

Awareness of and Reaction to Immigrant Deaths on the U.S. Border: A Summary of the 2016 BDAS

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1. INTRODUCTION

In the Fall of 2016, 2,437 college students from around the United States participated in a short opt-in survey regarding humanitarian issues and the undocumented immigration issue. Specifically, the initial survey was designed to assess and evaluate the degree to which individuals are aware of the issue of migrant deaths on the U.S. side of the U.S./Mexican border, their ability to assess the number who have died, and their beliefs/judgment/reaction to this issue. This report summarizes the data collected and serves as a full debriefing for student participants. By way of summary, the following are the main results:

1. Respondents generally report low levels of awareness of the migrant death issue, with Latina/os reporting the highest rates of awareness.
2. The ability to estimate the number of migrant deaths is associated with considerable uncertainty.
3. When individuals are asked to think about their ability in estimating migrant deaths in advance of working through an unfolding task (explained below), estimates are generally more accurate.
4. Respondents exhibit considerable surprise and shock when the estimated number of migrant deaths is reported to them.
5. Most respondents indicate distress, surprise/shock, anger, or shame/guilt reactions upon learning about the number of migrant deaths.
6. Most respondents, when asked to assess the cause of the migrant death problem, cite U.S. immigration policy as the

primary cause.

However, it is critical to point out there is substantial subgroup variation, particularly in terms of Latina/o identity, gender, and partisanship. In general, Latina/o indicate highest awareness and accuracy in estimation of migrant deaths; women tend to elicit more empathetic and sympathetic responses compared to men; and Republican identifiers are more likely to blame Mexico or the immigrants themselves for migrant deaths.

Before discussing the survey content, we first turn to the issue of migrant deaths, as this issue provides the motivation for the study and provides the context for the questions we asked in the short survey.

2. IMMIGRATION AND MIGRANT DEATHS

The U.S. Border Patrol has nine geographic sectors on the Southwest border, spanning the area from the Pacific Ocean to the Gulf of Mexico. These sectors are shown in Figure 1. Historically, unauthorized entry into the U.S. chiefly centered on two sectors: San Diego and El Paso. This made sense: both El Paso and (especially) San Diego were large metropolitan areas and so, once entered, it was relatively easy to disperse into local neighborhoods or exit the area by way of major interstate highways. However, mode-of-entry substantially changed in the mid-1990s.

During this period (1993-1994), the Clinton Administration implemented Operation Gatekeeper in the San Diego Sector and Operation Hold-the-Line (El Paso Sector). The intent of these policies was to materially increase enforcement in these sectors by erecting fences, increasing the number of Border Patrol agents, and upping the level of surveillance of crossing activity (Nevins 2002). Essentially, the idea was that if unauthorized entry could be limited in these sectors, the problem of unauthorized entry would mitigate or diminish (Nevins 2002).

However, the major effect increased enforcement seemed to have was that the point-of-entry into the U.S. shifted from the San Diego/El Paso Sectors to other sectors located in the Sonoran Desert, in particularly the Yuma and Tucson Sectors in the state of Arizona. These sectors differed markedly from San Diego or El Paso in that no major metropolitan areas were adjacent to the border. As such, in order for migrants to reach Tucson (a metropolitan

area of about 1 million people) or Phoenix (a metropolitan area of about 4.5 million people), it required multiple days of traversing the hostile Sonoran Desert, an area characterized by high mountains, scorching heat, little to no potable water, and dangerous animals.

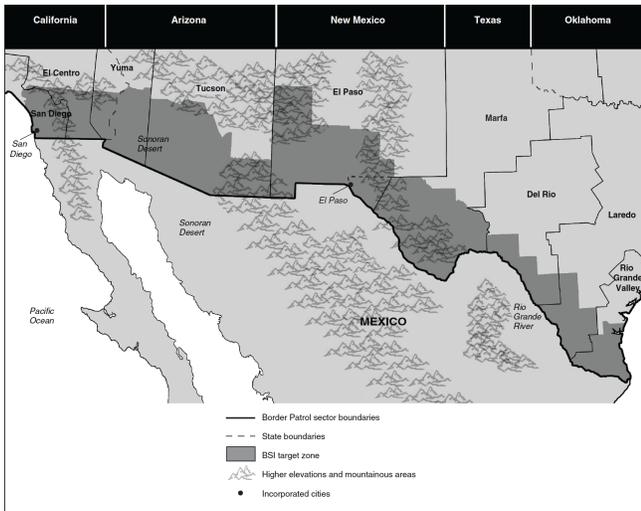


Fig. 1. U.S. Border Patrol Sectors. Source: U.S. Border Patrol.

Concomitant with the changing dynamics of unauthorized entry was the implementation of NAFTA. NAFTA, by most accounts, had severe negative effects on the Mexican economy (c.f. Fernández-Kelly and Massey 2007). The intended effects of NAFTA of boosting the Mexican economy did not materialize. As such, as the economy worsened in Mexico and improved in the United States, unauthorized inflows of migrants increased as labor demand increased. But because of changes to border enforcement policy discussed previously, migrants were crossing in ever more geographically hostile areas. As a result, there was an associated dramatic increase in the number of migrants who died while trying to enter the U.S.

The U.S. Border Patrol policy of “prevention by deterrence,” it seems, contributed to this rising death toll (De León 2015). The intent of “prevention by deterrence” was to prevent entry with stepped-up enforcement measures. As such, a “show of force,” would deter likely migrants. But since migration is largely driven by economic factors, migrants still attempted entry even as enforcement measures dramatically increased. Since entry occurred in hostile locations, migrant deaths amassed. Indeed, the problem was so severe that the U.S. Border Patrol implemented the Border Safety Initiative (BSI) in 1998, a program designed to reduce “injuries and preventing deaths among migrants.” (GAO 2006; the areas in which BSI were implemented are shown in dark grey in Figure 1).

Despite the BSI, the migrant death toll continued to rise. As a GAO report from 2006 noted, the “increase in deaths occurred despite the fact that ... there was not a corresponding increase in the number of illegal entries” (GAO 2006). In short, there is a low correlation between migrant inflows and migrant deaths. Based on U.S. Border Patrol counts, it is estimated that between 1998 and 2015, there were 6,571 bodies/remains covered. Table 1 gives the death tolls by year for each border sector. As is clear, the vast majority of these deaths occurred in the Tucson sector, the area where most migrants were crossing.

