HOW MANY CURRENT FARMWORKER AND FARMWORKER FAMILY MEMBERS WILL QUALIFY UNDER PROVISIONS OF PRESIDENT OBAMA'S EXECUTIVE ORDER?

The Department of Labor’s National Agricultural Worker Survey (NAWS) data provide a useful basis for developing an approximate estimate of the numbers of farmworker and farmworker family members (principally the undocumented spouses who are not, themselves, farmworkers, but also their undocumented sons and daughters) who qualify for administrative relief (either DAPA or DACA) based on President Obama’s November 20, 2014 announcement of executive action. Using NAWS public data from FY 2009 and FY 2010 (which provides the best “snapshot” of the farmworker population who may benefit from President Obama’s executive action), the Werner-Kohnstamm Family Fund is developing estimates of the size, regional distribution, socioeconomic, and demographic profile of those who will benefit. This analysis should be helpful in planning strategy for AR implementation in rural areas of the U.S.

The DAPA-eligible Current Farmworkers—5+ yrs. residence and U.S.-born or LPR son or daughter

Overall, slightly more than one-third (about 37%) of the undocumented farmworkers in the U.S. would be eligible for administrative relief under the DAPA program (Deferred Action for Parental Accountability), i.e. 5+ years in the U.S. and being the parent of a U.S.-born child or legal permanent resident. Therefore, since there are about 1.1 million undocumented farmworkers in the U.S., about 418,000 would be eligible for AR based on these core provisions. Different regions of the country vary in their reliance on undocumented workers and the maturity of migration networks linking them to Mexico and Central America so the distribution of DAPA-eligible farmworkers differs a bit from that of the overall farm labor force.

The DAPA-eligible Farmworker Spouses who are not Farmworkers

Many DAPA-eligible farmworkers’ undocumented spouses, since they too are parents of US-born children, will also benefit from DAPA. Almost all (96%) of the DAPA-eligible undocumented farmworkers’ spouses are, themselves, undocumented. However, about half (51%) of the farmworker spouses are, themselves, farmworkers. Therefore, they are already tabulated in the preceding estimate of DAPA-eligible farmworkers. So we estimate that at least another 196,000 farmworkers’ spouses with U.S.-born or LPR sons or daughters who are not currently farmworkers would also benefit from DAPA. A relatively small but significant number of the still-undocumented non-DAPA-eligible/non-DACA-eligible spouses and children of farmworkers who are naturalized
citizens or LPR’s may also benefit from President Obama’s announcement of revisions to requirements for the waiver to the 10-year bar for those who have been living in the U.S.

“DACA expansion” – removal of the age cap on the current DACA program

Removing the age cap on DACA in President Obama’s announcement of executive action has a modest positive impact on the proportion of current farmworkers who might qualify for DACA. In aggregate, as many as 140,000 (including both those who qualified under the original 2012 DACA provisions and the newly-eligible) might now qualify under the provisions of expanded DACA, i.e. removal of the age cap. However, it is important to remember that more than one-third (about 37%) of these DACA-eligible farmworkers are also eligible under the “core AR” (DAPA) provisions of President Obama’s executive action—because they also have 5+ years residence and a US-born child. Therefore, the DACA provisions only add a net number of 89,000 DACA-eligible farmworkers to the “core” DAPA-eligible population. For most in this population who are basically DACA-eligible but who do not currently meet the USCIS educational qualification, it would seem that the DAPA route to work authorization will be easier than the DACA route—although it is important that both options are available. In particular, DACA is a crucial option for the sub-group of farmworkers who came to the U.S. at young enough an age to qualify but who are not the parents of U.S. born children.

The eventual impact of DACA on farmworkers’ lives, however, still rests on access to adult learning—because so many of the farmworkers who are eligible for DACA based on their age at arrival and length of residence in the U.S. do not meet the USCIS educational requirements of having a high school degree or GED; therefore, for these potential DACA-eligible access to adult education or vocational training programs will be crucial. For young immigrants already in the labor force, these programs are an important on-ramp to future economic well-being and upward career movement.

The Consequence of DACA’s Education Requirement—Immediate vs. potential DACA qualification

The DACA expansion will have only a limited immediate impact on farmworker families’ lives because in order to secure DACA, applicants need to have a HS degree or GED to immediately qualify and only one out of six farmworkers (16%) do. Consequently, only 22,000 of the otherwise DACA-eligible farmworkers will qualify immediately—because the rest don’t currently meet the educational criteria. Nonetheless, many who are basically DACA-eligible can qualify for DACA by enrolling in an adult education or vocational training course. However, access to adult education programs is extremely limited in rural areas—so it will be difficult for them to find a course opening, especially a course that is well-aligned with their learning needs as already-employed working adults (i.e. night classes, VESL courses designed to work well for low-literate learners). Therefore, for the moment, DACA expansion has only a modest positive impact for farmworkers.

