



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
WASHINGTON, DC 20410-6000

OFFICE OF POLICY DEVELOPMENT  
AND RESEARCH

MEMORANDUM FOR: Chandana L. Achanta, Office of Information and Regulatory Affairs,  
Office of Management and Budget

FROM: Todd Richardson, Director, Program Evaluation Division

SUBJECT: Modifications to data collection protocol for Moving to Opportunity (MTO) study

DATE: March 13, 2008 (Revised memo April 9, 2008)

The original March 13, 2008 version of this memo was a follow-up to our phone conversation of February 26 in which we described modifications to the data collection protocol for the long term evaluation of the Moving to Opportunity study. Those initial changes were made in response to the first pretest of the MTO data protocol, conducted in November 2007. *On April 8<sup>th</sup> NBER, HUD and OMB held another conference call to briefly discuss the results of the second pretest of the MTO data collection protocols, which was completed in March 2008 with 13 MTO adults and 26 MTO youth ages 10 to 20. Updates to the original March 13 version of this memo, reflecting new modifications that NBER and HUD propose to the MTO data collection plans in response to the pretest2 findings, are indicated in italics in what follows.*

The U.S. Department of Housing and Urban Development (HUD) issued contract C-CHI-00808 to the National Bureau of Economic Research (NBER) to carry out the long-term evaluation of HUD's Moving to Opportunity (MTO) residential mobility experiment. NBER has subcontracted with the University of Michigan's Institute for Social Research (ISR) to carry out the data collection activities. The sample frame for the final impact analysis consists of one adult from each of the 4,604 households in the MTO study and up to 6,311 youth ages 10-20 as of December 31, 2007 (up to three per MTO household) who resided with MTO families at time of enrollment.

In August 2007 HUD and NBER submitted materials to OMB for approval of the long-term MTO data collection plan. In November 2007, OMB provided approval to HUD and NBER to conduct two pre-tests of the proposed data collection plan, with the requirement that we report back to OMB about the results of those pretests before OMB issues final approval for field data collection from the sample of MTO program participants. OMB's initial clearance, Number 2528-0251, expiration date 11/30/2010 can be found in Appendix A.

The first pretest was conducted in November 2007 (after OMB approval) with a convenience sample of 9 adult female household heads and 15 youth ages 10-20. The households were drawn from a sample of Detroit families provided to NBER by HUD, and were selected to match the MTO sample on the basis of age, race, and other socio-demographic characteristics. The pretest included the adult and youth surveys, youth achievement tests, measurement of height and weight, and interviewer observations of respondent neighborhoods, but excluded collection of other biomarkers

such as blood pressure and blood spots. The second pretest is scheduled to be conducted in March 2008 using a small sample of MTO study adults and youth. *We concluded the second pretest in March 2008 with a final sample of 13 MTO adults and 26 MTO youth aged 10 to 20.* The final field survey work is currently scheduled to begin in June 2008.

The first MTO pretest in November was quite successful. Debriefings with the ISR interviewers suggested that neither the interviewers nor the respondents had trouble understanding the questions or experienced any difficulty in navigating and completing the questionnaires. However the interviews ran much longer than we had hoped for. As a result, HUD and NBER have striven to substantially scale back or revise items to reduce the overall length of the survey. Most of the changes are deletions to questions while minimizing loss of substantive information. Other changes include streamlining who is eligible to be asked about which item and in some cases we rearranged material or slightly reworded questions. We have also slightly modified the consent forms for MTO at the suggestion of OMB (during our previous discussions) and our technical advisors for biomarker collection.

*The second MTO pretest in March 2008 was also quite successful. The adult and youth surveys are working quite smoothly. We were successful in our efforts to substantially scale back many of the modules that came in quite long from the first pretest, particularly those modules designed to measure mental health, crime victimization and risky behavior. The second pretest was also the first time ISR pre-tested the MTO data collection protocols for physical measures including height, weight, waist circumference, blood pressure and blood spots. The interviewers who conducted the second pretest will be serving as the team leaders for the MTO field data collection, scheduled to begin in June, and have all been certified to draw blood samples. All 13 MTO adults in the second pretest consented to blood sample collection (i.e. a 100% blood spot consent rate). Much of the focus of our work in preparation for survey fielding will be minor and primarily related to methods of improving efficiency of data collection.*

To provide OMB with as much review time as possible, this memo summarizes changes to the adult and youth survey and the consent forms *based on the results from the first and second MTO pretests*. Complete versions of all of these materials are provided as appendices. These materials reflect nearly all of the revisions that will ultimately have been made between our initial August 2007 submission to OMB and the final data collection. We would like to make OMB aware of these modifications as early as possible, rather than waiting until after pretest 2 is completed. Approval for MTO fieldwork, scheduled to start in June 2008, is particularly important since NBER and ISR have made financial and related resource commitments to a June 2008 start date for fielding the survey (i.e., commitments from over 50 interviewers, and nonrefundable reservations for conference space and hotel rooms for training).

Please do not hesitate to contact me at 202-402-5706 with any questions.

