MPAAT
MINNESOTA PARTNERSHIP FOR ACTION AGAINST TOBACCO

Request for Proposals

Survey Vendor for the 2006-2007 Minnesota Adult Tobacco Survey

RC-2007-0001

Schedule and Timeline

July 24, 2006 ……..	**RFP Released**
July 31-Aug 4, 2006 ……	**Bidder meetings (responses to bidder questions will be made available after August 4, 2006 at www.mpaat.org)**
August 30, 2006 ……	**One (1) original and ten (10) copies of full proposal due in MPAAT office by 5:00 p.m. CDT.** **Late proposals will NOT be accepted.** **Fax and email submissions will NOT be accepted.**
September 1-19, 2006 ……..	**Review of proposals**
September 20, 2006 ……...	**Evaluator selected and notified**
October 2, 2006 …….	**Contract begins**

Submit questions and proposals to:
Ann St. Claire, MPH
Research Program Manager
Minnesota Partnership for Action Against Tobacco
Two Appletree Square, Suite 400
8011 34th Avenue South
Minneapolis, MN 55425
(952) 767-1416
astclaire@mpaat.org

SURVEY VENDOR FOR THE MINNESOTA ADULT TOBACCO SURVEY

PURPOSE

MPAAT, in partnership with Blue Cross and Blue Shield of Minnesota (Blue Cross) and the Minnesota Department of Health (MDH), has conducted two previous Minnesota Adult Tobacco Surveys (MATS) to support tobacco control surveillance, policy development, advocacy, program planning, and evaluation. Contracts with previous MATS survey vendors were limited to the collection and management of data sets. MPAAT is currently seeking a survey vendor with the capacity to assist in all aspects of MATS including survey development and implementation, data analysis, and reporting of results. This MATS will consist of two samples: a statewide random digit dial (RDD) sample and a list sample consisting of Blue Cross members. MPAAT is seeking proposals to complete both samples. Vendors should submit one proposal with one budget. Two contracts will be established: one contract with MPAAT for the production of the MATS instrument and RDD sample, data collection and analysis; and one contract with Blue Cross and Blue Shield of Minnesota for the list sample data collection and analysis. Detailed instructions for preparing budgets are provided on page 14.

MATS BACKGROUND

The goal of the MATS series is to provide detailed information about tobacco use that helps public and private sector organizations develop effective tobacco reduction strategies. The next MATS will be the third in a series of surveys conducted over time to measure change in adult tobacco use and other indicators related to tobacco use. The goal of MATS III is to obtain comparable data to MATS I and II in order to validly compare key estimates of tobacco-related behaviors and attitudes from the different cross-sections across time.

MATS I was conducted in 1999 and resulted in the following reports:

- Secondhand Smoke: Knowledge, Attitudes, and Behaviors of Minnesotans (Nov 2000)
- Quitting Smoking: Nicotine Addiction in Minnesota (July 2001)

MATS II was conducted in 2002-2003 and resulted in the following reports:

- Quitting Smoking, 1999-2003: Nicotine Addiction in Minnesota (Jan 2004)
- Patterns of Smoking Among Minnesota's Young Adults (Jan 2004)
- Secondhand Smoke in Minnesota, 1999-2003 (March 2005)

All of the reports cited above are available at:
http://www.health.state.mn.us/divs/hpcd/tpc/TobaccoReports.html.

MATS II used complex stratified random sampling techniques to create a sample that represented Minnesota adults, young adults, and several subgroups among adult Blue Cross members in one large, combined sample (see Appendix F for the entire MATS II Methods Report which includes the sampling strategy and Appendix D for a detailed description of sampling and weighting for MATS II). MATS III seeks to replicate this methodology of conducting a survey using both a statewide random digit dial (RDD) sample and Blue Cross list sample and combining the two datasets.

