.1-1, 1-10, >10 pure grams); methamphetamine (0-10, 10-100, >100 pure grams); marijuana (0-10, 10-100, 100-1,000, >1,000 bulk grams).

3. A Model for Price

For each drug and each level of distribution, we regressed standardized price against standardized amount, purity, time and city. For the reason just outlined, purity was not included in the model for marijuana. Because price changes over short periods of time are of interest, both time and city were treated as factors (with 78 and 30 levels respectively). Had time been treated continuously, means estimated by the model would not have exhibited short-term fluctuations in price.

The regression model took the form of a generalized linear model with log link function, logarithmic predictors, and constant coefficient of variation (McCullagh and Nelder, 1989, ch. 8). This model implies the following mean and variance specifications:

$$E(price_{itj}) = \exp(\alpha + city_i + time_t + \beta \log(amount_{itj}) + \gamma \log(purity_{itj})) \quad (1)$$

$$V(price_{itj}) = \phi E^2(price_{itj}) \quad (2)$$

In these expressions, $price_{itj}$ represents the *j*th observation from the *i*th city at the *t*th time period, with covariate values $amount_{itj}$ and $purity_{itj}$. $E(price_{itj})$ is the mean value of $price_{itj}$, and $V(price_{itj})$ is its variance. ϕ is a dispersion parameter analogous to σ^2 in a linear model based on least squares.

Estimation and inference for the above model was carried out via the method of quasi-maximum likelihood. Under distributional assumptions involving only the first two moments (those embodied in (1) and (2)), quasi-maximum likelihood estimates are consistent and asymptotically

normal, and they are also optimal among a large class of estimators (McCullagh and Nelder, 1989, ch. 9). Residual analysis supported the adequacy of the specifications given by (1) and (2), although consistency and asymptotic normality hold even when the variance function is incorrectly specified (Fahrmeir and Tutz, 1994, pp.52-55).

Tables A3 through A6 list the average purchase price and parameter estimates associated with log(amount), β, and log(purity), γ, for each level of distribution. The figures in parentheses are standard errors. As expected, the price per pure gram (or price per gram for marijuana) falls as distribution level rises. Also, the magnitude of β tends to decrease, and the magnitude of γ tends to increase, with an increase in distribution level.

Table A3. Mean Price and Parameter Estimates for Cocaine

Level of Distribution	N	Average Price per Pure Gram	β	γ
Less than 1 pg	18025	265.420	-0.269(0.004)	-0.645(0.006)
1 to 10 pg	22456	151.126	-0.303(0.003)	-0.638(0.005)
10 to 100 pg	29707	94.967	-0.152(0.002)	-0.787(0.005)
More than 100 pg	3713	56.210	-0.138(0.005)	-0.868(0.019)

Table A4. Mean Price and Parameter Estimates for Heroin

Level of Distribution	N	Average Price per Pure Gram	β	γ
Less than 0.1 pg	8145	2875.092	-0.429(0.008)	-0.436(0.007)
0.1 to 1 pg	10142	1150.103	-0.286(0.007)	-0.291(0.006)
1 to 10 pg	5791	794.588	-0.260(0.010)	-0.298(0.009)
More than 10 pg	3885	437.251	-0.146(0.006)	-0.555(0.013)

Table A5. Mean Price and Parameter Estimates for Methamphetamine

Level of Distribution	N	Average Price per Pure Gram	β	γ
Less than 10 pg	5509	239.884	-0.314(0.004)	-0.687(0.006)
10 to 100 pg	3060	101.172	-0.299(0.012)	-0.541(0.012)
More than 100 pg	602	50.721	-0.114(0.023)	-0.712(0.036)

Table A6. Mean Price and Parameter Estimates for Marijuana

Level of Distribution	N	Average Price per Gram	β
Less than 10 g	1644	12.617	-0.636(0.017)
10 to 100 g	722	9.160	-0.116(0.028)
100 to 1000 g	975	3.677	-0.279(0.022)
More than 1000 g	216	1.869	-0.122(0.030)

The price model just described contained 109 parameter (29 for the 30 cities, 77 for the 78 quarters, and one each for amount, purity and intercept terms). Based on estimates of these parameters, we derived estimates for mean prices for each city in each quarter. For a given quarter, the 30 city means were multiplied by their respective DAWN weights (described below) and the sum of these contributions provided a weighted estimate for the mean price and mean purity in the U.S. for that quarter. The national results are shown in Tables 1-4, and Figures 1, 4, 7, and 9. Annualized versions of these are shown in Tables 6-9.

4. An Alternative Model for Retail Price

Additional information obtained from a DUF addendum data enabled us to estimate retail prices for cocaine and heroin by an alternative method. The DUF data provided arrestees' answers to various questions about drug expenditures over the last 7 days, and in particular, the amount paid by cocaine and heroin users for their last drug transaction. The data came from six cities (New York, Washington DC, Portland, San Diego, Chicago, and San Antonio) over one year (Q3 1995 – Q2 1996) and were used to obtain frequencies for the amount paid in nominal dollars by retail-level cocaine and heroin users. A retail purchase was defined as a purchase up to 100 nominal dollars, and prices were rounded to the nearest $10. The resulting cocaine and heroin price distributions are shown below in Figures A2 and A3.

In the previous section we used the STRIDE data to estimate a model that assumes price depends on amount. In this section, we estimate the "reverse" model which supposes the amount purchased (in pure grams) depends on the price paid (in nominal dollars). We considered several formulations of this model and settled on:

$$E(amount_{itj}) = \exp(\alpha + city_i + time_t + \beta \log(price_{itj})) \quad (1)$$

$$V(amount_{itj}) = \phi E^2(amount_{itj}) \quad (2)$$

Table A7 provides estimates for the parameters associated with log(price). Both estimates are close to unity which suggests that there are no quantity discounts at the retail level.

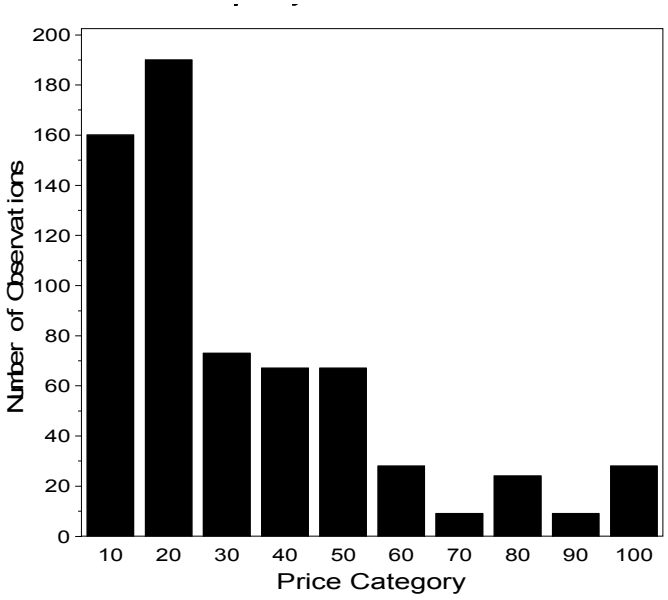


Figure A2. Relative Frequency of Retail Cocaine Purchases

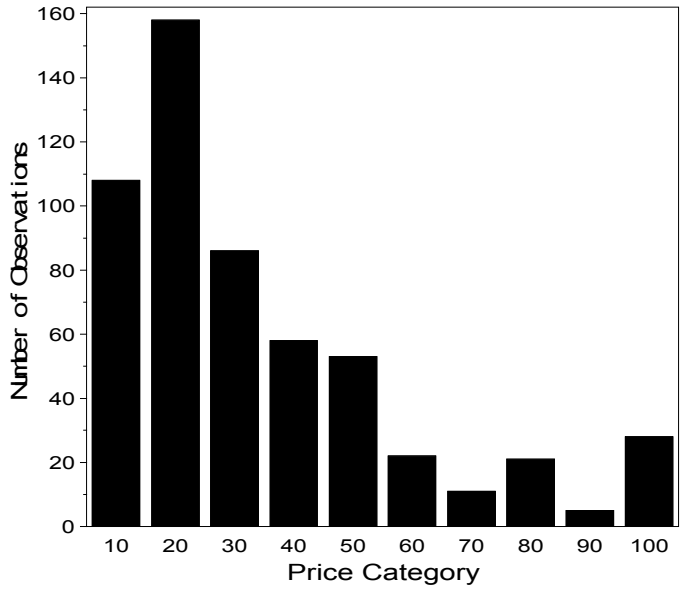


Figure A3. Relative Frequency of Retail Heroin Purchases

Table A7. Mean Price and Parameter Estimates: Retail Cocaine and Heroin

Type of Drug	N	Average Price per Pure Gram	□
Cocaine	18946	270.12	1.1549 (0.010)
Heroin	10659	1581.36	0.9378 (0.016)

Based on this model, we predicted the mean purchase amount for the set of nominal expenditures from $10 to $100 for each city and quarter. For example, Tables A8 and A9 give these estimates for Rest of U.S. in Q2 2000.

Table A8. Predicted mean amounts (pure milligrams) for given nominal prices: Cocaine, Rest of U.S., Q2 2000

Nominal Price ($)	Mean Amount	95% Confidence Limits Lower	Upper
10	36.28	30.71	41.35
20	80.78	67.41	93.37
30	129.02	106.79	150.37
40	179.86	148.00	210.86
50	232.73	190.64	274.08
60	287.28	234.45	339.57
70	343.26	279.25	407.01
80	400.50	324.93	476.16
90	458.85	371.38	546.85
100	518.23	418.54	618.93

Table A9. Predicted mean amounts (pure milligrams) for given nominal prices: Heroin, Rest of U.S., Q2 2000

Nominal Price ($)	Mean Amount	95% Confidence Limits Lower	Upper
10	29.68	23.19	37.99
20	56.86	43.46	74.40
30	83.17	62.75	110.23
40	108.92	81.43	145.70
50	134.28	99.67	180.89
60	159.31	117.58	215.87
70	184.09	135.20	250.67
80	208.65	152.58	285.32
90	233.02	169.77	319.84
100	257.22	186.77	354.24

Corresponding predicted real prices per pure gram for this set of nominal expenditures were obtained by deflating and then inverting these predicted mean amounts. The average retail price (in 2000 dollars) for a given city and quarter was then obtained as the weighted average of the set of 10 prices, with weights coming from the DUF-based cocaine and heroin price distributions described above. For a given quarter, the 30 city means were then multiplied by their respective DAWN weights and the sum of these contributions provided a weighted estimate for the mean price and mean purity in the U.S. for that quarter. The national results are show in Table 5 and Figures 2 and 5.

5. A Model for Purity

Given sufficient data, we could have estimated the mean purity for each city in each quarter by its sample mean. For a given quarter, a weighted average of these 30 city (29 large U.S. cities and the Rest of U.S.) sample means would have provided a sensible quarterly estimate for the mean purity in the U.S. for that quarter. However, given 30 cities and 78 quarters, this would require 2,340 sample means for each level of distribution for each drug, and this requirement goes well beyond the resources of the STRIDE database. For each level of distribution for cocaine, Table A10 contains the percentages of these cell means that do not have data. This section describes a feasible alternative to simple tabulations.

In order to estimate 2,340 cell means from a database containing less than 2,340 cells of data, some form of modeling is necessary. The linear model provides a straightforward possibility:

$$E(\text{purity}_{itj}) = \alpha + \text{city}_i + \text{time}_t \quad (3)$$

$$V(\text{purity}_{itj}) = \sigma^2 \quad (4)$$

However, both of these specifications are implausible for the purity data. First, the mean purity must lie in the unit interval, but (3) does not impose this restriction. Second, the variance of purity depends on its mean (it is higher around 0.5 than 0.9), but this is not embodied in (4). The first problem was particularly important for our data, as the linear model gave impossible estimates for purity for several cities in several quarters. We avoided both problems by working with a quasi-

binomial model and regarding a purity measurement as a realization from a quasi-binomial experiment.

Table A10. Percentage of Cell Means with no Data

Cocaine	Number of Cells Missing	Percent Cells Missing
0 to 1 Pure Grams	1174	50.17%
1 to 10 Pure Grams	573	24.49%
10 to 100 Pure Grams	310	13.25%
Greater than 100 pure grams	1347	57.56%

Heroin	Number of Cells Missing	Percent Cells Missing
0 to 0.1 Pure Grams	1138	48.63%
0.1 to 1 Pure Grams	923	39.44%
1 to 10 Pure Grams	1206	51.54%
Greater than 10 pure grams	1460	62.39%

Methamphetamine	Number of Cells Missing	Percent Cells Missing
0 to 10 Pure Grams	1673	71.50%
10 to 100 Pure Grams	1800	76.92%
Greater than 100 pure grams	2126	90.85%

Marijuana	Number of Cells Missing	Percent Cells Missing
0 to 10 Pure Grams	2079	88.85%
10 to 100 Pure Grams	2092	89.40%
100 to 1000 Pure Grams	2012	85.98%
Greater than 1000 pure grams	2209	94.40%

A DEA laboratory obtained a purity measurement for a given purchase by analyzing a small sample of the purchase. To construe this measurement as an outcome of a binomial experiment (even though the actual measurement process may have proceeded along different lines), let the small sample constitute a three dimensional grid of m cells, and let y be the number of pure cells. Then y follows a binomial(m, p) distribution, and $p = y/m$ is the observed proportion of pure cells, that is, the purity. The analysis of purity can now be carried out via a binomial

model because each purity observation corresponds to a binomial observation. For example, if a purchase had an observed purity of 0.8 then, if *m* was 1,000, we have effectively observed 800 events in 1,000 trials.

The problem is that the value of *m* is unknown. While a purity measurement of 0.8 is consistent with obtaining 800 events in 1,000 trials, it is also consistent with obtaining 8 events in 10 trials, but these two binomial observations convey different information. However, if we assume the value of *m* is the same for all purchases (i.e. that the size of the small sample used in the laboratory analysis was the same size for all purchases), any choice of *m* will suffice provided the variance function incorporates a dispersion parameter. That is, estimation and inference based on an *overdispersed* binomial model is invariant to the choice of *m*. Thus, our mean and variance functions for purity were:

$$E(\text{purity}_{itj}) = \exp(\alpha + \text{city}_i + \text{time}_t)/\{1 + \exp(\alpha + \text{city}_i + \text{time}_t)\} \quad (5)$$

$$V(\text{purity}_{itj}) = \phi\{E(\text{purity}_{itj})(1 - E(\text{purity}_{itj}))\}/m \quad (6)$$

Here, purity_{itj} represents the *j*th observation from the *i*th city at the *t*th time period, and ϕ is the dispersion parameter. Equation (5) specifies a logistic model, because the inverse of the mean function is the logit function. In contrast to the linear model (3), the logistic model restricts the mean purity to the unit interval.

This purity model contained 107 parameters (29 for the 30 cities, 77 for the 78 quarters, and one for the intercept). Based on estimate of these parameters, we derived estimates for mean purities for each city in each quarter. For a given quarter, the 30 city means were multiplied by their respective DAWN weights and the sum of these contributions provided a weighted estimate for the mean price and mean purity in the U.S. for that quarter. The national results are show in Tables 1-4, and Figures 3, 6, and 8.

6. A Model for Weights

As previously noted, the price and purity models described above provided estimates for mean price and mean purity for each city in each quarter. For a given quarter, the 30 city means were

multiplied by their respective weights, and the sum of these terms provided weighted estimates for the mean price and mean purity in the U.S. for that quarter. The weights for each drug and quarter are given in appendix B. The remainder of this section describes the method used to calculate the weights.

Weighting was necessary because the STRIDE database is not representative of drug purchases across the U.S. For example, STRIDE over-represents cocaine purchases in Washington D.C. and under-represents those in Los Angeles. Weighting seeks to remedy this situation. The required weight for a given city in a given quarter is the proportion of U.S. purchases made in that city in that quarter.

Unfortunately, these weights are unavailable, and it was necessary to estimate weights via a surrogate variable. We used Drug Abuse Warning Network (DAWN) emergency-event counts as a surrogate variable. These counts were compiled by the Substance Abuse and Mental Health Services Administration (SAMHSA) on a semi-annual basis over the period 1988-1999 for 21 of our 29 cities and for a Rest of U.S. category.

The original DAWN database is referred to as DAWN1 in the flow chart in Figure A1. This database was augmented by pairing eight large U.S. cities that were excluded from DAWN with eight similar DAWN cities, and the augmented database is referred to as DAWN2 in the flow chart. The imputed emergency-event counts for additional eight cities were calculated in proportion to their population. To illustrate the method, consider the (Houston, Dallas) pair. Dallas, a DAWN city, had a population of 2,566,124 and a cocaine emergency-event count of 823. Houston, a non-DAWN city, had a population of 3,274,963, and therefore its imputed cocaine emergency-event count was 1.276 x 823 = 1,050. The motivation for the pairing was to include large cities that for some reason are not in DAWN. The criteria for a particular pairing was that the two be broadly similar cities in similar locations. The list of all (matched city, DAWN city) pairs were: (Houston, Dallas), (Pittsburgh, Buffalo), (Tampa, Miami), (Milwaukee, Minneapolis), (Kansas City, St. Louis), (Cleveland, Detroit), (Portland, Seattle), and (San Antonio, Dallas).