The remainder of this memo provides updates on changes to the:

- Consent process and forms
- adult survey instrument, language assessments, and biomarker data collection
- youth survey instrument and achievement assessments

Appendices include:

Appendix A: Initial OMB clearance

Appendix B: Consent Forms

Appendix C: Adult Survey Instrument and Respondent Booklet

Appendix D: Physical Measures Protocol and Report Forms

Appendix E: Youth Survey Instrument and Respondent Booklet

## **I. Revisions to the MTO Consent Forms**

The August 2007 OMB submission for the MTO long-term evaluation described a consent process whereby we would seek permission of the core household head for completing the survey via five separate consent forms:

1. Signed consent for the MTO survey instrument;
2. Signed consent for physical measures (height, weight and blood pressure);
3. Signed consent for blood samples;
4. Signed consent for administrative records.
5. Signed consent for permission to interview underage children

OMB asked that we consolidate the consent for the MTO survey and the physical measures (height, weight, blood pressure), which we have done. OMB also requested that we consolidate the incentive payments (so that the \$50 we were going to offer respondents to complete the survey during phase 1 data collection now compensate them for both the survey and the physical measures), which we have done. OMB also requested that we limit the incentive payment for blood spot collection during phase 1 data collection to \$25, which we have done.

The main change that we have made to our proposed MTO consent strategy is to further consolidate these materials into three signed consents for MTO adults:

1. Signed consent for MTO surveys, physical measures, and blood samples;
2. Signed consent for administrative records;
3. Signed consent for permission to interview underage children;
4. And, verbal re-consent for blood sample collection at the end of the survey.

*Note that between the original OMB submission and pretest2 we did not make any changes whatsoever to several of these consent forms, including the signed consent for administrative records and for permission to interview the respondent's children. This further consolidation in the consent strategy was made at the suggestion of Stacy Tessler Lindau, MD, Assistant Professor in the Department of Obstetrics and Gynecology at the University of Chicago and a member of the investigation team for the National Social Life, Health, and Aging Project (NSHAP). The NSHAP used a similar consolidated signed consent form and verbal re-consent for blood samples, which achieved extremely high overall consent rates for blood spot collection and – crucial for MTO given the socio-demographics of the program population – the blood sample consent rate did not seem to vary within the NSHAP sample by income or race. The signed consent for combined survey, physical measures and blood samples emphasizes that respondents will have the chance to decline to participate in blood sample collection at the end of the survey, and more generally can stop participating in the study any time they wish. All 13 MTO adults in pretest2 consented to have blood samples taken.*

*The new versions of these consent forms are attached at Appendix B. These new versions reflect OMB's request to remove "OMB Disclaimer" and add new language regarding public reporting burden; and removal of the administrative records data collection consent. We are removing consent for administrative records data collection for several reasons: (1) at baseline HUD already obtained consent to collect administrative data from all heads of MTO households, covering themselves and their children. The purpose of adding a new administrative records*

*consent form to the long-term survey was really to seek consent among those children who are now 18 or older and who can give their own consent for future data collection; (2) the new administrative consent forms in the long-term surveys would only capture the survey sample frame, which undermines one of the great strengths of administrative data matching (measurement of outcomes for the full program population, including those not surveyed); (3) the baseline MTO administrative consent forms seem sufficient to secure administrative data records for the long-term evaluation, as suggested by our success to date in securing and negotiating agreements with administrative agencies; and most importantly (4) we need to focus the limited time that we have available in-person with MTO program participants for the long-term MTO study on those data collection activities that are directly required of NBER by its evaluation contract with HUD; in contrast, the new administrative data consent forms would have supported subsequent extra matching and analyses beyond the scope of the current HUD-NBER contract.*

## **II. Revisions to the Adult Survey Instrument, Biomarker Data Collection and Language Assessments**

The following discussion is structured so that major revisions are described first. Item numbers mentioned below are current item numbers in the updated survey. We do not discuss modules that have not changed since the August MTO OMB submission, including Neighborhoods (HNB), Education & Training (HED), Employment & Earnings (HEM & HEMS), K6/Tranquility (HK6), Mental Health Screener (HSC) and Mania (HMA). The adult survey instrument is provided in Appendix C.

### **Adult Instrument: Revisions**

Household Roster & Screener (HRS): In the August submission, we proposed to ask the head of household to confirm basic identifying information (name, date of birth, gender, race, etc.) for each member of the household. Note that per discussions with OMB we have since removed any queries or confirmation of racial or ethnic group. The first pretest revealed that this approach of confirming identifying information took far too much time. In addition, we think the quality of the demographic information that we already have is quite good. In the new version of this module, the interviewer will simply read pre-loaded information on the first names of baseline household members and ask the head of household to confirm whether the person is still living in the household. Interviewers will not ask about nor read information about other identifying information such as date of birth and gender. In addition, we will ask a very short series of questions about basic demographic characteristics, such as age and gender, of new current members of the household who were not in the baseline household and for whom we do not have baseline identifying information already in hand.

This version of HRS includes two other revisions. First, in the previous survey submitted to OMB, we proposed to ask the adult respondent to answer a series of questions about selected youth in our long-term study survey sample frame (this is the Parent on Youth, or HPY, module). This included a short set of items about whether the youth had ever lived away from the parent for a month or more, and if yes, for how long and why. We moved this series of questions to HRS as it is a more natural fit with the series of questions regarding who is and is not living in the household. Second, HRS includes a question about the street address for youth, who were present in the household at baseline, and who no longer live with the adult. This type of address information will be crucial for helping us track the neighborhood trajectories of youth as well as adults in the MTO study.

*Results from pretest2 confirmed that these revisions worked well and reduced by half the time it takes to get through this module. We are planning very minor additional refinements such as dropping birth date if we are already asking for age.*

Outlook & Social Networks (HSN): This section took twice as long as expected to administer during the first pretest (15 minutes compared to the expected 7). The Pretest 1 version of the survey included a set of items to measure the quality of the everyday experiences that people enjoy (as a complement to inquiring more general about overall happiness) that build off of work developed by Kahneman and Krueger, called the U-index (Kahneman and Krueger, 2004).

