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MINNESOTA MIGRANT EDUCATION PROGRAM:
2006 RE-INTERVIEW PROCESS

Prepared by HACER for the Minnesota Department of Education.

About Hispanic Advocacy and Community Empowerment through Research (HACER):

HACER's mission is to provide the Minnesota Latino community the ability to create and control information about itself in order to affect critical institutional decision-making and public policy. General support for HACER is provided by the Center for Urban and Regional Affairs (CURA) and Minnesota-based philanthropic organizations.

Executive Director: Rafael Ortiz, J.D., M.P.P.

HACER
330 HHH Center,
301 19th Avenue South
Minneapolis, Minnesota 55455
(612) 624-3326
www.hacer-mn.org

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HACER Staff and Consultants:
Elisabeth Golub
Pamela Jo Johnson, M.P.H, Ph.D.
Rafael Ortiz, J.D., M.P.P.
Jared Erdmann, M.P.H.
Alyssa Banks
Kirsten Bean

HACER interns:
Joseph Shansky

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Executive Summary

Introduction

Under the Migrant Education Program (MEP), state education departments in the United States receive federal funds to support the education of migrant children. The level of MEP funding dispersed to a particular school district depends on the number of eligible migrant students identified in that district. In 2005 the Minnesota Department of Education (MDE) contracted Hispanic Advocacy and Community Empowerment through Research (HACER) to implement a re-interview process to evaluate prior eligibility determinations for MEP. MDE hired HACER to conduct a similar re-interview process in 2006. Over the summer of 2006, HACER conducted re-interviews with the families of students previously identified as eligible for the program. This report describes HACER's research methodology for the 2006 re-interviews, explains the eligibility determination process, and estimates the ineligibility rate (i.e. the "defect rate") of identified migrant students in Minnesota. The report concludes with a discussion of findings and a series of recommendations to MDE.

Research Methodology

This project aimed to re-interview the families of at least 150 students identified as eligible for the program between September 2004 and September 2005. HACER received a sample of randomly selected students drawn from the MIS 2000 database in July 2006. The students in the sample were stratified by their Qualifying Arrival Date (QAD) and the Minnesota region where they were identified. Re-interviews were conducted during July and August of 2006 throughout the state of Minnesota. HACER attempted to contact the family of each student in our sample at least three times through three separate means. HACER conducted 187 successful re-interviews for this project, successfully reaching 62 percent of the sample. Most re-interviews (92 percent) were

conducted in person, though some were held over the phone. Re-interviews took place in both English and Spanish

During each re-interviews, HACER staff filled out a form with sufficient information to determine a student's eligibility. In turn, two HACER staff analyzed re-interview forms to determine whether students were indeed eligible for MEP. Each staff analyzed the re-interview forms independently, determined eligibility based on the information indicated on the form and recorded these determinations in separate computer databases. Only after each person had reviewed all the re-interview forms did they come together and compare their determinations. In situations where staff had arrived at different determinations of a student's eligibility, they discussed the case until they agreed to a final determination. Final eligibility determinations were marked on the re-interview form and were also recorded in an electronic database.

Summary of Findings

Estimated Ineligibility Rate

Assuming that responders are the same as non-responders, this study found the estimated ineligibility rate of the total population of students identified as eligible for MEP between September 2004 and September 2005 to be 36.1 percent (95 percent CI = 28.9 and 43.4 percent). The estimated ineligibility rate for students in QAD 1 under standard assumptions is significantly smaller, at only 17.2 percent.

Uncertainty Analysis

An uncertainty analysis was performed to try and quantify the ineligibility rate among non-responders. Five scenarios based on various assumptions about non-responders were generated:

- If all non-responders are assumed to be eligible for the program, the estimated ineligibility rate for the total population of identified migrant students would be 22.7 percent (95 percent CI =17.9 percent, 27.5 percent);

- If 85 percent of non-responders in each QAD group are assumed to be eligible, the estimated ineligibility rate for the total population of identified migrant students would be 28.4 percent (95 percent CI = 23.2 percent and 33.6 percent);

- If the eligibility rate of non-responders in each QAD is assumed to be equal to the eligibility rate of responders in the same QAD plus 10 percentage points, then the estimated ineligibility rate for the total population of identified migrant students would be 32.6 percent (95 percent CI = 27.3 percent, 37.9 percent);

- If student phone numbers and addresses are used as predictors of eligibility, then the estimated ineligibility rate for the total population of identified migrant students would be 36.7 percent (95 percent CI = 31.2 percent, 41.2 percent); *and*

- If only 50 percent of non-responders are assumed to be eligible for MEP, then the estimated ineligibility rate for the total population of identified migrant students would be 41.3 percent (95 percent CI = 35.7 percent, 46.9 percent).

Subgroup Analysis

A subgroup analysis was also performed to gauge the impact of selected subgroups of responders on the overall ineligibility rate estimate. Two subgroups were identified and excluded from the sample, and new ineligibility rates were calculated.

- When ineligible students flagged for “year-round work” were excluded from the sample, the overall ineligibility rate for identified migrant students is 30.2 percent (95 percent CI = 22.6 percent, 37.8 percent).

- When students enrolled in metro area school districts were excluded from the sample, the overall ineligibility rate for identified migrant students is 31.2 percent (95 percent CI = 24.3 percent, 38.2 percent).

Comparison between 2005 and 2006 Ineligibility Rates

There was *no* statistically significant difference in the ineligibility rates estimated for the 2005 re-interview process and for the 2006 re-interview process. The overall estimated ineligibility rates for 2005 and 2006 were 39.7 percent and 36.1 percent, respectfully. This difference, however, is not statistically significant. Thus, the 2006 ineligibility estimates does not show evidence of improved quality control measures to ensure that only migrant students are recruited, counted and served by MEP. At the same time, it does not show evidence to the contrary.

Recommendations to the Minnesota Department of Education

Decrease the MEP ineligibility rate through improved training and oversight:

- *Clarify the definition of qualifying temporary work.* MDE should explore the possibility of conducting industrial surveys as a means to clear up confusion over what constitutes qualifying temporary work.

- *Emphasize the difference between qualifying moves and vacations.*

- *Encourage new recruiters to shadow and partner with more experienced recruiters.*

- *Help recruiters address conflict of interest issues and ensure appropriate oversight for conflict of interest situations.*

- *Build Capacity of MEP staff in oversight positions.* Federal guidelines stress the importance oversight within an effective MEP, and MDE should ensure that staff in oversight positions are accountable for this responsibility and have the necessary training

- *Require recruiters to provide detailed information about eligible students on their COEs*

Asses training and oversight efforts through effective quality control evaluations:

- *Maximize the usefulness of future re-interview initiatives by using a larger sample size so that differences in the estimate can be better detected.*

- *Do not use re-interview initiatives as substitutes for improvements in training and oversight.*

- *Improve data collection, data entry and tracking of migrant students in Minnesota.*

- *Educate MEP staff about re-interview initiatives and share project findings.*

Request that the Office of Migrant Education (OME) clarify and revise key MEP regulations

- *Recommend that OME provide guidance on how to define qualifying temporary work*

- Encourage OME to amend its zero-tolerance policy for MEP ineligibility.

Introduction

Under the Migrant Education Program (MEP), state education departments in the United States receive federal funds to support the education of migrant children. The level of MEP funding dispersed to a particular school district depends on the number of eligible migrant students identified in that district. The *Draft Non-Regulatory Guidance: Title I, Part C, Education of Migrant Students—October 2003* outlines the federal eligibility requirements for MEP. Broadly speaking, a student is eligible for migrant education services if they meet the following criteria:

1) The student moves across school district lines as a qualifying migrant worker, with a qualifying migrant worker or to join a qualifying migrant worker;

2) The move occurs with the intent to engage in or seek qualifying work in agriculture or fishing that is temporary or seasonal in nature; *and*

3) The qualifying work is an important means of livelihood for the student and their family.

Federal guidelines further stipulate that a student is eligible for migrant education services for a 36-month period following their Qualifying Arrival Date (QAD). In cases where a student moves across school district lines as a qualifying migrant worker or with a qualifying migrant worker, their QAD is the date on which they arrive in the school district of their destination. In cases where a student moves to join a qualifying migrant worker (i.e. makes a “to-join move”), their QAD is still the date on which the student arrives in their destination school district.

In recent years, the federal Office of Migrant Education (OME) has voiced concern that states are not implementing sufficient quality control measures to ensure that only migrant students are recruited, counted and served by MEP. Current federal guidelines do not allow for any margin of error in counting eligible migrant students. Of particular concern to OME are allegations that some defective determinations are a result of clear errors, fraud or abuses in the program.

Following OME guidance, several states, including Minnesota, initiated processes to evaluate their counts of eligible migrant children. In 2005 the Minnesota Department of Education (MDE) contracted Hispanic Advocacy and Community Empowerment through Research (HACER) to develop and implement a re-interview process to evaluate prior student eligibility determinations for MEP. Over the summer of 2005, HACER re-interviewed the families of 381 randomly selected students who were identified as eligible for MEP services between September 2003 and September 2004. HACER submitted their findings to MDE in November 2005 (Achcar 2005). HACER's results were used to estimate the "ineligibility rate" (i.e. the percentage of students misidentified as eligible for the program, often referred to as a "defect rate"), and an uncertainty analysis of the estimated ineligibility rate was performed (Johnson 2005). MDE reported the estimated ineligibility rate and uncertainty analysis to OME.

The MDE contracted HACER to carry out a similar re-interview process in 2006. While the 2005 re-interview process was initiated following a federal request, the 2006 re-interview project was undertaken on MDE's own initiative. The goals of this project were to:

1) Develop a re-interview methodology incorporating lessons learned from the 2005 re-interview process;

2) Re-interview the families of at least 150 students previously determined eligible for the program between September 2004 and September 2005;

3) Determine which students whose families were successfully re-interviewed met federal guidelines for MEP eligibility;

4) Use HACER's eligibility determinations to estimate the ineligibility rate for the total population of identified migrant students in Minnesota;

5) Carry out an uncertainty analysis to place this estimated ineligibility rate in context; *and*

6) Compare the ineligibility rates for the 2005 and the 2006 re-interview processes.

This report details HACER's research methodology for re-interviewing families and describes the process and criteria used for determining students' eligibility. The report also summarizes the estimated ineligibility rate for students identified as eligible for MEP, offers an uncertainty analysis of the ineligibility rate, and compares the ineligibility rates for the 2005 and the 2006 re-interviews. We conclude with a discussion of findings and a series of recommendations to MDE.

Research Methodology

Project Design

The purpose of this project was to re-interview the families of students identified as eligible for the Minnesota Migrant Education Program between September 2004 and September 2005. HACER developed a protocol for locating, contacting and re-interviewing families from our sample [see **Appendix A**]. A re-interview form was created for HACER staff to complete with families in order to gather sufficient information to determine a student's eligibility for MEP [see **Appendix B**]. A script was also assembled in both English and Spanish for re-interviewers use as a guide during re-interviews [see **Appendix C**]. These documents were based on materials prepared by HACER for the 2005 re-interview process, HACER's experience during that project and suggestions provided by Minnesota Department of Education personnel.

Training Re-Interviewers

Before initiating the re-interviews, HACER staff already familiar with the process held a day-long informational session for new staff. HACER staff received training on MEP eligibility guidelines, re-interviewing families, filling out the re-interview form and tracking due diligence. MDE personnel also participated in this training, sharing their insight and offering feedback. One additional HACER staff person received this training in-house a few weeks later.

HACER staff built on this training session by conducting "mock-re-interviews" back at the office over subsequent weeks, during which they used role-playing to practice re-interviewing families and filling out the re-interview form. HACER

drew up a check-list to help staff remember what to take with them into the field [see **Appendix D**], and re-interviewers received further training on the road. During their initial trips into the field, all re-interviewers were accompanied by an HACER staff member who served as a key re-interviewer during the 2005 re-interview process. New re-interviewers shadowed this more experienced staff person and conducted a few re-interviews jointly with him. The more experienced staff member also observed new re-interviewers conducting their first independent re-interviews, and offered his feedback and support. All re-interviewers participating in this project were bilingual in Spanish and English.

Sample of Students

MDE provided an original sampling frame consisting of the 4,609 students in the in the MIS 2000 database identified as eligible for MEP between September 2004 and September 2005. MIS 2000 is the data management tool for MEP in Minnesota and contains information about students identified as eligible for the program. The database includes all students who are identified as eligible for MEP, regardless of whether or not they are actually served by the program. Since HACER was able to successfully re-interview 53 percent of the students from our sample during the 2005 re-interview process, a sample was requested based on an anticipated 50 percent success rate per stratum. **Table 1** (on the following page) describes the resulting sample, including re-interview goals by the region and QAD**.**

Table 1: Breakdown of Re-Interview Sample by QAD and Region

	QAD	Sample	Re-Interview Goals
REGION 1	1	12	6
	2	5	3
	3 & 4	2	1
Subtotal		19	10
REGION 3	1	20	10
	2	6	3
	3 & 4	5	3
Subtotal		31	16
REGION 4	1	13	7
	2	7	4
	3 & 4	10	5
Subtotal		30	16
REGION 5	1	58	29
	2	26	13
	3 & 4	18	9
Subtotal		102	51
REGION 6a (REGION 6 minus Metro Area)	1	57	29
	2	22	11
	3 & 4	10	5
Subtotal		89	45
REGION 6b (Metro Area)	1	7	4
	2	8	4
	3 & 4	14	7
Subtotal		29	15
TOTAL		300	153

The sampling frame was stratified by QAD and region. Students who had moved within the first year prior to September 2005 were designated by QAD 1; students who had moved within the second year prior to September 2005 were designated with QAD 2; and students who had moved more than 2 years prior to September 2005 were designated by QAD 3 & 4. The regional breakdown of the sample reflects the five Minnesota regions as defined by MEP. These are designated as

Regions 1, 3, 4, 5 and 6. There is no Region 2 because currently there are no MEP programs in the northeastern part of the state.

There were some key differences between the sampling processes for the 2005 re-interviews and the 2006 re-interviews. While the sample size for the 2005 re-interviews consisted of 722 randomly selected students, the sample size for the 2006 re-interview consisted of only 300 randomly selected students. The 2005 re-interviews were initiated following a federal request, which specified that Minnesota had to verify the eligibility determinations for a sample of at least 358 students identified as eligible for MEP. In responding to this request, the Minnesota Department of Education decided to conduct re-interviews with at least 358 students identified as eligible for MEP. By contrast, the 2006 re-interviews were undertaken on MDE's own initiative, and MDE requested a smaller sample of 300. Since the sample for the 2006 re-interviews was significantly smaller, there were not enough students in the sample to keep QAD 3 and QAD 4 students in each region separate. Thus, QAD 3 students and QAD 4 students were collapsed into a single stratum (QAD 3 & 4) for sampling purposes.

Sampling for the 7-county Twin Cities metropolitan area represents another difference between the two re-interview processes. For the 2006 re-interviews, Region 6, which encompasses metro area, was split into two regions (Region 6a and Region 6b). HACER separated the metro area from the rest of Region 6 because we hypothesized that the geographic and social features of the metro area are distinct from the rest of the state. HACER was interested in examining this area independently so that it would not skew regional results for Region 6. HACER provided MDE with a list of school district codes within the 7-county metro area, and identified migrant students enrolled in any one of the 142 metro districts were classified separately (6b) from the rest of Region 6 (6a).