The primary goal of MATS III is to achieve comparability between MATS II and MATS III. The planning committee recognizes a number of concerns that threaten comparability of the data due to trends in survey research specifically, declining response rates to phone surveys, increased reliance on cell phones and other factors that increase the potential for non-response and coverage error. For this reason, respondents to this RFP should provide a proposal that includes a mixed mode design. This and other key differences between MATS II and MATS III are briefly outlined below:

1. **Survey modes:** MATS I and MATS II were both exclusively phone-only surveys. Due to increased challenges in conducting survey research, MATS III seeks proposals that include a plan for implementing mixed mode survey techniques which will allow us to explore the feasibility to move away from relying on RDD for future MATS. A mixed mode approach should be applied to both the RDD and list samples. Proposals should discuss the benefits of using mixed modes and strategies for overcoming survey research barriers. Two tobacco use prevalence rates will need to be determined: 1) one for phone alone to compare rates between MATS II and III and 2) one for the alternative mode to measure mode effect and serve as a baseline for future mixed mode surveys. The applicant must provide a plan for determining the mode effect and provide assurance that the final results of MATS III will be comparable to MATS II.
2. **Research questions:** MATS III Will address similar research questions to those in MATS II. A limited number of additional research questions will be added. A list of research questions addressed in MATS II as well as additional questions for MATS III is included in Appendix C.
3. **Sampling plan:** MATS II conducted an oversample of young adults (18-24 year olds). In addition to oversampling for young adults, MATS III will also oversample African Americans in the RDD samples.
    a. **African American Oversample:** The planning committee for MATS III recognizes the importance of informing, soliciting input from, and interpreting the results of MATS III with the African American community in Minnesota. The selected MATS survey vendor will participate in planning meeting with the African American community during the initial phases of the study, and will provide MATS data to a consultant who will work with the African American Community to interpret and write up these results. The community process outlined here will be managed by the MATS III planning committee, although the selected MATS survey vendor will play a role in this process by participating in an initial planning meeting and responding to inquiries by the consultant.
    b. **Young Adult Oversample:** MATS III will follow the same protocol for oversampling young adults as MATS II. It is important to maintain combined samples (RDD and list samples) to obtain sufficient sample size for the young adult population as well as to assure comparability between young adult smoking rates from MATS II and MATS III. By merging the RDD and list sample, the study can achieve greater efficiency with the young adult oversample because Blue Cross can identify the age of its members.
4. **Development of a cohort study:** MATS III will initiate the development of a cohort for participation in a follow-up research study conducted by MPAAT. The selected MATS

survey vendor will be required to ask respondents (current and former smokers only) if they can be contacted in the future for participation in a additional study. The selected MATS survey vendor will also be asked to work with MPAAT to transfer relevant data as needed for this follow-up study.

Data collection for the MATS III is anticipated to take place December 2006-May 2007 with results released in December 2007. MPAAT seeks a qualified survey vendor for MATS III. Future MATS will be conducted every two to three years. This contract may be renewable for ongoing tobacco use surveillance contingent upon successful performance.

ROLES AND LEADERSHIP

MPAAT: MPAAT serves as the lead agency for the MATS III project. MPAAT is responsible for project coordination and management including convening an advisory panel, consulting with experts, and contracting with and managing the survey vendor.

Blue Cross: In addition to serving as active members of the advisory panel, Blue Cross is responsible for the coordination, management, and analysis of the Blue Cross list sample of members. Blue Cross will participate in ongoing progress reporting meetings with MPAAT and the vendor in order to assure that the two studies (RDD and list) match in interview methods, instrument design, and other study design issues. Blue Cross will also monitor issues of HIPAA compliance for the list sample of its members.

Advisory Panel: MPAAT will convene an Advisory Panel to meet a number of times over the course of the project to provide technical counsel on various topics such as project design, survey topics, data analysis, and dissemination. The Advisory Panel will be comprised of representatives from MPAAT, the Minnesota Department of Health, and Blue Cross. Representatives from the African American community and additional external experts will be consulted as necessary.