This index alone took about 5 minutes during Pretest 1, so to save time we cut out the U-index

questions altogether. The adult survey still includes a series of other standard questions about happiness such as general satisfaction with life (from the General Social Science Survey), satisfaction/happiness on behalf of one's child, and satisfaction/happiness with schools.

*We learned from pretest2 that respondents got confused when asked to switch between thinking about all friends for some items and then close friends for other items. We are scaling back and revising this module so that we only ask about close friends.*

Housing Consumption & Mobility (HHC): In the August submission, this module was designed to ask respondents to verify or correct their residential address history from the time of MTO random assignment through the time of the long-term MTO survey interview. This version of the module then asked respondents to answer a series of follow-up questions about the conditions of their current housing unit (where they are living at the time of the survey), and after completed reporting of all addresses, the respondent is then asked about which address was their most (and least) favorite and why. We altered this module in the following ways: (1) the sequence of the mobility trajectory is reversed, so that we now ask respondents to work backward in reconstructing their address history from their present address back to where they were living at the time of random assignment. We have learned that recall of prior addresses is easier for respondent when they begin with their current address; (2) we deleted the items on most or least favorite address and why as it was challenging for respondents to identify reasons that cleanly fit into pre-categorized response options and we want to minimize the number of open ended items in the survey; and (3) at HUD's suggestion NBER has deleted a few questions on housing quality that HUD deemed to be duplicative.

*In pretest2, interviewers reported that the mobility trajectory worked well and respondents were able to easily confirm or correct their preloaded address information based on tracking MTO families for the past decade or more. In addition to confirming each address, we asked respondents why they moved to their current address and each prior address until the time they were randomly assigned into the MTO study. Because the reasons why respondents move substantially vary and often entail a variety of factors, answering this item is taking a lot of time. For survey fielding we are only going to ask respondents about why they moved to their current address and refining the response categories so that we can distinguish involuntary from voluntary reasons for a move. We are further scaling back by removing two items about problems with current housing that are duplicative, and two items that seek more detail about reasons why there were payment delays on utility payments.*

Income & Public Assistance (HIN): In the August submission we proposed to ask respondents about three components of income—earnings, other income and child support income. We then proposed to ask respondents about total household income across all members of the household in the prior calendar year. We learned in pre-test 1 that to answer the item on total household income respondents took time to hand-calculate and sum the various components of income from members of the household. To save overall time on this series of items and to minimize any errors resulting from hand calculations, we revised this set of items to now ask respondents about each of the key components of income (their own earnings, their spouse's earnings, earnings of others in the household, public assistance income, business income and other income). As was the case in the

August submission of the survey, each of these components has its own unfolding scale so that if a respondent states “don’t know” she is asked a short set of items with ranges of income in \$5000 increments, a method that has been shown to be effective in increasing validity of income reporting from the MTO interim survey. The survey computer software will total these components for the respondent and then the respondent will be asked to confirm the estimate. The respondent also has the opportunity to adjust the final estimate if needed.

*The income calculator approach described above worked well in pretest2 both in decreasing the time it takes to collect this information and increasing the quality of the data. We will carry this approach through in survey fielding.*

Mental Health/Crime Victimization modules: The August submission of the MTO adult and youth interviews included several modules designed to measure DSM-IV diagnoses of mental health disorders—including depression, anxiety, panic disorders, intermittent explosive disorder, conduct disorder—originally designed and implemented as part of the National Co-Morbidity Study (NCS). These modules ran much longer than anticipated during Pretest 1. As such, we worked closely with Ronald Kessler, who is principal investigator and designer of these modules as part of the National Co-Morbidity Survey, to revise and scale back items while still preserving our ability to diagnosis the various disorders we are interested in measuring. We incorporated revisions that should save several minutes in the depression, panic, generalized anxiety, and intermittent explosive disorder modules and substantially scaled back on the crime victimization/post-traumatic stress disorder (PTSD) module. In addition to the content revisions, we inserted wherever possible new skip patterns in the long series of symptom questions that appears in most of these modules. Note that the revisions to the adult modules are also implemented as revisions to the comparable youth modules.

- Depression (HDE): In the series of items about symptoms during a depressive episode of two weeks or longer (HDE9\_D26), three items were removed (more energy than usual, loss of self-confidence, and feelings of guilt) because they are not necessary for a diagnosis. Another item in the series, HDE9o\_D26u, was changed from asking about feeling not as good as other people to its current form (feeling down on oneself, no good or worthless) per an update to the NCS.
- Panic Disorder (HPD): Because diagnosis of panic disorder requires a certain number of panic attacks to have occurred “out of the blue”, we moved the question about the lifetime number of such attacks to early in the module so as to skip out any respondents who have not experienced the number required for diagnosis. Similarly, due to their lack of inclusion in the criteria for diagnosis, we removed questions about the number of other types of attacks.
- Generalized Anxiety Disorder (HGA): About 20 symptom items were removed from this module because they are not required for the specific diagnosis that we are interested in measuring.
- Intermittent Explosive Disorder (HIE): We removed several items that are not required for diagnosis in order streamline this module. These items are questions about the frequency of feeling that one’s anger was out of control during an anger attack; the combined value of items broken during an attack; the number of times an attack resulted in someone else needing medical attention; how much the attacks interfered with the respondent’s life; and how often the respondent felt guilty, embarrassed or regretful following an attack. Inadvertently missing from the previous version of the module were two diagnosis-required questions regarding whether



attacks ever or always occur due to the effects of other physical illnesses or medications. We have added those in.