It is crucial to note that this number (6,571) should be viewed as a *lower-bound* estimate: deaths are only recorded if remains are found. Given the size of the Southwest border (the Tucson sector alone has 262 border miles and covers 90,530 square miles), many bodies are simply never found and so official counts must be viewed as a minimum estimate. De León (2015), using methods of forensic anthropology, suggests that the time until a deceased migrant likely disappears without any trace is only about 3 weeks. Thus, if remains are not recovered in a relatively short period of time, the deceased will not be reported in official counts. They are lost forever.

Given the scale of the migrant death issue happening within the United States, it has received surprisingly little media or political attention relative to other aspects of the undocumented immigration issue. This prompted us to assess opinions and awareness of the issue by way of the 2016 Border Death Awareness Survey (BDAS). Now we turn to the survey results.

3. DEMOGRAPHIC CHARACTERISTICS OF SURVEY

In September and October of 2016, we fielded a survey of college students from around the country. We recruited survey respondents by soliciting colleagues at several universities and asked them if they would distribute the survey to their students. The survey was online and was short in terms of duration; the average time it took respondents to complete the study was about 4 minutes.

We viewed this survey as a “proof-of-concept” study to assess (for the first time as far as we are aware), knowledge of and reaction to the migrant death issue. In all 2,437 students responded to the survey. Most students were recruited from political science courses; however, many were also recruited from psychology and sociology classes. In other words, nearly every student was recruited from the social sciences.

It is important to note that this is not a “scientific” survey, in that it does not entail random selection of survey respondents. Further, it is not representative of the U.S. population, or even of the U.S. population of college students. So what can we say about these responses as being indicative of anything? First, by definition, we have an educated sample of respondents. Our sample is about at the median for education attainment in the U.S. According to the Current Population Survey, 59 percent of the U.S. population has attained at least some college (<https://www.census.gov/hhes/socdemo/education/data/cps/2015/p20-578.pdf>). Thus, if we’re interested in assessing knowledge of and attention paid to an issue, college students should serve as a conservative test: *ex ante*, a more educated sample should report more interest in and awareness of the issue.

Second, the size of the opt-in sample is very large and geographically diverse. Thus, while we do not have a nationally representative sample, we have a sample of comparably educated students from distinct locations around the country. Importantly, we have variation in geographical proximity to the U.S./Mexico border (about 48 percent of respondents come from Arizona, California, New Mexico, and Texas and about 52 percent are from non-border states [with Mexico]).

Table 1 summarizes demographic information from the survey. Female respondents outnumber male respondents, 54.5 percent to 45.5 percent. With respect to race/ethnicity, the survey is diverse. About 57 percent of the respondents indicated their race as “white;” however, 21 percent identify as “Hispanic;” 10 percent identify as “Asian” or “Pacific Islander;” 6 percent identify as “African American;” and 2 percent identify as “Middle Eastern.” Around 4 per-

Table I. Migrant Deaths by Border Patrol Sector, 1998-2015

Year	Rio Grande									Total
	Big Bend	Del Rio	El Centro	El Paso	Laredo	Valley	San Diego	Tucson	Yuma	
1998	3	28	90	24	20	26	44	11	17	263
1999	0	30	56	15	37	36	25	29	21	249
2000	3	48	72	26	47	40	34	74	36	380
2001	3	41	96	10	28	37	21	80	24	340
2002	4	29	64	8	15	30	24	134	12	320
2003	0	23	61	10	17	39	29	137	22	338
2004	0	21	36	18	22	35	15	142	39	328
2005	4	28	30	28	53	55	23	219	52	492
2006	4	34	21	33	36	81	36	169	40	454
2007	0	20	12	25	52	61	15	202	11	398
2008	3	22	20	8	32	92	32	171	5	385
2009	3	29	27	5	58	68	15	212	3	420
2010	0	23	14	4	35	29	8	251	1	365
2011	2	18	5	6	65	66	15	195	3	375
2012	1	29	11	1	91	144	5	180	9	471
2013	3	18	3	2	56	156	7	194	6	445
2014	5	17	6	0	49	116	5	107	3	308
2015	4	12	4	2	47	97	6	63	5	263
Total	42	470	628	225	760	1208	359	2570	309	6571

Cells give the number of deaths per fiscal year in each of the nine U.S. Border Patrol Sectors on the U.S./Mexico border. Source: U.S. Border Patrol.

cent of the sample indicated “Other” as their identity. Many of the “other” respondents indicated they were multiracial and did not identify primarily with any of the stated categories. Several other respondents indicated they were “Native American,” or “American Indian.”¹

With respect to race/ethnicity, our sample, compared to U.S. Census Bureau population estimates slightly over samples Hispanic and Asian respondents. Recent Census estimates suggests Latina/os comprise around 17.5 percent of the U.S. population, and Asians slightly less than 6 percent of the population. In contrast, we *under*-sample African American respondents. Only about 5.6 percent of our sample identifies as African American, but Census estimates show this group constitutes about 13 percent of the U.S. population. With respect to partisan affiliation, our sample primarily consists of Democratic party identifiers (about 48 percent); however, 20 percent of the respondents identify with the Republican party and 20 percent identify as “independent.” About 11 percent of the sample indicated “other” or “no preference.”²

Figure 2 gives the frequency distribution for gender, controlling for race/ethnicity (upper left panel), gender, controlling for party affiliation (upper right panel), and party affiliation by race/ethnicity (bottom left panel). Thus, the *y*-axis informs us as to the percentage of the total sample that corresponds to each subgroup. Among white respondents, there are equal number of males and females, but there were significantly more female respondents who identified as being Hispanic, Asian/P.I., or African American. With respect to partisanship, Democratic identifying respondents were also significantly more likely to be female. For other response options (independent, Republican, no preference), there are no significant differences associated with gender. Finally, for whites, Hispanics, Asians, and African Americans, Democratic partisan affiliation was

the most frequently chosen. Republican identifiers in the sample are significantly more likely to identify as being white, while very few Hispanics, Asians, or African Americans in the sample identify as being Republican.

Table II. Demographic Information in Survey

Variable	<i>N</i>	Percentage
Gender		
Female	1311	54.49
Male	1095	45.51
Race/Ethnicity*		
African American	135	5.61
Asian/Pacific Islander	248	10.30
Hispanic/Latina/o	498	20.69
Middle Eastern	53	2.20
White non-Hispanic	1382	57.42
Other	91	3.78
Party Affiliation†		
Democrat	1159	48.35
Independent	484	20.19
Republican	489	20.40
Other	109	4.55
No Preference	156	6.51

*: Respondents who selected “other” tended to indicate they had multiple racial identities or that they were Native American. †: Respondents who indicated “other,” frequently wrote they were “Socialist,” “Social Democrats,” or “Libertarian.”