S**urvey Vendor:** The survey vendor will take the lead in collaborative consultation with MPAAT and the Advisory Panel to finalize the survey instrument, conduct interviews, analyze data, and produce data tables, technical reports, and other documents for public release. The vendor will update MPAAT and Blue Cross regularly on study planning and progress by providing bi-weekly progress reports (by phone and written correspondence) discussing issues such as study planning, sampling, pilot testing issues, response rate, analysis plans, and report drafts, among other activities. The vendor will also be responsible for maintaining comparability in the sampling approach, interview methods, and analysis plans between MATS II and MATS III. The vendor will be responsible for maintaining comparable instruments between the MATS III RDD and list samples.

SCOPE OF WORK

A qualified survey vendor will be required to facilitate and implement the following activities:

Prior to data collection:

1. **MATS II background:** For both the RDD and list samples, consult with MPAAT, Blue Cross, the MATS III advisory panel, and prior (MATS II) consultant to review sample selection and data collection techniques for the MATS II. Provide a detailed report on the similarities and differences in sampling and data collection between MATS II and III. The final plans will need approval by MPAAT and the Advisory Panel prior to implementation.

2. **Sampling plan:** Develop the sampling design for MATS III**.** This plan will include several components: 1) an RDD sample of the entire state of Minnesota; 2) a stratified representative list sample of Blue Cross members and 3) an alternative mode of data collection for both the RDD and the list sample.

   Oversample young adults: Design and specify a sampling plan for oversampling young adults similar to that of MATS II. MATS II oversampled the 18-24 year-old population (i.e., making an 18-24 year old respondents much more likely to be the selected individual within a household to be selected) using two methods. First, MATS II oversampled a list of additional Ble Cross members in this age group. Second, MATS II selectively sampled within the statewide RDD population. This method increased the odds of selecting an 18-24 year old in those households that had both people between the ages of 18-24 and 25 and older.

   Oversample African Americans: Design and specify a sampling plan for oversampling African Americans within the RDD sample. The sample will not include recent African immigrants as part of this group. The advisory panel recommends oversampling by geographical regions in which census data report a greater proportion of African American households. Proposals should address how data from African American respondents will be weighted. Finally, proposals should discuss the need/advisability of matching respondent and interviewers based on race/ethnicity and any other relevant characteristics and anticipate other issues of cultural competency.

3. **Sample size and power analysis:** MPAAT and the MATS III advisory panel have identified the following needs related to proposed sample sizes:
   - Applicants should propose plans that maintain similar confidence intervals and analytic power to that of MATS II for Minnesota adults.
   - For the Blue Cross list sample only, the selected vendor is expected to complete approximately 4,500-5,000 interviews. In MATS II, the list sample included the following numbers of completed interviews within the Blue Cross list sample:

Plan	Ages 18-24	Ages 25 and older
Prepaid Medical Assistance Program (i.e. Medicaid managed care)	65	1214
MinnesotaCare (i.e. state subsidized insurance for low income Minnesotans)	98	1115
Commercially Insured	452	315
Medicare Supplemental	0	1316
TOTAL	615	3960
Grand Total	4575	

Given the likely small shifts in the Blue Cross population, these numbers should provide adequate information to estimate the sample size for this proposal. For the current study, Blue Cross will provide the selected vendor with population counts to complete more accurate power calculations on the Blue Cross population.

- Applicants should demonstrate that samples sizes will provide adequate power to detect significant differences of 2 percentage points in overall prevalence rates (combined RDD and list sample) of cigarette smoking between MATS II and MATS III.
- Applicants should propose adequate sample size to measure mode effects for the alternative mode sample.
- Applicants should propose sample size options and recommendations for both the young adult and the African American subsamples.

Power analysis used to determine sample sizes should be included in the proposals. The selected survey vendor will be required to purchase enough sample to fulfill the needed sample size as determined by the power analysis. They will also specify the amount of list sample that Blue Cross should provide.