- Crime Victimization/PTSD (HCV): As mentioned above, this module was dramatically reduced in scope and length. The most significant change is the replacement of NCS questions designed to produce a PTSD diagnosis and to a PTSD “short form” comprised of six questions that are asked once about the respondent’s reaction to the most traumatic lifetime experience and asked a second time about reactions to any lifetime traumatic experience in the past year. This reduces the number of reaction questions from nearly 40 to only 12. Furthermore, to reduce the number of respondents who are asked these reaction questions, we narrowed the scope of traumatic experience question by retaining only inter-personal experiences (experiences such as man-made and natural disasters and car accidents were removed). Also removed from the experience list were the four MTO Interim items (being chased while fearing harm from the pursuer, being beaten up even if not badly, being mugged, and experiencing a home break-in), which were shifted to later in the module. These changes reduce the number of qualifying traumatic experiences from 22 to 11. The four personal Interim items were combined with subsequent items asked about other members of the respondent’s household, yielding more of an exact replication of these Interim items. As a follow-up to these items, we ask whether anyone was arrested in connection with crime victimization after each item the respondent endorses. This arrest question was previously asked only about the most traumatic experienced identified earlier in the module.

*These modules performed extremely well in pretest2 and timing results show substantial time savings, nearly 12 minutes on average, compared to the version of these modules tested in pretest1.*

### **Adult Instrument: Further Cuts & Minor Revisions**

Savings & Assets (HSA): The August submission version of this module performed well and within the time we had expected during pre-test 1. Because of the overall time constraints on the adult survey and the importance of scaling back, we are deleting several lower priority items. We will still ask MTO adult respondents about whether they have a checking or savings account (HSA1), but we will cut follow-up questions about whether the adult has other types of savings because we expect the prevalence rates for these types of savings will be very low. We will still ask respondents who are home owners about the present value of their home, but we will eliminate related questions about the purchase price and year of the home. Expecting the prevalence rate among the MTO population to be very low, we cut the question about student loan debt (we still ask about credit card, vehicle loan, and medical loan debt (HSA7-13a)). Finally, we retained the questions about where the respondent would go to borrow \$500 if they had to (HSA16-17) but cut the follow-up questions about the interest rate they would be charged for borrowing, assuming that we will be able to generally determine high- versus low-rates based on borrowing location.

*In pretest2, this module continued to perform well. In the interest of striving for further time savings in the survey, we are deleting a few more items on the value of a respondent’s home, how much is owed on a car, where respondents go to cash their checks, and one of two items designed to measure financial hardship.*

Physical Health (HPH): This module also ran quite long during Pretest 1. We retained the set of

questions about various chronic health problems (headaches, back or neck pain, arthritis, strokes and heart attacks (HPH7a-f)) but cut the series of questions on doctor diagnosed illnesses (including heart or lung disease, HIV and cancer) because these questions could confound MTO impacts on health from MTO impacts on the likelihood of seeing a doctor and getting a diagnosis. Similarly, we will still ask whether respondents have had an injury that required medical attention (HPH16) and the number of times they've visited a hospital ER (HPH19) in the past 12 months, but because we expect hospitalizations to be rare in the MTO population, we cut the set of four follow-up items about whether the respondent or any member in the household had any overnight hospital stay and (if so) how many stays and how many total days. We also scaled back the functional limitation questions by using the SF-12 version of these items, which is designed to be a shorter version of the SF-36. This included, for example, converting ten items (vigorous activities like running, moderate activities like moving a table, lifting or carrying groceries, climbing several flights of stairs, climbing one flight of stairs, bending, walking more than one mile, walking several blocks, walking one block, bathing or dressing yourself) into three items: moderate activities such as moving a table, pushing a vacuum cleaner, bowling or playing golf (HPH26b), lifting or carrying groceries (which we retain because it replicates an item asked in the Interim survey (HPH26c), and climbing several flights of stairs (HPH26d). Finally, we limited the questions about problems with work or other regular daily activities coming as a result of physical health to two (of four) items: accomplishing less than desired and being limited in the kind of work or other activities.

*Four physical measures were collected during the physical health module in the second pretest: height, weight, waist circumference and blood pressure. We had not collected these measures during the first MTO pretest. We are pleased to report that collection of these physical measures went very smoothly in the second MTO pretest. Interviewers and respondents report that they welcome the collection of these measures at this point in the survey as it gives interviewers and respondents a chance to get up and move around. The physical measure protocols are adopted from the Health and Retirement Survey and reviewed by Stacy Lindau, MD, a member of the faculty of the University of Chicago Pritzker School of Medicine and principal investigator of the NSHAP study, and Thom McDade, Professor at Northwestern University. We will be working on streamlining and simplifying the protocols with interviewers and ISR.*

Substance Abuse (HSU): In the August submission, this module included 5 questions about whether the adult's alcohol use in the past month caused problems for the respondent's life and then repeated the same 5 questions for drug use. To save time, because extensive alcohol and drug use often co-occur, and per recommendations by Ronald Kessler, the current version combines these questions to ask about both alcohol and drug use (where applicable).

*Moving forward, we will retain all questions designed to measure problem drinking and drug use but will drop a few detailed items about frequency of drinking.*

Mental Health Services (HSR): In this module we are following Ronald Kessler's recommendation to collapse the set of six questions about mental services into 3 items.