DACA-eligible Farmworker Dependents who are not, themselves, farmworkers

An earlier estimate I prepared in 2012 estimated that about 100,000 farmworker dependents might qualify under DACA—about half of whom were already age-eligible and half who would age into DACA eligibility when they turned 16. About 20,000 of these dependents are, themselves, farmworkers (and already included in the estimate of AR-eligible) so there are about 80,00 additional
farmworker dependents who are not, themselves, farmworkers who are basically DACA-eligible. Many are still in school but some are school dropouts working in a non-agricultural job.

It is likely that more of the younger DACA-eligible farmworker family members than the older “DACA expansion” cohort 31+ years old meet the USCIS educational requirements for DACA. Nonetheless, long as undocumented rural students’ high school dropout rates remain high (one study suggests that more than half leave before finishing), lack of a high school degree or GED and limited access to adult education or vocational training continues to be a major barrier for both the teenagers and the adults.

**Overall Family Impact of the Executive Order: farmworkers, spouses, and dependents potentially eligible for DAPA and/or DACA**

At least 704,000 undocumented farmworkers and their spouses are likely to benefit from AR and expanded DACA. When one includes in the tabulation of farmworker family beneficiaries, the 80,000 sons and daughters of farmworkers who are not, themselves, farmworkers (some of whom are still in school) who qualified under the original 2012 DACA provisions, President Obama’s executive action may ultimately benefit around 784,000 currently undocumented immigrants in farmworker families.

However, about 66,000 almost-DACA-eligible farmworkers who don’t qualify under the “core AR” (DAPA) requirements or satisfy the educational requirements for DACA currently have no option other than eventually accessing an adult learning program, e.g. vocational ESL, workforce skills development such as welding or another occupational training to successfully apply under DACA.

**Implications for Service Networks To Help Farmworkers and other Immigrants in Rural Areas**

About one in six undocumented immigrants in the U.S. eligible for administrative relief under “core AR” (DAPA) or DACA provisions is a farmworker or farmworker family member. Considering the diversity of groups within the farmworker population likely to benefit from DAPA or DACA has immediate implications for planning service delivery networks.

AR implementation planning and service network design will need to take into account farmworkers’ characteristically limited education, limited English, and economic hardship into account in order to provide effective service to potential applicants. In many farmworker households and family networks, multiple individuals will potentially benefit from administrative relief; however, in order to realize these potential benefits, it will be helpful to adopt a strategic family-oriented service style and prepare to guide entire families forward in determining their eligibility, fulfilling the various documentation requirements, and realizing the full benefits of work authorization and lawful presence.

Ultimately, service support for DAPA and DACA applicants will need to include not only legal advice but, also, more general advice about “navigating the system” in order to submit a successful application but, just as importantly, to understand how to maximize the benefits accruing from work authorization and their rights and responsibilities stemming from lawful presence/

Work authorization, for example, provides farmworkers greater flexibility in moving from one workplace to another and makes it easier to seek out non-agricultural work during seasonal
downturns. However, contrary to agribusiness expectations, few of the newly work-authorized farmworkers will be able to move onward out of farmwork and upward in the U.S. labor market without investing time and effort in building their workplace competencies—including oral English, reading and writing skills, applied math skills, and familiarity with information technology. Even for those who remain in farmwork (and most do plan on continuing to work in agriculture) building basic English and literacy skills will help them stabilize their employment and move upward as they grow older.

An important element—even in initial interactions with potential applicants—will be to not only communicate the limitations of deferred action but to motivate and mobilize DAPA and DACA beneficiaries into active efforts to promote fair and comprehensive immigration reform. The basic argument to be made to DAPA and DACA applicants will need to be that “getting their papers fixed” is simply a first step in moving ahead in their lives. Service providers should treat encounters with applicants as a way to “jumpstart” them on the long, often difficult pathway toward acquiring the skills they need to move upward in the workplace and toward full-fledged civic engagement.

Distribution and Initial Summary Socioeconomic/Demographic Profile of the AR-eligible Population

Geographic Distribution

At least one third of the farmworker population eligible for the “core AR” program lives in California and one-fifth (about 20%) live in the Pacific Northwest and Mountain states. Another one-third (30%) live in one of the Midwestern states while about 10% live in the Southeast.

Gender and Age

A relatively high proportion of the undocumented farmworkers eligible for relief under DAPA—38%—are women, although only 27% of the overall farm labor force are women. About one out of five of these AR-eligible female farmworkers (7% of the overall farmworker AR-eligible population) is an unmarried female head of household.

The average DAPA-eligible potential applicant is about 33 years old and most are between 26 and 40 years of age. However, the specific situations of the older and younger DAPA-eligible farmworkers are somewhat different for the younger and the older cohorts.

Poverty

At least one-third (33%) of the households eligible for relief under the “core AR” program, and 36% of those eligible under “expanded DACA” provisions, live below the poverty line. It is likely that the income of most of the rest falls quite close to the poverty guidelines—e.g. below 150% of poverty. Looking at the earnings of successive cohorts of currently undocumented farmworkers it is clear that those who have lived longer in the U.S. have made only very slow upward economic progress.