4. **Instrument development:** For both the RDD and list samples, review the survey instrument with MPAAT and the Advisory Panel, and recommend minor modifications necessary to improve question flow and reduce ambiguity. The survey for the statewide RDD and list samples will be identical. MPAAT and the Advisory Panel will be making revisions to the existing instrument from the previous MATS prior to the start of the vendor's contract. The MATS II instrument is attached as Appendix E for reference. Estimate the amount of time required for completing an interview. Work with the project team to eliminate questions if necessary to reduce estimated maximum interview time to 15 minutes for never smokers and 20 to 25 minutes for current smokers.

5. **IRB approval:** Assist MPAAT and Blue Cross in completing the IRB application. IRB approval will be sought through the Minnesota Department of Health on behalf of both MPAAT and Blue Cross.

6. **Survey programming:** For both the RDD and Blue Cross list samples, program the survey introduction, respondent selection process, and survey questions into a Computer Aided

Telephone Interview (CATI) system, including all prompting and appropriate skip logic, and have the system verified by MPAAT and Blue Cross.

7. **Reverse append:** For the Blue Cross list sample only, Blue Cross will deliver the list sample of its members to the survey vendor. The contracting organization will then purchase a "reverse append" of 1) listed addresses and 2) the telephone numbers for names selected from the Blue Cross list. The vendor will be responsible for implementing a similar process for matching RDD phone numbers to addresses in order to send out pre-notification letters.

8. **De-duplication:** If a respondent appears on both the RDD and list sample, the respondent will be removed from the RDD and allocated to the list sample only.

9. **Pilot test:** For the RDD sample, pilot test the survey instrument, CATI programming, and oversampling strategy (100 total interviews). A random sample of phone numbers should be used for the pilot. Any proposed modifications that result from the pilot should be discussed with MPAAT and Blue Cross.

10. **Pre-notification letters:** For both the RDD and Blue Cross list samples: Send out a pre-notification letter to each potential survey participant (both the RDD sample and the Blue Cross member sample for which addresses are found through the "reverse append" process) between 10 and 14 days prior to the anticipated call date. MPAAT and Blue Cross will provide language and stationary for their respective letters based on the notification letter from the previous MATS. MPAAT and Blue Cross will also provide a phone number to contact in order to opt out of the list sample. During the study, this contact person will notify the survey research firm immediately of those who decline participation.

11. **Survey center oversight:** Provide training, supervision, and monitoring of interviewers to ensure that they have adequate skills and experience in conducting the survey following CDC's Behavioral Risk Factor Surveillance System protocol. Proposals should discuss the vendor's experience and recommended number of attempts to contact respondents. The BRFSS protocols should serve as a minimum requirement from which vendors may choose to expand. Proposals should also address cultural training requirements of interviewers. The vendor will implement and document procedures that assure the quality of interviewing and data management. At least five percent of interviews must be monitored. The vendor must also make it possible for MPAAT and Blue Cross to conduct unobtrusive off-site monitoring of selected telephone interviews. On request, the vendor must provide MPAAT the actual sample of telephone numbers and disposition codes for cross-checking and validation.

During data collection:

12. **Sampling and sample size:** For both RDD and list samples, follow sampling procedures and sample size requirements reviewed and approved by MPAAT and the Advisory Panel.

13. **Conduct interviews:** For both the RDD and list samples, complete interviews. The protocol for completing these interviews should mimic the protocol used in MATS II, which was based on the CDC's Behavior Risk Factor Surveillance System. Phone calls are to be made

during evening, daytime, and weekend hours, and respondents are to be randomly selected within households according to CDC procedures. Unanswered telephones are to be called back a minimum of 15 times over 5 different calling periods, including at least one weekend period and one weekday evening. A selected respondent who is not available shall be called back a minimum of three times. Applicants are encouraged to discuss more rigorous procedures based on their experience in achieving high response rates.

14. **Monitor response rates:** MATS II achieved an overall response rate of 56.5%. For the Blue Cross member sample, a response rate of 61.5% was achieved. Comparable response rates are expected for MATS III. Response rates should be defined by the American Association of Public Opinion Research's [AAPOR] standard telephone response rate calculation RR4. The call disposition data with AAPOR disposition coding are to be maintained for each telephone number in both samples.