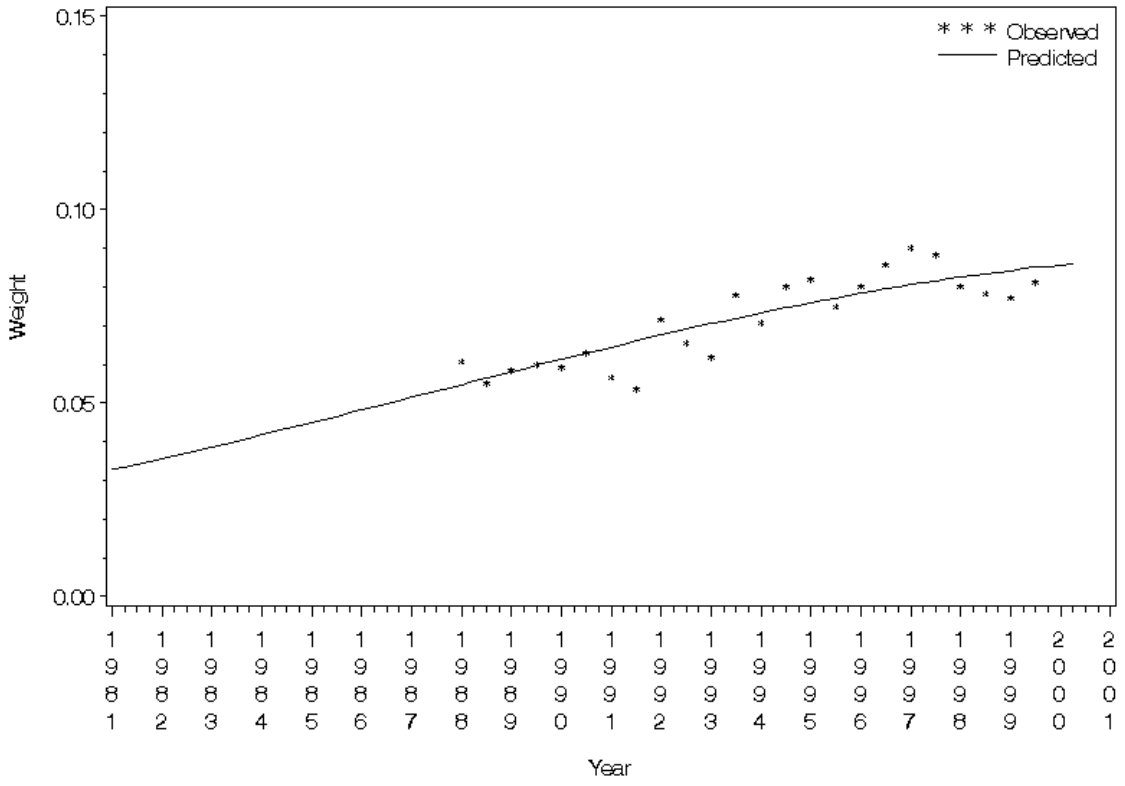


Figure A4. Predicted Weights for Cocaine: Cocaine, 1981-Q1 to 2000-Q2

We fit a Poisson regression model ($E(y_t) = \exp(\alpha + \beta time_t)$ and $V(y_t) = \phi E(y_t)$, where y_t = emergency-events at time *t*) to the resulting "extended" DAWN database (18 semi-annual emergency-event counts from 1988 through 1999 for 29 cities plus the Rest of U.S.) to obtain modeled counts for the 78 quarters from Q1 1981 through Q2 2000 for each city. The modeled weights were then calculated from the modeled counts in such a way that the weights in a given quarter summed to one. For example, Figure A4 shows the modeled and observed weights for Chicago.

Modeling the weights achieved two objectives. Firstly, it smoothed over the random fluctuations in quarters where data existed, and secondly, it provided estimates (extrapolations and interpolations) in quarters where data was unavailable. Overall the modeled weights appeared

very reasonable, particularly given that the length of the required extrapolation was nearly as long as the range of observable data.

7. The Relationship Between Retail and Wholesale Prices

It is of interest to know the relationship between retail and wholesale prices. This is not a simple matter of regressing one price on the other. Rather, one must account for the fact that both variables are time series with particular correlation structures which affect each other in a possibly delayed or dynamic fashion (Box et. al, 1994). We illustrate an approach to this bivariate time series problem for cocaine prices over the last decade 1991-2000. Retail prices were based on a monthly version of the method described in section 4, and wholesale prices were based on a monthly version of the method described in section 3. The two price series are shown in Figure A5.

The correlation between the two price series is 0.46, and even though this estimate is technically inappropriate, it does correctly portray the fact that both price series tend to move together. The technical problem arises because a simple correlation coefficient ignores the time series nature of the two series: its validity assumes firstly that observations in each price series are independent rather than autocorrelated, and secondly that the correlation between the two series is contemporaneous rather than delayed, dynamic (involving lags of some sort), or both.

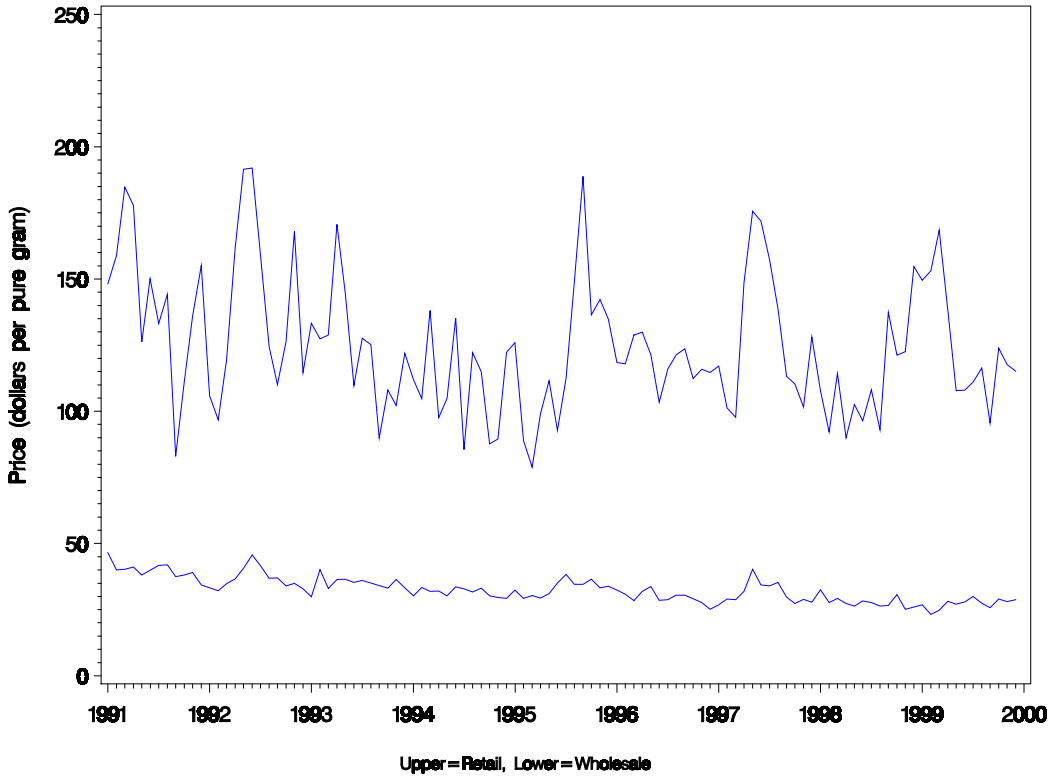


Figure A5. Monthly Retail and Wholesale Cocaine Prices : National

Transfer function methods, which do accommodate for time series aspects, indicate that both price series have high first order autocorrelation (0.550 ($p<0.0001$) for retail and 0.83904 ($p< 0.0001$) for wholesale), and that increases in wholesale prices are associated with lagged as well as contemporaneous increases in retail prices. Specifically, we estimate that an increase in retail prices of $1 in a given month is associated with an increase in wholesale prices of $0.034 ($p = 0.001$) the same month, and an increase of $0.039 ($p = 0.0003$) the following month. Thus, to some extent at least, wholesale prices appear to have followed, rather than lead, retail prices.

This surprising result requires some explanation. Consider the possibility of an external event (such as a successful interdiction) causing a temporary shortage in the cocaine market. Prices do not adjust at the wholesale/importation level because delivery prices are set by contract. Prices increase over time as contractual terms adjust to market realities. No such lag occurs at the retail level, however, where dealers charge the maximum price that the market will bear. Therefore,

wholesale prices lag behind increases in retail prices, but this does not imply that an increase in retail prices causes an increase in wholesale/importation prices. Note also that the estimated association summarizes the wholesale-retail relationship over a particular historical period, and it need not hold over other time periods when price changes are less the result of, for example, changes in supply, and more the result of increased law enforcement.

8. Regional Prices

Regional prices and purities are useful for a variety of reasons. Appendix C shows the results of aggregating the cleaned data (STRIDE3 in Figure A1) into six consumption regions (Northeast, Southeast, East Central, West Central, Mountain, and Pacific) and calculating annual sample means for prices and purities.

Although this simple approach may be suitable to ascertain rough trends, it suffers from several defects. Firstly, the sample weights are inappropriate. "No sample weights" actually implies "equal sample weights", and these are appropriate only for random samples. Secondly, prices have not been adjusted for transaction size and purity. Thirdly, the method for removing outliers is inappropriate, since outliers relative to the national model are not necessarily outliers relative to the regional model.

The last issue is particularly egregious in cases when it is desirable to keep the time series structure in the regional prices series. For example, the presence of a non-smoothed monthly time series structure would be critical to the success of a study attempting to measure the effect of monthly anti-cocaine smuggling operations on monthly cocaine prices. In fact, Abt Associates has recently conducted such a study, and for this purpose a regional price series that did maintain the time series structure was estimated for the South West Border from 1991-2000[1]. The resulting wholesale and retail price series are shown in Figure A6.

[1] Layne M., Bruen, A., Johnston P., Rhodes W., Decker S., Townsend M., Chester C., Schaffer G., Lavin J. "Measuring the Deterrent Effect of Enforcement Operations on Drug Smuggling, 1991-1999," Abt Associates 2001.

The approach used to obtain the South West Border price series was a variant of the method used to obtain the national price series (section 1-3). A direct application of the method failed to identify important outliers because of the sparseness of the data. For example, if a particular month had only a single transaction, then the model would necessarily fit perfectly, and the corresponding residual would be therefore be zero (the single observation being completely accommodated by its own parameter). Alternatively, if there were only two transactions in a month, then the model would be equidistant from both observations, and the magnitude (absolute value) of the two residuals would be identical, regardless of the position of the two observations. Clearly some degree of smoothing is required here. Our approach was to use a high degree polynomial model for outlier detection, and then fit the resulting "clean" data by (a monthly version of) the dummy variable model of section 3. This approach could be applied to other regional price series, and hopefully future editions of the report will contain these series.

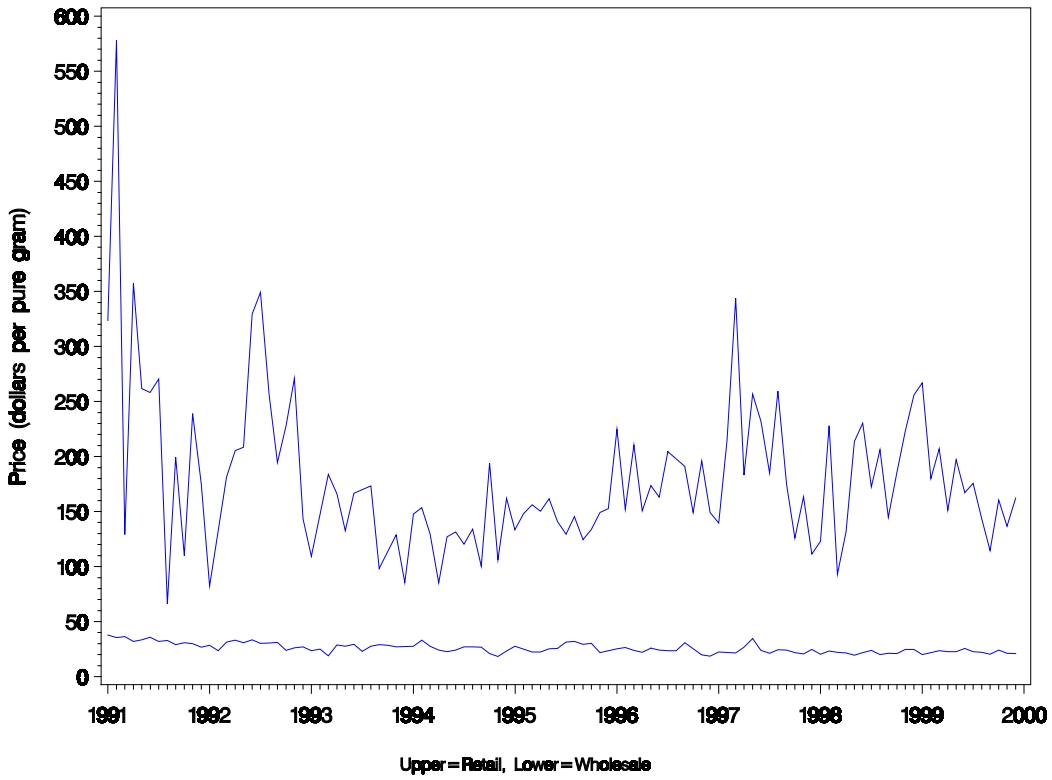


Figure A6. Monthly Retail and Wholesale Cocaine Prices: South West Border

Appendix B
Data Adjustments: List of Tables

Table B1: Estimated DAWN Weights for Cocaine

Metropolitan Area	1981				1982				1983			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Atlanta	0.020	0.021	0.021	0.021	0.022	0.022	0.022	0.023	0.023	0.023	0.024	0.024
Baltimore	0.028	0.029	0.029	0.030	0.030	0.031	0.031	0.031	0.032	0.032	0.033	0.033
Boston	0.024	0.024	0.025	0.025	0.025	0.025	0.025	0.026	0.026	0.026	0.026	0.026
Buffalo	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Chicago	0.033	0.034	0.034	0.035	0.036	0.036	0.037	0.038	0.039	0.039	0.040	0.041
Cleveland	0.028	0.028	0.029	0.029	0.029	0.029	0.029	0.030	0.030	0.030	0.030	0.030
Dallas	0.009	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
Denver	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.007	0.007	0.007	0.007	0.007
Detroit	0.053	0.054	0.054	0.055	0.055	0.055	0.056	0.056	0.057	0.057	0.057	0.058
Houston	0.012	0.012	0.012	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
Kansas City	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.004	0.004	0.004
Los Angeles	0.069	0.069	0.069	0.069	0.068	0.068	0.068	0.067	0.067	0.067	0.066	0.066
Miami	0.005	0.005	0.005	0.005	0.006	0.006	0.006	0.006	0.006	0.006	0.007	0.007
Milwaukee	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Minneapolis-St Paul	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
New Orleans	0.063	0.062	0.061	0.060	0.059	0.058	0.057	0.056	0.055	0.054	0.053	0.052
New York	0.177	0.177	0.177	0.178	0.178	0.178	0.178	0.178	0.178	0.178	0.178	0.178
Newark	0.058	0.058	0.057	0.057	0.057	0.056	0.056	0.055	0.055	0.055	0.054	0.054
Philadelphia	0.107	0.107	0.107	0.107	0.107	0.107	0.107	0.107	0.107	0.107	0.107	0.107
Phoenix	0.007	0.007	0.007	0.007	0.007	0.007	0.008	0.008	0.008	0.008	0.008	0.008
Pittsburgh	0.003	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.005	0.005	0.005
Portland	0.006	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.008	0.008
San Antonio	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.005
San Diego	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
San Francisco	0.043	0.042	0.042	0.041	0.041	0.041	0.040	0.040	0.039	0.039	0.038	0.038
Seattle	0.009	0.009	0.009	0.009	0.009	0.010	0.010	0.010	0.010	0.010	0.010	0.010
St Louis	0.005	0.005	0.005	0.005	0.005	0.006	0.006	0.006	0.006	0.006	0.006	0.006
Tampa	0.005	0.006	0.006	0.006	0.006	0.006	0.006	0.007	0.007	0.007	0.007	0.007
Washington, DC	0.162	0.159	0.155	0.151	0.148	0.144	0.140	0.137	0.134	0.130	0.127	0.124
Rest of US	0.043	0.044	0.046	0.048	0.049	0.051	0.053	0.054	0.056	0.058	0.060	0.062

Source: Drug Abuse Warning Network Emergency Room Mentions, 1988 – 1999.

Table B1: Estimated DAWN Weights for Cocaine
(Continued)

Metropolitan Area	1984				1985				1986			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Atlanta	0.024	0.025	0.025	0.025	0.026	0.026	0.026	0.027	0.027	0.027	0.028	0.028
Baltimore	0.034	0.034	0.035	0.035	0.036	0.036	0.037	0.037	0.037	0.038	0.038	0.039
Boston	0.027	0.027	0.027	0.027	0.027	0.027	0.028	0.028	0.028	0.028	0.028	0.028
Buffalo	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Chicago	0.042	0.043	0.043	0.044	0.045	0.046	0.047	0.047	0.048	0.049	0.050	0.051
Cleveland	0.030	0.030	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031
Dallas	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
Denver	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
Detroit	0.058	0.058	0.058	0.059	0.059	0.059	0.059	0.060	0.060	0.060	0.060	0.060
Houston	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.015
Kansas City	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.005	0.005	0.005	0.005
Los Angeles	0.066	0.065	0.065	0.065	0.064	0.064	0.063	0.063	0.062	0.062	0.061	0.061
Miami	0.007	0.007	0.007	0.008	0.008	0.008	0.008	0.008	0.009	0.009	0.009	0.009
Milwaukee	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Minneapolis-St Paul	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
New Orleans	0.051	0.050	0.049	0.048	0.047	0.046	0.045	0.045	0.044	0.043	0.042	0.041
New York	0.178	0.178	0.178	0.178	0.177	0.177	0.177	0.176	0.176	0.175	0.175	0.174
Newark	0.053	0.053	0.052	0.052	0.051	0.051	0.050	0.050	0.049	0.049	0.048	0.048
Philadelphia	0.107	0.107	0.106	0.106	0.106	0.106	0.105	0.105	0.105	0.104	0.104	0.104
Phoenix	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.009	0.009
Pittsburgh	0.005	0.005	0.005	0.006	0.006	0.006	0.006	0.006	0.006	0.007	0.007	0.007
Portland	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.009	0.009	0.009	0.009	0.009
San Antonio	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
San Diego	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
San Francisco	0.038	0.037	0.037	0.036	0.036	0.035	0.035	0.034	0.034	0.033	0.033	0.033
Seattle	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.012	0.012	0.012	0.012	0.012
St Louis	0.006	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.008	0.008	0.008
Tampa	0.008	0.008	0.008	0.008	0.008	0.009	0.009	0.009	0.009	0.010	0.010	0.010
Washington, DC	0.120	0.117	0.114	0.111	0.108	0.105	0.102	0.100	0.097	0.094	0.092	0.089
Rest of US	0.064	0.066	0.068	0.070	0.072	0.074	0.076	0.079	0.081	0.084	0.086	0.089

Source: Drug Abuse Warning Network Emergency Room Mentions, 1988 - 1999.