Parent Report on Youth (HPY): We are proposing two revisions from the version submitted to OMB in August. First, we will ask adult respondents about one randomly selected baseline household youth who is 10 to 17 as of December 2007, as compared to every baseline household

youth who is 10 to 17 as of December 2007. This will reduce time but still give us information about items such as parent involvement in their children's schooling. Second, we moved the school history and related items about youth's current schooling from the adult survey to the youth survey.

Finally, as mentioned above, items related to the youth having lived away from the head of household have been moved from this module to the household roster (HRS).

*We are further scaling back items in this module by dropping questions that ask parents about their child's current or last year of school enrollment, grade retention and suspensions/expulsions since we are collecting this same information from youth directly in the youth survey.*

Adult report on other household members (HHO): We removed two items about smoking. We also slightly revised the item about whether the household member has been arrested, convicted of a crime or put in jail in the past year to a related questions about whether the person has ever spent any time in jail or prison and, if so, how much time the person spent there and the last time the person was there (HHO10a-c).

Adult relationships and parenting (HRL): Revisions in this module include a wording change of the initial question about current romantic relationship status from a yes/no format to other options beside being married, being in a serious relationship, or not being in a serious relationship of any kind (new options include married but separated and divorced). We will continue to ask about the respondent's general satisfaction with their relationship with a spouse or partner, but will cut the detailed questions about the nature of the relationship related to affection, commitment, etc. Additionally, we removed two items about the parent's self-initiated contact with the youth's teacher or school.

*We will be removing duplicative information about current marital status since we will have updated household roster information and one of two items designed to measure how late children are allowed to stay out.*

Decision Making (HDM): Several lower priority items were cut from this section in order save time. These items include: planning for expenses (3 items), time preference for money from a trusted relative, general risk attitudes, trusting the local public schools and city / local government (2 items), and trusting behavior such as lending money (2 items). Also, to improve the measurement of MTO's effect on language, we have added several items to this module because it is the last module of the survey (see further discussion below).

*In pretest2, we learned more about how well the items in this module were able to measure risk aversion and delayed gratification as they were intended to, and plan to appropriately adjust some of the parameters in the response categories to avoid clustering of responses in, for example, a preference for one payout structure perhaps sooner, vs. another more generous but later payout structure.*

## **Language Assessments**

In the August MTO submission we described language assessments as an important aspect of the MTO long-term data collection to learn more about social class discrimination. The MTO survey

subcontractor, ISR, will digitally audiotape the MTO long-term survey interviews for their own quality control purposes, and we will use these same recordings to analyze language patterns. We ultimately will include three open-ended items at the end of the adult and youth survey, in addition to the standard item that ends the survey as a thank you to the respondent and gives them the opportunity to discuss any concerns or questions. These three items will be chosen out of six potential open ended items that will be included on the instruments that we use for the second MTO pretest conducted in March 2008.

For the final MTO field surveying, our plan is to assign 750 MTO adults and 750 youth to receive the language items, with each selected person being randomly asked to respond to 2 out of 3 language items. We are retaining items about what the respondent would say to a local school board or city council regarding a proposal to close to a park or school and to the president about anything on their mind (adult Decision Making module items HDM17-17a), and the open-ended item about anything else respondents would like to add about their experiences or about how to improve the MTO program (HDM18).

There are two updates to the language assessments. First, based on the recommendations of language experts John Rickford and William Labov, we changed the reading passage to text that will produce more variation in intonation, projection, and inflection:

“My brother works at an assembly plant where he runs these timing tests. Business is off and the company's putting pressure on the union to accept lay-offs. I asked this lawyer what they could do to keep from getting laid off at my brother's shop. So he says they couldn't do anything about it. "It's bad luck. Whatever's going to happen is going to happen." A guy who talks like that comes across to me as not knowing what he's talking about. He's a big mouth but it doesn't ever add up to anything. Whether somebody's luck is good or bad depends on how hard he tries. No matter what happens. I'm going to be sure that the good luck is mine and the bad luck is somebody else's.”

Second, we are pre-testing two new items. The first new item asks respondents to elaborate on whether they believe “that whatever is gonna happen is gonna happen” (HDM13-13a), designed to get respondents focused on the substance of their response so that they will speak in their normal daily conversational style rather than potentially alter their language patterns for a stranger (i.e. the ISR interviewer). We also will ask respondents about their perspective on job opportunities and to explain what they would say to a prospective employer if that employer had been informed that the respondent never came through on promises (HDM15-16), as a way to identify the ability of MTO participants to “code switch” between use of vernacular English and mainstream English that is adaptive to workplace or school or other such settings.

*John Rickford currently is reviewing the audio recordings from our second pretest and based on his review will recommend the three out of 6 items that will be included in the final survey.*

### **Update on MTO Biomarker Collection Plan**

In the August OMB submission we described plans to collect height, weight, blood pressure and blood spot samples from MTO adults, as well as height and weight measurements from MTO youth. One change that we have made since the OMB submission is to add measurement of waist

circumference, which has been shown to provide independent information about long-term risk for cardio-vascular disease and other long-term health problems even after controlling for body mass index (BMI). Waist circumference measurement will be performed immediately after the height and weight measurements at the end of the Physical Health module.