15. **Establish a cohort for follow-up:** For the RDD sample only, seek respondents' (current and former smokers) consent to be followed up for a future research study. This will include collecting contact information from the respondent.

16. **Data management:** For both the RDD and Blue Cross list samples perform data entry, editing, and verification of all survey responses. The computer code used to create the frequency distributions for all questions must also be provided. Data editing must include correction of data entry errors and evaluation/correction for out-of-range values and other logic testing. The final electronic databases transferred to MPAAT and Blue Cross should be in SPSS compatible format.

17. **Customer service issues:** For the Blue Cross list sample only, immediately communicate with Blue Cross regarding customer service issues that may arise during interactions with Blue Cross members.

18. **Managing errors:** For both the RDD and Blue Cross list samples, in the event that a systematic error is discovered in either sampling or interviewing operations, the vendor must immediately notify MPAAT of the error, correct the error at no cost, and provide documentation to MPAAT of the occurrence and correction. If MPAAT or its advisors find problems in reviewing the data sets, the problems must be corrected to their satisfaction at no cost within 14 days of notification.

After data collection:

19. **Combine and weight data:** For both the RDD and Blue Cross list samples, combine samples and weight data according to methods approved by MPAAT and Blue Cross. Both data sets will need to be weighted for age and gender. In addition the Blue Cross list sample will need to be weighted to provide estimates for each insured stratum as well as an overall prevalence for the Blue Cross population.

20. **Transfer data:** Transfer list sample survey data to Blue Cross. Transfer RDD and combined survey data (Blue Cross members de-identified according to HIPAA

requirements) to MPAAT, Blue Cross and Minnesota Department of Health. All data sets should be transferred using an encrypted digital file following legal and data privacy requirements.

21. **Data analysis:** The data analysis plan should be developed by the survey vendor for both the final combined and list samples, in close consultation with MPAAT, Blue Cross, and the Advisory Panel with a priority placed on replicating the analysis plan of MATS II for comparability (especially with regard to variable definitions). Syntax for computed variables and data tables will be provided to the selected vendor. MATS I and II data will be provided to the selected vendor in order to make comparisons. The data analysis plan should address each research question laid out in Appendix C, with particular attention paid to subpopulations of interest. Vendor will conduct an analysis for the alternative survey mode. The selected vendor will present results of the data analysis to MPAAT and the Advisory Panel at least twice for input and revisions to the analysis plan as needed.

22. **Reporting Results (combined sample):** For the combined sample, the selected vendor will be expected to produce data tables, a technical report, fact sheets and an interactive website.

23. **Reporting Results (list sample):** For the Blue Cross list sample, produce all of the same data in Excel spreadsheets as the RDD sample analysis results, but do not write the narrative.

DELIVERABLES

The contractor will provide:

1. A report on the comparability of MATS III sampling and data collection methods with MATS II methods.

2. A report on the pilot test with recommendations for revisions to the final instrument. A database containing survey responses from the pilot testing interviews to be delivered for review before data collection begins. This database should be accompanied with a narrative report of findings and recommendations from the pilot testing.

3. A final survey instrument.

4. A purchased RDD sample large enough to yield completed surveys to satisfy the sample size as determined through a power analysis. The list sample will be provided to the selected vendor by Blue Cross. Vendor needs to secure alternative mode sample through appropriate means.

5. Weekly and final detailed call disposition and response rate reports. These reports will include detailed counts for specific groups. For example, for Blue Cross participants, reports will separate the commercially insured, Prepaid Medical Assistance Program (PMAP), MinnesotaCare, and Medicare Supplemental members. For the RDD sample, reports will include detailed counts by geographic regions, African American subgroup, and by age groups, among other variables. Progress will also be reported on the alternative mode study.

6. A bi-weekly project progress report (either written or discussed via conference call with MPAAT and Blue Cross representatives). This progress report will describe pretest results, training objectives, changes in protocol, milestones achieved, and any other important program details and decisions. The contractor will also include copies of interview protocols, frequently asked question guides for interviewers, and any additional program documentation created or edited during the prior two weeks.