Because individual households’ economic status varies so greatly, it will probably be desirable and necessary to explore “sliding scale” arrangements for financial assistance for application fees if it turns out that administration of a program of financial assistance is feasible at all.
Educational Attainment/Literacy and English-language ability

Farmworkers who qualify for the “core AR” DAPA program typically have very modest levels of educational attainment. Their mean educational attainment is 6.6 years of schooling and two-thirds (67%) have only completed elementary school. The current farmworkers eligible under the DACA provisions, as might be expected, have somewhat more schooling because they came to the U.S. before the age of 16 but many never went to school in the U.S. For example, 40% have only completed 6 years of school.

Although a small proportion of the DAPA-eligible long-term settled farmworkers have attended an ESL class, few have become proficient in English. Almost nine out of ten (87%) of those qualifying under the DAPA provisions say they speak “little” or “no” English and virtually none say they speak English well. Those qualifying under the DACA provisions have, on the average, only a slightly better command of English. However, there is, within the DACA-eligible population, a sub-group who speak English well and have more schooling, suggesting the utility of recruiting some as peer counselors and service specialists.

Ethnicity/Native Language

About one in six (17%) of the farmworkers eligible under the “core AR” provisions of the executive order is of indigenous origin. Providers will need to assure them they can deliver culturally-responsive service and community workers who are tri-lingual will be particularly valuable—but, fortunately, most (though not all) of the indigenous farmworkers are used to functioning in Spanish as a lingua franca for a range of official and bureaucratic discussions and transactions.

*Estimate and profile prepared by Ed Kissam, WKF Fund, in consultation with Shannon Williams, LPC Consulting Associates, and Renato Rocha, graduate student, Woodrow Wilson School, Princeton University. Additional information on methodology and updated estimates can be requested by contacting us at: edkissam@me.com
APPENDIX-METHODOLOGY
Estimating Numbers of Farmworkers and Family Members Eligible for DAPA and/or DACA

Overall Analytic Strategy

The analysis presented here relies on data from the Census of Agriculture (COA) and from the National Agricultural Worker Survey (NAWS) to estimate the numbers of farmworkers and farmworker family members who may be eligible for DAPA and/or DACA.

An additional step to validate the estimate comes from triangulation. The estimate presented here was compared to a similar estimate of DAPA and DACA eligibility within the overall undocumented immigrant population developed at the Migration Policy Institute (Capps, Rosenblum, and Bachmeier 2014) using data from the American Community Survey (ACS) and the Survey of Income and Program Participation (SIPP).

A great advantage in using the NAWS data for estimating numbers of DAPA and/or DACA-eligible farmworkers is that it provides a direct indicator of respondents’ legal status; a disadvantage is that the public-use NAWS dataset requires special analyses to impute the legal status of the spouses of heads of household and children 0-17 in the household. The advantage of the ACS dataset is that it has rich detail on most individuals in most households—but a disadvantage is that it systematically undercounts the most marginal populations (including undocumented immigrants and farmworkers) and legal status is imputed (in the case of MPI by innovative use of the SIPP dataset which does have an indication of legal status). Community-level surveys such as the research conducted by Enrico Marcelli in Los Angeles have great promise—but are not available for most farmworker areas although the 2001-2006 New Pluralism project led by Ed Kissam and David Griffith surveyed rural communities with concentrations of farmworkers in California, Oregon, Iowa, North Carolina, and Georgia.

There are two policy analysis groups—the Migration Policy Institute and the Pew Hispanic Research Center with a great deal of experience using the ACS as an element in their estimates of DAPA and DACA impact. We are not aware whether they adjust their estimates to account for ACS differential undercount of households with undocumented persons; however, based on our research of census undercount in rural tracts with concentrations of farmworkers we believe the undercount is in the range of 10-15% and that most of the omitted households are mixed-status or all-undocumented.

A special public-use dataset being developed by Robert Warren for the Center for Migration Studies—also using American Community Survey data with a variable imputing undocumented status will soon be available and can be used to align the NAWS-based estimates with state-level data with the broader analysis of all rural undocumented farmworkers and other rural immigrants—for California, and for other broad regions of the country. The utility of such analyses is not so much to impeccably refine estimates of numbers eligible for deferred action as to better understand their lives, i.e. their socioeconomic and demographic profile, and, thereby, how to most effectively help them.
Estimating the Overall Number of Farmworkers in the U.S.

The most accurate estimates of the U.S. farmworker population rely on data from the Census of Agriculture (COA), the Farm Labor Supply Study (FLSS), and the NAWS to estimate the total number of U.S. farmworkers.