Locating Families

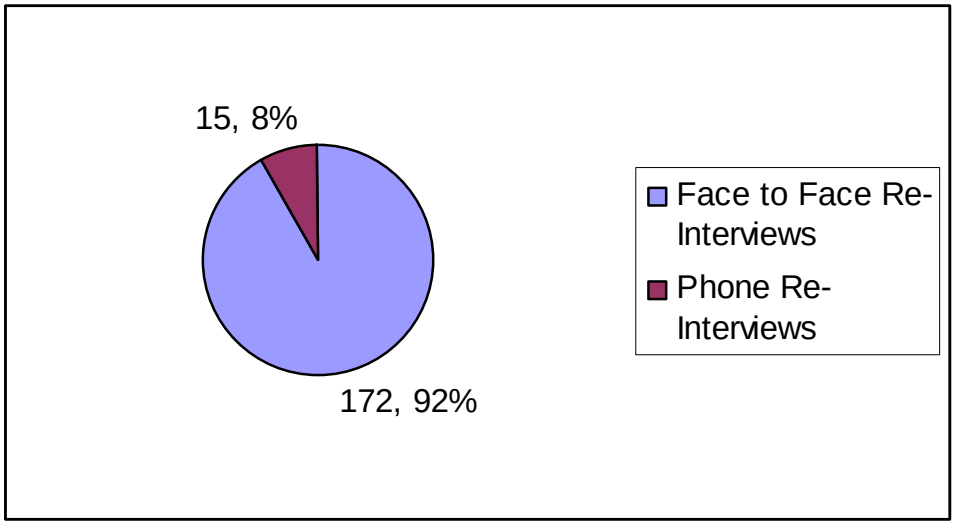
HACER sought the assistance of MEP staff to locate the families of students in our sample. Whenever possible, re-interviewers met with summer project coordinators and program recruiters either in person or by phone before beginning re-interviews in an area. HACER received more help from MEP staff during the 2006 re-interview process. When meeting with MEP staff, re-interviewers asked for updated information for families in our sample, such as new addresses and phone numbers for families with 2006 Certificates of Eligibility (COE, which is the forms filled out by MEP recruiters for each identified student). Tri-Valley Opportunity Council (TVOC) offered further assistance by sharing updated contact information for all families from our sample who had a new COE by early August 2006.

Drawing on HACER's experience during the 2005 re-interview initiative, re-interviewers tried to make initial contact with families in person. Re-interviewers used rental cars to travel to the communities of students from our sample and planned overnight stays when necessary. Re-interviewers visited families during times they were most likely to be at home, namely in the evenings and on the weekends. Locating families at home was complicated, at times, by insufficient or erroneous information in the MIS 2000 database (e.g., incorrect or incomplete addresses, P.O. Box numbers instead of street addresses, and address fields that were left blank). Re-interviewers also attempted to contact families by phone, through local employers known to hire migrant workers (e.g. food-processing plants), and by visiting residences where migrant families were more likely to live (e.g. migrant camps and area trailer parks). We sought additional information from relatives, neighbors, the post office, city offices, local libraries and social service agencies that work with Latino populations.

While HACER attempted to re-interview families in person, it was sometimes only possible to re-interview families by phone**.** Cases where families had to be re-interviewed by phone included families who had not come to Minnesota during

the summer of 2005 (i.e. who were in Texas or another state), and families whose work schedules made it difficult for re-interviewers to connect with them face to face. As described in **Figure 1**, only 8 percent of re-interviews took place over the phone.

Figure 1: Breakdown of Re-Interviews by Method (N=187)

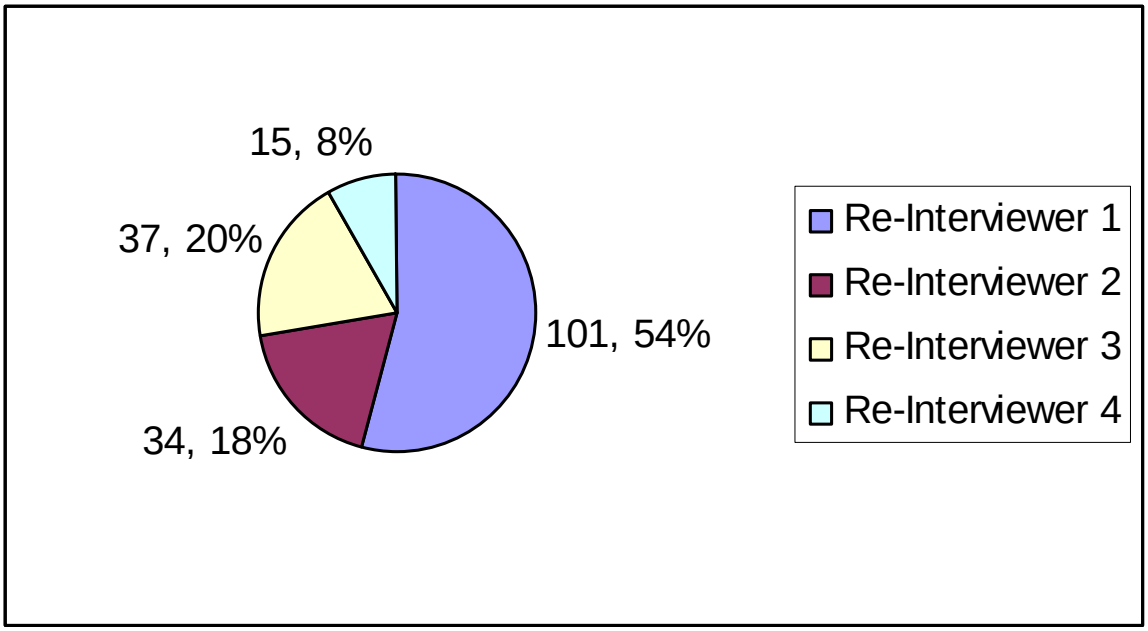


HACER re-interviewed the parents or guardians of the students from our sample whenever possible. Re-interviews were completed with other family members only when a parent or guardian could not be contacted. As a rule of thumb, HACER staff attempted to only re-interview the students from our sample when they were at least 18 years of age or emancipated minors. In some instances, however, staff did carryout re-interviews with students who were 16 or 17 years of age because they were unable to speak with a parent or guardian. HACER only re-interviewed persons thought to be a reliable source of information on the student and their family's move and work history.

Re-Interviewing

HACER received the sample of 300 randomly selected students from MIS 2000 in July 2006. The sample was divided among staff by region and town. Re-interviews occurred between July and August of 2006, and were carried out by four HACER staff. As illustrated in **Figure 2**, one staff member conducted over half of the successful re-interviews. Re-interviews took place in English and Spanish, and often in both languages

Figure 2: Breakdown of Successful Re-Interviews by Re-Interviewer (N=187)



Re-interviewers completed re-interview forms with families at the time of the re-interviews. In cases where multiple students from one household appeared in our sample, re-interviewers completed a separate form for each student. At the end of a face-to-face re-interview, the re-interviewer re-read all the information on the form out loud to the interviewee for verification. The interviewee then signed the form and received a pink carbon copy. In cases where a re-interview took place over the phone, the re-interviewer still read the completed form out-loud to confirm the information with the person being interviewed. The re-interviewer

then made a note on the form explaining that this re-interview took place over the phone, and mailed the pink carbon copy to the family. When necessary, staff followed up with families by phone to clarify information on the re-interview form. Any additional information gathered during a follow-up phone conversation was clearly recorded as such on the re-interview form.

HACER aimed to re-interview the families of at least 150 students from the original sample provided by MDE. Although HACER filled out re-interview forms with the families of 190 students from our sample, 3 of the re-interviews were discarded because we were unable to obtain sufficient information to make an eligibility determination. Thus, HACER conducted successful re-interviews with the families of 187 students for this project, which translates to a 62 percent success rate. **Table 2** (on the next page) describes the breakdown of successful re-interviews by region and QAD, with regional goals included for comparison.

Table 2: Breakdown of Successful Re-Interviews by Region and QAD

	QAD	Sample	Re-Interview Goals	Number of Successful Re-Interviews
REGION 1	1	12	6	8
	2	5	3	1
	3 & 4	2	1	0
Subtotal		19	10	9

	QAD	Sample	Re-Interview Goals	Number of Successful Re-Interviews
REGION 3	1	20	10	13
	2	6	3	4
	3 & 4	5	3	3
Subtotal		31	16	20

	QAD	Sample	Re-Interview Goals	Number of Successful Re-Interviews
REGION 4	1	13	7	11
	2	7	4	4
	3 & 4	10	5	10
Subtotal		30	16	25

	QAD	Sample	Re-Interview Goals	Number of Successful Re-Interviews
REGION 5	1	58	29	35
	2	26	13	19
	3 & 4	18	9	11
Subtotal		102	51	65

	QAD	Sample	Re-Interview Goals	Number of Successful Re-Interviews
REGION 6a (REGION 6 minus Metro Area)	1	57	29	38
	2	22	11	10
	3 & 4	10	5	9
Subtotal		89	45	57

	QAD	Sample	Re-Interview Goals	Number of Successful Re-Interviews
REGION 6b (Metro Area)	1	7	4	1
	2	8	4	4
	3 & 4	14	7	6
Subtotal		29	15	11
TOTAL		300	153	187

Tracking

HACER observed due diligence in contacting the families for all students in our sample. We defined due diligence as attempting to contact each family at least three times through three different means. For instance, a re-interviewer who was unable to connect with a family through a home visit would attempt to call them or visit their place of employment. HACER observed due diligence in order to make reasonable and consistent attempts to contact the family of each and every student from our sample. In practice, re-interviewers exceeded due-diligence in situations where we knew a family was in Minnesota and we felt confident about our ability to reach them. Re-interviewers filled out a tracking form to document due diligence efforts for every family they attempted to contact [see **Appendix E**]. HACER also created a computer database which allowed re-interviewers to track due diligence electronically [see **Appendix F** for a list of tracking codes]. This database was submitted to MDE along with hard copies of re-interviewers' tracking sheets

Eligibility Determination

Eligibility Determination Process

Two HACER staff analyzed re-interview forms to determine whether students were indeed eligible for the Migrant Education Program. Following our methodology from the 2005 re-interview process, eligibility determinations were made by one person who was not primarily involved in conducting re-interviews, and by another who had conducted more than half of the re-interviews. Staff analyzed re-interview forms independently, determined eligibility based on the information indicated on the form and recorded these determinations in separate computer databases. Only after each person had reviewed all the re-interview forms did they come together and compare their determinations. In cases where staff had arrived at different eligibility determinations, they discussed the case until they agreed on a final determination. When staff felt missing information made it impossible to make an eligibility determination, they followed up with the re-interviewer or attempted to follow-up with the family by phone. If staff was unable to contact a family to clarify information, this re-interview was discarded and treated as an unsuccessful re-interview. Thus, while HACER completed forms with the families of 190 students for this project, only 187 were counted as successful re-interviews. Final eligibility determinations were marked on the re-interview form and were also recorded in an electronic database [see **Appendix G** for a list of eligibility codes]. HACER submitted this database and the original re-interview forms to the Minnesota Department of Education.

HACER relied on two documents provided by MDE in making our eligibility determinations: *The Minnesota Title I, Part C Migrant Education Program Identification & Recruitment Training Manual—Draft Spring 2003* (the "*Minnesota Training Manual*") and *Draft Non-Regulatory Guidance: Title I, Part C, Education*

of Migrant Students—October 2003 (the "*Non-Regulatory Federal Guidance*"). In cases where there were content discrepancies between these two documents, precedence was given to the *Non-Regulatory Federal Guidance*.

Key Qualifying Criteria

Generally speaking, HACER found a student to be eligible for MEP if they met the following criteria:

1) The student had moved across school district lines as a qualifying migrant worker, with a qualifying migrant worker or to join a qualifying migrant worker;

2) The move occurred with the intent to engage in or seek qualifying work in agriculture of fishing that was temporary or seasonal in nature; *and*

3) The qualifying work was an important means of livelihood for the student and their family.

Federal regulations further stipulate that a student is eligible for MEP for 36 months following a qualifying move. Since this project aimed to verify the eligibility of students determined to be eligible for the program between September 2004 and September 2005, HACER reviewed each family's move and work history between September 2001 and September 2005.

Whether or not a student meets these key requirements for MEP eligibility is not always clear-cut. Furthermore, the *Minnesota Training Manual* and the *Non-Regulatory Federal Guidance* identify a number of other factors that determine a student's eligibility for MEP. Key issues that HACER staff encountered while making eligibility determinations are discussed in the following sections.

Issues Relating to Work

Temporary Work

In keeping with the *Minnesota Training Manual* and the *Non-Regulatory Federal Guidance*, HACER defined temporary work as generally consisting of work for a period shorter than 12 months. We determined whether or not work was temporary by asking families and reviewing their work and move histories. The case of meatpacking and processing workers presented HACER staff with particular dilemmas in making eligibility determinations based on qualifying temporary work. Occasionally, re-interviewers encountered families who had moved across district lines during the period under review and for whom an important source of income came from a qualifying agricultural activity, but who did not report that work to be temporary. This situation was perhaps most common among families in which the student, their parent(s) or their guardian(s) engaged in year-round work in meatpacking or poultry processing. It applied less frequently to families who derived an important source of income from year-round farm work. For instance, a few parents re-interviewed worked year-round on dairy farms.

In situations where families engaged in meatpacking or poultry processing reported their work was *not* temporary, and in which moves and interrupted work did not support a finding of temporary work, HACER determined these families to be ineligible based on the guidelines laid out in the *Non-Regulatory Federal Guidance.* This document asserts, “Employment that is available on a year-round basis may be considered temporary if working conditions or period of slack demand make it unlikely that a worker will remain at the job permanently.” In order to qualify a family for MEP under such circumstances, however, the *Non-Regulatory Federal Guidance* stipulates that the student’s COE must explicitly document why such work should be considered temporary. In cases where a job may appear to be permanent or year round, an “industrial survey” can be used to

determine if the job is in fact temporary. An industrial survey is an industry-wide survey of a specific job category that establishes whether it can be considered temporary due to "a high degree of turnover, frequent layoffs without pay, or few or no opportunities for permanent, full-time employment." The *Non-Regulatory Federal Guidance* lays out guidelines for conducting an industrial survey, and proposes that "a 50 percent turnover rate in a 12-month period is a sufficiently high turnover rate to consider work temporary" (26-27). A number of authors have documented the high turnover rate in the meatpacking industry (Fink 1998; Gouveia and Stull 1995; Stull and Broadway 1995) and to a lesser extent in the poultry processing industry (Griffith 1995). However, Minnesota has not conducted an industrial survey that could be used to qualify families working year-round jobs in these industries for MEP.

Although families working in year-round meatpacking and poultry processing work described by this scenario do not qualify for MEP according to criteria laid out in *Non-Regulatory Federal Guidance*, the practice on the ground in certain Minnesota school districts appears to be quite different. MDE personnel, and consequently MEP staff, do not seem to have received clear guidance on how to consider families who work in meatpacking or poultry processing. Additionally, some MEP staff appears to have been specifically trained that such families *do* qualify for MEP. In recognition of this, HACER chose to flag students from our sample whose families met the eligibility requirements for MEP *except* for the fact that they reported year-round work. Specifically, HACER wanted to investigate the degree to which these ineligible students skewed the overall ineligibility rate derived from the re-interviews

Before Initial Commercial Sale

For the purposes of MEP, qualifying work in agriculture or fishing must occur before the initial commercial sale of a crop or product. A significant number of families re-interviewed for this project worked in agriculture or first-stage food

processing (e.g. packaging corn for Seneca), and thus performed easily-identifiable qualifying activities. If a family reported work that was not so easily identifiable (e.g. “making chicken pies”), HACER sought additional information to see if this activity could be considered as occurring before the initial commercial sale. For instance, HACER staff sometimes called the Human Resources Department at food-processing factories to find out more about their operations.