Table B1: Estimated DAWN Weights for Cocaine
(Continued)

Metropolitan Area	1987				1988				1989			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Atlanta	0.028	0.028	0.029	0.029	0.029	0.030	0.030	0.030	0.030	0.031	0.031	0.031
Baltimore	0.039	0.040	0.040	0.041	0.041	0.041	0.042	0.042	0.043	0.043	0.043	0.044
Boston	0.028	0.028	0.028	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029
Buffalo	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.005	0.005	0.005
Chicago	0.051	0.052	0.053	0.054	0.055	0.056	0.056	0.057	0.058	0.059	0.060	0.060
Cleveland	0.031	0.031	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032
Dallas	0.011	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
Denver	0.007	0.007	0.007	0.007	0.007	0.007	0.008	0.008	0.008	0.008	0.008	0.008
Detroit	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061
Houston	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
Kansas City	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.006	0.006	0.006	0.006	0.006
Los Angeles	0.060	0.060	0.059	0.059	0.058	0.058	0.057	0.057	0.056	0.056	0.055	0.054
Miami	0.010	0.010	0.010	0.010	0.011	0.011	0.011	0.011	0.012	0.012	0.012	0.012
Milwaukee	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Minneapolis-St Paul	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
New Orleans	0.040	0.039	0.038	0.038	0.037	0.036	0.035	0.034	0.034	0.033	0.032	0.031
New York	0.174	0.173	0.172	0.172	0.171	0.170	0.169	0.168	0.168	0.167	0.166	0.165
Newark	0.047	0.047	0.046	0.046	0.045	0.045	0.044	0.043	0.043	0.042	0.042	0.041
Philadelphia	0.103	0.103	0.102	0.102	0.101	0.101	0.100	0.099	0.099	0.098	0.098	0.097
Phoenix	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
Pittsburgh	0.007	0.007	0.008	0.008	0.008	0.008	0.008	0.009	0.009	0.009	0.009	0.010
Portland	0.009	0.009	0.009	0.009	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
San Antonio	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
San Diego	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
San Francisco	0.032	0.032	0.031	0.031	0.030	0.030	0.029	0.029	0.028	0.028	0.027	0.027
Seattle	0.012	0.012	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.014
St Louis	0.008	0.008	0.008	0.008	0.008	0.009	0.009	0.009	0.009	0.009	0.009	0.009
Tampa	0.010	0.011	0.011	0.011	0.011	0.012	0.012	0.012	0.012	0.013	0.013	0.013
Washington, DC	0.086	0.084	0.081	0.079	0.077	0.074	0.072	0.070	0.068	0.066	0.064	0.062
Rest of US	0.091	0.094	0.096	0.099	0.102	0.105	0.108	0.111	0.114	0.117	0.120	0.123

Source: Drug Abuse Warning Network Emergency Room Mentions, 1988 - 1999.

Table B1: Estimated DAWN Weights for Cocaine
(Continued)

Metropolitan Area	1990				1991				1992			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Atlanta	0.032	0.032	0.032	0.032	0.032	0.033	0.033	0.033	0.033	0.034	0.034	0.034
Baltimore	0.044	0.044	0.045	0.045	0.045	0.046	0.046	0.046	0.047	0.047	0.047	0.047
Boston	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029
Buffalo	0.005	0.005	0.005	0.005	0.005	0.005	0.006	0.006	0.006	0.006	0.006	0.006
Chicago	0.061	0.062	0.063	0.064	0.064	0.065	0.066	0.067	0.068	0.068	0.069	0.070
Cleveland	0.032	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031
Dallas	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
Denver	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
Detroit	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.060	0.060	0.060
Houston	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
Kansas City	0.006	0.006	0.006	0.006	0.006	0.006	0.007	0.007	0.007	0.007	0.007	0.007
Los Angeles	0.054	0.053	0.053	0.052	0.051	0.051	0.050	0.049	0.049	0.048	0.047	0.047
Miami	0.013	0.013	0.013	0.014	0.014	0.014	0.014	0.015	0.015	0.015	0.016	0.016
Milwaukee	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Minneapolis-St Paul	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
New Orleans	0.031	0.030	0.029	0.028	0.028	0.027	0.026	0.026	0.025	0.024	0.024	0.023
New York	0.164	0.163	0.162	0.160	0.159	0.158	0.157	0.156	0.154	0.153	0.152	0.150
Newark	0.041	0.040	0.039	0.039	0.038	0.038	0.037	0.037	0.036	0.035	0.035	0.034
Philadelphia	0.096	0.096	0.095	0.094	0.093	0.093	0.092	0.091	0.090	0.089	0.088	0.088
Phoenix	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
Pittsburgh	0.010	0.010	0.010	0.011	0.011	0.011	0.011	0.012	0.012	0.012	0.012	0.013
Portland	0.010	0.010	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
San Antonio	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.006	0.006
San Diego	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
San Francisco	0.026	0.026	0.026	0.025	0.025	0.024	0.024	0.023	0.023	0.022	0.022	0.022
Seattle	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.015	0.015	0.015
St Louis	0.009	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.011	0.011	0.011
Tampa	0.014	0.014	0.014	0.014	0.015	0.015	0.015	0.016	0.016	0.016	0.017	0.017
Washington, DC	0.060	0.058	0.056	0.054	0.053	0.051	0.049	0.048	0.046	0.044	0.043	0.042
Rest of US	0.126	0.129	0.133	0.136	0.139	0.143	0.146	0.150	0.154	0.157	0.161	0.165

Source: Drug Abuse Warning Network Emergency Room Mentions, 1988 - 1999.

Table B1: Estimated DAWN Weights for Cocaine
(Continued)

Metropolitan Area	1993				1994				1995			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Atlanta	0.034	0.034	0.034	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
Baltimore	0.048	0.048	0.048	0.048	0.049	0.049	0.049	0.049	0.049	0.050	0.050	0.050
Boston	0.029	0.029	0.029	0.029	0.029	0.029	0.028	0.028	0.028	0.028	0.028	0.028
Buffalo	0.006	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.008	0.008	0.008	0.008
Chicago	0.071	0.071	0.072	0.073	0.073	0.074	0.075	0.075	0.076	0.077	0.077	0.078
Cleveland	0.031	0.030	0.030	0.030	0.030	0.030	0.030	0.029	0.029	0.029	0.029	0.029
Dallas	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
Denver	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.007	0.007
Detroit	0.060	0.060	0.060	0.059	0.059	0.059	0.059	0.058	0.058	0.058	0.057	0.057
Houston	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
Kansas City	0.007	0.007	0.007	0.007	0.007	0.008	0.008	0.008	0.008	0.008	0.008	0.008
Los Angeles	0.046	0.045	0.045	0.044	0.044	0.043	0.042	0.042	0.041	0.040	0.040	0.039
Miami	0.016	0.017	0.017	0.017	0.018	0.018	0.018	0.018	0.019	0.019	0.019	0.020
Milwaukee	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Minneapolis-St Paul	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.004	0.004	0.004	0.004
New Orleans	0.022	0.022	0.021	0.021	0.020	0.020	0.019	0.018	0.018	0.017	0.017	0.016
New York	0.149	0.148	0.146	0.145	0.143	0.142	0.140	0.139	0.137	0.136	0.134	0.133
Newark	0.034	0.033	0.033	0.032	0.031	0.031	0.030	0.030	0.029	0.029	0.028	0.028
Philadelphia	0.087	0.086	0.085	0.084	0.083	0.082	0.081	0.080	0.079	0.078	0.078	0.077
Phoenix	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
Pittsburgh	0.013	0.013	0.013	0.014	0.014	0.014	0.015	0.015	0.015	0.016	0.016	0.016
Portland	0.011	0.011	0.011	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
San Antonio	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
San Diego	0.007	0.007	0.007	0.007	0.007	0.007	0.006	0.006	0.006	0.006	0.006	0.006
San Francisco	0.021	0.021	0.020	0.020	0.019	0.019	0.019	0.018	0.018	0.017	0.017	0.017
Seattle	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
St Louis	0.011	0.011	0.011	0.011	0.011	0.012	0.012	0.012	0.012	0.012	0.012	0.012
Tampa	0.017	0.018	0.018	0.018	0.019	0.019	0.019	0.020	0.020	0.020	0.021	0.021
Washington, DC	0.040	0.039	0.037	0.036	0.035	0.034	0.032	0.031	0.030	0.029	0.028	0.027
Rest of US	0.169	0.172	0.176	0.180	0.184	0.188	0.192	0.197	0.201	0.205	0.209	0.214

Source: Drug Abuse Warning Network Emergency Room Mentions, 1988 - 1999.

Table B1: Estimated DAWN Weights for Cocaine
(Continued)

Metropolitan Area	1996				1997				1998			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Atlanta	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036
Baltimore	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.051	0.051	0.051	0.051	0.051
Boston	0.028	0.028	0.027	0.027	0.027	0.027	0.027	0.027	0.026	0.026	0.026	0.026
Buffalo	0.008	0.008	0.008	0.009	0.009	0.009	0.009	0.009	0.009	0.010	0.010	0.010
Chicago	0.078	0.079	0.080	0.080	0.081	0.081	0.082	0.082	0.083	0.083	0.083	0.084
Cleveland	0.029	0.028	0.028	0.028	0.028	0.028	0.027	0.027	0.027	0.027	0.026	0.026
Dallas	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.011	0.011	0.011
Denver	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
Detroit	0.057	0.056	0.056	0.056	0.055	0.055	0.054	0.054	0.054	0.053	0.053	0.052
Houston	0.015	0.015	0.015	0.015	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
Kansas City	0.008	0.008	0.008	0.008	0.008	0.009	0.009	0.009	0.009	0.009	0.009	0.009
Los Angeles	0.038	0.038	0.037	0.036	0.036	0.035	0.034	0.034	0.033	0.033	0.032	0.031
Miami	0.020	0.020	0.021	0.021	0.021	0.022	0.022	0.022	0.023	0.023	0.023	0.024
Milwaukee	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Minneapolis-St Paul	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
New Orleans	0.016	0.015	0.015	0.015	0.014	0.014	0.013	0.013	0.012	0.012	0.012	0.011
New York	0.131	0.130	0.128	0.126	0.125	0.123	0.122	0.120	0.118	0.117	0.115	0.113
Newark	0.027	0.026	0.026	0.025	0.025	0.024	0.024	0.023	0.023	0.022	0.022	0.021
Philadelphia	0.076	0.075	0.074	0.073	0.072	0.071	0.070	0.069	0.068	0.067	0.066	0.065
Phoenix	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
Pittsburgh	0.016	0.017	0.017	0.017	0.018	0.018	0.018	0.019	0.019	0.019	0.020	0.020
Portland	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
San Antonio	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
San Diego	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
San Francisco	0.016	0.016	0.016	0.015	0.015	0.014	0.014	0.014	0.013	0.013	0.013	0.012
Seattle	0.015	0.015	0.015	0.015	0.015	0.015	0.016	0.016	0.016	0.016	0.016	0.016
St Louis	0.012	0.012	0.012	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
Tampa	0.021	0.022	0.022	0.022	0.023	0.023	0.023	0.024	0.024	0.024	0.025	0.025
Washington, DC	0.026	0.025	0.024	0.023	0.022	0.021	0.021	0.020	0.019	0.018	0.018	0.017
Rest of US	0.218	0.222	0.227	0.231	0.236	0.240	0.245	0.249	0.254	0.258	0.263	0.268

Source: Drug Abuse Warning Network Emergency Room Mentions, 1988 - 1999.

Table B1: Estimated DAWN Weights for Cocaine
(Continued)

Metropolitan Area	1999				2000				2001			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Atlanta	0.036	0.036	0.036	0.036	0.036	0.036						
Baltimore	0.051	0.051	0.051	0.051	0.050	0.050						
Boston	0.026	0.026	0.025	0.025	0.025	0.025						
Buffalo	0.010	0.010	0.010	0.011	0.011	0.011						
Chicago	0.084	0.085	0.085	0.085	0.086	0.086						
Cleveland	0.026	0.026	0.025	0.025	0.025	0.025						
Dallas	0.011	0.011	0.011	0.011	0.011	0.011						
Denver	0.007	0.007	0.007	0.007	0.007	0.007						
Detroit	0.052	0.051	0.051	0.050	0.050	0.049						
Houston	0.014	0.014	0.014	0.014	0.013	0.013						
Kansas City	0.009	0.009	0.009	0.009	0.009	0.009						
Los Angeles	0.031	0.030	0.030	0.029	0.028	0.028						
Miami	0.024	0.024	0.025	0.025	0.025	0.026						
Milwaukee	0.002	0.002	0.002	0.002	0.002	0.002						
Minneapolis-St Paul	0.004	0.004	0.004	0.004	0.004	0.004						
New Orleans	0.011	0.011	0.010	0.010	0.010	0.009						
New York	0.112	0.110	0.108	0.107	0.105	0.103						
Newark	0.021	0.020	0.020	0.020	0.019	0.019						
Philadelphia	0.064	0.063	0.062	0.061	0.060	0.059						
Phoenix	0.008	0.008	0.008	0.008	0.008	0.008						
Pittsburgh	0.020	0.021	0.021	0.021	0.022	0.022						
Portland	0.012	0.012	0.012	0.012	0.012	0.012						
San Antonio	0.005	0.005	0.005	0.005	0.005	0.005						
San Diego	0.005	0.005	0.005	0.005	0.005	0.005						
San Francisco	0.012	0.012	0.011	0.011	0.011	0.011						
Seattle	0.015	0.015	0.015	0.015	0.015	0.015						
St Louis	0.013	0.013	0.013	0.013	0.014	0.014						
Tampa	0.025	0.026	0.026	0.026	0.027	0.027						
Washington, DC	0.016	0.016	0.015	0.014	0.014	0.013						
Rest of US	0.272	0.277	0.282	0.286	0.291	0.296						

Source: Drug Abuse Warning Network Emergency Room Mentions, 1988 – 1999.

Table B2: Estimated DAWN Weights for Heroin

Metropolitan Area	1981				1982				1983			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Atlanta	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Baltimore	0.039	0.040	0.040	0.041	0.042	0.043	0.044	0.044	0.045	0.046	0.047	0.048
Boston	0.025	0.025	0.026	0.026	0.026	0.026	0.027	0.027	0.027	0.028	0.028	0.028
Buffalo	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Chicago	0.018	0.019	0.019	0.020	0.021	0.021	0.022	0.023	0.023	0.024	0.025	0.026
Cleveland	0.032	0.032	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.030	0.030
Dallas	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
Denver	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Detroit	0.060	0.060	0.060	0.060	0.059	0.059	0.059	0.059	0.059	0.058	0.058	0.058
Houston	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
Kansas City	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Los Angeles	0.134	0.132	0.130	0.128	0.126	0.124	0.123	0.121	0.119	0.117	0.115	0.114
Miami	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001
Milwaukee	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Minneapolis-St Paul	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
New Orleans	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
New York	0.152	0.153	0.153	0.154	0.154	0.155	0.155	0.155	0.156	0.156	0.157	0.157
Newark	0.043	0.043	0.044	0.044	0.045	0.045	0.046	0.046	0.047	0.047	0.048	0.048
Philadelphia	0.057	0.057	0.057	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058
Phoenix	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.007	0.007	0.007	0.007
Pittsburgh	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.004	0.004	0.004	0.004	0.004
Portland	0.008	0.009	0.009	0.009	0.009	0.009	0.010	0.010	0.010	0.010	0.010	0.011
San Antonio	0.010	0.010	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.008	0.008
San Diego	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016
San Francisco	0.145	0.143	0.141	0.139	0.137	0.135	0.133	0.131	0.129	0.127	0.125	0.123
Seattle	0.012	0.012	0.012	0.012	0.013	0.013	0.013	0.014	0.014	0.014	0.014	0.015
St Louis	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Tampa	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
Washington, DC	0.070	0.069	0.068	0.067	0.067	0.066	0.065	0.064	0.063	0.062	0.061	0.060
Rest of US	0.139	0.140	0.142	0.143	0.144	0.146	0.147	0.149	0.150	0.152	0.153	0.154

Source: Drug Abuse Warning Network Emergency Room Mentions, 1988 – 1999.

Table B2: Estimated DAWN Weights for Heroin
(Continued)

Metropolitan Area	1984				1985				1986			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Atlanta	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.003
Baltimore	0.049	0.049	0.050	0.051	0.052	0.053	0.054	0.055	0.056	0.057	0.058	0.058
Boston	0.028	0.029	0.029	0.029	0.029	0.030	0.030	0.030	0.030	0.031	0.031	0.031
Buffalo	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.003
Chicago	0.026	0.027	0.028	0.029	0.030	0.031	0.031	0.032	0.033	0.034	0.035	0.036
Cleveland	0.030	0.030	0.030	0.030	0.029	0.029	0.029	0.029	0.029	0.029	0.028	0.028
Dallas	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
Denver	0.002	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Detroit	0.058	0.057	0.057	0.057	0.057	0.056	0.056	0.056	0.055	0.055	0.055	0.054
Houston	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.008	0.008	0.008
Kansas City	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Los Angeles	0.112	0.110	0.108	0.107	0.105	0.103	0.101	0.100	0.098	0.096	0.095	0.093
Miami	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Milwaukee	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Minneapolis-St Paul	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
New Orleans	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
New York	0.157	0.158	0.158	0.158	0.158	0.158	0.159	0.159	0.159	0.159	0.159	0.159
Newark	0.049	0.049	0.050	0.050	0.051	0.051	0.052	0.052	0.053	0.053	0.054	0.054
Philadelphia	0.058	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059
Phoenix	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.008	0.008	0.008
Pittsburgh	0.004	0.004	0.004	0.004	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Portland	0.011	0.011	0.011	0.012	0.012	0.012	0.012	0.013	0.013	0.013	0.013	0.014
San Antonio	0.008	0.008	0.008	0.008	0.008	0.008	0.007	0.007	0.007	0.007	0.007	0.007
San Diego	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016
San Francisco	0.121	0.119	0.117	0.115	0.113	0.111	0.109	0.108	0.106	0.104	0.102	0.100
Seattle	0.015	0.015	0.015	0.016	0.016	0.016	0.017	0.017	0.017	0.018	0.018	0.018
St Louis	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Tampa	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Washington, DC	0.059	0.059	0.058	0.057	0.056	0.055	0.054	0.053	0.053	0.052	0.051	0.050
Rest of US	0.156	0.157	0.158	0.160	0.161	0.162	0.164	0.165	0.166	0.167	0.168	0.170

Source: Drug Abuse Warning Network Emergency Room Mentions, 1988 - 1999.

Table B2: Estimated DAWN Weights for Heroin
(Continued)

Metropolitan Area	1987				1988				1989			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Atlanta	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Baltimore	0.059	0.060	0.061	0.062	0.063	0.064	0.065	0.066	0.067	0.068	0.069	0.070
Boston	0.031	0.032	0.032	0.032	0.032	0.033	0.033	0.033	0.033	0.033	0.034	0.034
Buffalo	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.004
Chicago	0.037	0.038	0.039	0.040	0.042	0.043	0.044	0.045	0.046	0.047	0.049	0.050
Cleveland	0.028	0.028	0.028	0.027	0.027	0.027	0.027	0.027	0.026	0.026	0.026	0.026
Dallas	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.006	0.006
Denver	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.004	0.004	0.004	0.004	0.004
Detroit	0.054	0.054	0.053	0.053	0.053	0.052	0.052	0.052	0.051	0.051	0.050	0.050
Houston	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
Kansas City	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Los Angeles	0.091	0.090	0.088	0.087	0.085	0.084	0.082	0.080	0.079	0.077	0.076	0.075
Miami	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002
Milwaukee	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Minneapolis-St Paul	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
New Orleans	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
New York	0.159	0.159	0.159	0.159	0.159	0.159	0.158	0.158	0.158	0.158	0.158	0.157
Newark	0.055	0.055	0.055	0.056	0.056	0.057	0.057	0.058	0.058	0.058	0.059	0.059
Philadelphia	0.059	0.059	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.057
Phoenix	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
Pittsburgh	0.005	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.007	0.007	0.007	0.007
Portland	0.014	0.014	0.014	0.015	0.015	0.015	0.015	0.016	0.016	0.016	0.016	0.017
San Antonio	0.007	0.007	0.007	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
San Diego	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016
San Francisco	0.098	0.097	0.095	0.093	0.091	0.090	0.088	0.086	0.085	0.083	0.081	0.080
Seattle	0.019	0.019	0.019	0.019	0.020	0.020	0.020	0.021	0.021	0.021	0.022	0.022
St Louis	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Tampa	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Washington, DC	0.049	0.048	0.048	0.047	0.046	0.045	0.044	0.044	0.043	0.042	0.041	0.041
Rest of US	0.171	0.172	0.173	0.174	0.175	0.176	0.177	0.178	0.179	0.180	0.181	0.182

Source: Drug Abuse Warning Network Emergency Room Mentions, 1988 - 1999.