¹In retrospect, we as researchers should have made “Native American” an option respondents could choose.

²Because we wanted to keep the survey short, we did not use the traditional “branched” party affiliation question. This format asks follow-up questions allowing researchers to determine strength of partisan attachments or the degree to which independents “lean” toward one party or another.

With respect to regional variation, there was substantial variability both in terms of the respondent’s state-of-residence as well as variation in geographical locales of the universities that participated. This variation is shown in the top two panels of Figure 3. Using U.S. Census Bureau definitions of region (“Northeast,”

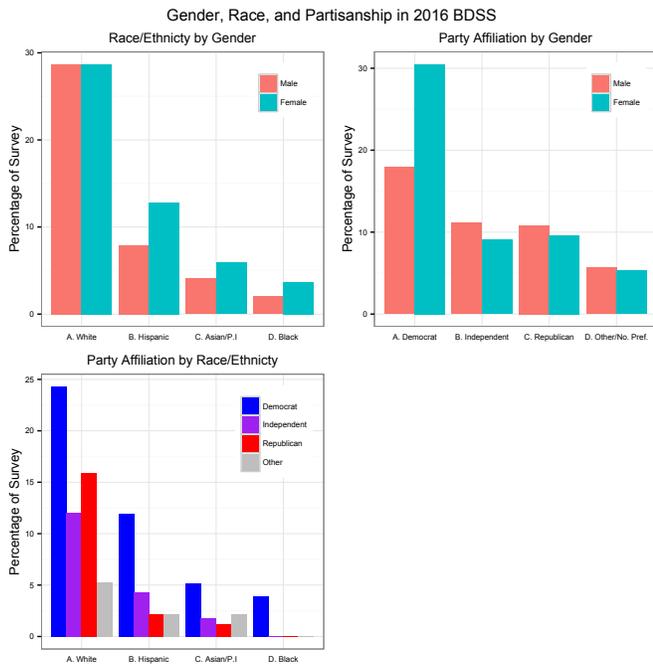


Fig. 2. Plots give the frequency distributions of various demographic and political indicators. Data are from 2016 BDAS.

“Midwest,” “South,” and “West”), we see that most respondents—about 43 percent—are from western states. About 34 percent are from southern states (which includes Texas), about 18 percent are from midwestern states, and about 6 percent are from northeastern states. In all, the total number of states-of-residence represented in the survey is 45 (including Washington, D.C.).

Of course, the number of respondents from any particular state was highly variable. The top ten states in terms of number of respondents are California (n=659), Texas (n=359), Florida (n=198), Colorado (n=143), Iowa (n=111), North Carolina (n=106), Arizona (n=104), Georgia (n=99), Michigan (n=71), and Minnesota (n=69). Importantly, the survey also demonstrates variation associated with Mexican border state status, which is shown in the bottom two panels of Figure 3. About 49 percent of the respondents are from Arizona, California, New Mexico, or Texas (Mexican border states), and about 51 percent were from outside these states. Of these, California and Texas was most frequently represented.

4. IMMIGRATION AS A HUMANITARIAN ISSUE

We next turn attention to the issue of undocumented immigration. In particular, we were interested in the extent to which individuals had thought about: a) the undocumented immigration issue as a humanitarian issue; and b) the extent to which respondents thought about migrant deaths on the U.S./Mexico border. In advance of fielding the survey, we pre-registered our research expectations with the Open Science Framework (<https://osf.io>).

Specifically, our expectations were that: 1) respondents’ awareness and attention to these aspects of the undocumented immigration issue would be low (that is, we expected reported rates of awareness and attention to indicate lack of awareness/attention); 2) confidence in the ability to “accurately” estimate the number of migrant deaths would be low (i.e. when asked about confidence in

the accuracy of their estimates, we expected few respondents to indicate “high confidence”); 3) respondents who did give estimates will tend to understate the number of migrant deaths.

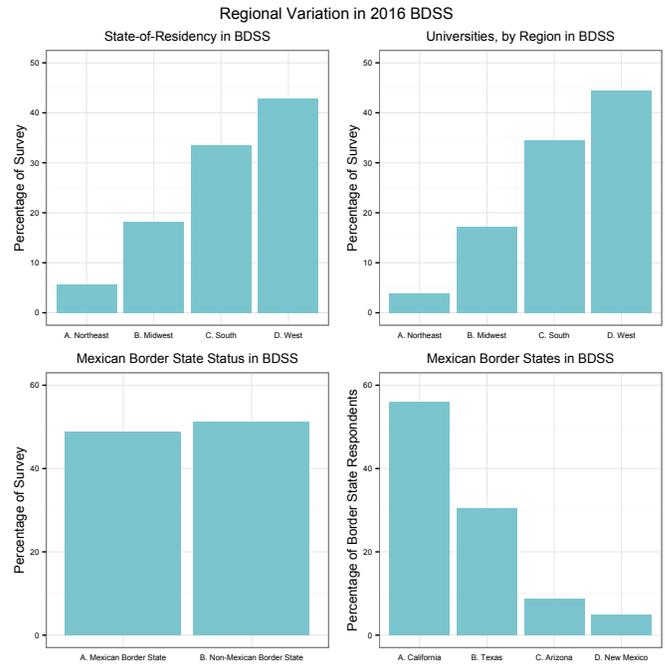


Fig. 3. Plots give the frequency distributions of various demographic and political indicators. Data are from 2016 BDAS.

4.1 Awareness of Issue

To assess awareness of and attentiveness to the humanitarian issue of migrant deaths, we asked respondents three questions, the first dealing with the extent to which the respondent had thought about the humanitarian aspects of the undocumented immigration and then two questions asking respondents to assess: a) the degree to which *they* have thought about migrant deaths and, b) the extent to which they think *Americans* have thought about migrant deaths. In advance of being asked about humanitarian aspects of the undocumented immigration issue, respondents were given the following prompt:

In recent years, the issue of undocumented immigration into the U.S. from Mexico has received a large amount of coverage in the news media. Topics such as the economic impacts and national security implications have largely been the focus. However, there are also humanitarian issues involved.

Following this, respondents were asked:

How much have you previously thought about the humanitarian aspects of undocumented immigration into the U.S.?

Response options were: “a great deal,” “a lot,” “a moderate amount,” “a little,” and “none at all.” The upper left panel of Figure 4 summarizes the response distributions for all respondents, and

for respondents broken down by race/ethnicity.³ Overall, about 47 percent of respondents indicated they had thought about these aspects a “a great deal,” or “a lot,” implying over half of respondents thought about this aspect of the issue only a moderate amount (or little to none).