Primary Means of Livelihood

In order to qualify a student for MEP, qualifying work must be an important means of livelihood for the student and their family. In cases where families reported multiple jobs, HACER looked for evidence that the qualifying activity was an important means of livelihood for the student and their family. However, the qualifying work did not have to be a family’s sole or most lucrative source of income.

Issues Relating to Migration

Intent

Providing they meet other conditions, students are eligible for MEP if they move to seek qualifying work, or if they move with or to join a parent or guardian seeking qualifying work, whether or not the work is actually obtained. Intent to obtain qualifying work is sufficient to be eligibility for MEP. In situations where qualifying work was not obtained, HACER examined a family’s move and work history, their time of arrival in Minnesota and their testimony to establish intent.

In some cases, HACER had to establish intent even when families had obtained qualifying work following a move across district lines. According to the *Non-Regulatory Federal Guidance*, MEP recruiters must probe the intent of a move

even in situations where a student, their parent(s) or their guardian(s) obtained qualifying work following a move. The *Minnesota Training Manual,* by contrast, states, “Provided that all other qualifying conditions are present, in cases where the worker is engaged in qualifying work, asking why the move took place is not necessary” (11). This discrepancy exists because the *Minnesota Training Manual* was developed using a previous federal guidance that contained different directions with regards to intent. MEP staff in Minnesota was not trained on or made aware of the change in interpretation of intent until November 2004. Following direction received by the state during the 2005 re-interview process [see **Appendix H**], HACER determined students who made a qualifying move predating the November 2004 and who met other qualifying conditions to be eligible whether or not the intent of the move was clearly documented. When students made a move after November 2004, however, we looked for evidence of intent. In gauging intent for a particular family, HACER took into consideration the family’s verbal affirmation of intent as well as their historical patterns of work and moves.

Qualifying Moves vs. Vacations

In keeping with guidelines set out in both the *Non-Regulatory Federal Guidance* and the *Minnesota Training Manual*, HACER did not treat vacations or trips to visit family or friends as qualifying moves. Some of the families re-interviewed as part of this project with permanent addresses in Minnesota had made regular trips to Texas, Mexico or other Latin American countries which they explicitly described as visits with family or friends. Such trips do not count as qualifying moves for MEP and thus do not provide students with an initial QAD or restart their 36-month period of eligibility for the program.

To-Join Moves

Students may qualify for MEP if they move across district lines to join a qualifying worker (i.e. a “to-join” move). As a rule of thumb HACER did not qualify students

for a to-join move that occurred more than 12 months after the move of the qualifying worker. As the *Non-Regulatory Federal Guidance* explains, following a 12-month period "it is difficult to establish a credible relationship between the child's move and the worker's move" (17). HACER always tried to look at the "big picture" of a student's situation and be attuned to exceptional circumstances that may have led to a qualifying to-join more than a year after the move of a qualifying worker; however, we did not have to make this exception.

QADs from Other States

Since students can qualify for MEP in Minnesota based on qualifying moves to or within other states, HACER gathered information about all of a family's moves and work performed during the period under review. Re-interviewers recorded information on all moves and work performed between September 2001 and September 2005 to ensure that we did not overlook any qualifying move.

Other Issues

Age and High School Graduation

The *Non-Regulatory Federal Guidance* explains that students are eligible for MEP if they are younger than 22 and have not graduated from high school or do not hold a high school equivalency certificate. In determining eligibility HACER verified that students were no more than 21 years old at the beginning of the period under review (i.e. in September 2004). We also confirmed that students had not graduated from high school in the US or received a high school equivalency certificate that would make them ineligible for the program. HACER found that 3 students had graduated from high school prior to September 2004, and this factor played into our ineligible determinations for these students.

It should be noted, however, that different understandings of “graduation” may have led to error in reporting that these students had graduated. Students will sometimes report that they “graduate” when they walk with their class but do not receive their diploma, and re-interviewers were not necessarily sensitive to this at the time of the re-interview. Nonetheless, the number of students affected by this potential miscommunication is not significant enough to affect the overall findings of this study.

Estimated Ineligibility Rate with Uncertainty Analysis

Sampling

The Minnesota Department of Education provided an original sampling frame consisting of the 4,609 students identified as eligible for the Migrant Education Program between September 2004 and September 2005. The sampling frame was stratified by QAD and region, resulting in 18 strata. It should be noted that Region 6, which encompasses the 7-county Twin Cities metropolitan area, was split into subregions 6a and 6b for sampling and analytical purposes. Subregion 6b includes all students identified as enrolled in any one of the 142 metro area school districts. Subregion 6a includes all students identified as enrolled in any school district in Region 6 outside the metro area.

A sample of 300 was requested for re-interviews, with the goals for the number of completed re-interviews anticipated at 50 percent per stratum (n = 150). Stratified random samples without replacements were drawn using proportionate allocation methods (Levy & Lemeshow, 1999). **Table 3** (on the following page) summarizes the total population, the targeted number of completed re-interviews, the total sample drawn, the actual number of completed re-interviews, and the re-interview response rate per QAD.

Table 3. Response Rates by QAD.

QAD	Total Population	Targeted Re-Interviews	Total Sample Drawn	Completed Re-Interviews	Response Rate
1: Within one year prior	2567	84	167	107	64.1%
2: Within two years	1114	37	74	42	56.8%
3 & 4: More than two years	908	29	59	38	64.4%
Total	**4609**	**150**	**300**	**187**	**62.3%**

Of the total population of students identified as eligible for MEP in Minnesota, 56 percent of students (n = 2,567) are classified as QAD 1, 24 percent (n = 1,114) are classified as QAD 2 and the remaining 20 percent (n = 908) are classified as QAD 3 & 4. The total sample drawn represents this same distribution.

Ineligibility Rate Estimation

The estimated ineligibility rate of the total population of students identified as eligible for MEP between September 2004 and September 2005 is 36.1 percent.
There is a 95 percent chance that the actual ineligibility rate falls between 28.9 percent and 43.4 percent, assuming non-responders are the same as responders.

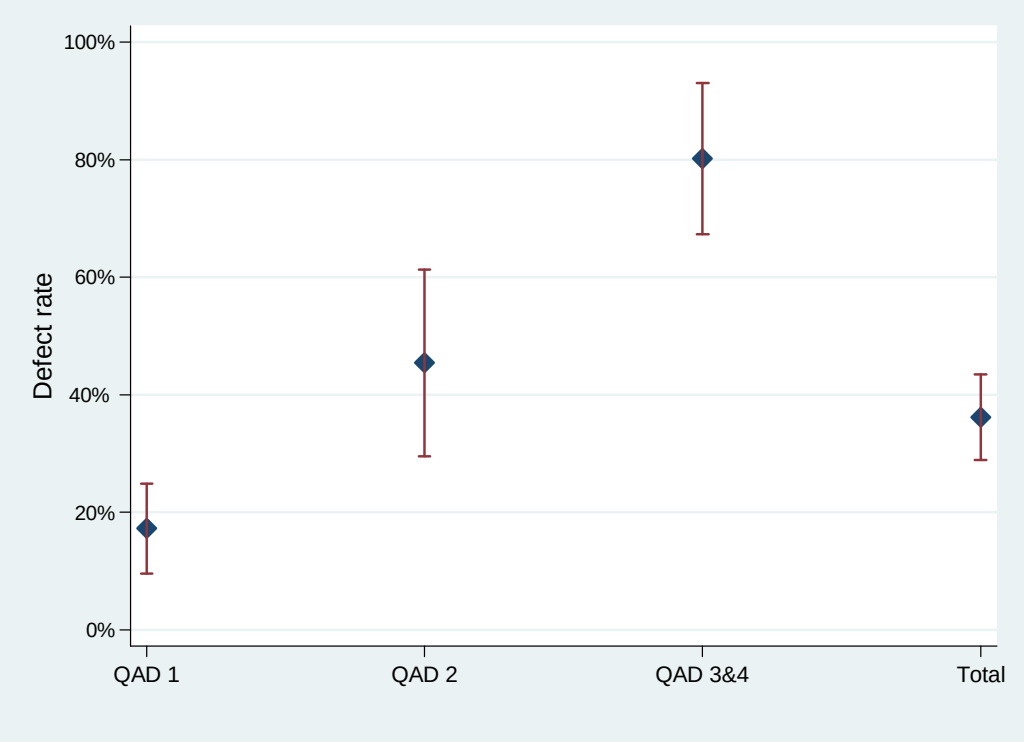
The ineligibility rate was estimated using the 187 re-interviewed individuals in the sample. The sample was weighted for probability of selection and adjusted for non-response. Details of the sampling weight construction are included in **Appendix I**. Ineligibility rates were calculated as weighted proportions with corresponding standard errors (SE) and 95 percent confidence intervals (CI). Analyses were performed with Stata 9.2 (StataCorp, 2005a) using survey estimation techniques (StataCorp, 2005b). **Table 4** (on the following page) presents the estimated ineligibility rates for the overall population (i.e. for the total population of students identified as eligible for MEP) and by QAD.

Table 4: Estimated Ineligibility Rate (Weighted Proportion Ineligible) With 95% CI by QAD and Overall

QAD	Ineligibility Rate	SE	Lower 95% CI	Upper 95% CI
1: Within one year prior	17.2%	3.9%	9.6%	24.9%
2: Within two years prior	45.4%	8.0%	29.6%	61.3%
3 & 4: More than two years	80.2%	6.5%	67.3%	93.1%
Total	**36.1%**	**3.7%**	**28.9%**	**43.4%**

Assuming that all re-interview non-responders are a random subsample of the re-interview responders, the rates in **Table 4** represent the proportion of the full population of those identified as eligible for MEP between September 2004 and September 2005 (n = 4,609) who would have been ineligible for these services. Overall, the estimates suggest that over one-third of those identified as eligible would have been ineligible for MEP, which equates to a total of 1,164 students. However, over 56 percent of the full population is classified as QAD 1. Students with QAD 1 had the lowest rate of ineligibility at 17.2 percent, which equates to 445 (out of 2,567) students who would have been ineligible. Correspondingly, over 2,100 students from QAD 1 would have been eligible. **Figure 3** (on the next page) presents a graphical depiction of the information displayed in **Table 4**.

Figure 3. Overall Ineligibility Rates With 95 % CI under Standard Assumptions About Non-Responders by QAD.



The underlying assumption of this ineligibility rate estimation (using standard methods for calculating non-response adjustment factors) is that non-responders are the same as responders. In other words, there is no difference between students whose families were located and re-interviewed and those who were not. However, it is possible that those not re-interviewed were in fact different from those who were re-interviewed, perhaps in systematic ways. Specifically, it seems plausible that those families *not* located and re-interviewed would have been more likely to be eligible for MEP. Families meeting the federal definition of migrant are likely to be more mobile and consequently harder to find, meaning the estimated ineligibility rate would be an overestimate. Thus, an uncertainty analysis is warranted for it may shed some light on the broader range of possible ineligibility rates given more reasonable assumptions about the non-responders.

Uncertainty Analysis

The goal of this uncertainty analysis is to quantify the uncertainty around the estimated ineligibility rate by producing a range of possible ineligibility rates that could occur depending on the assumptions about eligibility among the non-responders (n = 113). Five scenarios representing possible assumptions about the eligibility rates among non-responders in each QAD were suggested. **Table 5** (on the next page) presents the eligibility rates for those that were located and re-interviewed (i.e. the Re-Interviewed Sample), as well as under the five scenarios representing plausible distributions of eligibility among non-responders.

Table 5: Eligibility Rate Assumptions under Five Scenarios for Uncertainty Analyses.

QAD	Re-Interviewed Sample	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5
1: Within one year prior	83%	100%	85%	93%	Varies	50%
2: Within two years prior	52%	100%	85%	62%	Varies	50%
3 & 4: More than two years	21%	100%	85%	31%	Varies	50%

For each scenario, an eligibility indicator variable was created by randomly drawing subjects (according to the assumed eligibility rate) from the non-responders in each QAD. The random draw was necessary since subjects within QAD had different probability of selection based on region, and consequently had differing sample weights. Subjects randomly drawn were classified as eligible for services under the specified scenario; the remaining non-responders in each QAD were classified as ineligible for services. Using these eligibility indicator variables, the proportion of ineligibles (i.e. the ineligibility rate) was calculated along with standard errors and 95 percent confidence intervals. Uncertainty analyses were conducted using the full sample (n = 300) and the base weights. All sampling and analyses were performed with Stata 9.2 (StataCorp, 2005). Complete statistical output is available in **Appendix J**.

The uncertainty analysis for each scenario included an overall ineligibility rate estimate, as well as ineligibility rate estimates by QAD. This section summarizes the findings for each scenario. **Table 6** presents a summary of the estimated ineligibility rates under each of the five scenarios.

Table 6: Uncertainty Analysis of Estimated Ineligibility.