As noted above in our discussion of consent forms, we have worked with Thomas McDade at Northwestern and a new MTO collaborator on our team, Stacy Tessler Lindau, MD, to consolidate and improve our biomarker consent strategy. We are quite pleased to have added Dr. Lindau to the team, she is Assistant Professor at the University of Chicago Medical Center and a member of the investigation team for the National Social Life, Health, and Aging Project (NSHAP). We have also been working with McDade and Lindau to update our protocols for physical measurements and biomarkers to improve upon the approaches employed by ISR for the Health and Retirement Survey and to incorporate key lessons learned from experiences with the NSHAP. Appendix D includes our updated protocols for the physical measures.

NBER and ISR have now also finalized a plan for laboratory assays of our blood samples for key biomarkers. Specifically, ISR has subcontracted with Biosafe to assay total cholesterol, high density lipoproteins, glycosylated hemoglobin, and C-reactive protein. Biosafe is a fully CLIA-certified laboratory that is also accredited by the College of American Pathologists, the highest national standard in the U.S. All of Biosafe's tests use FDA-approved components. Biosafe's cholesterol panel test is certified by the National Cholesterol Education Program, while Biosafe's test for glycosylated hemoglobin meets the certification standards of the National Glycohemoglobin Standardization Program. Biosafe has previously successfully collaborated successfully with our survey subcontractor for MTO, ISR at the University of Michigan, for the NIA-funded national longitudinal Health and Retirement Study.

After Biosafe uses MTO blood samples to conduct the assays listed above, remaining blood samples from each MTO participant will be sent to McDade's Laboratory for Human Biology Research at Northwestern University for assays of Epstein-Barr Virus (EBV) antibodies and cortisol. We added assays of EBV to our physical measure data collection because antibodies against Epstein-Barr virus (EBV) are one indicator of immune system functioning (McDade et al., 2000). We expect MTO to potentially influence EBV by reducing psychosocial stress. EBV is a ubiquitous herpesvirus; most adults are infected by the age of 40. Compromised immune function allows EBV to reactivate and release viral antigens into circulation, to which a humoral antibody response may emerge, so measures of EBV antibodies can provide an indirect measure of cell-mediated immune function.

The Laboratory for Human Biology comprises 1,500 square feet of Biosafety Level 2 certified wet-lab space, and is fully equipped to perform a range of immunoassays on human blood and saliva. In particular, the Lab possesses the latest generation of immunoassay technology—the Luminex multi-analyte flow analyzer—that allows for the simultaneous analysis of multiple factors in very small quantities of sample. This represents state of the art biomarker analysis technology, even compared to other studies that have collected biomarker results and shared them with respondents.

TC, HDL, HbA1c, CRP and EBV can all be quantified in dried blood spot (DBS) samples. Importantly, fasting is not required to obtain accurate measurements of any of the biomarkers described above, and samples can be collected at any time of day. Measurement of HbA1c using

DBS samples provide excellent agreement ( $R=0.99$ ) with gold standard clinical methods that require venipuncture blood collection. The same is true for measurement of CRP with DBS, where agreement with gold standard clinical methods is very high ( $R=0.96$ ). Finger prick blood sampling provides a logistically feasible, minimally-invasive means for collecting physiological information in community-based settings. To collect a blood sample using the DBS method, the participant's finger is cleaned with an alcohol preparation, and then pricked with a sterile, disposable commercial lancet of the type commonly used in home pregnancy or HIV testing or by diabetics to monitor blood glucose. Interviewers are protected by wearing gloves during the procedure. Up to five drops of whole blood are applied to standardized filter paper, where the sample dries and becomes stabilized. An additional drop of blood from the same finger stick can be placed into a portable "point-of-care" device for instant measurement, which can be used to report instant measures of selected health outcomes to MTO participants and thereby increase the benefits to MTO study members themselves. Dried blood spot samples are stacked and stored in re-sealable plastic bags, and then shipped to the laboratory for storage and analysis. Most biomarkers are stable at normal room temperature for at least two weeks.

Following the protocols developed for other studies such as the Health and Retirement Study and NSHAP, when biomarker results are shared with respondents they are informed that these results are complements to, not substitutes for, regular physician care in a clinical setting. Respondents will be able to call BioSafe to receive the results of their blood spot analyses and will be given information about contacting a medical professional if their readings are above normal ranges.

*Each of the 13 MTO adults included in the second pretest consented to having blood drawn. Moreover in every case the collection of blood samples from pretest2 respondents went smoothly. Blood samples from the pretest were sent to BioSafe for analyses and, per pretest follow-up by ISR staff, BioSafe has successfully set up a system to be able to report results back to respondents who choose to call their 1-800- number. We expect that there will large efficiency gains in the time it is taking to collect physical measures more generally, but especially blood samples, as interviewers become accustomed to navigating the equipment and procedures for drawing blood and preserving the blood spots. Interviewers place blood spots on cards that take about 10 minutes to dry (the fastest drying cards currently available) and have reported back that they use this time to pack their things but that they are still left with a few awkward minutes with not a lot to do and ready to leave. We will be changing the sequence of the blood sample collection to occur just prior to the decision making module to make more efficient use of time to allow for the blood spots to dry while survey data collection continues.*

### **III. Revisions to the Youth Survey Instrument and Achievement Assessment**

The following discussion is structured so that major revisions are described first. We not discuss modules that have not changed since the August MTO OMB submission, including Employment & Earnings (YEM), Mania (YMA), and Behavioral Problems Index & Oppositional Defiant Disorder (YOD).