However, there is substantial variation associated with race. About 67 percent of Latina/o respondents report having thought about the issue a “great deal” or “a lot” compared to 41 percent for white respondents, 41 percent for Asian respondents, and 39 percent for African American respondents. Given the close connection of the undocumented immigration issue to the Latina/o community, this high level of attention is not surprising. However, with this exception, in general, majorities of all groups report thinking about the humanitarian aspects of the undocumented issue in the categories “moderate,” “little,” or “none.”

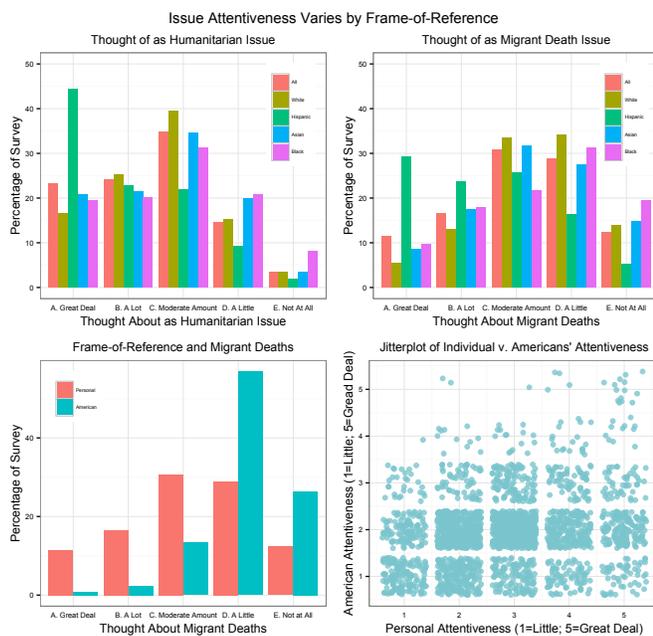


Fig. 4. Plots give the frequency distributions of various demographic and political indicators. Data are from 2016 BDAS.

But of course the phrase “humanitarian aspects” may be ambiguous as it could potentially entail many different kinds of considerations. Therefore, after assessing general attention, we asked two questions specifically dealing with the issue of migrant deaths. One issue we were concerned with in assessing awareness of migrant deaths was the *potential for social desirability* responses in these kinds of questions. That is, people are commonly motivated to view themselves positively in comparison to others and to adopt self-evaluations that further that goal (Dunning et al., 1989).

In the survey research context, respondents often wish to be viewed positively by the interviewer or researcher and consequently provide reports that may reflect that desire rather than the truth (Tourangeau and Yan, 2007). Assessing knowledge about topics where respondents may be motivated to present themselves in a

favorable light can be challenging. This phenomenon, known as social desirability bias, poses a threat to the validity of the estimates derived from these measures. In the current context, some respondents may—*may*—report higher levels of awareness because of the expectation that they normatively *should* be more aware than what they may be.

One widely used technique for avoiding socially desirable responding is indirect questioning. This method involves asking respondents to answer questions about others rather than themselves. Prior research has shown that this method can decrease socially desirable responses to sensitive items while not decreasing reports for socially neutral items (Fisher 1993). In the present study, we asked respondents to evaluate themselves and “average Americans” for some items that we believed may have been subject to socially desirable responding, including a question about how much thought the respondent had previously given to the topic of immigrant deaths on the U.S. border with Mexico. Our expectation was that most respondents would indicate they have *not* thought about this issue very much. That is, we expected responses to cluster in the lower range of the response options.

We also expected, on the basis of socially-desirable responding, that respondents would indicate that “Americans” have thought about this issue at levels significantly lower than they report they “personally” have thought about this issue. Third, we expected that across both items, reported rates of attention would cluster at the lower range of the response options.

To assess awareness of migrant deaths, then, respondents were presented with the following two questions:

How much thought do you think the average American has given to the issue of undocumented immigrants dying while trying to cross into the U.S.?

and

Before today, how much thought have you personally given to the issue of undocumented immigrants dying while trying to cross into the U.S.?

The response options were the same as in the previous question. Turning attention to having personally thought about migrant deaths, consider the upper right panel in Figure 4. Here, as before, we plot the percentage of all respondents, and percentages broken down by race, for those who indicated they had thought “a great deal,” “a lot,” “a moderate amount,” “a little,” or “none at all” about migrant deaths. For all respondents, only about 28 percent indicated they had thought about migrant deaths “a great deal” or “a lot.” Seventy percent indicated they had only given a “moderate amount” of thought to the issue (or little to none).

However, observe again stark differences associated with Latina/o identity. Among this group, about 53 percent indicated they had given much thought to the issue, a level significantly different from white (18 percent), Asian (26 percent), and African American (27 percent) respondents. Again, this shows evidence of the connection between the undocumented immigration issue and the Latina/o community.

But how do respondents view *other people’s* attentiveness to this issue? The lower left panel of Figure 4 provides the answer. When comparing respondents beliefs about how much “average Americans” think about migrant deaths, there is a *sharply lower* assessment relative to beliefs about how much they personally have attended to the issue. For all respondents, about 11 percent indicate they have thought about the issue a “great deal;” juxtaposed to this, fewer than 1 percent of respondents think Americans have thought about this issue a “great deal.” Indeed, across all response options,

³Only responses from those claiming to be white, Latina/o, Asian/Pacific Islander, or African American are reported; *n* was too small for other groups

respondents report significantly greater rates of personal attention compared to rates reported for “average Americans.”

This point is made more starkly in the lower right panel of Figure 4, which gives a jitterplot of the the two survey questions.⁴ Consider the *y*-axis, which gives responses on beliefs about American’s attentiveness to migrant deaths.

There literally are 0 respondents who think Americans have thought about migrant deaths a “great deal” (category 5) if the respondent believes he or she has given no thought at all to the issue (category 1). Similarly, there are only 14 respondents (out of 2,371!) who believe Americans have thought a “great deal” about the issue if the respondent also believes he/she has thought a “great deal” about the issue. In other words, there is a stark difference between self judgment and the judgment of others. Moreover, these stark differences hold for all respondents, invariant to race/ethnicity. This is shown in Figure 5.