Assuming that…	Ineligibility rate	Standard error	Lower 95% CI	Upper 95% CI
…all non-responders are eligible (1)	22.7%	2.4%	17.9%	27.5%
…85% of non-responders in each QAD are eligible (2)	28.4%	2.6%	23.3%	33.6%
…the sample eligibility rate + 10% in each QAD are eligible (3)	32.6%	2.7%	27.3%	37.9%
…non-responders are a random sub-sample of the responders in each QAD (i.e. are the same as responders)	**36.1%**	**3.7%**	**28.9%**	**43.4%**
…eligibility varies by phone & address within QAD (4)	36.7%	2.8%	31.2%	42.2%
…50% of non-responders in each QAD are eligible (5)	41.3%	2.8%	35.7%	46.9%

Figure 4 (on the next page) presents a graphical depiction of the six scenarios described in **Table 6**, i.e. the estimated ineligibility rates with 95 percent confidence intervals. The dashed vertical line highlights the ineligibility rate estimated under the standard assumptions about non-responders

Figure 4: Overall Ineligibility Rates with 95 % CI under Standard Assumptions about Non-Responders and the 5 Scenarios

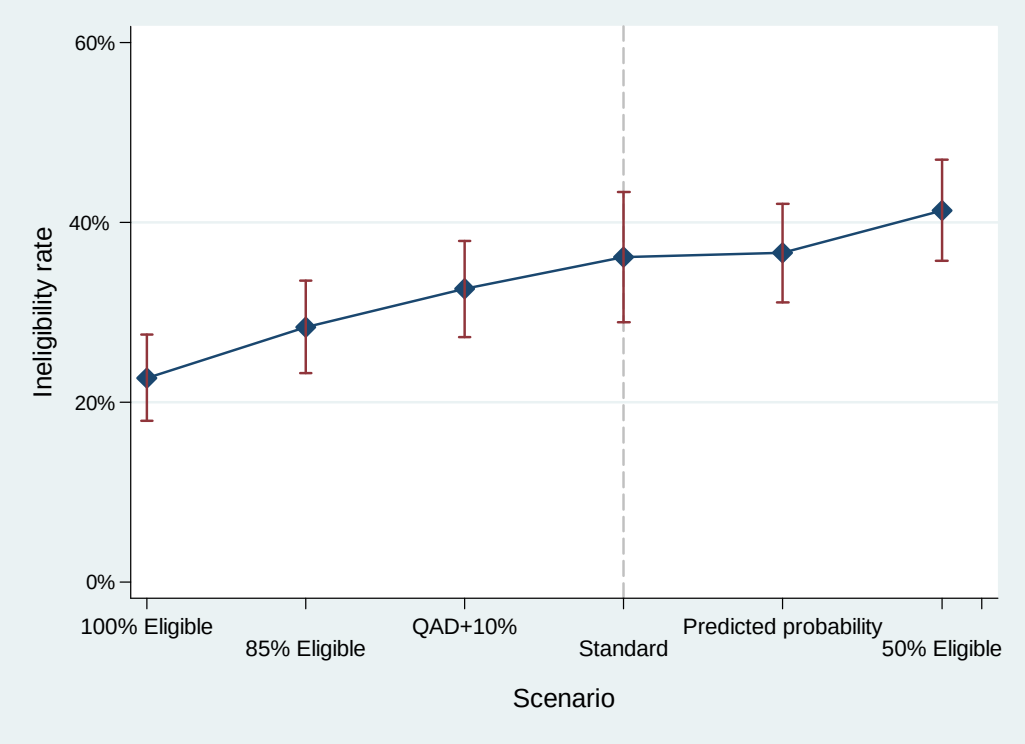
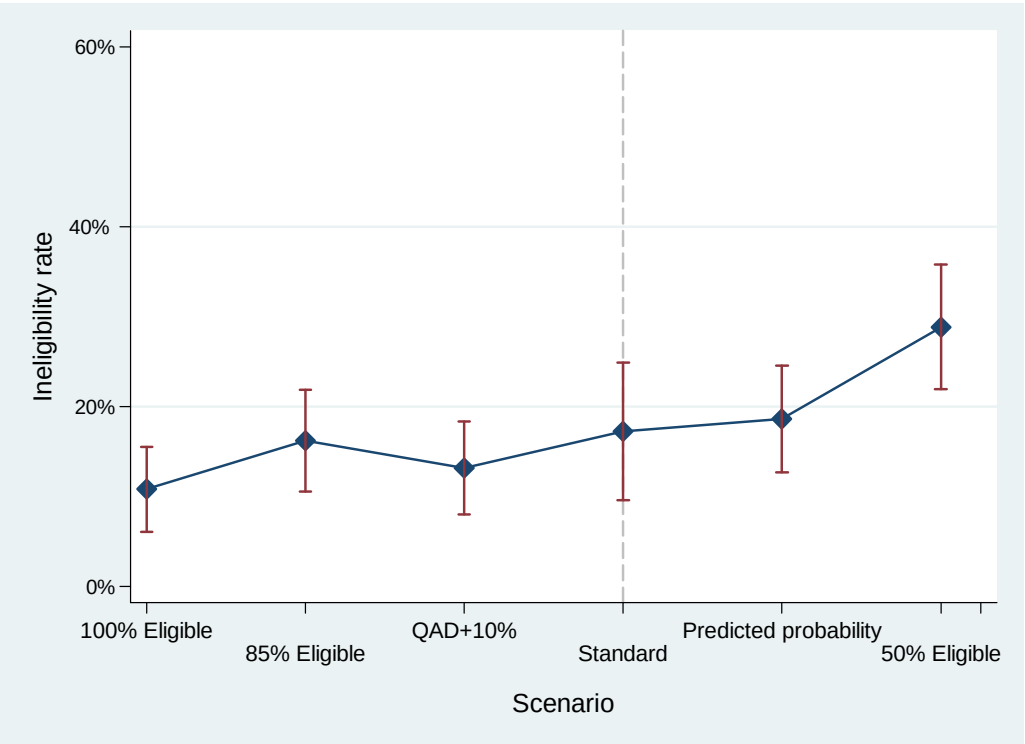


Figure 5 presents similar information as **Figure 4** except it shows estimates only for students in QAD 1, the largest QAD group.

Figure 5: QAD 1 Ineligibility Rates with 95 % CI under Standard Assumptions about Non-Responders and the 5 Scenarios



Scenario 1: All Non-Responders are Eligible

If all non-responders are assumed to be eligible for MEP, the estimated ineligibility rate for the total population of identified migrant students would be 22.7 percent.
Under this scenario there is a 95 percent chance that the actual ineligibility rate would fall between 17.9 percent and 27.5 percent.

Scenario 1 makes the possible, although somewhat extreme, assumption that all non-responders were in fact eligible for MEP. Under this assumption, the overall ineligibility rate was estimated to be 22.7 percent (95 percent CI = 17.9 percent, 27.5 percent).

Table 7:
Scenario1- Assumption that all Non-Responders are Eligible

QAD	Ineligibility rate	SE	Lower 95% CI	Upper 95% CI
1: Within one year prior	10.8%	2.4%	6.1%	15.6%
2: Within two years prior	27.2%	5.2%	17.0%	37.4%
3: More than two years	51.2%	6.5%	38.4%	64.0%
TOTAL	**22.7%**	**2.4%**	**17.9%**	**27.5%**

Assuming that all re-interview non-responders are eligible, the rates in **Table 7** represent the proportion of the full population of those identified as eligible for MEP between September 2004 and September 2005 (n = 4,609) who would have been ineligible for these services. Overall, the estimates suggest that less than one-fourth of identified migrant students would have been ineligible for migrant education services. This equates to a total of 1,046 students. Given that over 56 percent of the full population is classified as QAD 1, which has the lowest rate of ineligibility at 10.8 percent, only 279 (out of 2,567) students in this largest group would have been ineligible.

Scenario 2: Eighty-Five Percent of Non-Responders are Eligible

If 85 percent of non-responders in each QAD group are assumed to be eligible, the estimated ineligibility rate for the total population of identified migrant students would be 28.4 percent.
Under this scenario, there is a 95 percent chance that the actual ineligibility rate would fall between 23.2 percent and 33.6 percent.

Scenario 2 makes the arbitrary assumption that 85 percent of non-responders in each QAD group were eligible for migrant education services. Under this assumption, the overall ineligibility rate was estimated to be 28.4 percent (95 percent CI = 23.2 percent, 33.6 percent).

Table 8:
Scenario 2- Assumption that 85% of Non-Responders in Each QAD are Eligible

QAD	Ineligibility rate	SE	Lower 95% CI	Upper 95% CI
1: Within one year prior	16.3%	2.9%	10.6%	21.9%
2: Within two years prior	33.9%	5.5%	23.1%	44.8%
3: More than two years	56.2%	6.5%	43.5%	68.9%
TOTAL	**28.4%**	**2.6%**	**23.3%**	**33.6%**

Assuming that 85 percent of re-interview non-responders are eligible, the rates in **Table 8** represent the proportion of the full population of those identified as eligible for MEP between September 2004 and September 2005 (n = 4,609) who would have been ineligible for these services. Overall, the estimates suggest that slightly over one-fourth of those identified as eligible would have been ineligible for MEP. This equates to a total of 1,309 students. However, over 56 percent of the full population is classified as QAD 1, which has the lowest rate of ineligibility at 16.3 percent. Only 422 (out of 2,567) students in this largest group would have been ineligible.

Scenario 3: Non-Responders' Eligibility Rate is Ten Percent Greater than Responders

If the eligibility rate of non-responders in each QAD is assumed to be equal to the eligibility rate of responders in the same QAD plus 10 percentage points, then the estimated ineligibility rate for the total population of identified migrant students would be 32.6 percent.
Under this scenario, there is a 95 percent chance that the actual ineligibility rate would fall between 27.3 percent and 37.9 percent.

Scenario 3 makes the assumption that non-responders in different QAD groups were eligible for migrant education services at varying rates. Under this scenario, eligibility rates were based on the eligibility rates for each QAD among responders plus 10 percentage points. Specifically, 83 percent of responders in QAD 1 were eligible, so the assumption under scenario 4 was that 93 percent of non-responders were eligible. Using the same calculation for each QAD, 62 percent of non-responders in QAD 2, and 31 percent of non-responders in QAD 3 & 4 were assumed eligible. Under this assumption, the overall ineligibility rate was estimated to be 32.6 percent (95 percent CI = 27.3 percent, 37.9 percent).

Table 9:
Scenario 3- Assumption that Eligibility is QAD Sample Rate + 10%

QAD	Ineligibility rate	SE	Lower 95% CI	Upper 95% CI
1: Within one year prior	13.2%	2.6%	8.0%	18.4%
2: Within two years prior	43.2%	5.8%	31.9%	54.6%
3: More than two years	74.9%	5.6%	63.8%	86.0%
TOTAL	**32.6%**	**2.7%**	**27.3%**	**37.9%**

Assuming that re-interview non-responders in different QAD groups are eligible at varying rates, the rates in **Table 9** represent the proportion of the full population of those identified as eligible for MEP between September 2004 and September 2005 (n = 4,609) who would have been ineligible for these services.

Overall, the estimates suggest that nearly one-third of those identified as eligible for MEP would have been ineligible, which equates to a total of 1,503 students. However, over 56 percent of the full population is classified as QAD 1, which has the lowest rate of ineligibility at 13.2 percent. Only 341 (out of 2,567) students in this largest group would have been ineligible.

Scenario 4: Student Phone Numbers and Addresses are used as Predictors of Eligibility

If student phone numbers and addresses are used as predictors of eligibility, then the estimated ineligibility rate for the total population of identified migrant students would be 36.7 percent.
Under this scenario, there is a 95 percent chance that the actual ineligibility rate would fall between 31.2 percent and 41.2 percent.

Scenario 4 again makes the assumption that non-responders in different QAD groups were eligible for migrant education services at varying rates. Under this scenario, however, eligibility rates were estimated based on telephone and address information recorded for each student from our sample in MIS 2000. Drawing on HACER's experiences during the 2005 and 2006 re-interview process, we hypothesized that telephone and address information might help predict eligibility for non-respondents. HACER went through the MIS 2000 information provided for each student in the 2006 re-interview sample and coded for phone number and address. HACER coded phone and address information for *all* students from our sample regardless or whether or not their families were successfully re-interviewed. In coding phone numbers we noted whether MIS 2000 listed no phone number, a Minnesota phone number, a Texas phone number or some other out-of-state number. In coding addresses we noted whether MIS 2000 listed a migrant camp/hotel address, a farm address, a P.O. Box number, another valid form of address or an incorrect/incomplete address.

Since we coded MIS 2000 data we did not take into account new telephone or address information gathered during the re-interview process.

Following this coding process, eligibility among non-responders was estimated by calculating the predicted probability of eligibility among responders by category of phone and address within QAD group. Indicator variables were created for telephone type, address type and QAD. Predicted probabilities were then calculated using a traditional logistic regression model (with eligibility status as the dependent variable) and equation 1.0 shown below; where b_0 is the constant, $b_1 – b_n$ are the regression coefficients, and X is the vector of covariates modeled using the aforementioned indicator variables. It should be noted that the logistic regression model was used only for the purpose of estimating category-specific predicted probabilities to guide the assumptions for this scenario. No further interpretation of the regression coefficients is warranted.

$$\Pr(\text{eligibility}) = \exp(b_0 + b_1X_1 + \ldots + b_nX_n) / (1 + \exp(b_0 + b_1X_1 + \ldots + b_nX_n)) \quad (1.0)$$

For each combination of phone category and address category within QAD, a probability of eligibility was estimated. For example, respondents in QAD 1 with a farm address and a Texas phone number had a predicted probability of 0.994, which means that for this combination of QAD, phone and address information there was a 99 percent probability that the respondent was in fact eligible. Alternatively, respondents in QAD 2 with an ‘other valid address’ and a Minnesota phone number had a predicted probability of 0.429, which means that for this combination of QAD, phone and address information there was a 43 percent probability of eligibility. These predicted probabilities were then applied to the non-responders such that for each distinct combination of QAD, phone and address (n = 60 mutually exclusive combinations), the probability of eligibility was the percent of non-responders assumed eligible within that category. Continuing the above examples, 99 percent of non-responders in QAD 1 with a farm address and a Texas phone number were assumed eligible, while 43 percent of non-

responders in QAD 2 with another valid address and a Minnesota phone number were assumed eligible.

Table 10:
Scenario 4- Assumption that Eligibility Varies Within QAD and is a Function of Telephone Number Type and Address Type.

QAD	Ineligibility rate	SE	Lower 95% CI	Upper 95% CI
1: Within one year prior	18.7%	3.0%	12.7%	24.7%
2: Within two years prior	46.1%	5.8%	34.7%	57.5%
3: More than two years	76.5%	5.5%	65.6%	87.3%
TOTAL	**36.7%**	**2.8%**	**31.2%**	**42.2%**

Assuming that re-interview non-responders in different QAD groups are eligible at varying rates, and that eligibility can be predicted from address and telephone information, the rates in **Table 10** represent the proportion of the full population of those identified as eligible for MEP between September 2004 and September 2005 (n = 4,609) who would have been ineligible for these services. Overall, the estimates suggest that over one-third of those identified as eligible would have been ineligible for MEP, which equates to a total of 1,692 students. Over 56 percent of the full population, however, is classified as QAD 1, which has the lowest rate of ineligibility at 18.7 percent. Only 484 (out of 2,567) students in this largest group would have been ineligible.

It should be noted that this scenario comes closest to the estimated ineligibility rates using standard methods. This is likely due to the fact that assumptions about the eligibility of non-responders were estimated using information about responders to predict eligibility status. In other words, based on telephone and address information within QAD, non-responders were assumed to be *like* responders

Scenario 5: Fifty Percent of Non-Responders are Eligible

If only 50 percent of non-responders are assumed to be eligible for MEP, then the estimated ineligibility rate for the total population of identified migrant students would be 41.3 percent.
Under this scenario, there is a 95 percent chance that that the actual ineligibility rate would fall between 35.7 percent and 46.9 percent.

Scenario 5 makes the extreme assumption that only 50 percent of non-responders in each QAD group were eligible for MEP, which is less than the actual eligibility rate of the responders. Under this assumption, the overall ineligibility rate was estimated to be 41.3 percent (95 percent CI = 35.7 percent, 46.9 percent).

Table 11:
Scenario 5- Assumption that 50 % of Non-Responders in Each QAD are Eligible

QAD	Ineligibility Rate	SE	Lower 95% CI	Upper 95% CI
1: Within one year prior	28.7%	3.5%	21.8%	35.7%
2: Within two years prior	48.8%	5.8%	37.3%	60.2%
3: More than two years	68.1%	6.1%	56.2%	80.0%
TOTAL	**41.3%**	**2.8%**	**35.7%**	**46.9%**

Assuming that 50 percent of re-interview non-responders are eligible, the rates in **Table 11** represent the proportion of the full population of those identified as eligible for MEP between September 2004 and September 2005 (n = 4,609) who would have been ineligible for these services. Overall, the estimates suggest that over 40 percent of those identified as eligible would have been ineligible for MEP. This equates to a total of 1,904 students. However, over 56 percent of the full population is classified as QAD 1, which has the lowest rate of ineligibility at 28.7 percent. Only 742 (out of 2,567) students in this largest group would have been ineligible.

