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# Measuring Illegal Border Crossing Between Ports of Entry

An Assessment of Four  
Promising Methods

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## Summary<sup>1</sup>

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DHS is responsible for controlling the flow of goods and people across the U.S. border, a difficult task raising challenging resource management questions about how best to minimize illicit flows across the border while facilitating legitimate ones. Ideally, DHS could evaluate alternative investment strategies in terms of objective measures of the effectiveness with which border control systems prevent illicit flows or perform other essential functions. Instead, commonly reported border control measures, such as numbers of illegal migrants apprehended or miles of border under effective control, bear only an indirect and uncertain relationship to the border control mission, making them unreliable management tools.

Fundamental to the question of border control effectiveness is the proportion of illicit border crossings that are prevented either through deterrence or apprehension. Estimating these proportions requires knowing the total flow of illicit goods or border crossings, but compelling methods for producing such estimates do not yet exist. The objective of this short paper is to describe four innovative approaches to estimating the total flow of illicit border crossings between ports of entry. Each is sufficiently promising to warrant further attention for purposes of supporting reliable, valid, and timely measures of illicit cross-border flow. These are

- improved capture-recapture methods that account for attrition in the pool of migrants attempting to cross after an apprehension and of the number and length of successful crossings migrants make between apprehensions
- estimating total crossings from a stratified sampling of crossings at border segments selected with a known probability
- respondent-driven sampling surveys of migrant communities in the United States
- synthetic modeling either of the stock and flow of the migrant community or of the black market economy for coyote services.

Successfully implementing each of these approaches will require methodological development and analysis to identify barriers or constraints to using the approach, the cost of data collection, and the amount of error that can be expected in the resulting estimates.

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