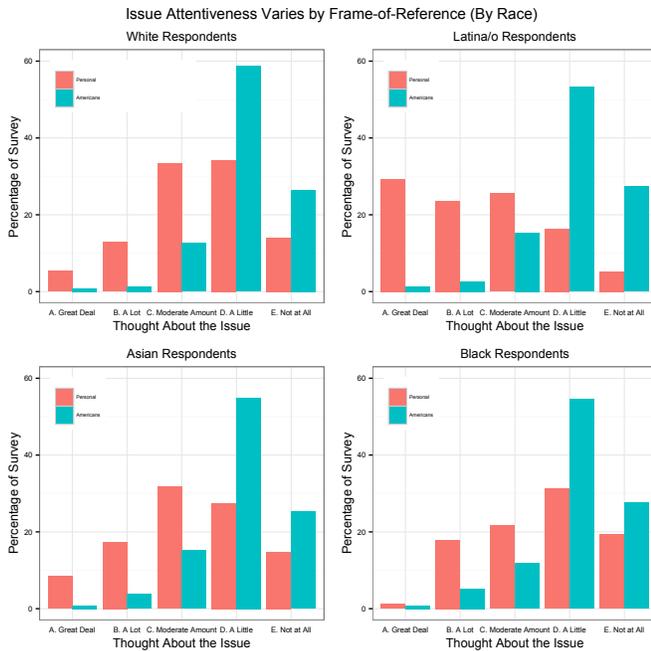


Fig. 5. Plots give the frequency distributions of various demographic and political indicators. Data are from 2016 BDAS.

The orange bar in the plots correspond to personal beliefs about attention paid to migrant deaths; the blue bar corresponds to beliefs about Americans. For whites, Latina/os, Asian, and African American respondents the story is the same: self assessment about attention is significantly higher than assessment of others’ attention. Although in context, “high” is only meaningful in relative terms. As we have shown, attentiveness to the issue of migrant deaths—except for Latina/o respondents—is generally *low* in absolute terms.

⁴Think of a “jitterplot” as the same thing as a scatterplot of categorical variables. Since each variable only has five categories, a standard scatter plot would not be informative. A “jitterplot” inserts a bit of random noise between plot points to indicate the extent (or lack thereof) respondents who score highly (or lowly) on one variable also score highly (or lowly) on the other variable.

Thus, if we think of the projective assessment of how much Americans think of the issue of migrant deaths as a veridical assessment, then the conclusion that most Americans think very little about this issue seems to hold and hold strongly.

4.2 Estimating Migrant Deaths

After assessment of respondents’ awareness of migrant deaths/humanitarian aspects of the issue, we then asked about assessment/estimation of the number of migrant deaths. Under any circumstance, simply guessing an unknown number is a difficult task, one prone with error. We as researchers understood that; however, what we were most interested in was the magnitude of estimation. Further, inquiring about this kind of information gives us a better understanding not only of knowledge about the issue, but also accuracy about migrant deaths, an issue, as noted in the introduction to this report, as being very important.

To assess estimation, we asked about migrant deaths in three different ways. Specifically, respondents were randomly assigned to one of three survey conditions.

Condition 1: Simple Estimation. In the first condition, respondents were asked the following question (which we subsequently refer to as a “confidence prompt”):

How confident are you that you can accurately estimate the number of immigrants who have died on the U.S. side of the border while crossing from Mexico in the past 17 years?

Response options were “extremely confident,” “very confident,” “moderately confident,” “slightly confident,” and “not confident at all.” In this condition, respondents who indicated they had *any* level of confidence were then asked:

How many immigrants do you believe have died on the U.S. side of the border while crossing from Mexico in the past 17 years? Please provide your best guess in the box below (enter a whole number).

Of the 782 respondents who were assigned to this condition, only 299 gave migrant death estimates. In other words, most (62 percent) individuals indicated they were “not confident at all” in their ability to render an estimate. Of those who did, estimates were, to say the least, wildly variable. The median estimate was 10,000 deaths, which over estimates the approximate number of 6,571; however, estimates exhibited extreme variability. Difference-in-medians tests for various subgroups (not reported here) revealed no significant differences associated with race/ethnicity, partisanship, or border state status.

Indeed, of those who offered estimates, the distribution of estimates suggests many have been randomly guessing. The interquartile range in estimates was 65,000 and the actual range of estimates varied from 0 deaths to 900,000 deaths (a number greater than the total number of military personnel who gave their lives in World Wars I and II). Given the skew in the estimates, the mean was about 58,500 and the standard deviation was about 125,000. In our view, asking individuals to make a cold guess of a number most people have rarely if ever thought about produces little useful information, at least in the context of survey research. To assess estimation differently, respondents who were not assigned to condition 1 were randomly assigned to what we call an “unfolding task.”

Conditions 2 and 3: Unfolding Task with and without confidence prompt. In condition 2, respondents were asked the same confi-

dence prompt question as in condition 1; however, after providing an answer, respondents were then asked the following question:

If you were told that in the last 17 years 2,500 immigrants have been estimated to have died on the United States side of the border while attempting to enter the country, would you find this estimate to be too high, too low, or fairly accurate?

If the respondent says “fairly accurate,” then they are taken to the end-of-survey questions (discussed below). If a respondent says “too high,” then she is given the following question:

If you were told that in the last 17 years 1,500 immigrants have been estimated to have died on the United States side of the border while attempting to enter the country, would you find this estimate to be too high, too low, or fairly accurate?

In other words, the respondent sees that the death estimate drops by 1,000. If the respondent indicates this number is “too low,” they are taken to the end-of-survey questions (as we infer they believe the estimate must be between 1,500 and 2,500 deaths). If a respondent says “too high,” they are taken to another question where the death estimate decreases to 1,000 and are given the same response options (too high, too low, or fairly accurate). At any point the respondent indicates “fairly accurate,” they are taken to the end-of-survey questions. If the respondent continues to say “too high,” they are exposed to levels of 750 and then 500. If at 500 the respondent continues to say “too high,” they are taken to the end-of-survey questions.

In contrast, if in the starting question where respondents are asked to evaluate the accuracy of 2,500 deaths, if a respondent says “too low,” they are given questions that increment up by 1000 (i.e. 3500, 4500, 5500, 6500, 7500, to a maximum of 8500). At any point the respondent reports “fairly accurate,” they are taken to the end-of-survey questions.

We refer to this task as an unfolding task because, given an initial starting point (2500), the task would unfold to reveal a smaller or larger number, depending on the response to the initial condition. Given the low saliency of the migrant death issue, our expectation is migrant death estimates will be lower than the “true” number reported by the U.S. Border Patrol (taken to be 6,571).

In condition 3, respondents went through the same unfolding task outlined above; however, they were *not* asked about their level-of-confidence in their estimation ability until *after* they completed their estimation. Thus, the difference between condition 2 and 3 is the location of the confidence prompt.