Table B2: Estimated DAWN Weights for Heroin
(Continued)

Metropolitan Area	1990				1991				1992			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Atlanta	0.003	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Baltimore	0.071	0.072	0.073	0.074	0.075	0.076	0.077	0.077	0.078	0.079	0.080	0.081
Boston	0.034	0.034	0.034	0.034	0.035	0.035	0.035	0.035	0.035	0.035	0.036	0.036
Buffalo	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Chicago	0.051	0.053	0.054	0.055	0.057	0.058	0.060	0.061	0.063	0.064	0.066	0.067
Cleveland	0.025	0.025	0.025	0.025	0.024	0.024	0.024	0.024	0.023	0.023	0.023	0.023
Dallas	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
Denver	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.005	0.005	0.005	0.005	0.005
Detroit	0.050	0.049	0.049	0.048	0.048	0.047	0.047	0.047	0.046	0.046	0.045	0.045
Houston	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
Kansas City	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.003	0.003
Los Angeles	0.073	0.072	0.070	0.069	0.067	0.066	0.065	0.063	0.062	0.061	0.059	0.058
Miami	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Milwaukee	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Minneapolis-St Paul	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
New Orleans	0.007	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
New York	0.157	0.157	0.156	0.156	0.155	0.155	0.155	0.154	0.154	0.153	0.152	0.152
Newark	0.060	0.060	0.060	0.061	0.061	0.061	0.062	0.062	0.062	0.063	0.063	0.063
Philadelphia	0.057	0.057	0.057	0.057	0.057	0.056	0.056	0.056	0.056	0.055	0.055	0.055
Phoenix	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
Pittsburgh	0.007	0.007	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.009	0.009	0.009
Portland	0.017	0.017	0.018	0.018	0.018	0.018	0.019	0.019	0.019	0.019	0.020	0.020
San Antonio	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.004	0.004
San Diego	0.016	0.016	0.016	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
San Francisco	0.078	0.077	0.075	0.074	0.072	0.071	0.069	0.068	0.066	0.065	0.064	0.062
Seattle	0.022	0.023	0.023	0.023	0.024	0.024	0.024	0.025	0.025	0.026	0.026	0.026
St Louis	0.003	0.003	0.003	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.005
Tampa	0.002	0.002	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.004
Washington, DC	0.040	0.039	0.038	0.038	0.037	0.036	0.036	0.035	0.034	0.033	0.033	0.032
Rest of US	0.183	0.184	0.185	0.186	0.186	0.187	0.188	0.189	0.189	0.190	0.190	0.191

Source: Drug Abuse Warning Network Emergency Room Mentions, 1988 - 1999.

Table B2: Estimated DAWN Weights for Heroin
(Continued)

Metropolitan Area	1993				1994				1995			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Atlanta	0.004	0.004	0.004	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Baltimore	0.082	0.083	0.084	0.085	0.086	0.087	0.088	0.089	0.090	0.091	0.091	0.092
Boston	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.037	0.037	0.037	0.037
Buffalo	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.006
Chicago	0.069	0.070	0.072	0.074	0.075	0.077	0.079	0.081	0.083	0.084	0.086	0.088
Cleveland	0.023	0.022	0.022	0.022	0.021	0.021	0.021	0.021	0.020	0.020	0.020	0.020
Dallas	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
Denver	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.006	0.006	0.006	0.006	0.006
Detroit	0.044	0.044	0.043	0.043	0.042	0.042	0.041	0.041	0.040	0.040	0.040	0.039
Houston	0.008	0.008	0.008	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
Kansas City	0.003	0.003	0.003	0.003	0.003	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Los Angeles	0.057	0.056	0.054	0.053	0.052	0.051	0.050	0.049	0.048	0.046	0.045	0.044
Miami	0.004	0.004	0.004	0.004	0.004	0.004	0.005	0.005	0.005	0.005	0.006	0.006
Milwaukee	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Minneapolis-St Paul	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
New Orleans	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
New York	0.151	0.151	0.150	0.149	0.149	0.148	0.147	0.146	0.146	0.145	0.144	0.143
Newark	0.064	0.064	0.064	0.064	0.065	0.065	0.065	0.065	0.065	0.066	0.066	0.066
Philadelphia	0.055	0.054	0.054	0.054	0.054	0.053	0.053	0.053	0.052	0.052	0.052	0.051
Phoenix	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.010	0.010
Pittsburgh	0.009	0.009	0.010	0.010	0.010	0.010	0.010	0.010	0.011	0.011	0.011	0.011
Portland	0.020	0.021	0.021	0.021	0.022	0.022	0.022	0.022	0.023	0.023	0.023	0.024
San Antonio	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.003	0.003
San Diego	0.015	0.015	0.015	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
San Francisco	0.061	0.059	0.058	0.057	0.056	0.054	0.053	0.052	0.051	0.049	0.048	0.047
Seattle	0.027	0.027	0.027	0.028	0.028	0.028	0.029	0.029	0.029	0.030	0.030	0.030
St Louis	0.005	0.005	0.005	0.005	0.005	0.005	0.006	0.006	0.006	0.006	0.006	0.006
Tampa	0.004	0.004	0.004	0.004	0.005	0.005	0.005	0.005	0.005	0.006	0.006	0.006
Washington, DC	0.031	0.031	0.030	0.030	0.029	0.028	0.028	0.027	0.027	0.026	0.025	0.025
Rest of US	0.191	0.192	0.192	0.193	0.193	0.194	0.194	0.194	0.195	0.195	0.195	0.195

Source: Drug Abuse Warning Network Emergency Room Mentions, 1988 - 1999.

Table B2: Estimated DAWN Weights for Heroin
(Continued)

Metropolitan Area	1996				1997				1998			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Atlanta	0.005	0.005	0.005	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
Baltimore	0.093	0.094	0.095	0.096	0.097	0.097	0.098	0.099	0.100	0.101	0.101	0.102
Boston	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037
Buffalo	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.007	0.007	0.007
Chicago	0.090	0.092	0.094	0.096	0.098	0.100	0.102	0.104	0.106	0.108	0.111	0.113
Cleveland	0.019	0.019	0.019	0.019	0.018	0.018	0.018	0.018	0.017	0.017	0.017	0.017
Dallas	0.006	0.006	0.006	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Denver	0.006	0.006	0.006	0.006	0.006	0.006	0.007	0.007	0.007	0.007	0.007	0.007
Detroit	0.039	0.038	0.038	0.037	0.037	0.036	0.036	0.035	0.035	0.034	0.034	0.033
Houston	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.006	0.006	0.006	0.006
Kansas City	0.004	0.004	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.006	0.006	0.006
Los Angeles	0.043	0.042	0.041	0.040	0.039	0.038	0.037	0.036	0.036	0.035	0.034	0.033
Miami	0.006	0.006	0.007	0.007	0.007	0.008	0.008	0.008	0.009	0.009	0.009	0.010
Milwaukee	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Minneapolis-St Paul	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
New Orleans	0.006	0.006	0.006	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
New York	0.142	0.141	0.140	0.139	0.138	0.137	0.136	0.135	0.134	0.133	0.132	0.131
Newark	0.066	0.066	0.066	0.066	0.067	0.067	0.067	0.067	0.067	0.067	0.067	0.067
Philadelphia	0.051	0.051	0.050	0.050	0.049	0.049	0.049	0.048	0.048	0.047	0.047	0.047
Phoenix	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
Pittsburgh	0.011	0.012	0.012	0.012	0.012	0.012	0.013	0.013	0.013	0.013	0.013	0.014
Portland	0.024	0.024	0.024	0.025	0.025	0.025	0.026	0.026	0.026	0.026	0.027	0.027
San Antonio	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
San Diego	0.014	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.012	0.012
San Francisco	0.046	0.045	0.044	0.043	0.042	0.041	0.040	0.039	0.038	0.037	0.036	0.035
Seattle	0.031	0.031	0.031	0.032	0.032	0.032	0.033	0.033	0.033	0.033	0.034	0.034
St Louis	0.007	0.007	0.007	0.007	0.007	0.007	0.008	0.008	0.008	0.008	0.009	0.009
Tampa	0.006	0.007	0.007	0.007	0.008	0.008	0.008	0.009	0.009	0.009	0.010	0.010
Washington, DC	0.024	0.024	0.023	0.023	0.022	0.022	0.021	0.021	0.020	0.020	0.019	0.019
Rest of US	0.195	0.195	0.195	0.195	0.195	0.195	0.195	0.195	0.195	0.195	0.194	0.194

Source: Drug Abuse Warning Network Emergency Room Mentions, 1988 - 1999.

Table B2: Estimated DAWN Weights for Heroin
(Continued)

Metropolitan Area	1999				2000				2001			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Atlanta	0.006	0.006	0.007	0.007	0.007	0.007						
Baltimore	0.103	0.104	0.104	0.105	0.106	0.106						
Boston	0.037	0.037	0.037	0.037	0.037	0.037						
Buffalo	0.007	0.007	0.007	0.007	0.007	0.007						
Chicago	0.115	0.117	0.119	0.122	0.124	0.126						
Cleveland	0.016	0.016	0.016	0.016	0.015	0.015						
Dallas	0.005	0.005	0.005	0.005	0.005	0.005						
Denver	0.007	0.007	0.007	0.007	0.007	0.008						
Detroit	0.033	0.032	0.032	0.031	0.031	0.030						
Houston	0.006	0.006	0.006	0.006	0.006	0.006						
Kansas City	0.006	0.006	0.006	0.007	0.007	0.007						
Los Angeles	0.032	0.031	0.030	0.030	0.029	0.028						
Miami	0.010	0.011	0.011	0.012	0.012	0.013						
Milwaukee	0.001	0.001	0.001	0.001	0.001	0.001						
Minneapolis-St Paul	0.002	0.002	0.002	0.002	0.002	0.002						
New Orleans	0.005	0.005	0.005	0.005	0.005	0.005						
New York	0.130	0.129	0.128	0.127	0.125	0.124						
Newark	0.067	0.067	0.067	0.067	0.067	0.067						
Philadelphia	0.046	0.046	0.045	0.045	0.044	0.044						
Phoenix	0.010	0.010	0.010	0.010	0.010	0.010						
Pittsburgh	0.014	0.014	0.014	0.015	0.015	0.015						
Portland	0.027	0.027	0.028	0.028	0.028	0.029						
San Antonio	0.002	0.002	0.002	0.002	0.002	0.002						
San Diego	0.012	0.012	0.012	0.012	0.012	0.011						
San Francisco	0.034	0.033	0.032	0.031	0.030	0.030						
Seattle	0.034	0.035	0.035	0.035	0.036	0.036						
St Louis	0.009	0.009	0.009	0.010	0.010	0.010						
Tampa	0.011	0.011	0.012	0.012	0.013	0.013						
Washington, DC	0.018	0.018	0.017	0.017	0.016	0.016						
Rest of US	0.194	0.193	0.193	0.193	0.192	0.192						

Source: Drug Abuse Warning Network Emergency Room Mentions, 1988 – 1999.

Table B3: Estimated DAWN Weights for Methamphetamine

Metropolitan Area	1981				1982				1983			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Atlanta	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.004	0.004
Baltimore	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Boston	0.007	0.007	0.007	0.007	0.006	0.006	0.006	0.006	0.006	0.006	0.005	0.005
Buffalo	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001
Chicago	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Cleveland	0.016	0.015	0.014	0.014	0.013	0.012	0.012	0.011	0.010	0.010	0.009	0.009
Dallas	0.078	0.076	0.075	0.073	0.071	0.070	0.068	0.067	0.065	0.064	0.062	0.061
Denver	0.005	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.007	0.007	0.007
Detroit	0.030	0.028	0.027	0.026	0.024	0.023	0.022	0.021	0.020	0.019	0.018	0.017
Houston	0.098	0.096	0.094	0.092	0.090	0.088	0.086	0.084	0.082	0.080	0.078	0.076
Kansas City	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Los Angeles	0.053	0.054	0.056	0.057	0.058	0.059	0.060	0.061	0.062	0.063	0.064	0.065
Miami	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Milwaukee	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Minneapolis-St Paul	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.004
New Orleans	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.004	0.004	0.004
New York	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Newark	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001
Philadelphia	0.053	0.052	0.051	0.050	0.049	0.047	0.046	0.045	0.044	0.043	0.042	0.040
Phoenix	0.029	0.029	0.030	0.030	0.031	0.031	0.032	0.032	0.033	0.034	0.034	0.035
Pittsburgh	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Portland	0.005	0.005	0.005	0.005	0.005	0.005	0.006	0.006	0.006	0.006	0.006	0.007
San Antonio	0.039	0.039	0.038	0.037	0.036	0.035	0.034	0.034	0.033	0.032	0.031	0.031
San Diego	0.196	0.194	0.193	0.192	0.190	0.188	0.187	0.185	0.183	0.181	0.179	0.177
San Francisco	0.132	0.132	0.132	0.132	0.133	0.133	0.133	0.132	0.132	0.132	0.132	0.131
Seattle	0.006	0.007	0.007	0.007	0.007	0.008	0.008	0.008	0.008	0.009	0.009	0.009
St Louis	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Tampa	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Washington, DC	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Rest of US	0.221	0.228	0.234	0.241	0.247	0.254	0.261	0.268	0.275	0.281	0.288	0.295

Source: Drug Abuse Warning Network Emergency Room Mentions, 1988 – 1999.

Table B3: Estimated DAWN Weights for Methamphetamine
(Continued)

Metropolitan Area	1984				1985				1986			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Atlanta	0.004	0.004	0.004	0.004	0.004	0.004	0.005	0.005	0.005	0.005	0.005	0.005
Baltimore	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001
Boston	0.005	0.005	0.005	0.005	0.005	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Buffalo	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Chicago	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.004	0.004	0.004	0.004
Cleveland	0.008	0.008	0.007	0.007	0.007	0.006	0.006	0.005	0.005	0.005	0.005	0.004
Dallas	0.059	0.058	0.056	0.055	0.053	0.052	0.050	0.049	0.048	0.046	0.045	0.044
Denver	0.007	0.007	0.007	0.007	0.007	0.008	0.008	0.008	0.008	0.008	0.008	0.008
Detroit	0.016	0.015	0.014	0.013	0.013	0.012	0.011	0.010	0.010	0.009	0.009	0.008
Houston	0.074	0.072	0.070	0.069	0.067	0.065	0.063	0.061	0.060	0.058	0.056	0.054
Kansas City	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003
Los Angeles	0.066	0.067	0.068	0.069	0.070	0.071	0.071	0.072	0.073	0.074	0.075	0.076
Miami	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Milwaukee	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Minneapolis-St Paul	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.005	0.005	0.005	0.005
New Orleans	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
New York	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Newark	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Philadelphia	0.039	0.038	0.037	0.036	0.035	0.034	0.033	0.032	0.031	0.030	0.029	0.028
Phoenix	0.035	0.036	0.036	0.037	0.037	0.038	0.038	0.038	0.039	0.039	0.040	0.040
Pittsburgh	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Portland	0.007	0.007	0.007	0.007	0.008	0.008	0.008	0.008	0.008	0.009	0.009	0.009
San Antonio	0.030	0.029	0.028	0.027	0.027	0.026	0.025	0.025	0.024	0.023	0.022	0.022
San Diego	0.175	0.173	0.171	0.169	0.166	0.164	0.162	0.159	0.157	0.154	0.152	0.150
San Francisco	0.131	0.131	0.130	0.130	0.129	0.128	0.128	0.127	0.126	0.125	0.124	0.123
Seattle	0.009	0.010	0.010	0.010	0.010	0.011	0.011	0.011	0.011	0.012	0.012	0.012
St Louis	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Tampa	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Washington, DC	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Rest of US	0.302	0.309	0.317	0.324	0.331	0.338	0.345	0.352	0.359	0.366	0.373	0.380

Source: Drug Abuse Warning Network Emergency Room Mentions, 1988 - 1999.

Table B3: Estimated DAWN Weights for Methamphetamine
(Continued)

Metropolitan Area	1987				1988				1989			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Atlanta	0.005	0.005	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.007	0.007
Baltimore	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Boston	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.002
Buffalo	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Chicago	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Cleveland	0.004	0.004	0.004	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.002	0.002
Dallas	0.042	0.041	0.040	0.039	0.037	0.036	0.035	0.034	0.033	0.032	0.031	0.030
Denver	0.008	0.008	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
Detroit	0.008	0.007	0.007	0.006	0.006	0.006	0.005	0.005	0.005	0.004	0.004	0.004
Houston	0.053	0.051	0.050	0.048	0.047	0.045	0.044	0.042	0.041	0.039	0.038	0.037
Kansas City	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Los Angeles	0.076	0.077	0.078	0.078	0.079	0.080	0.080	0.081	0.081	0.082	0.082	0.083
Miami	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Milwaukee	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Minneapolis-St Paul	0.005	0.005	0.005	0.005	0.005	0.005	0.006	0.006	0.006	0.006	0.006	0.006
New Orleans	0.004	0.004	0.004	0.004	0.004	0.004	0.003	0.003	0.003	0.003	0.003	0.003
New York	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Newark	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Philadelphia	0.027	0.026	0.025	0.024	0.024	0.023	0.022	0.021	0.020	0.020	0.019	0.018
Phoenix	0.040	0.041	0.041	0.042	0.042	0.042	0.043	0.043	0.043	0.043	0.044	0.044
Pittsburgh	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Portland	0.009	0.009	0.010	0.010	0.010	0.010	0.010	0.011	0.011	0.011	0.011	0.012
San Antonio	0.021	0.020	0.020	0.019	0.019	0.018	0.017	0.017	0.016	0.016	0.015	0.015
San Diego	0.147	0.144	0.142	0.139	0.137	0.134	0.132	0.129	0.127	0.124	0.121	0.119
San Francisco	0.122	0.121	0.120	0.119	0.118	0.117	0.115	0.114	0.113	0.112	0.110	0.109
Seattle	0.012	0.013	0.013	0.013	0.014	0.014	0.014	0.014	0.015	0.015	0.015	0.015
St Louis	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.005	0.005
Tampa	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
Washington, DC	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.002
Rest of US	0.387	0.394	0.401	0.408	0.415	0.422	0.429	0.435	0.442	0.449	0.455	0.462

Source: Drug Abuse Warning Network Emergency Room Mentions, 1988 - 1999.