It is worth noting that under this scenario the ineligibility rate for the largest group, QAD 1, is about two-thirds higher than under the standard assumptions, while the ineligibility rate for QADs 3 & 4 is 15 percent lower. Moreover, under this scenario the majority of ineligibles come from QAD 1, which seems largely implausible.

Subsample Analysis

A subgroup analysis was performed to gauge the impact of selected subgroups of responders on the overall ineligibility rate estimate. Two subgroups were identified, and ineligibility rates for the whole sample were recalculated excluding each of these subgroups. The results of these two analyses are presented here.

Subgroup 1: Ineligible Students Flagged for "Year-Round Work"

When ineligible students flagged for "year-round work" are excluded from the sample, the overall estimated ineligibility rate for identified migrant students is 30.2 percent.
Within this subgroup, there is a 95 percent chance that the actual ineligibility rate falls between 22.6 percent and 37.8 percent.

The first identified subgroup are students whose families were successfully re-interviewed, had moved across district lines between September 2001 and September 2005 and for whom an important source of income came from a qualifying agricultural activity, but who did not report that work to be temporary or seasonal. Put simply, students in this subgroup met all criteria for MEP eligibility except that they, their parent(s) or their guardian(s) performed year-round work, and there was no evidence they moved with the intent to seek temporary or seasonal work. Specifically, HACER identified this subgroup as students who met the following criteria:

1) The student was found to be ineligible for MEP;

2) The student had made a move across district lines between 9/2001 and 9/2005;

3) The student, their parent(s) or their guardian(s) had performed work related to agriculture;

4) This work was NOT temporary or seasonal;

5) This work was in production or processing;

6) This work was with crops, poultry, dairy, meat/livestock or eggs; *and*

7) There was not evidence of intent to seek qualifying temporary or seasonal work.

As described in the “Eligibility Determination” section to this report, HACER was interested in flagging these students because their ineligibility may result from confusion or misunderstanding over eligibility requirements. This situation was perhaps most common among families that worked year-round jobs in meatpacking or poultry processing. A total of 24 students were flagged for year round work.

A subgroup analysis was performed in order to estimate the ineligibility rate for the total population if students flagged for year-round work were excluded from our sample. After exclusion, sampling weights with non-response adjustment were re-calculated. Standard analysis was conducted with the altered sample and sampling weights to determine what would be the ineligibility rate if these individuals had never been identified. Under these restrictions the overall

ineligibility rate was estimated to be 30.2 percent (95 percent CI = 22.6 percent, 37.8 percent). **Table 12** illustrates the range of ineligibility rates generated by this subgroup analysis for each QAD.

Table 12:
Subsample Analysis 1- Excluding Students with a Year-Round Work Flag.

QAD	Ineligibility rate	SE	Lower 95% CI	Upper 95% CI
1: Within one year prior	14.6%	3.8%	7.2%	22.0%
2: Within two years prior	36.2%	8.2%	20.0%	52.5%
3: More than two years	69.3%	9.4%	50.7%	87.9%
TOTAL	**30.2%**	**3.8%**	**22.6%**	**37.8%**

As **Table 12** describes, when students flagged for year-round work are excluded from our sample, the overall estimated ineligibility rate falls from 36.1 percent to 30.2 percent, a decrease of approximately 5 percentage points.

Subgroup 2: Students Enrolled in Metro Area School Districts

When students enrolled in metro area school districts are excluded from the sample, the overall ineligibility rate for students identified as eligible for MEP during the period under review is 31.2 percent.
Within this subgroup, there is a 95 percent chance that the actual ineligibility rate falls between 24.3 percent and 38.2 percent.

The second identified subgroup are students enrolled in school in the Twin Cities metro area. HACER was interested in differentiating the metro area (subregion 6b) from the rest of Region 6 (subregion 6a) because of our experience during the 2005 re-interview process. During the 2005 re-interviews we experienced a particularly low rate of successful re-interviews and a distinctly high rate of student ineligibility in the metro area. Specifically, we hypothesized that the geographic and social features of the Twin Cities are distinct from the rest of the state and could, therefore, skew the overall result.

For this analysis, re-interviewed students enrolled in a school district in the 7-county metro area were simply excluded. Eleven (11) students were excluded, representing 456 individuals in the full population. Because these individuals were sampled by region in separate strata, no reweighting of the rest of the sample was necessary. Standard analysis was conducted excluding Region 6b. This analysis assumes that individuals in Region 6b are not part of the sampling frame or the target population. Under these restrictions the overall ineligibility rate was estimated to be 31.2 percent (95 percent CI = 24.3 percent, 38.2 percent).

Table 13:
Subsample Analysis 2- Excluding Students Enrolled in Metro Area School Districts (Region 6b).

QAD	Ineligibility rate	SE	Lower 95% CI	Upper 95% CI
1: Within one year prior	15.7%	3.5%	8.7%	22.7%
2: Within two years prior	41.6%	8.3%	25.2%	58.0%
3: More than two years	73.8%	8.0%	58.0%	89.6%
TOTAL	**31.2%**	**3.5%**	**24.3%**	**38.2%**

As illustrated in **Table 13**, when students in metro area school districts are excluded from our sample, the overall estimated ineligibility rate falls from 36.1 percent to 31.2 percent. This translates to a decrease of roughly 5 percentage points.

Comparison between 2005 and 2006 Ineligibility Rates

There was *no* statistically significant difference in the estimated ineligibility rates for the 2005 and 2006 re-interview projects.

A comparison between ineligibility rates for the 2005 and 2006 re-interviews was conducted using the t-test to test for a significant difference in means. **Table 14** illustrates the difference in ineligibility rates over time, by QAD.

Table 14. Difference in Ineligibility Rates over Time, by QAD.

	Year	Ineligibility rate	SE	95% LCI	95% UCI	Diff	SE(Diff)	t-value	p-value
QAD 1	2005	25.0%	3.2%	18.7%	31.3%				
	2006	17.2%	3.9%	9.6%	24.9%	-7.8%	5.0%	-1.55	0.12
QAD 2	2005	44.1%	5.0%	34.3%	54.0%				
	2006	45.4%	8.0%	29.6%	61.3%	1.3%	9.5%	0.14	0.89
QAD 3 & 4	2005	67.4%	5.0%	57.5%	77.2%				
	2006	80.2%	6.5%	67.3%	93.1%	12.9%	8.2%	1.56	0.12
Total	2005	39.7%	2.5%	34.7%	44.7%				
	2006	36.1%	3.7%	28.9%	43.4%	-3.6%	4.5%	-0.80	0.43

While the overall ineligibility rate declined by 3.6 percentage points from 2005 to 2006, this difference was not statistically significant. Similar tests were conducted by QAD. In QAD 1, the ineligibility rate declined by 7.8 percentage points from 2005 to 2006. QAD 2 showed a small increase and QAD 3 & 4 showed a larger increase. However, each of these changes could just as well have been 0 or in the opposite direction. There are no statistically significant differences in the estimated ineligibility rate from the 2005 re-interview and the 2006 re-interview projects.

Discussion of Findings

Study Limitations

The migratory nature of the families we sought to re-interview represents a key limitation to this study. HACER did not always have current contact information for the students from our sample, as the MIS 2000 data we received at the beginning of the re-interview process reflected contact information that was at least one year old. MIS 2000 also did not necessarily contain students' home base contact information (i.e. permanent year-round addresses and telephone numbers). Furthermore, the high mobility of migrant families means ineligible students are probably overrepresented among respondents. Students meeting the federal definition of migrant are likely to be more mobile, and consequently harder to find, while ineligible students whose families had settled out or did not move for work were probably easier to locate.

This study yields estimated ineligibility rates for the population of students identified as eligible for MEP—that is, it provides an estimate of the proportion of ineligible students who were misidentified as eligible ("false positives"). However, this study does not provide other information that would be helpful in assessing recruiter training and quality control measures for the program. Significantly, this study does not provide estimates for the number of students who are misidentified as ineligible for the program ("false negatives"), or about the eligible students who are not served by MEP because they have not been located and interviewed by a program recruiter.

Re-Interview Success Rate

In spite of the high mobility of families from our sample, HACER achieved a greater success rate for contacting families during the 2006 re-interview process as compared with the 2005 re-interview process. While the 2005 re-interview process had a 53 percent success rate, the 2006 re-interview process had a 62 percent success rate. A greater success rate increases the likelihood that our estimated ineligibility rate reflects the actual ineligibility rate for the total population of students identified as eligible for MEP during the period under review.

A number of factors likely contributed to the greater success rate during the 2006 re-interview process. Information learned, skills gained and relationships built during the 2005 re-interviews certainly enabled the re-interview team to be more effective in locating, approaching and re-interviewing families in 2006. To cite just one example, the re-interviewer in charge of the Rochester area during the 2005 re-interview process learned which apartment complexes tend to rent to seasonal workers at the local food-processing plant, and also made contact with the building manager for one of these complexes. This kind of information greatly facilitated the work of re-interviewers during the 2006 re-interview process.

Perhaps the greatest factor contributing the increased success rate during the 2006 re-interview process was the assistance HACER received from MEP staff. HACER more support from MEP staff during the 2006 re-interviews than during the 2005 re-interviews. In fact, MEP staff contacted during the 2006 re-interviews process proved extremely helpful, and offered crucial assistance in locating and approaching the families of students from our sample. In some instances, program staff went so far as to personally arrange re-interviews with families, offer tips on when would be a good time of day to reach a particular family or counseled re-interviewers about how to make the first contact a family who was especially wary of unfamiliar persons knocking on their door. A better

understanding of the purpose and the methodology of the re-interview process might be one reason why MEP staff was more helpful during the 2006 project. Greater familiarity with HACER as an organization due to our work on the Comprehensive Needs Assessment (CNA) for migrant students in Minnesota could be another.

MEP Ineligibility Rate

Using standard statistical methods, this study found the estimated ineligibility rate of the total population of students identified as eligible for MEP between September 2004 and September 2005 to be 36.1 percent (95 percent CI = 28.9 and 43.4 percent). The estimated ineligibility rate for students in QAD 1 under standard assumptions is smaller, at only 17.2 percent. However, these estimates are made under the assumption that non-responders are the same as responders, whereas non-respondents may actually differ from respondents in systematic ways. Furthermore, these estimates do not really help us understand why there may be such a proportion of ineligible students identified by MEP. The following sections provide context for this ineligibility rate by evaluating additional statistical analyses as well as HACER's experiences and observations in the field

Estimating Non-Responders' Ineligibility

An uncertainty analysis was performed to try and quantify the ineligibility rate among non-responders. Five assumptions about non-responders were suggested, and estimated ineligibility rates were calculated accordingly. The first scenario proposes that had HACER been able to successfully re-interview all non-responders from our sample, every one of these students would have been eligible for MEP. This scenario assumes that all non-responders were in fact eligible for MEP during the period under review. Under this scenario, the estimated ineligibility rate for all identified migrant students would be 22.7 percent

(95 percent CI = 17.9 and 27.5 percent). This scenario is highly unlikely, yet it is interesting because it offers the most optimistic (i.e. the lowest) estimated ineligibility rate for MEP when non-responders are taken into account.

The second scenario suggests that had HACER been able to successfully re-interview all non-responders from our sample, a strong majority (85 percent) of these students would have been eligible for MEP. This scenario assumes that 85 percent of non-responders in each QAD were eligible for MEP. Under this scenario, the estimated ineligibility rate for all identified migrant students would be 28.4 percent (95 percent CI = 23.2 and 33.6 percent). Eighty-five (85) percent is a standard rate used by statisticians in uncertainty analysis, rather than one suggested by the social context of migrant families in Minnesota. However, this scenario offers an estimate of what the ineligibility rate for MEP might look like if a significant number of non-responders were in fact eligible for the program.

The third scenario hypothesizes that had HACER been able to re-interview all non-responders from our sample, non-responders in each QAD would have been slightly more likely (plus 10 percent) to be eligible for MEP. This third scenario assumes that the eligibility rate of non-responders in each QAD is equal to the eligibility rate of responders in the same QAD plus 10 percentage points. According to this scenario, the estimated ineligibility rate for all identified migrant students would be 32.6 percent (95 percent CI = 27.3 and 37.9 percent). The eligibility rate proposed in this scenario is also arbitrary, but it offers an estimate of what the ineligibility rate for MEP might look like if non-responders were slightly more eligible than responders.

The fourth scenario proposes that phone numbers and address can be used as predictors of non-respondents eligibility. This scenario uses student phone numbers and addresses as predictors of eligibility. Under this assumption, the estimated ineligibility rate for all identified migrant students would be 36.7 percent (95 percent CI = 31.2 percent and 41.2 percent). Based on HACER's

experiences in the field, we proposed that phone and address information provided in MIS 2000 might serve as predictors for non-respondents eligibility. Re-interviewers noted, for instance, that nearly all students with Texas phone numbers from MIS 2000 whose families were successfully re-interview turned out to be eligible for the program. Re-interviewers hypothesized that all non-responders with Texas phone numbers from MIS 2000 might also be eligible. Thus, all students from our sample were coded for phone and address information and ineligibility rates were calculated. Since scenario 4 hypothesizes that HACER's experience with responders can be used to infer the ineligibility rate for non-responders, this scenario also assumes that non-responders and responders are alike. This is probably why the ineligibility rate generated by this scenario is similar to the estimated ineligibility rate under standard assumptions.

The fifth and final scenario speculates that had HACER been able to successfully re-interview all non-responders from our sample, half of these students would have been eligible for MEP. Under these assumptions, the estimated ineligibility rate for all students identified as eligible for MEP during the period under review would be 41.3 percent (95 percent CI =35.7 and 46.9 percent). This assumption is not very likely, since it proposes the ineligibility rate among non-responders is actually higher than among responders. The fact that the majority of ineligibles under this assumption are students with QAD 1 further underscores its implausibility. Nonetheless, this scenario is interesting because it puts forth the most "pessimistic" (i.e. the highest) estimated ineligibility rate for MEP among all five scenarios.

This uncertainty analysis should encourage MDE to look beyond the estimated ineligibility rate for MEP. Given the broader range of possible ineligibility rates among non-responders, all the scenarios presented here should be considered. That said, HACER believes that the actual ineligibility rates falls somewhere between the rates suggested by scenarios 3 and 4 (i.e. between 32.6 percent and 36.7 percent), given that scenarios 1, 2 and 5 are less likely.

Understanding Responders' Ineligibility

Misunderstanding and confusion over what constitutes qualifying, temporary work might have contributed to the ineligibility rate among responders. Conversations between HACER and MEP program staff indicate there are very different interpretations of how to define qualifying temporary work. Some program staff implied to HACER that year-round work in meatpacking or poultry processing qualified students for MEP, and that returns from long family vacations to Texas or Mexico represented qualifying moves. It is likely that these interpretations of the federal guidelines for MEP are not the result of isolated misunderstandings on the part of program staff. Rather, they suggest more systematic issues regarding guidance interpretation and recruiter training.

Confusion over the definition of qualifying temporary work may have increased the ineligibility rate for MEP, and a subsample analysis of students flagged for year-round work helps us quantify this impact. As explained in previous sections, HACER flagged students who met eligibility criteria for MEP except for the fact that their families did not perform or did not intend to seek temporary or seasonal work. Twenty-four (24) students out of 187, or 13 percent, were flagged according to these criteria. When these students were excluded from the sample, the estimated ineligibility rate for the population of students identified during the period under review is 30.2 percent (95 percent CI = 22.6 percent and 37.8 percent). This figure represents a decrease of approximately 6 percentage points from the estimated ineligibility rate for the total population of migrant students.