Ed Kissam and Shannon Williams (2013) developed an estimate of farmworkers using 2007 COA data in conjunction with 2007-2009 NAWS public use data (the latest available at that point). Williams has gone on to develop an updated estimate using the 2012 COA data and the 2010-2012 NAWS public-use dataset (Williams 2014)—both of which became available this year. Philip Martin at the University of California, Davis has developed an updated estimate using 2012 COA data in conjunction with California UI data (Rural Migration News, November, 2014). ETA/DOL has developed an unpublished estimate of the numbers of farmworkers in the U.S. using the full, restricted-use NAWS dataset.

While there is agreement among experienced researchers about the best general approach to estimate aggregate U.S. farmworker numbers, there are specific assumptions incorporated in each analysis. These varying assumptions are complementary in that they take different approaches to adjusting for data limitations which are universally recognized and where it is not easy to determine the optimal adjustment.

A key issue is that the NAWS survey samples only crop workers (technically defined as “seasonal agricultural services” workers) and does not include livestock workers. Thus, one uncertainty is the extent to which the population of farmworkers working on livestock farms resembles the population of farmworkers.

Other issues relevant to the reliability of the analysis include uncertainties about agribusiness reporting of COA data (e.g. how COA respondents interpret COA instructions to report “hired farm labor expenses” and “contract labor expenses”), limitations to the COA sampling frame (e.g. a substantial amount of Florida citrus is harvested by the employees of citrus brokers who buy the crop on the tree and hire farmworkers for the harvesting—but they are not surveyed by USDA because they are not “farmers”).

Although the NAWS clearly provides the most accurate available data on U.S. farmworkers, some researchers believe that it also has a small but discernible bias which is adjusted for statistically but which may affect the reliability of data on farmworker wages, hours, and days worked (due to grower refusals).

Other analytic issues arise regarding the definition of “farmworker” (e.g. varying opinions as to whether workers employed in fruit-packing operations should be considered farmworkers). Another definitional consideration is whether the definition of “farmworker” should refer only to individuals who are “current farmworkers” at the time a survey “snapshot” was taken or whether a more sociologically-oriented definition of “farmworker” should be used which includes some individuals who are not “current farmworkers”—e.g. discouraged workers, temporarily disabled farmworkers, women out of the farm labor force temporarily for pregnancy or child care responsibilities—who are, nonetheless in the farm labor force.

Consequently, recent estimates of the numbers of farmworkers in the U.S. range from 2.0 million to 2.5 million. The estimate of DAPA and DACA eligible farmworkers in the U.S. presented here is
based on the most recent detailed estimate of total farmworkers by Williams based on 2012 data: 2,100,000. If, however, there we actually more or less U.S. farmworkers and more undocumented farmworkers in the U.S. in 2010 than in 2012, it would move the estimate presented here of DAPA-eligible and DACA-eligible undocumented farmworkers upward or downward by as much as 5-10%.

**Determining the Proportion of Farmworkers who are Undocumented**

The proportion of undocumented farmworkers in the NAWS sample varies slightly from year to year over the past five years or so—reflecting not only changes in the composition of the workforce but, also, sampling error. From 2009 through 2012 the reported proportion of undocumented workers varies from 48% to 52%.

Grower refusals probably slightly bias the NAWS toward an under-estimate of the number of undocumented workers; however, years of field research lead me to believe that a common concern—that the NAWS survey respondents might not answer truthfully about their legal status—is unfounded. Therefore, I adjusted the NAWS 2009-2010 average of undocumented farmworkers only very slightly upward to 51.7%.

**Estimating the Proportions of Undocumented Farmworkers who are Parents of US-born sons and/or daughters**

The guidelines for DAPA eligibility require that a beneficiary be the parent of a U.S.-born son or daughter. Therefore, the analysis considers, first, whether there is a minor U.S.-born child in the household and, then, whether the undocumented parents in the household have a U.S.-born child 18 years of age or older—who may either be living with them or in their own separate household.

This presents something of an analytic challenge because the NAWS (and most surveys) focus on the family structure of households—parents living with their children and are less clear about sons and daughters who have already moved out of the household. To estimate DAPA-eligible, then, it is necessary to adjust the NAWS data on U.S. born children 0-17 years old in DAPA households.

**Estimating the Proportion of Undocumented Farmworkers with US-born Minor Children**

The Pew Hispanic Research Center (Taylor, Lopez, and Passel 2011) estimate that about 46% of unauthorized immigrant households have minor children living in them and that about 73% of the children in these unauthorized immigrant households are U.S.-born citizens (Passel and Cohn 2009). However, since DAPA eligibility requires only that there be one U.S.-born son or daughter (who may, in fact, not still be part of the household) for undocumented parents to qualify, the proportion of households eligible for DAPA does not perfectly reflect the product of these ratios (.34) of households with undocumented children X children who are U.S.-born.