Table B3: Estimated DAWN Weights for Methamphetamine
(Continued)

Metropolitan Area	1990				1991				1992			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Atlanta	0.007	0.007	0.007	0.007	0.007	0.007	0.008	0.008	0.008	0.008	0.008	0.008
Baltimore	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Boston	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001
Buffalo	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Chicago	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Cleveland	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Dallas	0.029	0.028	0.027	0.026	0.025	0.024	0.023	0.022	0.021	0.021	0.020	0.019
Denver	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
Detroit	0.004	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002
Houston	0.036	0.034	0.033	0.032	0.031	0.030	0.029	0.028	0.027	0.026	0.025	0.024
Kansas City	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Los Angeles	0.083	0.084	0.084	0.084	0.085	0.085	0.085	0.086	0.086	0.086	0.086	0.087
Miami	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Milwaukee	0.003	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Minneapolis-St Paul	0.006	0.006	0.006	0.006	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
New Orleans	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
New York	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002
Newark	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Philadelphia	0.018	0.017	0.016	0.016	0.015	0.014	0.014	0.013	0.013	0.012	0.012	0.011
Phoenix	0.044	0.044	0.044	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.046	0.046
Pittsburgh	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Portland	0.012	0.012	0.012	0.012	0.013	0.013	0.013	0.013	0.014	0.014	0.014	0.014
San Antonio	0.014	0.014	0.013	0.013	0.012	0.012	0.011	0.011	0.010	0.010	0.010	0.009
San Diego	0.116	0.114	0.111	0.109	0.106	0.104	0.102	0.099	0.097	0.095	0.092	0.090
San Francisco	0.107	0.106	0.105	0.103	0.102	0.100	0.099	0.098	0.096	0.095	0.093	0.092
Seattle	0.016	0.016	0.016	0.017	0.017	0.017	0.017	0.018	0.018	0.018	0.018	0.019
St Louis	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Tampa	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Washington, DC	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Rest of US	0.468	0.474	0.481	0.487	0.493	0.499	0.505	0.511	0.517	0.522	0.528	0.534

Source: Drug Abuse Warning Network Emergency Room Mentions, 1988 - 1999.

Table B3: Estimated DAWN Weights for Methamphetamine
(Continued)

Metropolitan Area	1993				1994				1995			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Atlanta	0.008	0.008	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.010
Baltimore	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Boston	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Buffalo	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Chicago	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002
Cleveland	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000
Dallas	0.018	0.018	0.017	0.016	0.016	0.015	0.014	0.014	0.013	0.013	0.012	0.012
Denver	0.010	0.010	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
Detroit	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Houston	0.023	0.022	0.021	0.020	0.019	0.019	0.018	0.017	0.017	0.016	0.015	0.015
Kansas City	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Los Angeles	0.087	0.087	0.087	0.087	0.087	0.087	0.087	0.087	0.087	0.087	0.087	0.087
Miami	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Milwaukee	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Minneapolis-St Paul	0.007	0.007	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
New Orleans	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
New York	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Newark	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Philadelphia	0.011	0.010	0.010	0.010	0.009	0.009	0.008	0.008	0.008	0.007	0.007	0.007
Phoenix	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046
Pittsburgh	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Portland	0.015	0.015	0.015	0.015	0.015	0.016	0.016	0.016	0.016	0.017	0.017	0.017
San Antonio	0.009	0.009	0.008	0.008	0.008	0.007	0.007	0.007	0.007	0.006	0.006	0.006
San Diego	0.088	0.086	0.084	0.081	0.079	0.077	0.075	0.073	0.071	0.069	0.068	0.066
San Francisco	0.090	0.089	0.087	0.086	0.084	0.083	0.081	0.080	0.078	0.077	0.076	0.074
Seattle	0.019	0.019	0.020	0.020	0.020	0.020	0.021	0.021	0.021	0.021	0.022	0.022
St Louis	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Tampa	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Washington, DC	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Rest of US	0.539	0.545	0.550	0.555	0.560	0.565	0.570	0.575	0.580	0.585	0.590	0.594

Source: Drug Abuse Warning Network Emergency Room Mentions, 1988 - 1999.

Table B3: Estimated DAWN Weights for Methamphetamine
(Continued)

Metropolitan Area	1996				1997				1998			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Atlanta	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.011	0.011	0.011	0.011	0.011
Baltimore	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Boston	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Buffalo	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Chicago	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Cleveland	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Dallas	0.011	0.011	0.010	0.010	0.010	0.009	0.009	0.008	0.008	0.008	0.007	0.007
Denver	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
Detroit	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Houston	0.014	0.013	0.013	0.012	0.012	0.011	0.011	0.010	0.010	0.010	0.009	0.009
Kansas City	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Los Angeles	0.087	0.087	0.087	0.087	0.086	0.086	0.086	0.086	0.086	0.086	0.085	0.085
Miami	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Milwaukee	0.004	0.004	0.004	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Minneapolis-St Paul	0.008	0.008	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
New Orleans	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.001
New York	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Newark	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Philadelphia	0.007	0.006	0.006	0.006	0.005	0.005	0.005	0.005	0.005	0.004	0.004	0.004
Phoenix	0.046	0.046	0.046	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045
Pittsburgh	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Portland	0.017	0.017	0.018	0.018	0.018	0.018	0.019	0.019	0.019	0.019	0.019	0.020
San Antonio	0.006	0.005	0.005	0.005	0.005	0.004	0.004	0.004	0.004	0.004	0.004	0.003
San Diego	0.064	0.062	0.060	0.059	0.057	0.055	0.054	0.052	0.051	0.049	0.048	0.047
San Francisco	0.073	0.071	0.070	0.069	0.067	0.066	0.065	0.063	0.062	0.061	0.060	0.058
Seattle	0.022	0.022	0.023	0.023	0.023	0.023	0.024	0.024	0.024	0.024	0.024	0.025
St Louis	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Tampa	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Washington, DC	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Rest of US	0.599	0.603	0.607	0.611	0.616	0.620	0.624	0.628	0.631	0.635	0.639	0.642

Source: Drug Abuse Warning Network Emergency Room Mentions, 1988 - 1999.

Table B3: Estimated DAWN Weights for Methamphetamine
(Continued)

Metropolitan Area	1999				2000				2001			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Atlanta	0.011	0.011	0.011	0.011	0.012	0.012						
Baltimore	0.000	0.000	0.000	0.000	0.000	0.000						
Boston	0.001	0.000	0.000	0.000	0.000	0.000						
Buffalo	0.001	0.001	0.001	0.001	0.001	0.001						
Chicago	0.002	0.002	0.002	0.001	0.001	0.001						
Cleveland	0.000	0.000	0.000	0.000	0.000	0.000						
Dallas	0.007	0.007	0.006	0.006	0.006	0.005						
Denver	0.011	0.011	0.011	0.011	0.011	0.011						
Detroit	0.000	0.000	0.000	0.000	0.000	0.000						
Houston	0.008	0.008	0.008	0.007	0.007	0.007						
Kansas City	0.003	0.003	0.003	0.003	0.003	0.003						
Los Angeles	0.085	0.085	0.084	0.084	0.084	0.083						
Miami	0.001	0.001	0.001	0.001	0.001	0.001						
Milwaukee	0.005	0.005	0.005	0.005	0.005	0.005						
Minneapolis-St Paul	0.009	0.009	0.009	0.010	0.010	0.010						
New Orleans	0.001	0.001	0.001	0.001	0.001	0.001						
New York	0.002	0.002	0.002	0.002	0.002	0.002						
Newark	0.000	0.000	0.000	0.000	0.000	0.000						
Philadelphia	0.004	0.004	0.003	0.003	0.003	0.003						
Phoenix	0.044	0.044	0.044	0.044	0.044	0.044						
Pittsburgh	0.001	0.001	0.001	0.001	0.001	0.001						
Portland	0.020	0.020	0.020	0.020	0.021	0.021						
San Antonio	0.003	0.003	0.003	0.003	0.003	0.003						
San Diego	0.045	0.044	0.043	0.041	0.040	0.039						
San Francisco	0.057	0.056	0.055	0.054	0.053	0.051						
Seattle	0.025	0.025	0.025	0.026	0.026	0.026						
St Louis	0.005	0.005	0.005	0.005	0.005	0.005						
Tampa	0.001	0.001	0.001	0.001	0.001	0.001						
Washington, DC	0.002	0.002	0.001	0.001	0.001	0.001						
Rest of US	0.646	0.649	0.653	0.656	0.659	0.662						

Source: Drug Abuse Warning Network Emergency Room Mentions, 1988 – 1999.

Table B4: Estimated DAWN Weights for Marijuana

Metropolitan Area	1981				1982				1983			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Atlanta	0.025	0.025	0.025	0.026	0.026	0.026	0.027	0.027	0.027	0.027	0.027	0.028
Baltimore	0.008	0.009	0.009	0.009	0.009	0.009	0.010	0.010	0.010	0.010	0.010	0.011
Boston	0.025	0.026	0.026	0.026	0.027	0.027	0.027	0.027	0.028	0.028	0.028	0.029
Buffalo	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002
Chicago	0.042	0.043	0.043	0.044	0.044	0.045	0.045	0.046	0.047	0.047	0.048	0.048
Cleveland	0.030	0.031	0.031	0.031	0.031	0.031	0.032	0.032	0.032	0.032	0.032	0.033
Dallas	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022
Denver	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.013	0.013	0.013
Detroit	0.057	0.058	0.058	0.059	0.059	0.059	0.060	0.060	0.061	0.061	0.061	0.062
Houston	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029
Kansas City	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.004	0.004	0.004	0.004
Los Angeles	0.053	0.053	0.054	0.054	0.054	0.055	0.055	0.055	0.055	0.055	0.056	0.056
Miami	0.008	0.008	0.008	0.008	0.009	0.009	0.009	0.009	0.009	0.009	0.010	0.010
Milwaukee	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
Minneapolis-St Paul	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
New Orleans	0.038	0.038	0.038	0.037	0.037	0.037	0.037	0.037	0.036	0.036	0.036	0.036
New York	0.126	0.126	0.125	0.124	0.123	0.122	0.122	0.121	0.120	0.119	0.118	0.117
Newark	0.062	0.061	0.059	0.058	0.057	0.055	0.054	0.053	0.052	0.050	0.049	0.048
Philadelphia	0.037	0.037	0.038	0.039	0.039	0.040	0.040	0.041	0.042	0.042	0.043	0.043
Phoenix	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.008	0.008
Pittsburgh	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Portland	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.012
San Antonio	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.004	0.004	0.004	0.004	0.004
San Diego	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.017	0.017	0.017	0.017	0.017
San Francisco	0.063	0.061	0.059	0.058	0.056	0.055	0.053	0.052	0.050	0.049	0.048	0.046
Seattle	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.016	0.016	0.016
St Louis	0.005	0.005	0.005	0.005	0.005	0.006	0.006	0.006	0.006	0.006	0.006	0.007
Tampa	0.009	0.009	0.009	0.009	0.009	0.010	0.010	0.010	0.010	0.010	0.010	0.011
Washington, DC	0.169	0.167	0.164	0.161	0.159	0.156	0.153	0.151	0.148	0.145	0.143	0.140
Rest of US	0.100	0.103	0.105	0.108	0.111	0.113	0.116	0.119	0.122	0.125	0.128	0.131

Source: Drug Abuse Warning Network Emergency Room Mentions, 1988 – 1999.

Table B4: Estimated DAWN Weights for Marijuana
(Continued)

Metropolitan Area	1984				1985				1986			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Atlanta	0.028	0.028	0.028	0.029	0.029	0.029	0.029	0.029	0.030	0.030	0.030	0.030
Baltimore	0.011	0.011	0.011	0.011	0.011	0.012	0.012	0.012	0.012	0.013	0.013	0.013
Boston	0.029	0.029	0.029	0.030	0.030	0.030	0.030	0.031	0.031	0.031	0.031	0.031
Buffalo	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Chicago	0.049	0.049	0.050	0.050	0.050	0.051	0.051	0.052	0.052	0.053	0.053	0.054
Cleveland	0.033	0.033	0.033	0.033	0.033	0.033	0.034	0.034	0.034	0.034	0.034	0.034
Dallas	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.021	0.021
Denver	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
Detroit	0.062	0.063	0.063	0.063	0.064	0.064	0.064	0.064	0.065	0.065	0.065	0.065
Houston	0.029	0.029	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.027	0.027
Kansas City	0.004	0.004	0.004	0.004	0.004	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Los Angeles	0.056	0.056	0.056	0.056	0.056	0.057	0.057	0.057	0.057	0.057	0.057	0.057
Miami	0.010	0.010	0.010	0.010	0.010	0.011	0.011	0.011	0.011	0.011	0.011	0.012
Milwaukee	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
Minneapolis-St Paul	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
New Orleans	0.035	0.035	0.035	0.035	0.034	0.034	0.034	0.033	0.033	0.033	0.033	0.032
New York	0.116	0.115	0.114	0.113	0.112	0.111	0.110	0.108	0.107	0.106	0.105	0.104
Newark	0.047	0.046	0.045	0.043	0.042	0.041	0.040	0.039	0.038	0.037	0.036	0.035
Philadelphia	0.044	0.045	0.045	0.046	0.046	0.047	0.047	0.048	0.049	0.049	0.050	0.050
Phoenix	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.009	0.009	0.009
Pittsburgh	0.003	0.003	0.003	0.003	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Portland	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
San Antonio	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.005	0.005	0.005
San Diego	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017
San Francisco	0.045	0.044	0.042	0.041	0.040	0.039	0.037	0.036	0.035	0.034	0.033	0.032
Seattle	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.017	0.017	0.017
St Louis	0.007	0.007	0.007	0.007	0.007	0.008	0.008	0.008	0.008	0.008	0.008	0.009
Tampa	0.011	0.011	0.011	0.011	0.011	0.011	0.012	0.012	0.012	0.012	0.012	0.012
Washington, DC	0.137	0.135	0.132	0.130	0.127	0.125	0.122	0.120	0.117	0.115	0.112	0.110
Rest of US	0.134	0.137	0.140	0.143	0.146	0.150	0.153	0.156	0.159	0.163	0.166	0.170

Source: Drug Abuse Warning Network Emergency Room Mentions, 1988 – 1999.

Table B4: Estimated DAWN Weights for Marijuana
(Continued)

Metropolitan Area	1987				1988				1989			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Atlanta	0.030	0.030	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.032
Baltimore	0.013	0.013	0.014	0.014	0.014	0.014	0.014	0.015	0.015	0.015	0.015	0.015
Boston	0.032	0.032	0.032	0.032	0.032	0.033	0.033	0.033	0.033	0.033	0.033	0.033
Buffalo	0.002	0.002	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Chicago	0.054	0.054	0.055	0.055	0.055	0.056	0.056	0.056	0.057	0.057	0.057	0.058
Cleveland	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034
Dallas	0.021	0.021	0.021	0.021	0.021	0.021	0.020	0.020	0.020	0.020	0.020	0.020
Denver	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.011
Detroit	0.065	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.067	0.067	0.067	0.067
Houston	0.027	0.027	0.027	0.027	0.026	0.026	0.026	0.026	0.026	0.025	0.025	0.025
Kansas City	0.005	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.007	0.007	0.007	0.007
Los Angeles	0.057	0.057	0.057	0.057	0.057	0.057	0.057	0.056	0.056	0.056	0.056	0.056
Miami	0.012	0.012	0.012	0.012	0.012	0.012	0.013	0.013	0.013	0.013	0.013	0.013
Milwaukee	0.007	0.007	0.007	0.007	0.007	0.007	0.006	0.006	0.006	0.006	0.006	0.006
Minneapolis-St Paul	0.012	0.012	0.012	0.012	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
New Orleans	0.032	0.032	0.031	0.031	0.031	0.030	0.030	0.030	0.029	0.029	0.029	0.028
New York	0.103	0.102	0.100	0.099	0.098	0.097	0.095	0.094	0.093	0.092	0.091	0.089
Newark	0.034	0.033	0.032	0.031	0.030	0.030	0.029	0.028	0.027	0.026	0.025	0.025
Philadelphia	0.051	0.051	0.052	0.052	0.053	0.053	0.054	0.054	0.055	0.055	0.056	0.056
Phoenix	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.010
Pittsburgh	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.006	0.006	0.006	0.006	0.006
Portland	0.012	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
San Antonio	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
San Diego	0.017	0.017	0.017	0.017	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016
San Francisco	0.031	0.030	0.029	0.028	0.027	0.026	0.025	0.025	0.024	0.023	0.022	0.021
Seattle	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017
St Louis	0.009	0.009	0.009	0.009	0.010	0.010	0.010	0.010	0.010	0.011	0.011	0.011
Tampa	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.014	0.014	0.014	0.014	0.014
Washington, DC	0.108	0.105	0.103	0.101	0.098	0.096	0.094	0.092	0.090	0.088	0.085	0.083
Rest of US	0.173	0.177	0.180	0.184	0.187	0.191	0.194	0.198	0.202	0.205	0.209	0.213

Source: Drug Abuse Warning Network Emergency Room Mentions, 1988 – 1999.