Geographically-specific factors could have further contributed to responders rate of ineligibility. HACER found low ineligibility rates among responders from certain school districts from our sample, and high ineligibility rates from responders from other school districts. An in-depth analysis of how ineligibility rates varied across particular school districts lies beyond the scope of this study. However, the particularities of the Twin Cities metropolitan area warrant some

discussion here. HACER experienced a low success rate and a high ineligibility rate for students in the metro area during the 2005 re-interviews, and we encountered similar patterns in 2006. Various factors help explain these trends. For instance, the urban environment of the Twin Cities made it particularly hard to locate the families of students from our sample, especially those that were most mobile (and possibly most migrant). While ineligible families are probably overrepresented among our successful re-interviews, this may be particularly true in the metro area. Furthermore, metro area addresses in MIS 2000 may be students' home base addresses, as some migrant families live in the Twin Cities during the off-months. These families are likely to be working in greater Minnesota during the summer months, and consequently would be unaccounted for during the re-interview process. The greater racial, ethic and cultural diversity of the metro area might also make it easier for recruiters to misidentify immigrant students as migrant students, and thus mistakenly qualify students for MEP.

A subsample analysis of students enrolled in metro area schools suggests the degree to which the distinct characteristics of the Twin Cities might have affected the estimate ineligibility rate presented in this report. When students enrolled in school districts within the 7 county metro area were excluded from our sample, the estimated ineligibility rate for the population of students identified during the period under review is 31.2 percent (95 percent CI = 24.3 percent and 38.2 percent). This figure represents a decrease of approximately 5 percentage points from the ineligibility rate for the total population of migrant students.

The fact that MEP recruiters often come from within migrant communities—or within broader but also tight-knit Latino communities—could also help explain the ineligibility rate among responders. This "insider" status clearly helps recruiters identify migrant families more effectively. A recruiter's informal social networks, for instance, may help them locate migrant families and establish trust. However, insider status can also put recruiters in the very difficult position of having to evaluate the eligibility of students whose families are relatives or close friends.

Such conflicts of interest situations are easily resolved, particularly within the close-knit communities characteristic of small towns in rural Minnesota. HACER's experience in the field raises questions about whether recruiters receive sufficient training, support and oversight to effectively confront these situations

The subjective nature of identifying eligible students for MEP may have further contributed to responders rate of ineligibility. Since families do not need to provide documentation (e.g. pay stubs and school records) to establish a students' eligibility for MEP, recruiters must rely on families' description of their move and work history. Not requiring documentation is crucial to ensure that MEP remains accessible to all eligible migrant students. At the same time, however, it means that recruiters need to use their best judgment in weighing the credibility of potential eligible family's testimony. This situation is complicated by the fact that recruiters may have to re-interview families under chaotic conditions, such as during a parent's lunch break at work. Recruiters also shoulder a particular burden because they are now required to establish a family's intent to seek qualifying work. Federal guidelines discourage recruiters from asking leading questions, and the balancing act of uncovering a family's state of mind without telling them what one is looking for is incredibly challenging. Given these multiplicity of factors, the federal expectation of a zero defect rate for the program seems unreasonable.

Finally, ineligibility rate among responders in our sample could also be due to misrepresentation. HACER did not find any clear-cut instances of abuse during the course of our research. However, re-interviewers did encounter parents who were confused as to why their child appeared as a student in our sample. Some parents claimed they had never heard of MEP and did not recall speaking to a recruiter. A few insisted that their child could not be eligible for the program because they had lived in the same Minnesota school district for over three years (and in some cases for their whole lives). In these situations, it remained unclear

whether the misidentification of students resulted from human error, or from mischaracterization or abuse.

MEP Quality Control

A difference of means test was carried out in order to measure change in ineligibility rates between the 2005 re-interview process and the 2006 re-interview process. This test found no statistically significant difference between the ineligibility rates estimated for the 2005 and the 2006 re-interview processes. Although the overall estimated ineligibility rate declined from 39.7 percent to 36.1 percent between 2005 and 2006, we cannot say that this difference is statistically different than 0. Thus, the "lower" 2006 ineligibility rate is not evidence of improved quality control measures to ensure that only migrant students are recruited, counted and served by MEP. At the same time, it is not evidence to the contrary.

While this study does not provide evidence of improved or declining quality control measures, the information presented here can serve as a baseline for future quality control evaluations. Carrying out future re-interview initiatives using the same methodology would help MDE assess the success of quality control measures over time. *The larger the sample sizes of subsequent re-interview initiatives, the more likely they are to be useful to MDE. Larger samples will yield ineligibility rates with narrower confidence intervals, making it easier to identify any changes in ineligibility rates over time.*

Although subsequent re-interview initiatives can help measure the effectiveness of MDE quality control, the re-interview initiatives themselves should not serve as a stand-in for quality control. If MDE contacts migrant families who HACER found to be ineligible for MEP and discontinue them from the program, or simply eliminates program recruiters who identified a high proportion of ineligible

students, MDE would effectively skew the sample population for future re-interview projects. In this case, future decreases in the range of estimated ineligibility rates in MEP could *not* be interpreted as evidence of improvements in training or oversight. Furthermore, using the re-interview process as quality control rather than a measure of quality control might also inhibit the success of future re-interview processes. Such measures could create distrust between the re-interview team, MEP staff and identified migrant families. This environment would make it even more difficult for the re-interview team to locate families from their sample.

Recommendations for the Minnesota Department of Education

This section highlights key recommendations to the Minnesota Department of Education suggested by this research. Recommendations are grouped according to three categories: decreasing the Migrant Education Program's ineligibility rate, implementing and supporting future quality control evaluations, and seeking guidance and clarification from the federal Office of Migrant Education.

Decrease the MEP Ineligibility Rate through Improved Recruiter Training and Oversight

- *Clarify the definition of temporary work.* MDE personal and MEP staff need clear guidance on how to define temporary work. In particular, MEP recruiters need standardized training on how to determine eligibility for families who work in meatpacking, poultry processing and other jobs that can be either temporary or year round. MDE personal should explore the possibility of conducting industrial surveys as a means to clear up confusion over what constitutes temporary work.

- *Clarify the difference between qualifying moves and vacations.* HACER encountered families from our sample who may have been deemed eligible for the program based on trips to visit family and friends in Texas, Mexico and other US states or Latin American countries. Materials and trainings for recruiters should emphasize that trips to visit friends or family do not count as qualifying moves for the purposes of MEP, even if these trips cause a student to fall behind in school.

- *Encourage new recruiters to shadow and partner with more experienced recruiters.* Recruiters require a certain level of experience and skill in order to locate potentially eligible families, build trust and make accurate eligibility determinations. However, as often happens with MEP staff, recruiters experience a high degree of turnover. MDE might improve their recruiter training by creating more experiential learning opportunities, namely accompanying a recruiter with more experience one the job.

- *Help recruiters address conflict of interest issues and ensure appropriate oversight for conflict of interest situations.* While recruiters' "insider status" can help them more effectively identify migrant families and build trust, recruiters are also placed in the difficult position of evaluating the eligibility of family and friends. MDE needs to ensure that recruiters are equipped to recognize and navigate conflict of interest situations—for instance, by offering specialized training to deal with conflicts of interest. MDE should also implement and/or strengthen recruiter oversight for situations that represent clear conflicts of interest. By way of example, MDE could require a supervisor to sign off when a recruiter fills out a COE for a family member.

- *Build capacity of MEP staff in oversight positions.* Federal guidelines stress the importance oversight within an effective MEP. Oversight is important not only to ensure the quality of recruiters' eligibility determinations, but also to provide recruiters with the support they need to confront challenging working conditions and make difficult eligibility determinations. MDE should ensure that staff in oversight positions are accountable for this responsibility and have the necessary training. Staff in oversight positions needs to be knowledgeable about federal guidelines for MEP, but should also be attuned the needs of the recruiters that they supervise. In some cases, it may be appropriate for staff with oversight to shadow recruiters. This could help supervising staff to evaluate a

particular recruiter on the job. However, perhaps more importantly, it can also educate them about the skills recruiters require and the obstacles the obstacles recruiters face in their daily work.

- *Require recruiters to provide detailed information about eligible students on their COEs.* Obviously, neither recruiters nor migrant families want to deal with cumbersome and unnecessary paperwork during the identification and recruitment process. Nonetheless, recruiters should be expected to provide detailed, relevant information on COEs to facilitate oversight by MEP staff as well as review by outside auditors. Clear documentation of families' work and move history could also make it easier for recruiters to seek advice from their supervisors in making difficult eligibility determinations.

Assess Recruiter Training and Oversight Efforts through Effective Quality Control Evaluations

- *Maximize the usefulness of future re-interview initiatives by using a sufficiently-large sample size.* Re-interview processes which draw from a larger sample size than the 2006 re-interviews will produce ineligibility rates with a narrower confidence interval. Consequently, these results would better measure the effectiveness of recruiter training and oversight initiatives.

- *Do not use re-interview initiatives as a substitute for improvements in training and oversight.* MDE may be tempted to use the re-interview process as a form of quality control, for instance by disqualifying ineligible students from the program or penalizing recruiters who identified a high proportion of ineligible students. Such moves, however, would be mis-guided. Substituting the re-interview process for internal quality control efforts could skew the sample population for future re-interview processes,

meaning that future changes ineligibility rates to improvements or declines in the quality of training and oversight. Furthermore, using the re-interview process as a form of quality control might foster a climate of distrust between the re-interview team, MEP staff and identified migrant families. Such an environment could make it more difficult for the re-interview team to locate and re-interview the families of students from their sample, and thus limit the accuracy of their results.

- *Improve data collection, data entry and tracking of migrant students in Minnesota.* Good data collection and management practices could enhance MEP service and facilitate oversight. However, clean, accurate databases might also greatly facilitate quality control evaluations like the re-interview process. A significant improvement in data entry occurred following the 2005 re-interviews, when MDE requested that recruiters stop listing P.O. Boxes in the address field for some eligible students. Additionally, taking down a family's cell phone number instead of a landline could help re-interviewers to locate a family after they move to another part of Minnesota or to another state. Collecting contact information for a student at both their home base and the community to which they migrate may also make it easier to locate families. MDE might want explore making information from the New Generation Systems (NGS) database, Texas' database for migrant students, available to future re-interview teams. NGS could provide additional contact information for hard-to-track families from the sample of students in MIS 2000.

- *Educate MEP staff about re-interview initiatives and share project findings.* MEP staff is more likely to support the re-interview team if they are informed about the project. While MEP staff on the whole was extremely helpful during the 2006 re-interviews, re-interviewers also had to clear up some serious misconceptions about the 2005 re-interview process. Some project coordinators, for instance, were under the impression that HACER

had found eligible students to be ineligible in cases were there was a discrepancy between the QAD reported by the original recruiter and the QAD recorded by an HACER re-interviewer (this was not the case). Both MDE and the re-interview team need to communicate with MEP staff through all stages of the project. Re-interview findings should be organized and written up in a way that is accessible to MEP staff, and MDE should take steps to disseminate this information to program staff.

Request that OME clarify and revise key MEP regulations

- *Recommend that OME provide guidance on how to define qualifying temporary work.* Anecdotal evidence suggests that different interpretations of the definition of qualifying temporary work have created confusion about this issue at the state level. MDE should clarify and standardize definitions for qualifying and temporary work. At the same time, it is suggested that MDE ask OME for leadership and guidance on this issue. Currently, MEPs across the country are struggling with this topic, which speaks to broader debates on the changing nature of migrant work in contemporary US society. This is an area of national concern that should not be left to states to resolve individually.

- *Encourage OME to amend its zero-tolerance policy for MEP ineligibility.* Although states were allowed a 5 percent margin of error in their counts for migrant children, this provision was reversed in 1994. In is unrealistic to hold even the best recruiters to this standard, given the oftentimes subjective nature of the eligibility determination process and other challenges such as chaotic interview settings and communication. States should be accountable for ensuring the accuracy of their migrant student counts. At the same time, it is OME's responsibility to set and enforce standards that are feasible.

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APPENDICES

Appendix A: Re-interview Protocol

Summer 2006 MEP Re-Interview Protocol

Before Re-interviews

1. Be prepared to conduct most re-interviews 'on the spot' and without previous arrangements.

2. If you cannot locate a home address or a family, consider visiting common places of employment, schools, post offices, gas stations, migrant camps, trailer parks, community centers, fire stations, and other places where the community gathers. These are often good resources of information.

3. Be attentive to the Migrant Education Program (MEP) registration blitz and/or other similar events when scheduling and planning re-interview trips. The MEP blitz takes place roughly two weeks prior to the start of school, and most programs will be underway by the time we begin the 2006 Re-interview process.

4. When traveling to conduct re-interviews, be prepared to do several of them per day in the same area. Calculate realistic travel times and average re-interview durations when scheduling multiple, sequential re-interviews. Also, arrange for room reservations in local hotels during overnight trips to more remote locations

5. When re-interviewing, dress appropriately, in a manner most comfortable for and customary to interviewees

6. Carry a batch of re-interview forms, MEP contact information, resources, your contact list, and educational and promotional materials at all times. Re-interview teams may encounter unexpected opportunities for re-interviewing, or for obtaining leads for additional families on your list.

7. When approaching homes or other locations where privacy is expected, stand where others can easily see you.

8. Show identification from the Department of Education and, if possible, encourage migrant recruiters or any other assisting personnel to

introduce the re-interviewer(s) prior to conducting each re-interview (See Script).

9. Ask to be introduced as a member of the Department of Education re-interview team (See Script).

10. **IMPORTANT:** Explain that the re-interview process is a check on the Migrant Education program to ensure that students eligible to receive services are actually receiving services. Specify that you work for the Department of Education, and are not in any way connected to immigration authorities (See Script).

11. Indicate that all information provided during the re-interview is confidential, for the Department of Education, and that families were selected randomly (See Script).

12. Perform due diligence for all of the families on your list, which means make at least three attempts to contact each family before designating them "unable to track." These attempts should include one face-to-face, one phone attempt, and at least one other attempt (e.g. talking to someone at the local post office). You should exceed due diligence only for situations where you reasonably believe you will be able to locate the family (e.g. you have a compelling lead from a good information source).

13. You may schedule phone re-interviews with a family, but only in situations where you have performed due diligence and been unable to re-interview the family face to face.

During Re-interviews

14. Conduct the re-interviews in the interviewee's preferred language.

15. Do not conduct re-interviews in the presence of any Migrant Education Program recruiter or agent.

16. Re-state the purpose of the re-interview, if needed, and fill out all of the recipient and family information.

17. Proceed with the re-interview questions. Use the script as a guide. Choose the appropriate questions depending on the context.

18. Keep in mind the importance of informal social conversation as a means to establish minimal rapport with interviewees.

19. If interviewee provides information for multiple moves, ask each applicable question marked with an (*) again.

20. Repeat and elaborate on questions and ask probing questions as necessary for interviewee to understand what they are being asked.

21. Do not leave any field in the re-interview form blank. For each field that does not apply or which the family does not or cannot answer, write a note on the form accordingly, e.g., ‘n/a,’ ‘none,’ ‘refused to answer,’ ‘did not know.’

22. End each re-interview by showing the interviewee the form and re-reading what is on the form. Have the interviewee verify that the information annotated on the re-interview form is correct, and ask the interviewee if they have any questions. Remember to verify the information orally if conducting a re-interview over the phone.