Unfortunately, the NAWS public-use dataset does not provide a direct indicator of the legal status/citizenship of the children in farmworker households (although the relevant information is available in the restricted-use NAWS dataset). Therefore, I estimated proportions of heads of households with U.S.-born children by comparing the length of undocumented farmworker parents’ residence in the U.S. with the age range of children in the household—because the public-use data set reports only age ranges.
The NAWS public-use dataset has three construct variables identifying households with children 0-5 years of age, 6-13 years of age, and 14-17 years of age. It also has immigrant farmworker respondents' and spouses' years of arrival making it possible to construct cohorts of parents who have been in the U.S. from 0-5 years, 6-13 years, 14-17 years, and 18 or more years. This procedure makes it possible to tabulate the proportion of children who are definitely U.S. born (e.g. all of the children of parents who have resided in the U.S. 6+ years are assumed to be U.S. born) and the proportion where we do not directly know how many are U.S.-born (e.g. the 6-13 year-old children of parents who have lived in the U.S. 6-13 years—in which case we estimated that half were U.S.-born and half were foreign-born).

Analysis of NAWS 2009-2010 data using this approach suggests that about 77% of the farmworker households with children have at least one U.S.-born child 0-17 years old. We will be interested in how this compares to the “gold standard” of ETA/DOL estimates generated from the full NAWS dataset if/when they become available. Nonetheless, there is little doubt that the correct estimate of U.S.-born children 0-17 in undocumented farmworkers’ households is in the 70%-80% range.

Adjustment to account for Undocumented Farmworkers with A U.S.-Born Son or Daughter not living in their household

However, since having any U.S.-born child of any age (not simply a minor) qualifies an undocumented parent for DAPA, we seek to adjust for this by adjusting the number of undocumented farmworker parents with U.S. born children 0-17 living in their household to account for “false negatives” (i.e. due to an unknown number of sons and daughters 18 or older and sons or daughters 0-17 years of age not living in their household) by multiplying the households with US-born children 0-17 by a coefficient of 1.25.

There are uncertainties about the proper coefficient for this adjustment since NAWS sheds little light on the proportion of undocumented farmworkers who have no US-born children living in their household but who do have US-born children who have already left their parents’ household, nor is it entirely clear how many of the sons and daughters no longer in the household are U.S.-born and how many are foreign-born.

Assuming that the youngest post-IRCA farmworkers arrived in the U.S. in 1987 at the age of 17, it is likely that the overwhelming majority of undocumented farmworker parents of U.S. children are 45 years of age or younger—because almost all of the earlier arrivals were legalized under IRCA. Consequently, it is likely that only a few have U.S.-born sons or daughters older than 27 years of age.

To estimate the size of the unobserved sub-population of 18 year-old to 26 year old daughters of the post-IRCA undocumented farmworker parents who are the primary DAPA beneficiaries, we used the U.S. Census tables on the age structure of the Hispanic population to calculate the ratio of Hispanic children 0-17 years old to the young adults 18-26 years old).

Calculating that the ratio of children 0-17 years old who do mostly live in their parents’ households and who are tabulated in the NAWS to the estimated number of U.S.-born children 18-26 who are not tabulated in NAWS suggests the proper adjustment ratio is 1.27. We arbitrarily adjusted downward by 2% to yield the conservative coefficient of 1.25 we used to upwardly adjust the observed proportion of households with U.S.-born children 0-17.
At the same time, cross-tabulation of the 2009-2010 NAWS undocumented respondents by year of arrival shows that a small number of older undocumented farmworkers with U.S. children (2%) failed to legalize under IRCA. Therefore, some may qualify for DAPA on the basis of sons or daughters over the age of 26.

**Adjustment to Account for Undocumented Farmworker Parents with an LPR but no U.S.-born son or daughter**

An additional adjustment is also required because having an LPR son or daughter also qualifies a parent for DAPA. A discussion with Sally Kinoshita of ILRC clarified that this situation would include at least cases where a foreign-born undocumented son or daughter married a U.S. citizen and secured LPR status or where a child qualified for a U Visa.

Here, we provisionally adjusted for the LPR sons and daughters by multiplying the estimate of farmworkers with at least one U.S. citizen son or daughter by 1.02. This may well be an underestimate; we will look to see if there are data sources which provide a solid basis for estimating the proportion of all children of undocumented farmworkers who are LPR’s. We assume that most of the LPR sons and daughters of undocumented farmworkers are 18+ years of age and adjusted their status under preference category F2A and are of Mexican nationality.

**Adjustment to exclude “recent arrivals”—less than 5 years U.S. residence**

Basically, DAPA eligibility requires, at least 5 years of continuous residence since 2010 as well as being the parent of a U.S.-born son or daughter. However, the overall population of undocumented farmworkers in the U.S. with U.S.-born sons and daughters includes some recent arrivals (e.g. those who arrived 3 years previously and had a U.S.-born child after 2 years of residence in the U.S.). Therefore, a small proportion of households with U.S.-born children might not meet the DAPA residency requirements. Tabulating year of arrival of undocumented farmworkers with U.S.-born children permitted us to identify the proportion who in 2009-2010 had lived in the U.S. less than 5 years—8.2%. We then adjusted the estimate number of undocumented farmworkers with a U.S. born child downward—multiplying by 0.918 to determine the proportion who had resided in the U.S. for 5 or more years.