#### **Youth Instrument: Revisions**

Household Listing (YHL): In the August submission we proposed to ask youth to tell the respondent about each individual the youth is currently living with, and selected demographic characteristics of these household members. As was the experience with the adult household listing, this section of the youth survey took a long time. We simplified this sequence and now ask one question about their current living arrangement (with parents, with other adult caregiver, with spouse/partner, etc.) that will have initial response-dependent follow-up items to illicit details about the situation (e.g. if living with parents: mom, dad, step-parent(s), etc.; if living with another adult guardian or others: what is their relationship to youth?).

*The simplified version of the youth household listing performed quite well during the second pretest taking only about one minute.*

Education & Schooling (YED): As mentioned in the Adult Survey revisions in module HPY above, the most substantial change to this module is insertion of the school history and current schooling items as youth have been shown to be reliable reporters of their own schooling history. We also ask youth currently attending school to distinguish between full- and part-time attendance (YED2). For youth eligible to attend a post-secondary institution, we ask about the type of institution (two- or four-year college, trade school, etc. (YED3e)) and the type of program (degree, certificate, etc. (YED3g)). Note that the questions asked in HPY about enrollment in advanced classes and special services for learning or behavioral/emotional problems are not asked of youth because they appear in similar form later in the module. We also cut several items. We cut one item on youth's perspective of teacher engagement (students get along well with teachers) because the section contains two other related items, teachers' interest in students (YED32a) and feeling put down by teachers in class (YED22i). We also cut one of two items on school discipline: whether misbehaving students often get away with it was cut while fair discipline (YED32f) was retained. The question about how much homework the youth does both in and outside of school in a typical week was split in two questions: one about in school homework (YED36a), the other about homework outside of school (YED38b). The time frame for the frequency of Internet use question was changed from monthly to weekly (YED39). The questions about participation in student government/honor society and in academic clubs were combined into one question (YED43b).

*The second pretest was our first attempt at asking youth to reconstruct their school histories where we ask youth to name their current school and recall their school history from their current grade, or most recent experience in school, until the MTO interim survey in 2002 (for those youth who we also surveyed at interim) or until time of random assignment. Youth tell interviewers the name of a school and interviewers then identify this school with a preloaded data file listing all public and private schools in the U.S. We will be improving the efficiency of this module in two ways: by*

*cleaning the preloaded school listing file to minimize the duplicate school information and hence the time interviewers spend with youth choosing the right school and by reducing the level of identifying information we ask from youth about the school (e.g. we will only ask school name and city and not address). We also plan to scale back on a number of lower priority items from this module including items detailing grades in English, social studies and science (dropping items YED30c, YED30d and YED30g but, retain the item about math); an item asking for specific types of math classes taken (item YED31a) since we already ask one question about taking any advanced math class; two items about whether students are disruptive and whether there is cheating in school (items YED32d and YED32e); an item about how much homework is assigned (item YED33) since we already ask about how much time is spent on homework, periods spent in study hall since we ask how much time is spent on homework at school, and streamlining the number of items asking about details types of school and related extracurricular activities that the youth participate in (in items YED43 and YED48).*

Mental Health, Risky Behavior & Crime Victimization modules: All revisions to the youth mental health, risky behavior and crime victimization modules follow the revisions described above for the comparable adult survey modules.<sup>1</sup> However, there is no adult corollary to the Youth Risky Behavior (YRB) module, which also underwent substantial revisions. The Pretest 1 version of this module contained the NCS Conduct Disorder sequence, but in subsequent discussions with Ronald Kessler, we have altered this sequence to replicate the MTO Interim survey's Risky Behavior module which has the added benefit of taking much less time. YRB now replicates the set of items asked of youth during the interim MTO youth survey including certain risky or delinquent behaviors and (if the behavior is endorsed) one follow-up about whether the behavior was exhibited in the past 12 months (YRB16a-j and YRB17-18). These behaviors include destruction of property, theft, property crimes, assault, and carrying a handgun. The only other change to the module was the deletion of the question about the gang involvement of the youth's relatives and friends (due to time constraints and very low response rates on the Interim survey).

We also revised the Attention Deficit Disorder (YAD) module to ensure that we had the set of items needed to measure the relevant DSM diagnosis. The module is split into two sections: one about concentration and attention difficulties and the other about problems with restlessness and impatience. In each section, we have added the following:

- (1) A series of four questions about how often the symptoms associated with the disorder caused respondents problems at school, at home, at work, and in their relationships and social life (YAD4a-d and YAD11ad)
- (2) (If problems occur in at least two of the above), a series of questions asking respondents to rate on a scale of 0 to 10 how much the problems affected their chores at home, ability to do well at school or work, ability to get along with their family, and social life (YAD5a-d and YAD12a-d)
- (3) (If at least one of the above is greater than 0), a question about how many days in the past year the respondent was completely unable to work, go to school, or carry out normal activities due to their problems (YAD6 and YAD13)

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<sup>1</sup> Two other mental health modules underwent minor revisions not reflected in the adult versions (see next section for details).



- (4) A question about whether the respondent ever spoke to a medical profession about the problems (YAD7 and YAD13 or YAD14).

*The revised youth mental health and risky behavior modules took substantially less time in the second pretest compared to the first pretest, and now fit within our target time limit. At the recommendation of MTO research team member Ronald Kessler, professor at Harvard Medical School and an expert on measuring DSM-IV disorders through surveys, we will be deleting items intended to measure attention deficit disorder as this is not a disorder that is likely to change in response to an intervention like MTO.*

### **Youth Survey: Further Cuts and Minor Revisions**

Outlooks & Social Networks (YSN): We deleted a few items from this module. From the series of questions about how the youth's close friends feel about academic achievement, we removed the item about the importance of studying. We also reduce the number of questions about self esteem and locus of control from 11 to 3 (YSN16a-c) as subsequent analyses showed high correlation among the items we have kept with the items we have decided to delete. Furthermore, we scaled back the number of questions we ask about the youth's popularity by removing 4 of the 8 items in the sequence that were highly correlated about how youth think other people see them (YSN17 series), removing "socially active," "important," "fitting in", and "part of the leading crowd".