23. Sign the re-interview form and request interviewee to print their name and sign the form as indication that the information is accurate.

24. If conducting a re-interview over the phone, sign the re-interview form and make a note that it was a phone re-interview directly on the form.

25. In situations where you are re-interviewing a child under 18 who is not an emancipated minor, a parent or guardian must also sign the re-interview form.

26. Remove the pink carbon copy version of the re-interview form and give it to interviewee for their records. If you are conducting a re-interview

over the phone, request a reliable mailing address for the interviewee so you may send them the pink carbon copy version of the form for their records.

27. Show interviewee the Migrant Education Program contact information listed on the re-interview form and instruct them to use it if they have questions or concerns about the re-interview or the MEP itself.

28. Offer resource and educational/promotional materials available.

29. Thank interviewee for their time and assistance in completing the re-interview.

After Re-interviews

30. Enter re-interview information in the tracking and roster electronic files.

31. Interviewers may ask follow-up questions to interviewee later, by phone, to verify information on the re-interview form. Any additional information provided after the re-interview process ends goes under the 'Comments' field in the re-interview form or the tracking sheets.

32. Determine recipient eligibility by considering the information collected in the re-interview form. Ideally, different staff members should make individual eligibility determinations and then compare their findings.

33. Complete the sections on the re-interview form marked 'office use only.' Mark eligibility finding in the bottom right corner of the re-interview form by checking 'yes' or 'no.'

34. File re-interview form first, by geographical region (1-6), then by QAD, and finally, in alphabetical order.

Appendix B: Re-Interview Form

Appendix C: Re-Interview Script

Summer 2006 MEP Re-Interview Script

GREETING

"Good morning/afternoon/evening, how are you today?"

"Buenos días/buenas tardes/buenas noches, ¿cómo está?"

CONTACTING INTERVIEWEE

"Is _____(student) available?"

"¿Está _____ (el/la estudiante) disponible?"

[OR]

"May I speak to _____(student's father/mother)?"

"¿Se encuentra Don/Doña/Sr(a)_____ (padre/madre del/ de la estudiante)?"
"¿Puedo hablar con_____(padre/madre del/ de la estudiante) por favor?"

[If necessary, ask for an alternative guardian instead.]

[If interviewee is the person with whom you had first contact proceed to INTRODUCTION. Otherwise, repeat GREETING.]

INTRODUCTION

"My name is _____, and I work with the Migrant Education Program. [Show identification] I met with [recruiter/coordinator's name], the Migrant Education Program Recruiter/Head Start Coordinator, who has met you before. Do you remember him/her? He/she told me that I may find you here."

"I am here as part of a survey for the Migrant Education Program. I work for the Minnesota Department of Education, and am not connected to immigration enforcement. Either you or one of your children were identified to receive migrant education services. The survey is intended to improve the Migrant Education Program and to determine whether it is running well. You or your child was randomly-selected from a list of people identified to receive migrant education services. The information that we gather about your family will remain confidential and be used only for the purposes of the Department of Education. Do you have a few moments to talk about the program?"

"Me llamo _____ y trabajo con el Programa de Educación para Niños Migrantes. [Muestra tu identificación]. Hablé con [nombre del/de la recrutador(a)/coordinador(a)], el/la recrutador(a) del Programa de Educación

para Niños Migrantes (o el/la coordinador(a) para el programa de Head Start), quien le conoce a usted. ¿Se acuerda de el(la)? Me dijo donde podría encontrarle."

"Estoy haciendo una encuesta para el Programa de Educación para Niños Migrantes. Trabajo por el Departamento de Educación y no tengo nada que ver las autoridades de inmigración. Usted o uno de sus hijos ha sido identificado como elegible para recibir servicios de este programa. Esta encuesta tiene el propósito de mejorar el programa y evaluar si está funcionando bien. Su nombre fue seleccionado al azar de una lista de personas que fueron identificadas como elegibles para recibir servicios del programa. La información recopilada sobre su familia será confidencial. Sólo tendrá acceso a esta información el Departamento de Educación de Minnesota. ¿Tiene unos momentos para hablar sobre el programa?"

THANK INTERVIEWEE

[If interviewee agrees to a re-interview:]

"Thanks!"
"¡Gracias!"

[OR, if interviewee is apprehensive about granting a re-interview, offer an explanation/clarification/elaboration:]

"May I explain better what we are doing or provide you more helpful information?"
"¿Puedo explicar mejor lo que estamos haciendo, o darle más información?

[Proceed with a more in-depth explanation of the re-interview process:]

"We want to make sure that the students who should receive these services are actually receiving these services. It does the program no good for districts to receive money for each student that they identify as migrant if in fact the migrant students are not receiving services."

"Queremos asegurar que los estudiantes quienes deben recibir los servicios de hecho son los que están recibiendo los servicios. De nada sirve que los distritos reciban dinero del gobierno para cada estudiante identificado como migrante si de hecho los estudiantes migrantes no están recibiendo los servicios."

[If interviewee insists on not continuing, you may provide Minnesota Department of Education contact information, thank them for their time and leave the premises.]

RE-INTERVIEW

[Fill out ALL of the recipient and family information, then proceed with Re-interview]

[1. Establish a time line of all moves made by completing columns 1 and 2 on the re-inteview form. The following questions may be helpful in completing this step.]

In the last five years, how many times have you moved?
En los últimos cinco años, ¿Cuántas veces se han movido?

Have you moved within Minnesota?
Have you moved between Minnesota and another state?
Have you moved within another state?
¿Se han movido dentro de Minnesota?
¿Se han movido entre Minnesota y otro estado?
¿Se han movido dentro de otro estado?

Can you tell me a bit about each time that you moved? For example, when you moved, where you moved from, and where you moved to?
¿Me puede contar un poco sobre cada vez que se movió? ¿Por ejemplo, cuándo se movió? ¿De dónde? ¿A dónde?

[2. Collect information about each move by filling in columns 3 through 8. The following questions may be helpful in completing this step.]

Now, I need to ask you a few questions about each of these moves. Can you tell me why you moved in [month and year X]?

Ahora, necesito hacerle algunas preguntas a cerca de cada mudaza. Cuando se movieron en [X fecha] ¿recuerda usted a qué vinieron? ¿Por qué se movieron?

When you moved in [month and year X], who were the main workers in the family?
Cuando se movieron en [X fecha] ¿quiénes principalmente trabajaron para mantener a la familia?

When you moved in [month and year X], did you all arrive together? If not, when did [student] arrive?
Cuando se movieron en [X fecha], ¿llegaron todos juntos? Si no, ¿cuándo llegó [el/la estudiante]?

[If there are multiple principle workers in the family (e.g. both mother and father work), ask the following questions for each worker]

When you moved in [month and year X], where and when did [principle worker X] work?
What was the name of the company?
What was the name of [his/her] boss?
What work did [he/she] do? What kinds of things did [he/she] do as part of [his/her] job?
Was the work temporary/seasonal or year-round?
Was the work an important means of livelihood for the family?

Cuando llegó [trabajador(a) X], ¿dónde y cuándo comenzó a trabajar?
¿Cómo se llamaba la compañía?
¿Cómo se llamaba su patrón/a?
¿Qué hacía allí? ¿A qué se dedicaba?
¿Fue trabajo para todo el año o por temporada/por un tiempo determinado?
¿Fue el trabajo importante para mantener a la familia?

[Repeat questions for each move.]

THANK INTERVIEWEE

"Thank you for your input"
"Gracias por sus comentarios."

Appendix D: Re-Interviewer Checklist

Summer 2006 MEP Re-Interviewer Checklist

☐ Identification badge

☐ Re-interview forms

☐ Ballpoint pens (for carbon-copy re-interview forms)

☐ Re-interview questions

☐ Re-interview script

☐ Re-interview tracking sheets

☐ List of identified migrant children

☐ MEP contact materials

☐ Promotional materials

☐ Local contact information: recruiter, coordinator (if applicable)

☐ Cellular telephone

☐ Team contact information

Appendix E: Re-Interview Tracking Sheet

Summer 2006 MEP Re-Interview: Tracking

PRIMARY FAMILY CONTACT:	**CONTACT METHOD/ DATE/AM or PM:**			**OUTCOME AND NOTES:**
Example: Juan Garcia, guardian of Adrian Torres	*P* *5/17* *1PM*	*P* *5/20* *7:30PM*	*FF* *6/1* *9AM*	*He works 2:30-11pm. Scheduled re-interv. During his lunch break at Lakeside Foods.*

Appendix F: HACER Tracking Codes

Summer 2006 MEP Tracking Codes

Student Sequence Number:

Last Name:

First Name:

Middle Name:

Status:
0=Unsuccessful, Exhausted all available options
1=Successful
2=Still trying to find
3=Successful, but unable to count

Move:
0=No info available on move
1=Moved back to country of origin
2=Moved back to state of origin
3=Moved to another MN town/city
4=Moved to different home in same town/city
5=Has not moved, just cannot connect
6=Moved to another state

Address:
0=No address given
1=Hotel/Migrant Camp/PO Box
2=Address exists but no longer lives there
3=Address does not exist
4=Incomplete address info
5=Still good address for them

Telephone:
0=No telephone number given
1=Old telephone number given
2=Incomplete telephone number
3=No answer and no voice mail
4=Left message, no response
5=Still good number for them

Infosource1:
0=Other
1=Neighbor
2=Family member
3=Employer

4=Recruiter/School
5=Property/Trailer Park Manager
6=Friend of Family
7=Post Office/Mail Carrier

Infosource2

Infosource3

Interviewer
1=Elisabeth
2=Kirsten
3=Alyssa
4=Jared
5=Rafael

Comments

Appendix G: HACER Eligibility Codes

Summer 2006 MEP Eligibility Codes

Student Sequence Number

Last Name

First Name

Middle Name

Birth Date

Address Code
0= No address given
1= Hotel/Migrant Camp address
2= Farm Address
3= PO Box Address
4= Other Valid address
5= Incomplete/Incorrect address

MIS Address

City

State

Zip

Phone Code

Phone

Phone_new

District Name

Recruiter Name

Region Code
1=Region 1
3=Region 3
4=Region 4
5=Region 5
6=Region 6
7=Region 6 except Metro Area

QAD Code
1 = within 1 year prior to 9/05
2 = within 2 years prior to 9/05
34 = more than 2 years prior to 9/05

MIS QAD

Interviewer
1= Elisabeth
2= Kirsten
3= Alyssa
4= Jared
5= Rafael

Interview Method
0 = no interview
1 = face-to-face
2 = phone

Employment 1

Employment Type 1
0 = undetermined
1 = crops
2 = poultry
3 = dairy
4 = meat/livestock
5 = other(s)

Employment Activity 1
0 = undetermined
1 = production
2 = processing
3 = transportation
4 = other

Employment in Agriculture 1
0=no
1=yes
3=undetermined

Employment Temporary or Season 1
0=no
1=yes
3=undetermined

Employment is PMOL 1
0=no
1=yes
2=undetermined

Emp_2

Emp_3

Emp_4

Emp_5

Emp_6

Emp_7

Intent
0=No evidence of intent for qualifying work since 9/2001
1=Evidence of intent for qualifying work since 9/2001
2=undetermined

QAD
0=No QAD since 9/2001
1=At least 1 QAD since 9/2001
2=undetermined

Move
0=No move across district lines since 9/2001
1=At least 1 move across district lines since 9/2001
2=Undetermined

Intra_move
0=no intrastate moves
1=at least 1 intrastate move since 9/2001
2=other (e.g. QAD outside of MN)

Eligibility
0=ineligible
1=eligible
2=unable to determine
3=follow-up for more info

Year Round Work Flag
1= yes

Graduation flag
1=Graduated from HS/GED before 9/2004
2=Possible graduation from HS/GED before 9/2004

Hacer QAD

arriv_2005

depart_2005

New QAD

Employment Comments

Interview Status
0=unsuccessful, exhausted all available options
1=successful, able to count
2=successful, unable to count

Comments

Appendix H: MDE Letter on Interpretation of Intent

Appendix I: Technical Appendix

Technical Appendix: Sample weight and non-response adjustment factor methods

This appendix describes the procedures used to construct the sampling weights for the Migrant Education Program (MEP) re-interview data. The data were collected using a stratified random sample with differential probabilities of selection as well as differing levels of non-response, thus requiring special weighting procedures (Kish, 1992). Three basic procedures are used to create the sampling weights. First, sample expansion weights are created to reflect the number of individuals in the target population represented by each individual in the survey sample. Second, a non-response adjustment factor is calculated for each stratum. Finally, the final sampling weights are calculated from the base weights and the non-response adjustment factor.

First, we create sample expansion weights or base weights. Base weights are defined as "the inverse of the inclusion probability of the individual in the sample" (Korn & Graubard, 1999). These base weights account for the differential probability of selection into the sample for subjects across strata. Table 1 shows the 18 strata and the base weight calculation for each.

Table 1. Sampling expansion weights (base weights) for sampling strata

Strata		Total Population (a)	Total Sample (b)	Selection probability (b / a)	Base weight (1 / (b/a))
Region 1	1: Within one year prior	182	12	0.0659	15.17
	2: Within two years	70	5	0.0714	14.00
	3: More than two years	32	2	0.0625	16.00
Region 3	1: Within one year prior	307	20	0.0651	15.35
	2: Within two years	87	6	0.0690	14.50
	3: More than two years	76	5	0.0658	15.20
Region 4	1: Within one year prior	202	13	0.0644	15.54
	2: Within two years	104	7	0.0673	14.86
	3: More than two years	158	10	0.0633	15.80
Region 5	1: Within one year prior	898	58	0.0646	15.48
	2: Within two years	394	26	0.0660	15.15
	3: More than two years	269	18	0.0669	14.94
Region 6a	1: Within one year prior	883	57	0.0646	15.49
	2: Within two years	332	22	0.0663	15.09
	3: More than two years	159	10	0.0629	15.90
Region 6b	1: Within one year prior	115	7	0.0609	16.43
	2: Within two years	127	8	0.0630	15.88
	3: More than two years	214	14	0.0654	15.29
Total		**4,609**	**300**		

If all subjects sampled were in fact surveyed, the base weights would be sufficient to expand (through weighting) the survey data to be representative of the entire target population. However, there was substantial non-response (primarily due to individuals that were unable to be located), which also varied across strata. Thus, a non-response adjustment factor (NAF) was calculated for each stratum and was used to adjust the base weights to account for non-response. Table 2 indicates the 18 strata and the non-response adjustment factor calculation for each. Notice, as the response rate becomes lower, the adjustment factor becomes higher. It is also important to note that the assumption underlying the NAF calculation is that all non-respondents are in fact similar to the respondents. In other words, it assumes that the respondents are a random subsample of the full sample that was drawn. In practice, this is often untrue.