It is not clear exactly how accurate this adjustment is. It is possible that this adjustment for recency of arrival may represent an over-adjustment—because the influx of recent migrants between 2010 and 2015 has been lower than it was in 2005-2009 (the time span for which we measured the proportion of undocumented recent arrivals with U.S.-born children as compared to undocumented settled families with U.S.-born children who had lived in the U.S. 5+ years at the time they were interviewed.

**Assessment of possible DAPA ineligibility due to lack of continuous residence during the previous 5 years**

Qualifying for DAPA requires 5 years of continuous residence in the U.S. As part of the analysis of DAPA-eligible we also examined whether any of the presumably DAPA-eligible farmworkers had been abroad for a substantial amount of time in the year before they were interviewed. Almost all (97.7%) had resided continuously in the U.S. during the prior year; and only 1% had been abroad for longer than 1 month suggesting that even those who had been briefly abroad would be able to...
demonstrate to USCIS that their absence was casual and innocent. This stands to reason since the cost of border-crossing for virtually all undocumented farmworkers is beyond their economic reach.

**Estimating the Numbers of DAPA-eligible Non-Farmworker Spouses of Undocumented Farmworkers**

The NAWS lacks a direct indicator of a farmworker spouse’s legal status but it does include year of arrival. Therefore, it was assumed that virtually all of the foreign-born spouses of DAPA-eligible farmworkers who arrived after 1986 were undocumented. Testing this hypothesis by examining the proportion of foreign-born spouses among DAPA-eligible farmworkers who had arrived post-IRCA suggested that about 96% were.

**Adjustments for DAPA-eligible families where both parents are farmworkers**

The tabulations of NAWS data from DAPA-eligible respondents includes many couples where a farmworker is married to another farmworker. The presumed estimate of undocumented spouses of farmworkers, therefore, needs to be adjusted to account for the fact that these undocumented farmworker spouses are already included in the national estimate of undocumented farmworkers. In the 2009-2010 dataset, in about 51% of the households headed by a DAPA-eligible farmworker, an undocumented spouse (who is also eligible for DAPA) is, themselves a farmworker so the estimate of DAPA-eligible spouses is decreased by this proportion so as to represent only non-farmworker spouses; thus in 49% of the DAPA households there is a DAPA-eligible non-farmworker spouse as well as the DAPA-eligible farmworker(s).

However, it is important to remember that about 27% of the farm labor force, are women and that “farmworker spouses”, while mostly women, also include men. The non-farmworker spouses include women who stay at home to care for children, others who work in other immigrant-dominated industries such as restaurants but, also, the husbands of female farmworkers who might, for example, be working in construction or other blue-collar job.

It seems that actually more of the DAPA-eligible farmworkers are women—38%—than in the overall farm labor force. This stands to reason since a distinctive feature of the farm labor force is that, despite a slowdown in Mexico-U.S. migration it does still include a significant number of unaccompanied male workers (who generally do not have a U.S.-born child).

In this regard, the precise boundaries between “farmworker families” and broader rural social networks of extended families, friends, and paisanos, in which farmworkers and their families are embedded. A social marketing study of teenage farmworker networks Kissam directed in Fresno County in 2011 showed substantial overlap with immigrant teenagers in other non-farmwork occupations.

Similarly, our New Pluralism research showed that the vast majority of immigrants, but not all, in these rural communities were farmworkers. However, the rural, predominantly Mexican, Guatemalan, Honduran, and Salvadoran immigrant population who are not farmworkers appear to be quite similar socioeconomically and demographically to farmworkers. For example, although these rural-to-rural immigrants’ employment is slightly more stable than farmworkers’ they, too, almost all work in low-wage occupations/industry sectors.
It is possible that, in some households, a DAPA-eligible farmworker’s undocumented spouse is not the parent of a US-born child (e.g. where a farmworker has divorced and remarried). However, we do not adjust for this—in part, because the proportion of households where this is the case is relatively low and, moreover, it is likely that the final USCIS guidelines will clarify that a step-parent of a U.S.-born child qualifies as a “parent” of that child.

Not surprisingly, as was the case with the DAPA-eligible NAWS respondents, a negligible proportion of the DAPA-eligible spouses had been abroad for a period of time which would indicate more than a brief, casual, and innocent trip.

**Estimating the Number of DACA-eligible current farmworkers**

In contrast to the estimate of DAPA-eligible farmworkers and spouses, developing a NAWS-based estimate of DACA-eligible farmworkers is quite straightforward since the NAWS data includes the respondent’s age when interviewed and their year of arrival so that it is easy to determine if they arrived before the age of 16 and if they are currently undocumented. My estimate is that 6.7% of all are DACA-eligible—although the exact proportion of DACA-eligible in the farmworker population varies by 1-2% from one region to another. Reviewing estimates for NAWS interviews in FY10-FY12 show that the percent of DACA-eligible in the sample during the period varies from 5.1% to 8.2% and averages 6.7% for the 3-year period.