Table B4: Estimated DAWN Weights for Marijuana
(Continued)

Metropolitan Area	1990				1991				1992			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Atlanta	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032
Baltimore	0.016	0.016	0.016	0.016	0.016	0.017	0.017	0.017	0.017	0.017	0.017	0.018
Boston	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.035	0.035
Buffalo	0.003	0.003	0.003	0.003	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Chicago	0.058	0.058	0.058	0.059	0.059	0.059	0.059	0.060	0.060	0.060	0.060	0.060
Cleveland	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034
Dallas	0.020	0.019	0.019	0.019	0.019	0.019	0.019	0.018	0.018	0.018	0.018	0.018
Denver	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.010	0.010	0.010	0.010
Detroit	0.067	0.067	0.067	0.067	0.067	0.067	0.066	0.066	0.066	0.066	0.066	0.066
Houston	0.025	0.024	0.024	0.024	0.024	0.024	0.023	0.023	0.023	0.023	0.022	0.022
Kansas City	0.007	0.007	0.007	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.009	0.009
Los Angeles	0.056	0.056	0.056	0.055	0.055	0.055	0.055	0.054	0.054	0.054	0.054	0.053
Miami	0.013	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.015	0.015	0.015
Milwaukee	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
Minneapolis-St Paul	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.010	0.010	0.010	0.010
New Orleans	0.028	0.027	0.027	0.027	0.026	0.026	0.026	0.025	0.025	0.025	0.024	0.024
New York	0.088	0.087	0.086	0.084	0.083	0.082	0.081	0.079	0.078	0.077	0.076	0.074
Newark	0.024	0.023	0.023	0.022	0.021	0.021	0.020	0.019	0.019	0.018	0.017	0.017
Philadelphia	0.057	0.057	0.058	0.058	0.058	0.059	0.059	0.060	0.060	0.060	0.061	0.061
Phoenix	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
Pittsburgh	0.006	0.007	0.007	0.007	0.007	0.007	0.008	0.008	0.008	0.008	0.008	0.009
Portland	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
San Antonio	0.005	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
San Diego	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.015	0.015	0.015	0.015	0.015
San Francisco	0.021	0.020	0.019	0.019	0.018	0.017	0.017	0.016	0.016	0.015	0.014	0.014
Seattle	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017
St Louis	0.011	0.011	0.012	0.012	0.012	0.012	0.012	0.013	0.013	0.013	0.013	0.013
Tampa	0.014	0.014	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.016	0.016
Washington, DC	0.081	0.079	0.078	0.076	0.074	0.072	0.070	0.068	0.066	0.065	0.063	0.061
Rest of US	0.216	0.220	0.224	0.228	0.232	0.235	0.239	0.243	0.247	0.251	0.255	0.258

Source: Drug Abuse Warning Network Emergency Room Mentions, 1988 - 1999.

Table B4: Estimated DAWN Weights for Marijuana
(Continued)

Metropolitan Area	1993				1994				1995			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Atlanta	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032
Baltimore	0.018	0.018	0.018	0.018	0.019	0.019	0.019	0.019	0.019	0.019	0.020	0.020
Boston	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
Buffalo	0.004	0.004	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.006
Chicago	0.060	0.060	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061
Cleveland	0.034	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.032	0.032	0.032
Dallas	0.018	0.017	0.017	0.017	0.017	0.017	0.016	0.016	0.016	0.016	0.016	0.015
Denver	0.010	0.010	0.010	0.010	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
Detroit	0.066	0.066	0.065	0.065	0.065	0.065	0.065	0.064	0.064	0.064	0.064	0.063
Houston	0.022	0.022	0.021	0.021	0.021	0.021	0.020	0.020	0.020	0.020	0.019	0.019
Kansas City	0.009	0.009	0.009	0.009	0.010	0.010	0.010	0.010	0.010	0.010	0.011	0.011
Los Angeles	0.053	0.053	0.053	0.052	0.052	0.052	0.051	0.051	0.051	0.050	0.050	0.050
Miami	0.015	0.015	0.015	0.015	0.015	0.015	0.016	0.016	0.016	0.016	0.016	0.016
Milwaukee	0.006	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Minneapolis-St Paul	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.009	0.009	0.009	0.009
New Orleans	0.024	0.023	0.023	0.022	0.022	0.022	0.021	0.021	0.021	0.020	0.020	0.020
New York	0.073	0.072	0.071	0.070	0.068	0.067	0.066	0.065	0.064	0.062	0.061	0.060
Newark	0.016	0.016	0.015	0.015	0.014	0.014	0.013	0.013	0.012	0.012	0.012	0.011
Philadelphia	0.061	0.062	0.062	0.062	0.063	0.063	0.063	0.064	0.064	0.064	0.064	0.065
Phoenix	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.011	0.011	0.011	0.011	0.011
Pittsburgh	0.009	0.009	0.009	0.009	0.010	0.010	0.010	0.010	0.011	0.011	0.011	0.011
Portland	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
San Antonio	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.007	0.007	0.007
San Diego	0.015	0.015	0.015	0.015	0.015	0.014	0.014	0.014	0.014	0.014	0.014	0.014
San Francisco	0.013	0.013	0.012	0.012	0.012	0.011	0.011	0.010	0.010	0.010	0.009	0.009
Seattle	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.016	0.016	0.016	0.016
St Louis	0.014	0.014	0.014	0.014	0.015	0.015	0.015	0.015	0.015	0.016	0.016	0.016
Tampa	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.017	0.017	0.017	0.017
Washington, DC	0.060	0.058	0.057	0.055	0.054	0.052	0.051	0.049	0.048	0.047	0.045	0.044
Rest of US	0.262	0.266	0.270	0.274	0.278	0.282	0.286	0.290	0.294	0.298	0.302	0.305

Source: Drug Abuse Warning Network Emergency Room Mentions, 1988 - 1999.

Table B4: Estimated DAWN Weights for Marijuana
(Continued)

Metropolitan Area	1996				1997				1998			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Atlanta	0.032	0.032	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031
Baltimore	0.020	0.020	0.020	0.020	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.022
Boston	0.035	0.035	0.035	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034
Buffalo	0.006	0.006	0.006	0.006	0.006	0.006	0.007	0.007	0.007	0.007	0.007	0.007
Chicago	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.060
Cleveland	0.032	0.032	0.032	0.031	0.031	0.031	0.031	0.031	0.030	0.030	0.030	0.030
Dallas	0.015	0.015	0.015	0.015	0.014	0.014	0.014	0.014	0.014	0.014	0.013	0.013
Denver	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.007	0.007	0.007
Detroit	0.063	0.063	0.063	0.062	0.062	0.062	0.061	0.061	0.061	0.060	0.060	0.060
Houston	0.019	0.019	0.018	0.018	0.018	0.018	0.017	0.017	0.017	0.017	0.016	0.016
Kansas City	0.011	0.011	0.011	0.011	0.012	0.012	0.012	0.012	0.012	0.012	0.013	0.013
Los Angeles	0.049	0.049	0.049	0.048	0.048	0.047	0.047	0.047	0.046	0.046	0.045	0.045
Miami	0.016	0.016	0.016	0.016	0.016	0.016	0.017	0.017	0.017	0.017	0.017	0.017
Milwaukee	0.005	0.005	0.005	0.005	0.005	0.005	0.004	0.004	0.004	0.004	0.004	0.004
Minneapolis-St Paul	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.008	0.008	0.008	0.008	0.008
New Orleans	0.019	0.019	0.019	0.018	0.018	0.018	0.017	0.017	0.017	0.016	0.016	0.016
New York	0.059	0.058	0.057	0.056	0.055	0.054	0.053	0.052	0.051	0.050	0.049	0.048
Newark	0.011	0.010	0.010	0.010	0.009	0.009	0.009	0.008	0.008	0.008	0.008	0.007
Philadelphia	0.065	0.065	0.065	0.065	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066
Phoenix	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
Pittsburgh	0.012	0.012	0.012	0.012	0.013	0.013	0.013	0.013	0.014	0.014	0.014	0.015
Portland	0.013	0.013	0.013	0.013	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
San Antonio	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
San Diego	0.014	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.012	0.012	0.012
San Francisco	0.008	0.008	0.008	0.008	0.007	0.007	0.007	0.006	0.006	0.006	0.006	0.005
Seattle	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.015	0.015	0.015
St Louis	0.016	0.017	0.017	0.017	0.017	0.018	0.018	0.018	0.018	0.018	0.019	0.019
Tampa	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.018	0.018	0.018
Washington, DC	0.043	0.041	0.040	0.039	0.038	0.037	0.036	0.035	0.034	0.033	0.032	0.031
Rest of US	0.309	0.313	0.317	0.321	0.325	0.329	0.333	0.337	0.340	0.344	0.348	0.352

Source: Drug Abuse Warning Network Emergency Room Mentions, 1988 – 1999.

Table B4: Estimated DAWN Weights for Marijuana
(Continued)

Metropolitan Area	1999				2000				2001			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Atlanta	0.030	0.030	0.030	0.030	0.030	0.030						
Baltimore	0.022	0.022	0.022	0.022	0.022	0.022						
Boston	0.034	0.034	0.034	0.033	0.033	0.033						
Buffalo	0.007	0.007	0.008	0.008	0.008	0.008						
Chicago	0.060	0.060	0.060	0.060	0.060	0.060						
Cleveland	0.030	0.029	0.029	0.029	0.029	0.028						
Dallas	0.013	0.013	0.013	0.012	0.012	0.012						
Denver	0.007	0.007	0.007	0.007	0.007	0.006						
Detroit	0.059	0.059	0.058	0.058	0.058	0.057						
Houston	0.016	0.016	0.015	0.015	0.015	0.015						
Kansas City	0.013	0.013	0.013	0.014	0.014	0.014						
Los Angeles	0.045	0.044	0.044	0.043	0.043	0.042						
Miami	0.017	0.017	0.017	0.017	0.017	0.017						
Milwaukee	0.004	0.004	0.004	0.004	0.004	0.004						
Minneapolis-St Paul	0.008	0.008	0.008	0.008	0.008	0.007						
New Orleans	0.016	0.015	0.015	0.015	0.014	0.014						
New York	0.047	0.046	0.045	0.044	0.043	0.042						
Newark	0.007	0.007	0.007	0.006	0.006	0.006						
Philadelphia	0.067	0.067	0.067	0.067	0.067	0.067						
Phoenix	0.011	0.011	0.011	0.011	0.011	0.011						
Pittsburgh	0.015	0.015	0.016	0.016	0.016	0.016						
Portland	0.012	0.012	0.012	0.012	0.012	0.012						
San Antonio	0.007	0.007	0.007	0.007	0.007	0.007						
San Diego	0.012	0.012	0.012	0.012	0.012	0.011						
San Francisco	0.005	0.005	0.005	0.005	0.004	0.004						
Seattle	0.015	0.015	0.015	0.015	0.015	0.015						
St Louis	0.019	0.019	0.020	0.020	0.020	0.020						
Tampa	0.018	0.018	0.018	0.018	0.018	0.018						
Washington, DC	0.030	0.029	0.028	0.027	0.026	0.025						
Rest of US	0.356	0.360	0.363	0.367	0.371	0.375						

Source: Drug Abuse Warning Network Emergency Room Mentions, 1988 - 1999.

Table B5: Comsumer Price Index, First Half of 2000 as Reference Point

Year	January	February	March	April	May	June	July	August	September	October	November	December
1981	0.522	0.528	0.531	0.535	0.539	0.544	0.55	0.554	0.559	0.56	0.562	0.563
1982	0.565	0.567	0.566	0.568	0.574	0.581	0.585	0.586	0.587	0.588	0.587	0.585
1983	0.585	0.585	0.587	0.591	0.594	0.596	0.597	0.6	0.603	0.604	0.604	0.604
1984	0.606	0.608	0.608	0.609	0.612	0.613	0.616	0.622	0.625	0.625	0.625	0.625
1985	0.626	0.629	0.632	0.634	0.637	0.639	0.639	0.64	0.642	0.644	0.646	0.648
1986	0.650	0.648	0.644	0.642	0.644	0.647	0.647	0.648	0.651	0.651	0.652	0.652
1987	0.656	0.659	0.662	0.666	0.668	0.671	0.673	0.676	0.679	0.681	0.682	0.682
1988	0.683	0.685	0.687	0.690	0.693	0.696	0.699	0.702	0.707	0.710	0.710	0.711
1989	0.714	0.717	0.721	0.727	0.731	0.733	0.735	0.735	0.738	0.741	0.742	0.744
1990	0.751	0.754	0.759	0.760	0.761	0.766	0.768	0.775	0.782	0.787	0.789	0.789
1991	0.793	0.793	0.794	0.796	0.798	0.800	0.801	0.803	0.807	0.808	0.810	0.811
1992	0.812	0.814	0.818	0.819	0.821	0.824	0.826	0.828	0.830	0.833	0.834	0.834
1993	0.837	0.840	0.842	0.845	0.847	0.847	0.848	0.850	0.851	0.855	0.856	0.855
1994	0.857	0.859	0.862	0.864	0.865	0.868	0.870	0.874	0.877	0.877	0.879	0.878
1995	0.882	0.885	0.887	0.891	0.893	0.895	0.895	0.896	0.899	0.901	0.901	0.901
1996	0.905	0.908	0.912	0.917	0.919	0.920	0.921	0.922	0.926	0.928	0.93	0.930
1997	0.933	0.936	0.937	0.938	0.938	0.939	0.940	0.942	0.945	0.946	0.946	0.944
1998	0.945	0.946	0.947	0.949	0.952	0.953	0.954	0.955	0.956	0.958	0.959	0.959
1999	0.961	0.961	0.963	0.971	0.972	0.972	0.975	0.978	0.983	0.985	0.985	0.985
2000	0.988	0.994	1.002	1.003	1.004	1.010						

Source: Consumer Price Index for Urban Wage Earners and Clerical Workers,
Bureau of Labor Statistics, 1981 – 2000.

Appendix C

Regional Estimates: List of Tables

Table C1. Annual Cocaine Price and Purity for Six Regions for Purchases < 1 pure gram

	Price (2000$/pure gram)						Purity (%)						Number of Cases					
	EC	MTN	NE	PAC	SE	WC	EC	MTN	NE	PAC	SE	WC	EC	MTN	NE	PAC	SE	WC
1981	1,087.77	1,334.84	1,387.53	698.35	1,774.59	1,228.02	41	30	25	53	28	36	8	8	12	18	15	10
1982	1,218.16	1,195.10	1,258.28	583.46	1,664.38	1,289.04	33	45	29	53	25	30	12	9	22	24	22	19
1983	1,096.67	689.39	890.75	411.37	1,171.27	1,236.90	42	48	35	61	29	37	17	4	19	20	39	20
1984	761.33	571.62	850.17	481.30	897.42	733.70	43	49	43	62	33	59	28	5	18	18	61	16
1985	771.09	816.68	822.67	492.55	912.61	803.51	44	37	39	61	33	42	34	7	10	21	117	38
1986	520.14	623.05	438.43	346.23	709.45	505.45	51	48	64	78	43	56	24	4	14	24	118	19
1987	531.99	383.41	415.90	287.85	543.07	347.41	54	62	76	68	65	78	11	4	8	31	140	10
1988	368.34	273.07	342.10	194.33	289.32	435.29	66	75	67	87	76	64	29	6	13	20	238	8
1989	313.34	300.35	236.49	169.09	260.95	393.11	72	63	67	86	80	68	21	4	34	17	296	12
1990	376.55	349.36	364.72	244.33	577.61	385.78	66	64	58	78	72	64	32	5	47	7	258	14
1991	221.45	252.34	247.09	135.50	310.16	311.41	67	83	61	80	81	69	20	6	34	3	321	8
1992	287.61	283.97	184.17	212.23	256.19	342.78	73	65	64	83	79	76	23	8	29	5	183	13
1993	294.89	181.08	162.25	152.85	225.88	207.61	68	59	69	82	75	80	21	2	29	5	105	13
1994	247.77	175.01	178.34	124.66	206.24	204.94	72	66	71	81	74	74	11	4	41	14	72	19
1995	285.56	223.99	204.69	153.92	228.64	210.39	70	70	65	73	68	67	12	6	33	30	71	27
1996	209.86	191.93	180.79	138.25	223.31	177.23	64	75	67	83	71	75	28	5	63	10	60	28
1997	236.13	230.79	253.04	230.68	280.75	223.61	67	66	57	66	61	75	43	13	57	4	92	24
1998	156.96	183.21	381.09	186.63	231.69	272.50	76	67	60	69	69	69	15	12	35	7	100	37
1999	213.67	395.55	211.18	162.69	200.77	272.18	64	63	60	73	63	65	52	10	69	11	191	20
2000	215.69	165.44	307.09	74.47	234.61	291.02	57	67	61	77	59	55	77	20	83	9	127	31

Regions: EC = East Central SE = Southeast NE = Northeast
WC = West Central MTN = Mountain PAC = Pacific

Source: System To Retrieve Information on Drug Evidence (STRIDE) Prepared by: Abt Associates, Inc. 3/2/01

Table C2. Annual Cocaine Price and Purity for Six Regions for Purchases between 1 and 10 pure grams

	Price (2000$/pure gram)						Purity (%)						Number of Cases					
	EC	MTN	NE	PAC	SE	WC	EC	MTN	NE	PAC	SE	WC	EC	MTN	NE	PAC	SE	WC
1981	521.26	473.71	553.07	324.50	444.25	646.08	38	43	39	60	40	35	24	23	14	13	17	24
1982	485.77	403.82	468.31	392.59	499.20	483.45	41	49	42	57	37	43	27	26	46	16	17	24
1983	391.24	393.20	403.41	295.68	452.05	454.49	47	50	47	62	40	46	41	15	51	19	28	33
1984	341.92	317.64	313.31	208.90	380.73	365.48	51	56	56	72	45	51	44	17	35	16	43	35
1985	335.71	335.04	313.71	233.29	375.35	346.73	49	49	53	67	42	49	68	25	49	21	46	57
1986	268.72	280.73	228.51	176.14	323.07	278.04	60	57	65	74	56	57	61	19	42	18	56	47
1987	214.45	178.65	166.28	171.03	220.07	236.69	69	73	75	65	70	67	44	13	30	25	66	29
1988	195.95	184.12	156.38	113.34	201.97	171.92	69	70	68	82	72	67	53	15	37	37	63	26
1989	158.82	155.36	150.61	106.31	164.54	149.47	68	56	58	76	75	70	53	12	52	22	71	27
1990	209.34	199.56	244.41	147.67	209.56	208.34	59	49	43	63	66	58	51	12	65	21	61	31
1991	145.86	125.52	163.11	123.23	141.52	141.62	65	67	57	78	75	70	53	17	71	11	91	38
1992	154.09	113.29	127.62	100.30	143.11	130.77	68	72	69	80	74	75	48	23	44	18	112	32
1993	128.58	106.38	134.24	97.84	132.65	126.59	66	70	63	77	74	70	39	15	47	23	91	31
1994	125.60	95.92	102.96	78.60	120.11	111.63	64	70	75	80	72	71	27	16	85	22	118	50
1995	139.90	106.02	109.96	97.57	118.29	112.77	62	65	67	62	68	68	39	20	81	19	102	52
1996	115.29	101.09	121.01	83.16	112.43	110.53	67	69	62	73	68	71	38	24	83	15	142	64
1997	125.52	113.42	120.50	85.32	112.41	112.08	64	63	59	62	65	68	42	30	97	12	152	72
1998	117.09	100.48	101.13	69.33	105.99	114.39	61	67	63	70	66	70	53	30	94	18	133	86
1999	123.79	83.11	120.78	100.69	135.20	122.07	63	67	60	68	56	60	74	43	129	16	147	63
2000	158.68	101.64	156.26	77.96	157.76	142.44	51	58	59	60	51	53	77	47	190	16	144	76

Regions: EC = East Central SE = Southeast NE = Northeast
WC = West Central MTN = Mountain PAC = Pacific