*As noted for the adult social networks module, we are revising this module so that it only asks about close friends and thus will minimize respondent confusion regarding distinctions between "any" or "all" friends as compared to "close" friends.*

Neighborhoods (YNB): The only change to this module from the August OMB submission is the removal of eight-questions designed to capture the U-index (described above in the adult social networks modules and includes items about what the youth was doing, with whom the youth was doing it, how the youth felt, etc. at a randomly selected time the day prior to the survey).

K6/Tranquility (YK6): The wording of the general behavior questions at the end of the module (YK68-YK612) was changed from "do you"/"are you" to direct statements, although the response options did not change. For example, YK68 changed from "Are you generally obedient? Do you usually do what adults request?" to "I am generally obedient. I usually do what adults request." (with the same response options of "Not true", "Somewhat true", and "Very true").

Mental Health Screener (YSC): Due to the removal of the NCS Conduct Disorder questions from the Risky Behavior module (see discussion above), three screener questions for this disorder are removed.

Youth Reports on Parents & Parenting (YOP): We removed a few items from this module including whom the youth admires most and the youth's relationship to that person were removed, though we still ask about adults with whom the youth feels comfortable talking about personal problems (YOP1) and who care about the youth future and to whom the youth turns in times of trouble (YOP2) as well as the youth's relationship to that/those adult(s) (YOP3). We also removed the question about whether the youth's primary caregiver ever had a problem with drugs or alcohol.

*Based on results from the second pretest we are planning to further streamline this module by deleting lower priority items about involvement of the primary caregiver as well as supportiveness of the nonresident father. The items we plan to cut regarding youth reports on the primary caregiver include asking youth to identify which adults they go to first to talk about personal problems or if in trouble (item YOP3); an item about whether a parent knows the youth's close friends (item YOP9a) since we already ask about whether the parent knows the youth's whereabouts when they are not at home; one of three items about parent's involvement in school (item YOP9c); an item about whether youth do chores (item YOP10e) since we are asking other types of parent involvement questions including whether or not there is a curfew; and, an item regarding parent limitations on the amount of time they can go out with their friends on school nights (item YOP10d) since we already ask about how often parents restrict youths from leaving home to hang out with friends. On father's supportiveness we ask about how supportive their father was when they were growing up, how often they have seen their father in the past 12 months, how far in school their father wants them to go, and then how much their father knows about close friends, who youth are with, and who youth's teachers are. We will cut the latter three items regarding father's knowledge of friends, youth's time spent away from home and youth's teachers (items YOP14a, b, and c) as we will still have youth's general perception of how supportive their nonresident father is, and how often they have seen their father in past 12 months. Finally, we will cut two of the detailed questions about parent reactions to coming home late on sulk/pout (item YOP16c) and make threats that won't be kept (item YOP16e) but will retain the other items such as having a calm discussion, ignoring, grounding and using physical punishment.*

**Decision Making (YDM):** From the version in the August submission, we will cut 2 of the 6 items on future expectations (cut YDM2, expect life as adult to be better than own family, and YDM3 chances of getting ahead better than others in neighborhood). We will still be asking questions about the expected chances of having stable job, college education and living until age 35. We cut two of our 7 items on trust (cut YDM10, trust people hanging out with at school, and YDM11, trust other students at school that you don't know), though we are still keeping items YDM8a to YDM9 on trust taken from the General Social Survey.

*We will be implementing similar changes with respect to the response categories and options for payout structures as described for the adult decision making module.*

### **Achievement Assessments for Youth**

As described in the August submission, we will administer the reading and math assessments designed for the 5<sup>th</sup> and 8<sup>th</sup> grade follow-up waves of the U.S. Department of Education's Early Childhood Longitudinal Study of Kindergartners in 1998 (ECLS) to all youth in the MTO long-term survey sample. Pretest 1 results showed that the 5<sup>th</sup> grade assessment worked as expected, with MTO timings matching results from the national ECLS sample. The 8<sup>th</sup> grade reading and math assessment is designed to be 60 minutes, or 15 minutes longer than the 45 minutes we initially allocated to achievement assessments, and results from pre-test 1 confirmed that an MTO-like population will need the entire 60 minutes to complete the assessment. Upon further consultation with Donald Rock, Education Testing Service, we have shortened the 8<sup>th</sup> grade reading assessment by removing free-response items. This has the advantage of preserving to the extent possible the

psychometric properties of the 8<sup>th</sup> grade assessment yet substantially decreasing the amount of time allowed to take the reading test. We plan to evaluate performance and quality of the shortened 8<sup>th</sup> grade reading test in pre-test 2 by randomly assigning half of older youth to receive the shortened version of the reading assessment and the other half to receive the reading test as usual. We are in active communication about these changes and our plans with Elvira Hausken, Project Officer for ECLS at the National Center for Education Statistics, U.S. Department of Education.

*We currently are reviewing the results from this random assignment test of the shortened 2<sup>nd</sup> stage 8<sup>th</sup> grade English assessment with Donald Rock and per this review will either administer the ECLS assessments with a shortened 2<sup>nd</sup> stage English 8<sup>th</sup> grade test or the standard version of the test.*