We were interested in whether or not asking respondents to assess their estimation ability *in advance* of providing an estimate would produce estimates different from confidence prompt. That is, we likened the confidence prompt to Zaller and Feldman’s (1992) notion of a “stop-and-think” probe. Zaller and Feldman (1992) found that if, in advance of asking individuals survey questions about social welfare, they were told to “stop and think” about the issue first, the marginal distribution of responses looked much differently (i.e. exhibited more ambivalence) than if respondents simply answered the question without the prompt. In other words, these kinds of probes force individuals to think more deeply about an issue in advance of responding to questions about the issue. Herein, in a survey task where people must estimate an uncertain number,

we were interested in whether or not the confidence prompt induced greater accuracy in responses.

Turning to the results, they could be summarized as follows: 1) on average, respondents tended to *underestimate* the migrant death toll *conditional on all respondents starting at a level of 2,500 deaths*; 2) respondents who were asked the confidence probe in advance of the task tended to, on average, provide *more accurate* (i.e. larger) estimates; 3) respondents asked to assess confidence in their estimate *after* providing an estimate tended to both underestimate the migrant death toll and express *higher* confidence in their estimate. It is important to acknowledge our unfolding task assess estimation relative to an initial condition of 2,500 deaths; hence what we are interested in is the extent to which a respondent “moves” toward or away from a more or less accurate estimate.⁵

To visualize the estimates, consider Figure 6. The orange bars correspond to condition 2 (prompt given first) and the blue bars correspond to condition 3 (no prompt given). The *x*-axis corresponds to the estimated number of migrant deaths. The large spikes at 2500 deaths suggest that many respondents indicated that the starting point of the estimation task (2500) was “fairly accurate.” However, we see that in the no-prompt condition, respondents were significantly *more likely* to stop at 2500 compared to the confidence-prompt condition. This seems to suggest that forcing respondents to first think about their ability to provide an estimate in advance of estimation improves accuracy.

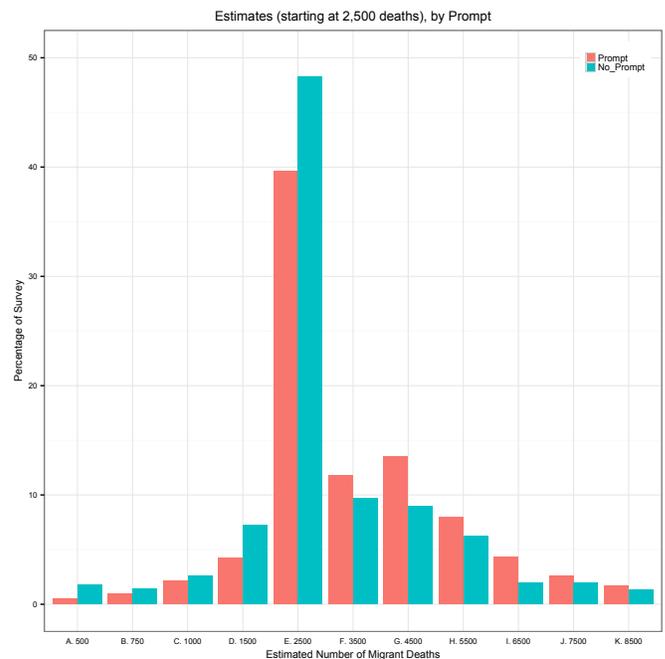


Fig. 6. Migrant death estimates, starting at 2500 deaths for each experimental condition. Data are from 2016 BDAS.

Indeed, if we look at responses above or below 2500, we see that for each category, there are no significant differences per category

⁵We are currently assessing the reproducibility of the results by starting the unfolding task at 5,500 deaths. These data have not been fully collected as of the writing of this report.

by condition—the differences at each estimation level are not statistically significant. Of course one issue with the unfolding task is that for each category above or below the starting point of 2,500 deaths, the number of respondents per cell diminishes, thus reducing our ability to compare estimates with much statistical power. To facilitate comparison, for each respondent we created a variable that recorded the number of migrant deaths the respondent viewed as “fairly accurate.” Thus, if someone indicated that 4,500 deaths was a “fairly accurate” estimate, the respondent was recorded as providing an estimate of 4,500.

These estimates are reported in Figure 7. The upper left panel shows the migrant death estimate for all respondents, respondents controlling for gender, and for race/ethnicity (in terms white, Hispanic, and Asian/P.I respondents). The orange bar corresponds to the estimate for respondents in the prompt condition and the blue bar corresponds to respondents in the no-prompt condition. For each group, we see again the strong effect of the confidence prompt on estimation. Those who receive the prompt give estimates significantly larger than those who do not receive the prompt. Moreover, it is useful to point out that the largest (and therefore most accurate) estimate is, on average, given by Latina/o respondents in the confidence prompt condition.

The upper right panel of Figure 7 gives the death estimates controlling for border and non-border state status, as well as for white respondents and Latina/o respondents in border/non-border states. Again, we see estimation significantly varies by the prompt. Except for Latina/o respondents in non-border states, estimation of migrant deaths is significantly higher in the prompt condition compared to the no-prompt condition. Additionally, we again see that Latina/o respondents residing in US/Mexico border states who received the confidence prompt tended to give the highest migrant death estimates of all.

The bottom left panel of Figure 7 give estimates by partisan affiliation (Democrat, independent, or Republican). Two takeaway points are clear. First, controlling for partisan affiliation, the confidence prompt induces significantly larger estimates than the no-prompt condition, but only for Democrat and independent identifiers; for Republicans, there are no significant differences in estimation due to condition. Second, for respondents in the prompt condition, Democratic identifier estimates are significantly larger (and putatively more accurate) than Republican identifier estimates.

Lastly, we turn attention to the levels-of-confidence espoused by respondents. For those who asked to assess their estimation ability in advance of the unfolding task, 60 percent of respondents indicated they had no confidence at all in their ability to assess migrant deaths; for those asked about their estimation ability *after* the task was completed, only 29 percent indicated they had no confidence. Thus significantly greater numbers of respondents in the no-prompt condition evinced some degree of confidence in their estimation ability (about 71 percent) compared to those in the confidence-prompt condition (about 40 percent).

To visualize how confidence assessment was associated with migrant death estimation, consider the bottom right panel of Figure 7. The orange bar in this plot corresponds to individuals who expressed *any* level of confidence in their estimation ability; the blue bar corresponds to individuals who expressed no confidence in their ability. In principal, if confidence estimate is related to the unfolding task, we would expect to find that those with some confidence in their ability would tend to give more accurate (i.e. larger) estimates than those with less confidence. In fact, for respondents who were asked to assess confidence in advance of the task, this is exactly what we show. The difference in mean estimates for these respondents gives a $t = 2.50$ ($p = .01$). For respondents who were

asked to assess confidence after the task, there are no significant differences ($t = 0.80, p = .43$). Therefore, what we discover is, respondents who rated their estimation ability after giving an estimate were both more confident in their ability *and* less accurate in their estimation (again, relative to the starting point of 2,500).