Source: System To Retrieve Information on Drug Evidence (STRIDE) Prepared by: Abt Associates, Inc. 3/2/01

Table C3. Annual Cocaine Price and Purity for Six Regions for Purchases between 10 and 100 pure grams

	Price (2000$/pure gram)						Purity (%)						Number of Cases					
	EC	MTN	NE	PAC	SE	WC	EC	MTN	NE	PAC	SE	WC	EC	MTN	NE	PAC	SE	WC
1981	293.36	261.06	269.74	249.41	260.15	312.76	56	68	59	69	61	56	14	7	8	11	6	15
1982	276.41	232.25	254.92	218.69	225.88	265.76	55	65	59	70	62	59	13	11	15	12	9	11
1983	239.18	245.14	197.71	170.11	232.31	219.92	62	64	73	80	59	70	23	12	40	24	20	22
1984	198.16	188.82	169.04	162.01	183.83	202.81	68	71	74	78	66	67	47	15	52	27	39	40
1985	197.18	175.58	171.14	141.27	186.06	190.44	66	71	68	77	63	64	59	24	70	32	49	72
1986	144.93	143.71	121.05	114.01	146.59	148.02	76	75	80	82	73	76	93	28	76	36	69	77
1987	108.93	104.23	101.49	84.95	114.54	112.04	81	82	80	86	79	79	126	34	102	56	65	94
1988	85.09	79.91	77.64	60.77	87.74	80.88	81	82	79	83	82	82	129	44	85	64	93	72
1989	77.11	74.44	77.82	55.78	78.51	72.78	76	74	69	75	78	78	112	42	100	65	98	60
1990	98.05	88.37	116.41	85.87	99.75	94.01	69	63	56	64	68	69	69	26	87	40	79	40
1991	78.52	70.69	84.44	61.07	78.24	75.24	76	72	68	76	75	77	111	35	97	68	148	106
1992	78.39	58.76	78.67	48.59	75.72	77.33	75	77	66	80	74	79	82	24	63	52	139	86
1993	77.07	68.04	76.70	51.84	73.77	69.54	71	65	66	76	70	73	48	11	48	43	92	33
1994	65.32	53.62	63.76	43.57	65.40	64.16	73	76	69	76	72	74	59	18	83	44	135	67
1995	71.49	60.95	64.45	48.55	68.03	65.83	68	65	65	68	67	70	80	16	76	23	98	64
1996	61.85	58.78	66.05	43.68	63.50	57.67	70	68	63	72	65	69	79	33	118	32	143	68
1997	67.30	53.34	71.68	46.67	70.39	59.47	66	66	58	68	60	68	88	30	103	29	161	69
1998	62.43	51.29	58.75	40.25	60.66	57.28	68	66	62	68	63	65	91	40	126	43	195	77
1999	67.58	47.75	67.92	43.96	71.36	60.13	61	65	57	66	57	62	93	46	104	35	151	50
2000	81.20	47.64	81.99	59.45	90.07	69.99	52	58	54	54	48	53	79	46	112	38	142	48

Regions: EC = East Central SE = Southeast NE = Northeast
WC = West Central MTN = Mountain PAC = Pacific

Source: System To Retrieve Information on Drug Evidence (STRIDE) Prepared by: Abt Associates, Inc. 3/2/01

Table C4. Annual Cocaine Price and Purity for Six Regions for Purchases > 100 pure grams

	Price (2000$/pure gram)						Purity (%)						Number of Cases					
	EC	MTN	NE	PAC	SE	WC	EC	MTN	NE	PAC	SE	WC	EC	MTN	NE	PAC	SE	WC
1981	-	-	131.93	139.41	-	-	-	-	86	52	-	-	0	0	1	0	0	0
1982	-	231.47	-	152.44	157.56	-	-	54	-	73	78	-	0	0	0	1	2	0
1983	118.73	-	112.41	126.22	100.44	168.98	81	-	87	86	86	67	2	0	5	2	5	0
1984	112.04	89.21	99.58	91.97	88.82	87.37	84	92	88	84	84	95	2	0	6	3	5	1
1985	115.48	88.68	94.85	93.09	89.12	93.74	83	92	81	86	78	84	3	0	12	6	3	2
1986	88.68	55.14	68.29	71.25	61.05	81.47	86	94	90	85	88	88	4	1	16	4	6	4
1987	79.09	54.46	52.25	51.27	53.59	61.32	79	80	88	85	88	85	4	3	29	11	12	8
1988	46.95	35.31	39.09	73.10	44.33	42.16	90	86	94	85	86	89	13	9	39	21	13	7
1989	45.51	39.30	39.12	33.67	44.35	40.57	83	87	84	83	83	84	15	5	33	17	13	9
1990	59.66	64.65	53.89	55.45	66.09	54.92	78	76	88	78	70	74	5	4	20	7	10	2
1991	49.18	42.84	40.61	39.93	57.56	35.93	90	79	91	84	78	87	16	10	26	21	15	16
1992	53.51	34.46	42.99	34.92	44.66	37.82	79	87	83	85	80	86	14	3	16	11	9	12
1993	41.47	42.84	44.59	37.70	41.43	33.29	83	72	81	78	79	85	5	2	9	7	8	3
1994	42.33	27.24	40.66	30.95	38.59	34.74	78	90	80	80	80	82	6	3	13	7	13	8
1995	47.15	35.26	48.03	31.67	44.18	38.04	78	77	70	75	76	76	4	3	11	5	10	6
1996	40.14	33.59	36.69	30.43	39.58	30.40	78	75	82	78	75	82	9	6	18	10	12	8
1997	39.10	40.72	39.76	32.96	38.77	33.77	78	74	78	76	76	75	5	3	16	9	10	7
1998	34.61	32.94	39.46	28.45	40.41	35.21	77	68	74	79	74	74	10	5	11	13	14	10
1999	33.91	29.54	45.18	39.78	44.45	28.72	80	74	67	59	65	75	9	9	4	10	7	6
2000	44.24	27.31	53.84	37.88	46.68	36.99	71	72	48	66	63	65	4	5	2	13	5	6

Regions: EC = East Central SE = Southeast NE = Northeast
WC = West Central MTN = Mountain PAC = Pacific

Source: System To Retrieve Information on Drug Evidence (STRIDE) Prepared by: Abt Associates, Inc. 3/2/01

Table C5. Annual Heroin Price and Purity for Six Regions for Purchases < 0.1 pure gram

	Price (2000$/pure gram)						Purity (%)						Number of Cases					
	EC	MTN	NE	PAC	SE	WC	EC	MTN	NE	PAC	SE	WC	EC	MTN	NE	PAC	SE	WC
1981	8,918.18	13,881.90	8,416.65	7,788.37	5,926.19	8,980.48	5	3	4	8	4	4	4	10	58	12	79	21
1982	8,881.90	8,617.17	6,591.53	5,859.51	6,364.57	7,606.31	4	5	6	10	4	5	10	7	35	15	79	39
1983	9,370.86	6,416.76	6,632.26	4,336.29	7,436.13	9,865.81	4	10	8	14	5	8	9	4	35	19	74	10
1984	9,514.77	6,346.38	6,504.75	3,908.34	5,583.58	7,329.69	3	24	7	14	6	11	15	2	22	11	81	7
1985	8,623.19	2,633.75	6,734.52	2,648.94	4,418.20	6,587.70	5	39	7	18	8	10	16	1	18	10	93	5
1986	9,647.97	5,925.50	6,997.00	3,846.43	4,772.09	7,310.28	3	14	12	14	9	10	7	1	9	5	81	6
1987	9,058.38	5,281.81	4,748.66	2,814.64	2,926.52	8,587.37	6	21	18	16	12	6	6	4	6	28	27	3
1988	5,867.32	4,144.25	3,633.93	2,081.95	3,474.02	8,293.21	11	35	22	17	12	15	17	9	10	14	30	6
1989	4,074.96	2,093.05	1,877.13	4,135.97	2,494.62	3,131.75	9	38	25	13	14	10	10	5	11	8	32	2
1990	3,707.40	3,603.29	2,662.46	3,413.44	4,410.84	2,371.14	13	19	27	11	10	12	14	6	17	9	45	5
1991	3,452.08	2,871.95	2,583.44	3,678.21	2,704.57	6,061.79	9	19	33	11	16	8	14	13	16	18	35	18
1992	3,270.51	2,531.18	2,969.59	2,808.59	2,228.56	5,197.66	15	33	39	22	18	9	13	5	5	11	18	17
1993	2,384.54	3,373.80	1,447.53	1,927.35	2,338.59	2,940.65	19	32	42	22	19	16	10	13	6	6	39	10
1994	2,806.22	1,674.71	1,793.44	1,688.42	2,610.12	3,678.37	15	30	38	20	21	8	12	12	9	5	21	8
1995	4,185.10	1,999.88	1,632.13	1,736.19	2,221.67	3,337.01	18	22	38	25	25	13	7	11	8	7	19	10
1996	1,729.67	3,716.14	3,028.75	1,794.46	2,537.50	2,791.73	20	13	37	20	20	20	16	5	12	9	21	12
1997	1,572.27	1,929.84	1,942.88	1,948.10	2,135.49	4,171.27	35	13	39	25	26	10	12	3	9	7	20	11
1998	2,258.03	1,912.10	1,203.56	824.69	2,339.73	3,349.55	23	19	45	24	20	17	5	5	7	8	22	12
1999	1,932.05	1,760.37	1,183.47	1,123.94	1,813.55	2,827.09	23	22	50	21	18	12	6	6	12	10	38	8
2000	1,055.22	1,645.53	1,358.40	1,531.49	2,239.37	2,654.69	38	20	46	12	22	13	7	3	7	8	19	12

Regions: EC = East Central SE = Southeast NE = Northeast
WC = West Central MTN = Mountain PAC = Pacific

Source: System To Retrieve Information on Drug Evidence (STRIDE) Prepared by: Abt Associates, Inc. 3/2/01

Table C6. Annual Heroin Price and Purity for Six Regions for Purchases between 0.1 and 1 pure grams

	Price (2000$/pure gram)						Purity (%)						Number of Cases					
	EC	MTN	NE	PAC	SE	WC	EC	MTN	NE	PAC	SE	WC	EC	MTN	NE	PAC	SE	WC
1981	6,372.99	4,987.81	3,388.13	4,628.02	3,158.88	5,258.42	13	15	12	18	24	6	13	8	63	16	8	15
1982	5,286.81	3,352.28	2,848.00	2,520.74	4,339.30	4,335.07	17	22	16	37	15	9	13	9	38	24	11	13
1983	4,794.29	3,129.75	3,861.56	2,174.74	3,522.63	3,475.33	16	35	13	40	18	14	13	7	44	16	16	13
1984	5,216.20	2,103.51	2,997.47	1,781.14	4,330.26	3,829.28	5	54	21	44	17	24	14	3	20	17	8	11
1985	4,027.07	1,585.98	2,504.11	1,425.91	3,039.21	2,214.54	15	58	21	49	20	31	16	2	24	18	9	14
1986	3,448.10	2,124.67	1,979.63	1,475.33	3,211.21	2,366.76	14	36	30	43	16	24	10	6	16	17	7	13
1987	3,177.91	1,872.27	1,482.65	1,337.18	3,287.09	3,003.73	15	40	37	37	14	19	8	6	18	22	9	11
1988	2,873.30	1,623.98	1,031.94	1,089.07	2,103.46	2,649.67	21	42	53	37	22	30	12	15	26	17	9	11
1989	1,605.21	958.03	890.27	886.06	1,252.75	1,337.39	34	47	49	37	28	36	10	7	22	13	8	6
1990	2,333.19	2,281.72	1,255.05	1,462.79	2,394.42	2,184.43	20	22	45	22	23	28	11	6	38	15	7	4
1991	1,670.66	2,291.27	1,025.01	1,418.66	1,492.06	2,073.25	27	23	54	23	26	17	10	4	41	25	15	14
1992	1,289.25	1,608.00	770.18	809.23	1,133.20	2,384.22	27	34	66	39	35	22	9	4	36	26	11	10
1993	1,007.34	1,012.15	690.15	582.70	994.30	1,247.20	33	45	67	42	25	15	18	4	57	18	21	15
1994	999.45	509.96	586.51	605.76	903.20	1,179.25	26	53	66	37	47	18	14	5	79	28	30	12
1995	875.73	535.00	530.08	466.62	916.56	1,043.59	39	42	69	42	35	21	19	8	81	37	23	19
1996	851.68	454.83	537.31	413.26	750.69	1,114.02	41	42	59	39	31	37	13	13	78	28	33	24
1997	731.62	583.80	467.79	523.18	940.92	1,213.05	46	38	67	36	48	25	18	18	58	27	43	13
1998	565.62	394.51	444.79	292.96	564.79	960.49	40	40	64	38	41	35	24	20	74	46	51	13
1999	591.50	477.97	502.96	340.45	582.89	782.06	42	39	63	37	35	26	21	25	70	33	53	25
2000	568.08	412.24	450.52	270.84	544.69	729.44	49	43	65	42	39	31	27	32	65	37	42	29

Regions: EC = East Central SE = Southeast NE = Northeast
WC = West Central MTN = Mountain PAC = Pacific

Source: System To Retrieve Information on Drug Evidence (STRIDE) Prepared by: Abt Associates, Inc. 3/2/01

Table C7. Annual Heroin Price and Purity for Six Regions for Purchases between 1 and 10 pure grams

	Price (2000$/pure gram)						Purity (%)						Number of Cases					
	EC	MTN	NE	PAC	SE	WC	EC	MTN	NE	PAC	SE	WC	EC	MTN	NE	PAC	SE	WC
1981	2,418.17	3,634.55	1,835.07	2,082.26	2,275.19	2,940.50	14	9	17	26	30	6	6	3	34	16	5	3
1982	1,994.86	1,970.54	1,567.15	1,436.54	1,544.31	1,708.83	19	18	22	53	55	25	15	4	27	18	6	5
1983	2,008.85	2,091.05	2,456.29	1,535.94	1,335.48	1,619.24	23	36	19	51	38	21	12	5	19	11	5	9
1984	1,984.18	784.51	2,129.08	1,250.39	2,673.89	1,523.43	15	60	28	45	39	35	10	3	16	10	4	9
1985	1,657.02	818.91	1,799.95	944.75	2,157.37	1,471.10	18	61	38	55	34	46	13	3	15	14	10	12
1986	1,693.13	887.78	1,621.36	1,114.36	2,056.90	1,369.76	23	53	33	38	25	38	15	5	16	7	4	12
1987	1,687.38	924.50	1,363.84	1,023.98	2,527.80	1,454.53	21	60	41	34	17	28	8	3	16	12	5	12
1988	1,746.59	1,000.25	1,065.64	803.71	1,259.47	1,292.12	28	38	54	35	26	32	8	9	17	11	3	10
1989	966.85	871.40	843.81	646.73	997.13	1,065.43	42	47	56	36	37	24	7	4	11	16	3	9
1990	1,417.93	923.51	1,339.66	765.96	1,320.16	1,045.76	30	28	37	28	30	28	7	4	16	25	7	12
1991	984.83	1,502.90	928.26	973.86	1,259.28	1,244.31	38	25	48	22	27	29	7	5	12	19	7	13
1992	1,001.25	709.42	851.03	597.52	854.57	870.35	41	39	46	27	54	29	6	4	8	17	10	13
1993	885.71	579.27	461.37	458.42	805.36	857.65	43	52	70	31	38	31	7	3	25	9	6	9
1994	720.71	597.27	477.30	363.60	520.60	728.19	53	37	64	30	53	27	7	8	37	15	11	5
1995	736.61	313.88	418.95	275.94	559.89	491.54	48	40	69	33	54	44	11	3	34	21	7	6
1996	698.00	514.08	419.66	217.76	563.88	399.73	43	32	58	41	46	39	10	8	45	19	9	8
1997	551.55	338.29	373.88	210.95	487.08	628.13	48	39	61	30	55	32	11	7	29	19	13	8
1998	464.50	336.80	349.46	185.83	510.04	409.58	62	40	61	33	58	36	6	5	66	15	18	5
1999	452.85	213.28	357.97	210.96	437.54	480.86	54	57	60	33	44	38	8	6	64	20	24	7
2000	413.33	158.15	291.95	191.34	367.60	438.25	51	53	64	24	49	37	10	11	50	20	18	11

Regions: EC = East Central SE = Southeast NE = Northeast
WC = West Central MTN = Mountain PAC = Pacific

Source: System To Retrieve Information on Drug Evidence (STRIDE) Prepared by: Abt Associates, Inc. 3/2/01

Table C8. Annual Heroin Price and Purity for Six Regions for Purchases > 10 pure grams

	Price (2000$/pure gram)						Purity (%)						Number of Cases					
	EC	MTN	NE	PAC	SE	WC	EC	MTN	NE	PAC	SE	WC	EC	MTN	NE	PAC	SE	WC
1981	-	-	977.13	629.66	1,223.80	-	-	-	66	79	50	-	0	0	16	2	2	0
1982	1,088.23	-	926.38	895.04	798.47	1,007.11	51	-	65	63	65	45	3	0	12	5	1	1
1983	1,363.68	748.84	909.82	704.00	739.73	1,221.86	46	66	62	65	72	43	3	1	12	7	1	2
1984	843.53	655.86	851.14	697.65	902.02	857.72	67	68	59	60	52	67	2	2	17	8	1	1
1985	994.10	530.19	834.15	533.32	1,149.51	841.81	52	69	60	62	37	62	5	1	17	9	3	8
1986	860.31	473.59	822.53	572.17	847.00	583.71	43	60	48	61	54	61	4	1	13	6	2	2
1987	784.50	562.36	678.46	534.26	607.95	730.68	37	49	59	50	58	44	1	2	17	9	2	3
1988	611.11	509.94	593.23	477.51	502.36	539.48	61	56	76	43	55	53	3	3	22	5	2	9
1989	539.06	384.55	463.76	369.94	485.07	527.81	68	58	72	48	61	54	5	7	19	13	9	6
1990	560.82	464.25	557.36	494.20	580.42	484.58	51	43	58	47	56	52	3	6	9	10	3	5
1991	538.96	524.19	507.00	442.56	597.80	771.42	65	41	60	55	63	36	3	2	10	5	5	8
1992	421.12	439.10	381.15	427.04	398.89	508.37	67	52	73	49	67	42	7	2	15	9	9	7
1993	355.86	305.52	290.94	281.67	339.07	323.65	66	56	81	52	73	54	8	2	22	9	9	6
1994	415.22	281.88	254.53	180.70	342.24	321.64	61	61	73	58	69	53	6	2	28	14	6	4
1995	366.62	257.53	231.69	196.57	248.07	274.76	53	51	72	50	82	53	7	6	33	14	5	12
1996	379.68	169.81	244.58	152.12	271.78	188.55	53	54	62	47	81	57	4	6	22	22	2	7
1997	252.40	151.29	215.95	138.55	262.88	249.31	70	58	68	41	71	48	9	7	25	19	7	10
1998	240.06	154.08	189.56	115.61	215.44	168.13	61	56	64	42	72	57	8	9	41	21	11	9
1999	273.16	112.10	158.49	114.27	198.92	120.27	65	58	70	44	69	58	3	4	29	26	17	7
2000	192.53	93.49	132.33	95.98	145.88	158.47	70	59	71	40	71	65	4	13	28	29	11	8