However, it is important to keep in mind that “DACA-eligible” as used in this analysis actually means “almost-DACA-eligible”, i.e. potentially eligible based on age at arrival in the U.S. In fact, only 15.7% of the DACA-eligible farmworkers actually meet the USCIS education requirement of having a high school degree or GED (because most of those who did actually graduate from high school do not go into farmwork).

The high school dropout rate among undocumented Mexican immigrants is very high and a substantial number of the DACA-eligible teenage arrivals never even “dropped in” to school. Consequently, there is a very large gap between those who are potentially DACA-eligible and those who will immediately qualify. This is why access to adult education and vocational training is such an important component in maximizing the aggregate positive impact of the DACA provisions.

**Estimating the Number of DACA-eligible current farmworkers who are also DAPA-eligible**

Once the DACA-eligible sub-population of farmworkers is identified it is quite straightforward to cross-tabulate the DACA-eligible and DAPA-eligible farmworkers. This cross tabulation shows that 36.7% of the DACA-eligible farmworkers are, also, DAPA-eligible because they are the parent of a U.S.-born child.

In planning services to assist DAPA and DACA applicants it is useful to keep in mind that, because of the overlap, the total numbers of AR beneficiaries who are farmworkers is less than the sum of DAPA-eligible+DACA-eligible farmworkers. In fact, I estimate that about 52,000 undocumented farmworkers are dual-eligible. But, conversely, for almost two-thirds (89,000 farmworkers), DACA remains the only route to work authorization and freedom from fear of deportation.
The Undocumented Spouses of DACA-eligible farmworkers

It is challenging to estimate the impact of executive action on the spouses of the farmworkers who are eligible only for DACA—in part because it seems the households where the head of household is a younger DACA-eligible farmworker include a broader range of legal statuses.

The DACA-eligible farmworkers’ spouses include some who are U.S. citizens and some who are LPRs. However, it is likely that many of the DACA-eligible farmworkers’ spouses are, themselves, undocumented. However, although some may be DAPA-eligible, others may not, because he/she is not the parent of a U.S.-born son or daughter or because he/she has children but none are U.S.-born.

We have not yet estimated the number of undocumented spouses of DACA-eligible farmworkers who might be eligible for DAPA or DACA, but surely some will benefit from executive action/administrative relief.

Farmworker Dependents who are DACA-eligible

Based on an analysis of NAWS data prepared by Susan Gabbard for ETA/DOL, I developed a discussion of DACA-eligible farmworker children (Kissam 2012) for use by Migrant Education recruiters. Gabbard’s analysis indicates that in 2010 there were about 100,000 DACA-eligible dependents of farmworkers living in their parents’ households. Apparently, about 40% are “in the pipeline” of future-eligible and actually will only able to apply for DACA when they turn 15.

Of the remaining 60,000 farmworker dependents currently potentially eligible for DACA, it is likely that some are still in school (i.e. 16-18 year olds who can apply) or have completed high school (perhaps 25,000) and that about 35,000 dropped out before completing high school and will need to enroll in adult education or vocational training to qualify.

Of the DACA-eligible farmworker dependents who dropped out of school, there are probably no more than 20,000 of those school dropouts (i.e. 65% of the DACA age-eligible/arrival-eligible dropouts) who went into farmwork (and are, therefore, included in the core estimate of DACA-eligible farmworkers).

Comparison of NAWS-based analysis of farmworker eligibility for DAPA and DACA to MPI’s ACS-based Analysis of Overall Eligibility among Undocumented Immigrants

MPI estimates that approximately 3.7 million undocumented adult immigrants in the U.S. will qualify for DAPA (Randy Capp presentation to GCIR CIII meeting on December 4, 2014). Assuming that about 10.7 million of the undocumented immigrants in the U.S. are adults, this implies that about 35% qualify for DAPA.

The estimate presented here is that DAPA-eligible farmworkers make up about 38% of the overall undocumented farmworker population.

MPI estimates that DACA-eligible undocumented immigrants (Table 1 in MPI’s November, 2014 brief) are equivalent to 13.5% of the undocumented population of adult immigrants currently eligible for DACA, i.e. 1.44 million eligible after removal of the age cap and an estimated unauthorized adult immigrant population of 10.7 million.
The estimate presented here implies that DACA-eligible current farmworkers make up 13.2% of the undocumented farmworker population. Neither the MPI estimate in Table 1 nor the estimate of DACA-eligible farmworkers presented here (i.e. “currently eligible for DACA”)(includes the DACA-eligible children currently in school who are not yet old enough to be eligible but who will be in future years. They differ however, in that MPI’s tabulation is based on those who are fully-DACA-eligible (i.e. who meet the USCIS education requirements) while the tabulation presented here is of those who are potentially DACA-eligible.

**Strengths and Weaknesses of This Analysis and Recommendations for Use**

Obviously there remain unresolved questions related to the data used in the analysis we present here, the analytic strategies used, and the resulting estimate. Nonetheless, we are convinced that estimating the overall number of farmworkers eligible for DAPA and/or DACA is an important component in planning effectively for implementation of a service network to help applicants.