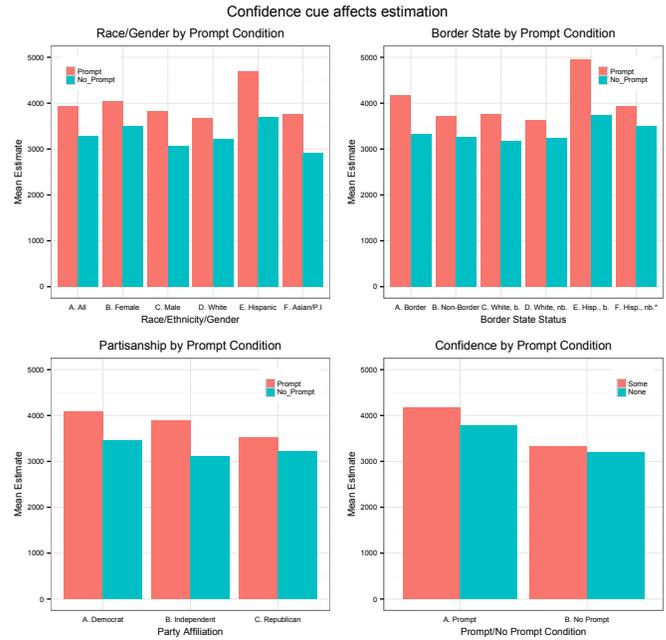


Fig. 7. Migrant death estimates (averaged over category placement in unfolding experiment). Data are from 2016 BDAS.

Upon completion of the estimation tasks outlined in Conditions 1,2, and 3, all respondents were taken to the end-of-survey questions where we assessed reaction and blame attribution for the migrant death issue. We turn to these results directly.

4.3 Reaction and Blame Attribution

Within the study, we fully debriefed all respondents as to the U.S. Border Patrol estimates of migrant deaths within the U.S./Mexico border sectors. Prior to answering the last few questions, all respondents were presented with the following text:

Thank you for your responses to this point, there are only a few more questions.

The U.S. Border Patrol estimates that 6,571 immigrants have died on the U.S. side of the border while attempting to cross from Mexico since 1998.

After being given this information, all respondents were then asked:

How surprising do you believe most Americans would find the statistic about the number of immigrant deaths on the border with Mexico?

and

How surprising did you personally find the statistic about the number of immigrant deaths on the border with Mexico?

Response options were “extremely surprising,” “very surprising,” “moderately surprising,” “slightly surprising,” “not surprising at all.” We expect two results. First, respondents will indicate “Americans” will be on, average highly surprised by this number and that respondents will report personal surprise at significantly lower levels. Second, we expect in general that “surprise levels” to be high, given the lack-of-awareness and attention paid to this aspect of the issue. In general, this is what was found. Figure 8 reports responses to these two questions.

It’s also worth pointing out that this response pattern holds across partisan identification: all partisan groups expressed moderate to high-levels of personal surprise but reported beliefs about how “Americans” would react were substantially higher. For Democrats, 71 percent reported moderate (or greater) levels of personal surprise and 86 reported Americans would exhibit moderate (or greater) levels of surprise. For Republicans, these respective estimates were 63/80 percent, and for Independents, the estimates were 67/82 percent.

The survey concluded with three questions asked of all respondents. The first question asked individuals to assess the degree to which they think the migrant death issue is a problem in comparison to other social issues. The specific question wording was:

Compared to other social problems in the U.S., how bad of a problem is the number of immigrant deaths on the U.S. side of the border?

This item had response options of “extremely bad,” “very bad,” “moderately bad,” “slightly bad,” and “not bad at all.” The lower-right panel in Figure 8 reports the response distribution for this item for all respondents and for partisan subgroups. While most respondents reported the problem to be moderately, very, or extremely bad, there was significant partisan variation.

The proportion of Democratic identifiers who viewed the migrant death issue as “slightly bad” or “not bad at all” was about 12 percent; however about 42 percent of Republican identifiers viewed the migrant death issue as “slightly bad” or “not bad at all.” Thus, even though Democrats and Republicans tended to exhibit similar surprise at the number of migrants deaths, the degree to which partisans viewed this as an important social problem was highly variable. Thus we find that Republican respondents in this survey were both more likely to underestimate migrant death counts and more likely to see the issue as less of a problem compared to Democrats (or independents).

We found similar sorts of partisan variation in the last two items asked about on the survey. We were interested in gauging individuals’ emotional reactions to the migrant death estimate that had been presented to them. Rather than supplying respondents with an inventory of reaction words (i.e. “sad,” “angry,” “shocked,” etc.) from which they could select a word, we asked respondents to enter a one-word response in a text box. Specifically we used the following prompt:

Using only one word, how did reading about the number of immigrant deaths make you feel?

Our expectation is that the death information will produce emotional responses that indicate empathy, sadness, or anger. However, because we have permitted the respondent to choose the word, any response is possible. We are not constraining the outcome to fit our expectation of an empathetic response. In order to analyze the words, we cleaned up any misspellings, leading or trailing spaces, differences in capitalization, and any other issues associated with text entry. Further, we stemmed similar words to a common root (i.e. “sadness” was stemmed to “sad,” “angered” was stemmed to “angry” and so forth). In total, 323 different words were used among the 2,322 respondents who answered this question describing their personal reactions.