Regions: EC = East Central SE = Southeast NE = Northeast
WC = West Central MTN = Mountain PAC = Pacific

Source: System To Retrieve Information on Drug Evidence (STRIDE) Prepared by: Abt Associates, Inc. 3/2/01

Table C9. Annual Methamphetamine Price and Purity for Six Regions for Purchases < 10 pure gram

	Price (2000$/pure gram)						Purity (%)						Number of Cases					
	EC	MTN	NE	PAC	SE	WC	EC	MTN	NE	PAC	SE	WC	EC	MTN	NE	PAC	SE	WC
1981	-	604.10	337.53	932.79	723.95	440.47	-	39	34	32	51	41	0	2	16	7	2	2
1982	564.43	424.49	578.61	484.44	606.78	631.59	34	39	26	51	41	36	2	4	15	16	3	5
1983	317.97	615.41	597.02	588.00	638.23	575.11	42	53	33	47	30	34	1	2	16	18	2	4
1984	-	479.74	486.05	724.80	471.09	431.29	-	42	28	41	26	39	0	7	8	24	9	15
1985	669.51	179.65	572.12	479.05	793.17	1,101.63	18	70	18	42	28	33	2	3	7	30	4	10
1986	723.85	331.25	838.07	363.83	517.17	900.61	27	46	22	48	18	33	2	6	5	24	3	25
1987	419.90	475.02	279.02	324.58	630.04	909.72	36	42	30	57	45	30	3	3	3	28	2	7
1988	851.43	345.15	652.45	170.62	821.19	478.98	11	41	15	67	18	30	1	4	5	36	2	15
1989	744.85	315.93	860.44	189.09	624.30	313.13	16	32	12	54	46	38	1	6	4	26	2	8
1990	603.54	871.93	669.63	340.43	1,104.11	841.27	30	15	13	32	22	21	1	7	3	18	4	13
1991	359.73	1,095.96	751.51	417.20	1,148.02	1,149.24	25	11	7	28	8	17	1	8	2	20	4	3
1992	404.95	709.34	785.98	379.17	525.99	498.23	26	26	25	42	15	28	2	6	9	11	3	12
1993	280.32	665.92	500.40	358.11	352.34	643.92	42	50	17	51	36	30	5	7	4	9	2	15
1994	748.92	225.22	271.05	90.95	365.60	321.96	14	54	17	82	42	38	2	7	5	18	3	11
1995	430.16	533.12	1,067.42	226.19	895.48	964.97	29	46	14	60	26	29	3	9	10	27	5	19
1996	951.24	467.06	938.86	271.23	901.03	548.11	18	36	13	44	14	24	2	14	14	20	5	12
1997	907.12	187.74	304.04	106.40	629.67	519.95	20	45	30	57	22	28	5	36	4	20	18	19
1998	1,092.47	457.57	807.58	307.62	822.68	799.26	17	21	26	24	19	15	13	53	11	59	21	23
1999	1,567.63	402.96	879.16	172.20	965.17	730.68	11	28	10	31	16	18	9	33	7	58	23	26
2000	320.95	207.54	415.45	227.16	810.79	373.92	28	30	29	27	18	28	11	23	5	86	27	22

Regions: EC = East Central SE = Southeast NE = Northeast
WC = West Central MTN = Mountain PAC = Pacific

Source: System To Retrieve Information on Drug Evidence (STRIDE) Prepared by: Abt Associates, Inc. 3/2/01

Table C10. Annual Methamphetamine Price and Purity for Six Regions for Purchases between 10 and 100 pure grams

	Price (2000$/pure gram)						Purity (%)						Number of Cases					
	EC	MTN	NE	PAC	SE	WC	EC	MTN	NE	PAC	SE	WC	EC	MTN	NE	PAC	SE	WC
1981	30.96	-	105.34	151.93	-	157.81	15	-	55	61	-	58	1	0	3	1	0	0
1982	320.71	135.48	178.97	139.37	169.67	222.54	45	64	41	70	46	46	1	1	4	3	3	2
1983	106.97	141.88	172.37	116.45	267.14	175.88	18	75	41	68	36	63	1	1	6	1	1	1
1984	-	133.01	157.39	128.83	322.30	146.63	-	62	39	73	20	66	0	2	11	4	3	4
1985	195.72	134.47	126.91	162.93	201.27	237.97	55	68	50	57	44	54	1	1	7	8	2	4
1986	403.78	-	152.78	83.94	299.17	176.34	39	-	43	71	26	56	1	0	4	4	2	3
1987	210.72	175.21	202.16	84.53	-	156.11	37	47	36	66	-	52	0	1	2	7	0	4
1988	110.26	114.62	152.88	75.23	264.02	149.30	62	68	29	67	23	55	1	2	4	15	0	6
1989	-	100.21	269.01	94.72	-	88.30	-	57	18	70	-	64	0	5	0	8	0	5
1990	218.61	176.60	234.12	92.88	-	259.54	33	37	25	43	-	31	1	3	2	3	0	2
1991	257.93	206.27	168.16	181.32	-	327.81	21	53	22	58	-	19	0	2	2	9	0	0
1992	134.91	180.49	263.45	86.06	-	201.66	54	50	19	68	-	37	1	2	4	13	0	2
1993	129.20	74.49	183.92	63.94	96.33	171.58	75	58	27	79	45	47	1	4	4	10	1	2
1994	114.73	56.04	127.95	39.63	179.74	103.05	60	79	51	87	55	70	0	7	6	18	2	7
1995	115.12	88.20	218.58	101.60	309.56	138.71	62	59	30	64	28	45	1	11	11	24	2	7
1996	227.53	77.87	219.91	101.32	184.02	122.94	25	56	22	54	48	55	0	11	6	28	2	5
1997	176.86	70.68	154.14	61.92	128.70	124.11	49	51	35	61	50	44	3	30	7	50	9	10
1998	238.56	145.95	211.34	107.80	222.78	187.11	22	32	25	28	25	25	2	21	3	52	10	6
1999	-	118.89	246.75	87.95	196.24	152.71	-	24	16	31	28	20	0	21	1	75	10	13
2000	179.53	98.29	199.76	87.20	178.40	103.72	37	37	16	28	17	29	5	12	1	99	13	16

Regions: EC = East Central SE = Southeast NE = Northeast
WC = West Central MTN = Mountain PAC = Pacific

Source: System To Retrieve Information on Drug Evidence (STRIDE) Prepared by: Abt Associates, Inc. 3/2/01

Table C11. Annual Methamphetamine Price and Purity for Six Regions for Purchases > 100 pure grams

	Price (2000$/pure gram)						Purity (%)						Number of Cases					
	EC	MTN	NE	PAC	SE	WC	EC	MTN	NE	PAC	SE	WC	EC	MTN	NE	PAC	SE	WC
1981	33.33	-	62.21	-	-	-	14	-	79	-	-	-	0	0	0	0	0	0
1982	-	-	-	82.01	-	-	-	-	-	51	-	-	0	0	0	1	0	0
1983	-	-	50.47	98.47	-	-	-	-	72	61	-	-	0	0	1	1	0	0
1984	-	59.61	101.36	138.20	-	-	-	79	48	60	-	-	0	1	2	1	0	0
1985	-	-	81.39	88.40	288.64	-	-	-	42	68	20	-	0	0	1	2	0	0
1986	27.51	129.61	-	40.92	38.73	73.62	66	51	-	95	81	42	1	0	0	1	0	0
1987	-	-	-	44.58	-	38.86	-	-	-	83	-	90	0	0	0	3	0	1
1988	-	45.06	126.04	27.74	-	64.52	-	91	18	146	-	72	0	1	0	3	0	0
1989	59.27	18.79	117.90	28.15	-	26.64	76	77	27	88	-	98	1	0	0	1	0	0
1990	-	78.03	-	59.94	-	-	-	66	-	50	-	-	0	0	0	2	0	0
1991	-	49.79	-	125.56	-	-	-	82	-	73	-	-	0	1	0	3	0	0
1992	-	23.48	107.48	37.17	-	87.61	-	90	25	79	-	54	0	1	0	6	0	1
1993	-	53.40	-	28.74	-	100.78	-	77	-	85	-	57	0	1	0	4	0	1
1994	-	34.51	75.95	23.50	-	32.67	-	85	27	91	-	89	0	3	0	15	0	1
1995	-	36.57	-	21.77	43.18	49.06	-	78	-	81	93	73	0	4	0	11	0	1
1996	-	81.47	86.37	42.03	51.49	57.81	-	33	28	70	95	59	0	3	1	12	1	1
1997	-	30.64	61.24	28.28	55.83	30.47	-	64	34	72	45	63	0	2	1	21	2	1
1998	-	51.08	71.94	56.10	108.42	73.74	-	36	36	30	46	36	0	2	1	9	1	1
1999	-	68.16	-	42.15	-	62.66	-	26	-	44	-	21	0	1	0	12	0	1
2000	-	19.61	-	47.03	88.36	37.97	-	86	-	47	31	54	0	1	0	16	1	1

Regions: EC = East Central SE = Southeast NE = Northeast
WC = West Central MTN = Mountain PAC = Pacific

Source: System To Retrieve Information on Drug Evidence (STRIDE) Prepared by: Abt Associates, Inc. 3/2/01

Table C12. Annual Marijuana Price for Six Regions for Purchases < 10 pure gram

	Price (2000$/pure gram)						Number of Cases					
	EC	MTN	NE	PAC	SE	WC	EC	MTN	NE	PAC	SE	WC
1981	-	-	-	12.31	7.94	9.47	0	0	0	3	35	0
1982	1.81	-	4.70	18.71	12.61	7.91	0	0	0	2	13	1
1983	11.78	-	12.95	8.52	23.37	5.90	1	0	0	6	6	3
1984	6.94	-	3.82	10.45	19.27	6.49	2	0	0	7	16	1
1985	8.20	-	-	7.68	24.85	11.78	2	0	0	4	14	0
1986	-	9.60	-	26.50	26.35	18.15	0	1	0	2	10	0
1987	-	11.26	9.66	6.41	22.00	14.57	0	0	1	1	7	7
1988	11.45	-	-	11.04	15.92	7.90	1	0	0	1	7	2
1989	7.16	-	13.01	31.81	14.26	8.26	1	0	1	2	6	3
1990	15.78	9.58	13.48	15.12	17.87	6.06	0	0	0	0	9	1
1991	17.78	30.28	12.06	7.18	18.17	26.06	1	1	1	0	6	1
1992	12.48	13.07	21.88	12.76	18.49	11.60	2	0	1	1	11	2
1993	19.58	21.74	11.34	17.82	17.07	30.34	1	2	1	1	25	1
1994	4.45	26.61	-	3.55	10.60	13.33	0	2	0	1	9	2
1995	9.16	12.84	9.46	6.33	9.20	7.52	0	2	1	5	11	2
1996	5.04	8.80	7.24	11.08	8.40	9.80	2	1	1	2	12	2
1997	6.52	10.12	17.15	11.45	4.89	10.17	1	1	1	11	19	1
1998	5.03	12.68	13.30	-	6.59	4.75	1	1	1	0	22	1
1999	7.76	6.83	9.40	11.21	6.51	8.25	2	1	2	2	47	1
2000	6.19	19.59	10.52	-	6.83	-	1	2	1	0	22	0

Regions: EC = East Central SE = Southeast NE = Northeast
WC = West Central MTN = Mountain PAC = Pacific

Source: System To Retrieve Information on Drug Evidence (STRIDE) Prepared by: Abt Associates, Inc. 3/2/01

Table C13. Annual Marijuana Price for Six Regions for Purchases between 10 and 100 pure grams

	Price (2000$/pure gram)						Number of Cases					
	EC	MTN	NE	PAC	SE	WC	EC	MTN	NE	PAC	SE	WC
1981	2.69	4.46	2.64	3.05	3.25	2.92	0	1	0	2	11	1
1982	7.39	-	5.48	8.06	2.76	4.41	2	0	1	1	3	3
1983	8.52	-	13.57	7.03	4.98	5.82	2	0	0	2	3	5
1984	5.50	-	3.19	5.49	3.78	3.82	4	0	1	2	2	2
1985	5.04	-	-	4.75	5.26	4.67	1	0	0	3	3	1
1986	7.57	9.83	-	3.15	7.61	8.66	1	0	0	1	1	1
1987	5.08	-	8.95	10.29	10.66	6.83	1	0	0	2	1	2
1988	9.13	-	-	8.33	8.54	5.27	0	0	0	3	5	3
1989	7.53	-	4.63	11.30	9.31	4.49	1	0	0	2	1	1
1990	9.94	6.36	7.84	11.57	7.04	-	2	0	2	1	2	0
1991	8.90	5.29	14.40	39.81	4.48	8.57	2	0	7	1	0	2
1992	7.73	6.28	12.07	7.49	9.10	8.46	1	2	2	0	1	2
1993	10.93	-	12.62	23.57	12.77	12.74	2	0	1	0	5	1
1994	-	8.27	13.01	7.95	7.57	5.64	0	1	0	6	2	1
1995	8.75	6.47	-	2.74	6.49	5.44	0	1	0	3	6	1
1996	7.00	6.08	7.19	1.96	8.45	4.99	1	2	2	1	5	2
1997	4.86	6.58	-	5.86	4.21	4.36	0	7	0	2	5	3
1998	7.98	6.89	6.29	5.44	4.85	4.03	1	3	2	1	3	1
1999	10.41	3.88	11.10	-	5.75	8.13	2	2	1	0	3	2
2000	5.44	3.53	2.04	4.37	3.67	-	2	2	1	2	2	0

Regions: EC = East Central SE = Southeast NE = Northeast
WC = West Central MTN = Mountain PAC = Pacific

Source: System To Retrieve Information on Drug Evidence (STRIDE) Prepared by: Abt Associates, Inc. 3/2/01

Table C14. Annual Marijuana Price for Six Regions for Purchases between 100 and 1000 pure grams

	Price (2000$/pure gram)						Number of Cases					
	EC	MTN	NE	PAC	SE	WC	EC	MTN	NE	PAC	SE	WC
1981	1.68	-	-	4.79	1.94	1.57	1	0	0	1	1	1
1982	1.85	3.76	1.58	2.82	2.03	2.22	0	0	1	0	3	1
1983	4.07	2.47	3.84	4.28	3.44	2.74	1	0	1	0	2	2
1984	2.99	1.92	2.56	3.19	3.71	2.78	3	0	1	0	1	1
1985	2.61	-	-	2.64	3.17	1.55	3	0	0	1	2	3
1986	2.86	-	-	4.22	3.94	2.93	2	0	0	0	1	1
1987	4.29	2.10	5.96	3.79	-	3.90	7	0	1	1	0	3
1988	3.03	6.53	4.58	3.14	5.04	2.60	1	1	1	1	1	2
1989	3.03	2.35	4.33	2.36	3.31	2.90	1	1	1	1	1	4
1990	5.69	1.85	6.42	3.24	4.83	4.24	5	0	3	1	1	1
1991	5.17	2.93	5.70	3.38	5.25	4.19	4	1	5	1	2	2
1992	4.36	5.72	5.53	7.62	4.09	5.33	3	3	6	2	2	5
1993	5.58	3.97	5.70	2.04	4.43	3.30	4	2	1	1	2	3
1994	4.67	3.48	3.05	2.06	3.77	2.90	2	1	7	2	2	1
1995	2.82	3.01	3.27	0.93	5.24	2.64	1	2	4	1	5	3
1996	3.36	2.61	3.58	0.83	2.92	1.97	2	2	5	1	6	3
1997	3.05	2.03	2.87	0.77	2.64	2.63	6	2	3	0	7	5
1998	2.96	4.84	2.72	3.40	3.53	2.83	6	1	7	1	7	2
1999	2.64	1.72	2.71	1.64	2.74	2.30	2	3	5	2	6	2
2000	2.27	1.58	3.32	1.32	2.44	1.42	7	4	3	1	8	3

Regions: EC = East Central SE = Southeast NE = Northeast
WC = West Central MTN = Mountain PAC = Pacific

Source: System To Retrieve Information on Drug Evidence (STRIDE) Prepared by: Abt Associates, Inc. 3/2/01

Table C15. Annual Marijuana Price for Six Regions for Purchases > 1000 pure grams

	Price (2000$/pure gram)						Number of Cases					
	EC	MTN	NE	PAC	SE	WC	EC	MTN	NE	PAC	SE	WC
1981	-	-	-	-	0.94	0.96	0	0	0	0	1	1
1982	1.50	-	-	-	2.65	-	4	0	0	0	0	0
1983	-	-	-	-	-	2.37	0	0	0	0	0	0
1984	-	-	7.57	-	1.27	1.64	0	0	0	0	0	1
1985	-	-	2.25	-	3.50	2.15	0	0	1	0	0	1
1986	-	1.31	-	-	2.43	-	0	0	0	0	0	0
1987	2.08	-	-	1.92	-	-	0	0	0	1	0	0
1988	-	-	-	-	3.21	2.00	0	0	0	0	0	1
1989	2.59	1.20	3.86	-	3.11	1.72	0	1	1	0	0	1
1990	3.35	-	4.95	-	2.82	1.30	0	0	1	0	0	1
1991	6.30	2.36	4.09	5.36	1.27	2.18	1	1	1	0	0	0
1992	1.13	10.38	4.83	-	4.03	1.25	0	1	1	0	1	1
1993	4.47	3.02	-	0.96	-	1.13	0	0	0	1	0	1
1994	1.60	1.48	-	1.19	2.73	1.49	0	1	0	0	1	1
1995	2.75	1.78	2.60	2.27	2.34	1.50	1	4	2	1	0	1
1996	1.72	1.56	3.39	-	2.50	1.25	0	1	1	0	1	1
1997	1.88	1.93	2.03	1.39	1.12	1.35	0	1	1	2	1	1
1998	-	1.53	1.84	1.06	1.64	0.88	0	1	1	1	0	1
1999	1.24	1.74	2.04	0.96	2.14	-	1	0	0	1	1	0
2000	1.57	0.95	-	0.89	-	-	1	2	0	1	0	0

Regions: EC = East Central SE = Southeast NE = Northeast
WC = West Central MTN = Mountain PAC = Pacific

Source: System To Retrieve Information on Drug Evidence (STRIDE) Prepared by: Abt Associates, Inc. 3/2/01