Even more important than determining the exact numbers potentially eligible for DAPA and/or DACA is to identify this population within a rich dataset such as NAWS so as to tailor the service delivery network to effectively address their needs for assistance as they embark on their journey to secure deferred action as a result of President Obama’s executive action. As can be seen in the very summary initial profile of the farmworker population identified as DAPA and/or DACA eligible in our white paper and the discussion in this appendix, it will be useful to continue efforts to identify distinct sub-populations within the overall eligible population, to better understand the overlap between those eligible for one pathway to relief or another.

As the DAPA and expanded DACA programs move forward it would be extremely helpful to fashion a program of ongoing research to test the initial characterization of the eligible population and provide rapid feedback into an ongoing process of implementation planning. Additional research efforts oriented not so much toward analyzing the socioeconomic and demographic profile of applicants as toward deeper understanding of other aspects of their lives which affect implementation of administrative relief (by both USCIS and DAPA/DACA applicant assistance networks) will be equally valuable.

A final objective of such continuing research should be to generate insights which can be used, once DAPA and DACA applicants have successfully completed their applications, to initiate and provide ongoing support to assist them in the difficult process of becoming fully integrated into U.S. society. The process of securing work authorization is a unique occasion to “jumpstart” many on a process of moving onward and upward in their work lives and in their interactions with neighbors and local community institutions, i.e. civic engagement.v

**References**

Brandon Hooker, Philip Martin, and Andy Wong, “California Farm Labor: Jobs versus Workers in 2012”, November 25, 2014


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iEstimate and profile prepared by Ed Kissam, WKF Fund, in consultation with Shannon Williams, LPC Consulting Associates, and Renato Rocha, graduate student, Woodrow Wilson School, Princeton University. Additional information on methodology and updated estimates can be requested by contacting us at: edkissam@me.com

iiWe estimated 10% Census 2010 undercount in a study of rural areas in Central California with concentrations of farmworkers (Kissam 2012). We did not secure information on the legal status of heads of household but field research observations of the profile of families living in low-visibility households not enumerated in the census strongly indicated that those households were generally of mixed-status or entirely undocumented. The issue of the exact magnitude of differential undercount in ACS data on rural immigrant communities depends on one’s views as to whether the ACS does a better job than the decennial census in enumerating hard-to-count households. I believe it is substantially worse due to its survey methodology (which relies primarily on telephone contacts for non-response followup).

iiiKissam and Williams’ 2013 estimate of the national farmworker population sought to adjust estimates of COA labor expenses used to compute numbers of farmworkers downward to account for fringe labor costs and reporting of non-farmworker “hired farm labor”. It is likely we over-adjusted since it may be the case that COA respondents more accurately restrict their reporting of “hired farm labor costs” to bona fide farmworkers (rather than managers, clerical staff working on farms); however our cross-tabulation of ACS-derived data on employees in agricultural NAICS industry codes and farmworker SOIC categories showed gross discrepancies in occupational distribution and left us without any doubt that the COA data was more reliable than the ACS data.

ivThis decision stems from the desirability of using the NAWS dataset and the COA dataset from the same year in estimating the total number of farmworkers in the US. However, since the 2010 is the best reference year for determining DAPA-eligible farmworkers, the 2009-2010 NAWS dataset is used for other components of the estimate. As is the case with the ACS, use of multiple years of data is helpful since it yields a larger sample size for analysis.

*See Sarah Hooker, Margie McHugh, and Angelo Mathay, “Lessons from the Local Level: DACA’s Implementation and Impact on Education and Training Success”, draft, December, 2014 for an excellent discussion of the issues which need to be addressed to help newly-DACAmended youth and young adults (and DAPA recipients) move onward once they have work authorization and lawful presence.
## ESTIMATED DISTRIBUTION OF U.S. FARMWORKERS AND DAPA OR DACA ELIGIBLE SERVICE POPULATION

<table>
<thead>
<tr>
<th>STATE</th>
<th>% OF US FARMWORKERS</th>
<th>EK Est. % of DACA and DAPA</th>
<th>Estimated DAPA and DACA Service Population: Farmworkers and spouses only</th>
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*Approximate distribution of U.S. farmworkers from tabulations by ETA/DOL using Census of Agriculture and Farm Labor Supply Survey data

** Distribution of DAPA and DACA eligible farmworkers and spouses estimated by Ed Kissam with reference to tabulation of service population by NAWS region. (DACA-eligible children not included but distribution should be similar to overall DAPA-eligible population.

*** See "Identifying Concentrations of Migrant and Seasonal Farmworkers", report by Aguirre International Division of JBS Inc. to Population Division, Bureau of the Census, 2007, for county-by-county distribution of migrant and seasonal farmworkers in the densest concentrations in agricultural production areas (with approximately 68% of the population living in these densely-populated areas)