Figure 9 presents the emotional response words in the form of a word cloud. The size of the word is proportional to the times the word mentioned. As is clear, words associated with sadness, shock, anger, and surprise were most prevalently mentioned. In terms of overall frequencies, “sad” was most frequently mentioned. About 19 percent of respondents indicated this response. The next most

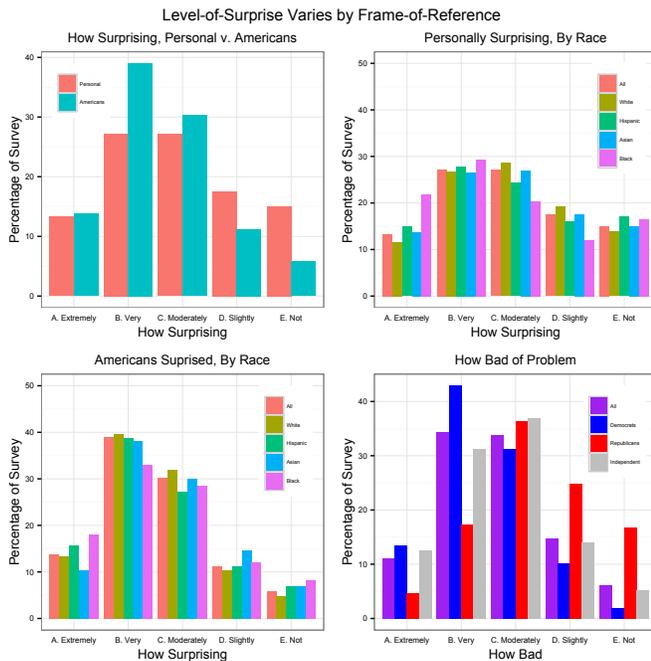


Fig. 8. Figure gives percentage of respondents in each category recording level-of-surprise in response to learning about migrant death level. Data are from 2016 BDAS.

The top left panel of Figure 8 gives the responses for each question for all respondents in the survey. Two points are clear: first, overall level of “surprise” is high; second, respondents believe that the level-of-surprise would be much higher for “Americans.” In other words, we again see the discrepancy in responses when one references him or herself in contrast to a typical American.

For personal surprise, we see that 68 percent of respondents are either moderately, very, or extremely surprised to learn of the death rate. Regarding beliefs about Americans’ surprise, about 83 percent of respondents see “Americans” as being moderately, very, or extremely surprised by this information. This general pattern seems to also hold across different subgroups. The upper-right panel and lower-left panel of Figure 8 breaks down the surprise response questions by race/ethnicity. In general, across all groups, reported rates of “personal surprise” are generally high but significantly lower compared to reports of how a typical “American” would be surprised.

About 70 percent of Republicans selected these categories compared to 29 percent of Democrats. When it comes to blame attribution, it seems there is a significant partisan gap in terms of where individuals see most of the blame as lying.

The middle right panel of Figure 10 plots blame assessment for border state status. In general, there are not any large differences associated with residence in a border state on blame attribution, with most respondents citing U.S. immigration policy as the primary causes. Finally, the bottom left panel plots blame attribution by emotional response type. This plot has a couple of important takeaway points. First, respondents who had distress, anger, or guilt reactions were significantly more likely to blame U.S. immigration policy; however those who evinced indifferent reactions were far more likely to blame the immigrants themselves as the cause of the migrant death problem.

5. CONCLUSION

This study has sought to assess the degree to which individuals have thought about the migrant death issue, their ability to assess and estimate the migrant death toll, and their reactions to the estimated number of migrant deaths. In general we find the following: 1) awareness of the issue of migrant deaths is generally low; 2) ability to estimate migrant deaths is not strong (conditional on the tasks respondents were asked to complete); 3) asking to assess one's ability at estimation in advance of obtaining an estimate significantly alters the assessed death level and leads to, on average, more accurate estimates; 4) generally, respondents exhibited high levels of surprise; 5) most respondents elicited empathetic or sympathetic reactions; and 6) most respondents assessed blame as a function of U.S. immigration policy.

However, these main results are also very nuanced. We demonstrated considerable "gaps" associated with Hispanic identity, gender, and partisanship. Latina/os were more likely to be aware of the issue of migrant deaths and generally gave more accurate estimates of migrant deaths; women tended to have more sympathetic or empathetic responses than did males and were also more likely to cite U.S. immigration policy as the main cause, compared to males. Republican identifiers on average gave lower migrant death estimates, exhibited higher rates of indifference, and tended to blame migrants more readily than did Democratic identifiers. Interestingly, *nearly all* respondents who did the unfolding task exhibited strong sensitivity to the confidence prompt; the only group that did not were Republican identifiers.

This study, as far as we are aware, is the first study to assess awareness of and knowledge about the immigrant death issue. Given we designed the BDAS to be very short to minimize survey fatigue, we would have liked to assess several other aspects of the issue. In on-going and upcoming work, we are interested in whether or not information about migrant deaths can serve as "humanizing" information that might counteract negative stereotypes about immigrants. That is, if exposed to information about the risk migrants incur in trying to cost, does that induce greater empathetic responses toward undocumented migrants generally. Additionally, we are also interested in assessing the unfolding task using different starting points. Of particular interest is in whether we can reproduce the effect of the confidence prompt that seemed to strongly influence judgment in this study.

Lastly, and more broadly, one aim of the short survey was to also convey information about migrant death counts to respondents. Crossing into the United States is lethal resulting in many thousands of deaths. If our results tell us anything, they suggest that many are simply unaware of what has and is happening on

the U.S./Mexico border. Further, given that a majority of respondents assessed blame for migrant deaths on U.S. immigration policy, there seems to be an implicit connection between deaths and the kinds of policy choices made in the U.S. Another important point we wish to stress is this: although unauthorized entry by way of border crossing from Mexico is effectively at "net zero"—as many leave as enter—and despite that inflows of migrants are in recent years, quite low, the incidence of migrant deaths has largely been *unchanged*.

Even though border crossings are substantially lower now than, say, 10 years ago, the fact is, migrants *do* attempt entry. The principal reason for entry is chiefly economic: labor demand in the U.S. helps propel entry. However, throughout the first decade of the 2000s, enforcement measures on the U.S./Mexico border have substantially increased. As we noted, for the period under study here (dating back to the late 1990s), U.S. undocumented immigration policy has almost exclusively been characterized as restrictionist and enforcement-oriented. During the time period of this study, the number of U.S. Border Patrol agents more than doubled, extensive fencing was installed on the border, particularly along the Arizona/Mexico border, and the technological capability of the U.S. Border Patrol to surveil the border dramatically increased (drones, in-ground sensors, infrared technology and so forth). The upshot of increased enforcement is, for migrants who *do* attempt to cross, they take greater and greater risks. In a hostile climate, these risks can translate to death. As such, migrant inflows and migrant deaths have a very low correlation.

History tells us that if there is labor demand, migrants *will* come whether or not there are numerous Border Patrol agents or even a border wall (note that much of the Arizona border *already* has a 20 foot steel fence that has been in place for over a decade). In thinking about the current political environment, one where even more border enforcement measures have been proposed (including building a wall), it may be useful to think about the feasibility of a wall relative to the actual volume of unauthorized crossers. Further, if migrants in fact do come because of labor pressure, they will simply take greater risks to enter the country. As then governor of Arizona Janet Napolitano famously said, "Show me a 50 foot wall, I'll show you a 51-foot ladder."

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