Table 2. Non-response adjustment factors (NAF) for sampling strata

Strata		Total Sample (a)	Total Completes (b)	Response rate (b / a)	NAF (1 / (b/a))
Region 1	1: Within one year prior	12	8	0.6667	22.8
	2: Within two years	5	1	0.2000	70.0
	3: More than two years	2	0	0.0000	00.0
Region 3	1: Within one year prior	20	13	0.6500	23.6
	2: Within two years	6	4	0.6667	21.8
	3: More than two years	5	3	0.6000	25.3
Region 4	1: Within one year prior	13	11	0.8462	18.4
	2: Within two years	7	4	0.5714	26.0
	3: More than two years	10	10	1.0000	15.8
Region 5	1: Within one year prior	58	35	0.6034	25.7
	2: Within two years	26	19	0.7308	20.7
	3: More than two years	18	11	0.6111	24.5
Region 6a	1: Within one year prior	57	38	0.6667	23.2
	2: Within two years	22	10	0.4545	33.2
	3: More than two years	10	9	0.9000	17.7
Region 6b	1: Within one year prior	7	2	0.2857	57.5
	2: Within two years	8	4	0.5000	31.8
	3: More than two years	14	5	0.3571	42.8
Total		**300**	**187**		

The final weights are the product of the base weight and the non-response adjustment factor (NAF). Table 3 shows the final weight calculation for each of the 18 strata. These final weights are the sampling weights that, when applied to survey respondents (n = 187) within each stratum, will weight (or expand) the data to represent the entire target population (n = 4,609). It should be noted, however, that in Region 1/QAD 3 & 4 there were no successful interviews, thus there are no respondents to weight for representation of this stratum. Consequently, the sample weighted with the final weights is slightly smaller (n=4,577) than the full population.

Table 3. Final non-response adjusted sampling weights for sampling strata

Strata		Total Response (a)	Base weight (b)	Non-response Adjustment (c)	Final weights (b x c)	Weighted population (a x b x c)
Region 1	1: Within one year	8	15.17	1.50	22.8	182
	2: Within two years	1	14.00	5.00	70.0	70
	3: More than two years	0	16.00			
Region 3	1: Within one year	13	15.35	1.54	23.6	307
	2: Within two years	4	14.50	1.50	21.8	87
	3: More than two years	3	15.20	1.67	25.3	76
Region 4	1: Within one year	11	15.54	1.18	18.4	202
	2: Within two years	4	14.86	1.75	26.0	104
	3: More than two years	10	15.80	1.00	15.8	158
Region 5	1: Within one year	35	15.48	1.66	25.7	898
	2: Within two years	19	15.15	1.37	20.7	394
	3: More than two years	11	14.94	1.64	24.5	269
Region 6a	1: Within one year	38	15.49	1.50	23.2	883
	2: Within two years	10	15.09	2.20	33.2	332
	3: More than two years	9	15.90	1.11	17.7	159
Region 6b	1: Within one year	2	16.43	3.50	57.5	115
	2: Within two years	4	15.88	2.00	31.8	127
	3: More than two years	5	15.29	2.80	42.8	214
Total		**187**				**4,577**

Note: Weights and non-response adjustment factors are rounded to 2-digits for presentation purposes only. The actual calculations are carried out to 9-digit precision.

Appendix J: Statistical Output

Statistical Output

Ineligibility rate with completed interview sample weighted for probability of selection and adjusted for non-response (i.e. assumption that non-responders are the same as responders)

```
Survey: Proportion estimation

Number of strata =       1          Number of obs    =     187
Number of PSUs   =     187          Population size  =    4577
                                    Design df        =     186

--------------------------------------------------------------
             |             Linearized         Binomial Wald
             | Proportion   Std. Err.     [95% Conf. Interval]
-------------+------------------------------------------------
elig         |
           0 |     .36148   .0368016      .2888778    .4340823
           1 |     .63852   .0368016      .5659177    .7111222
--------------------------------------------------------------



Survey: Proportion estimation

Number of strata =       1          Number of obs    =     187
Number of PSUs   =     187          Population size  =    4577
                                    Design df        =     186

      _prop_1: elig = 0
      _prop_2: elig = 1

            1: qadsamp = 1
            2: qadsamp = 2
           34: qadsamp = 34

--------------------------------------------------------------
             |             Linearized         Binomial Wald
        Over | Proportion   Std. Err.     [95% Conf. Interval]
-------------+------------------------------------------------
_prop_1      |
           1 |   .1723462   .0388019      .0957977    .2488946
           2 |   .4541576   .0803919      .2955605    .6127547
          34 |   .8021724   .0652451       .673457    .9308879
-------------+------------------------------------------------
_prop_2      |
           1 |   .8276538   .0388019      .7511054    .9042023
           2 |   .5458424   .0803919      .3872453    .7044395
          34 |   .1978276   .0652451      .0691121     .326543
--------------------------------------------------------------
```

Uncertainty Scenario 1: Ineligibility rate under assumption that all non-responders are eligible

```
Scenario 1: All nonresponders eligible

Survey: Proportion estimation

Number of strata =       1          Number of obs    =     300
Number of PSUs   =     300          Population size  =    4609
                                    Design df        =     299

--------------------------------------------------------------
             |             Linearized         Binomial Wald
             | Proportion   Std. Err.     [95% Conf. Interval]
-------------+------------------------------------------------
elig1        |
           0 |   .2272051   .0242609      .1794614    .2749488
           1 |   .7727949   .0242609      .7250512    .8205386
--------------------------------------------------------------



Survey: Proportion estimation

Number of strata =       1          Number of obs    =     300
Number of PSUs   =     300          Population size  =    4609
                                    Design df        =     299

      _prop_1: elig1 = 0
      _prop_2: elig1 = 1

            1: qadsamp = 1
            2: qadsamp = 2
           34: qadsamp = 34

--------------------------------------------------------------
             |             Linearized         Binomial Wald
        Over | Proportion   Std. Err.     [95% Conf. Interval]
-------------+------------------------------------------------
_prop_1      |
           1 |   .1081074   .0241027      .0606749    .1555399
           2 |   .2717508   .0519076      .1696003    .3739013
          34 |   .5118768    .065195      .3835776     .640176
-------------+------------------------------------------------
_prop_2      |
           1 |   .8918926   .0241027      .8444601    .9393251
           2 |   .7282492   .0519076      .6260987    .8303997
          34 |   .4881232    .065195       .359824    .6164224
--------------------------------------------------------------
```

Uncertainty Scenario 2: Ineligibility rate under assumption that 85% of non-responders in each QAD are eligible

```
Scenario 2: 85% nonresponders eligible


Survey: Proportion estimation

Number of strata =       1          Number of obs    =     300
Number of PSUs   =     300          Population size  =    4609
                                    Design df        =     299

--------------------------------------------------------------
             |             Linearized         Binomial Wald
             | Proportion   Std. Err.     [95% Conf. Interval]
-------------+------------------------------------------------
elig2        |
           0 |   .2841384   .0261139      .2327481    .3355287
           1 |   .7158616   .0261139      .6644713    .7672519
--------------------------------------------------------------



Survey: Proportion estimation

Number of strata =       1          Number of obs    =     300
Number of PSUs   =     300          Population size  =    4609
                                    Design df        =     299

      _prop_1: elig2 = 0
      _prop_2: elig2 = 1

            1: qadsamp = 1
            2: qadsamp = 2
           34: qadsamp = 34

--------------------------------------------------------------
             |             Linearized         Binomial Wald
        Over | Proportion   Std. Err.     [95% Conf. Interval]
-------------+------------------------------------------------
_prop_1      |
           1 |   .1628975   .0287162      .1063861    .2194089
           2 |   .3392084   .0552052      .2305684    .4478483
          34 |   .5620044   .0646765      .4347256    .6892833
-------------+------------------------------------------------
_prop_2      |
           1 |   .8371025   .0287162      .7805911    .8936139
           2 |   .6607916   .0552052      .5521517    .7694316
          34 |   .4379956   .0646765      .3107167    .5652744
--------------------------------------------------------------
```

Uncertainty Scenario 3: Ineligibility rate under assumption that eligibility is QAD sample rate + 10%

```
Scenario 3: QAD+10% nonresponders eligible

Survey: Proportion estimation

Number of strata =       1          Number of obs    =     300
Number of PSUs   =     300          Population size  =    4609
                                    Design df        =     299

--------------------------------------------------------------
             |             Linearized         Binomial Wald
             | Proportion   Std. Err.     [95% Conf. Interval]
-------------+------------------------------------------------
elig4        |
           0 |   .3261268   .0271086       .272779    .3794747
           1 |   .6738732   .0271086      .6205253     .727221
--------------------------------------------------------------



Survey: Proportion estimation

Number of strata =       1          Number of obs    =     300
Number of PSUs   =     300          Population size  =    4609
                                    Design df        =     299

      _prop_1: elig4 = 0
      _prop_2: elig4 = 1

            1: qadsamp = 1
            2: qadsamp = 2
           34: qadsamp = 34

--------------------------------------------------------------
             |             Linearized         Binomial Wald
        Over | Proportion   Std. Err.     [95% Conf. Interval]
-------------+------------------------------------------------
_prop_1      |
           1 |     .13205   .0262699      .0803527    .1837474
           2 |   .4324845    .057712      .3189112    .5460577
          34 |   .7485875   .0563796      .6376365    .8595385
-------------+------------------------------------------------
_prop_2      |
           1 |     .86795   .0262699      .8162526    .9196473
           2 |   .5675155    .057712      .4539423    .6810888
          34 |   .2514125   .0563796      .1404615    .3623635
--------------------------------------------------------------
```

Uncertainty Scenario 4: Ineligibility rate under assumption that eligibility varies by QAD as a function of telephone number type and address type (predicted probability).

```
Scenario 4: Nonresponders by QAD phone/address eligible

Survey: Proportion estimation

Number of strata =       1          Number of obs    =     300
Number of PSUs   =     300          Population size  =    4609
                                    Design df        =     299

--------------------------------------------------------------
             |             Linearized         Binomial Wald
             | Proportion   Std. Err.     [95% Conf. Interval]
-------------+------------------------------------------------
elig3        |
           0 |   .3670123   .0278889       .312129    .4218956
           1 |   .6329877   .0278889      .5781044     .687871
--------------------------------------------------------------



Survey: Proportion estimation

Number of strata =       1          Number of obs    =     300
Number of PSUs   =     300          Population size  =    4609
                                    Design df        =     299

      _prop_1: elig3 = 0
      _prop_2: elig3 = 1

            1: qadsamp = 1
            2: qadsamp = 2
           34: qadsamp = 34

--------------------------------------------------------------
             |             Linearized         Binomial Wald
        Over | Proportion   Std. Err.     [95% Conf. Interval]
-------------+------------------------------------------------
_prop_1      |
           1 |   .1868881   .0303004      .1272591    .2465171
           2 |   .4611075   .0580825      .3468052    .5754097
          34 |   .7647647   .0551597      .6562143    .8733151
-------------+------------------------------------------------
_prop_2      |
           1 |   .8131119   .0303004      .7534829    .8727409
           2 |   .5388925   .0580825      .4245903    .6531948
          34 |   .2352353   .0551597      .1266849    .3437857
--------------------------------------------------------------
```

Uncertainty Scenario 5: Ineligibility rate under assumption that 50% of non-responders in each QAD are eligible

```
Scenerio 5: 50% nonresponders eligible

Survey: Proportion estimation

Number of strata =       1          Number of obs    =     300
Number of PSUs   =     300          Population size  =    4609
                                    Design df        =     299

--------------------------------------------------------------
             |             Linearized         Binomial Wald
             | Proportion   Std. Err.     [95% Conf. Interval]
-------------+------------------------------------------------
elig5        |
           0 |   .4133548   .0284867       .357295    .4694146
           1 |   .5866452   .0284867      .5305854     .642705
--------------------------------------------------------------



Survey: Proportion estimation

Number of strata =       1          Number of obs    =     300
Number of PSUs   =     300          Population size  =    4609
                                    Design df        =     299

      _prop_1: elig5 = 0
      _prop_2: elig5 = 1

            1: qadsamp = 1
            2: qadsamp = 2
           34: qadsamp = 34

--------------------------------------------------------------
             |             Linearized         Binomial Wald
        Over | Proportion   Std. Err.     [95% Conf. Interval]
-------------+------------------------------------------------
_prop_1      |
           1 |   .2874821   .0350863      .2184347    .3565295
           2 |   .4875533   .0582289      .3729628    .6021437
          34 |   .6809489    .060651      .5615921    .8003057
-------------+------------------------------------------------
_prop_2      |
           1 |   .7125179   .0350863      .6434705    .7815653
           2 |   .5124467   .0582289      .3978563    .6270372
          34 |   .3190511    .060651      .1996943    .4384079
--------------------------------------------------------------
```

Subsample Analysis 1: Excluded 24 subjects with a year-round-work flag. Analysis to determine what would be the Ineligibility rate if these 24 individuals had never been identified. After exclusion, sampling weights with non-response adjustment were re-calculated.

```
Survey: Proportion estimation

Number of strata =       1          Number of obs    =     163
Number of PSUs   =     163          Population size  =    4553
                                    Design df        =     162

--------------------------------------------------------------
             |             Linearized         Binomial Wald
             | Proportion   Std. Err.     [95% Conf. Interval]
-------------+------------------------------------------------
elig         |
           0 |   .3021716   .0384497      .2262445    .3780987
           1 |   .6978284   .0384497      .6219013    .7737555
--------------------------------------------------------------



Survey: Proportion estimation

Number of strata =       1          Number of obs    =     163
Number of PSUs   =     163          Population size  =    4553
                                    Design df        =     162

      _prop_1: elig = 0
      _prop_2: elig = 1

            1: qadsamp = 1
            2: qadsamp = 2
           34: qadsamp = 34

--------------------------------------------------------------
             |             Linearized         Binomial Wald
        Over | Proportion   Std. Err.     [95% Conf. Interval]
-------------+------------------------------------------------
_prop_1      |
           1 |   .1459023   .0375921      .0716685     .220136
           2 |   .3621696   .0822506      .1997481    .5245911
          34 |   .6929316    .094297      .5067218    .8791415
-------------+------------------------------------------------
_prop_2      |
           1 |   .8540977   .0375921       .779864    .9283315
           2 |   .6378304   .0822506      .4754089    .8002519
          34 |   .3070684    .094297      .1208585    .4932782
--------------------------------------------------------------
```

Subsample Analysis 2: Excluded subjects in the Twin Cities metro area (Region 6b). Analysis to determine what would be the ineligibility rate if individuals in Region 6b had never been identified.

```
Survey: Proportion estimation

Number of strata =       1          Number of obs    =     176
Number of PSUs   =     176          Population size  =    4121
                                    Design df        =     175

--------------------------------------------------------------
             |             Linearized         Binomial Wald
             | Proportion   Std. Err.     [95% Conf. Interval]
-------------+------------------------------------------------
elig         |
           0 |   .3124834   .0351598      .2430917    .3818752
           1 |   .6875166   .0351598      .6181248    .7569083
--------------------------------------------------------------



Survey: Proportion estimation

Number of strata =       1          Number of obs    =     176
Number of PSUs   =     176          Population size  =    4121
                                    Design df        =     175

      _prop_1: elig = 0
      _prop_2: elig = 1

            1: qadsamp = 1
            2: qadsamp = 2
           34: qadsamp = 34

--------------------------------------------------------------
             |             Linearized         Binomial Wald
        Over | Proportion   Std. Err.     [95% Conf. Interval]
-------------+------------------------------------------------
_prop_1      |
           1 |   .1571034   .0354598      .0871194    .2270873
           2 |   .4160908   .0832177      .2518513    .5803302
          34 |   .7382221   .0801487      .5800397    .8964045
-------------+------------------------------------------------
_prop_2      |
           1 |   .8428966   .0354598      .7729127    .9128806
           2 |   .5839092   .0832177      .4196698    .7481487
          34 |   .2617779   .0801487      .1035955    .4199603
--------------------------------------------------------------
```