7. A printout or computer file providing information on all values changed as a result of data editing procedures.

8. SPSS formatted (or compatible) electronic database of survey responses cleaned and tested for out-of-range values and logical errors for all completed interviews.

9. An electronic code book and data dictionary with variable name descriptions and value labels, to be included with the dataset.

10. In the Blue Cross list data file only, each Blue Cross record will connect the individual's name and specified unique identifiers (as received in the file from Blue Cross) to each member. These unique identifiers *must* accompany each record in the file in order to connect these members to their claims data for future analysis. NOTE: All data files sent to MPAAT and Blue Cross will be sent via a secure data transfer procedure to protect member confidentiality. Blue Cross members will be de-identified according to HIPAA procedures in the final merged data set.

11. A separate data file created and provided to MPAAT for all those respondents who have consented to participate in the follow-up cohort.

12. A final methods report describing the: 1) survey instrument pilot testing and revisions, 2) data collection process, 3) sampling procedures, 4) opt out (by phone after pre-notification letter) and call disposition outcomes, 5) response rate calculations, 6) data cleaning, merging and weighting procedures, 7) outline of analysis plan, 8) an analysis of the alternative mode effect, and 9) list of key variables used in the analysis for the list sample, statewide RDD, and alternative mode samples The report's appendices will include: 1) a copy of the final survey with skip patterns clearly indicated, and 2) a copy of the pre-notification letter sent to the list of possible respondents. The project manager and advisory team will review a draft of the report before the final deadline. This report will be a comprehensive methods report available to the public upon request.

13. Analysis and final report on the alternative mode study with recommendations for future data collection.

14. Preliminary and final data analysis plans and results.

15. Final data tables, a technical report, up to six fact sheets (two to four pages each) and an interactive website. The technical report will include an executive summary and chapters

dedicated to survey methods, and results by topics of interest (i.e., overall prevalence, quitting, young adults, secondhand smoke). The interactive website will feature MATS reports and related documents as well as data tables and a function to query data.

16. For the Blue Cross list sample only, provide Excel tables (for overall Blue Cross population and insured subgroups) comparable to those produced in the analysis of the combined statewide sample.

CONTRACT TERM AND TIMETABLE

The contract term is for two years, with the option to renew contract, based on performance as determined by MPAAT, Blue Cross, and the MATS III Advisory Panel. The contract is anticipated to begin October 1, 2006 and end September 30, 2008.

Proposed Project Timetable

July 19, 2006	Issue RFP
August 30, 2006	Proposals Due
September 1-19, 2006	Proposal Review
September 20, 2006	Proposal is recommended to MPAAT Board of Directors
October 2, 2006	Contract with MPAAT is completed
October, 2006	Survey review
October 31, 2006	Contract with Blue Cross is completed
November, 2006	Pilot testing
December 2006	Data collection begins
May 2007	Data collection ends
June 2007	Data editing
July-September 2007	Data analysis
September 2007	Report writing begins
December 2007	First results report is released (others to follow)

Please note: this RFP does not obligate MPAAT and Blue Cross to complete the proposed surveillance activities, and MPAAT and Blue Cross reserves the right to reject all proposals and/or cancel the solicitation if it is not considered to be in its best interest.

FUNDING AND PAYMENT

MPAAT and Blue Cross expect that the contracting agency will be able to conduct the activities under this request for proposals at rates per completed interview that are competitive for the survey research industry. Applicants are required to break out costs for various study components. Proposals that provide options (i.e., sample sizes, survey modes, etc.) are encouraged to detail those options separately. See page 14 for detailed instructions for completing the budget in your proposal.

For both MPAAT and Blue Cross contracts, payment terms will be negotiated during the contracting process.

DATA OWNERSHIP STATEMENT: RDD and combined RDD and list sample

MPAAT, Blue Cross, and the Minnesota Department of Health will have complete and exclusive control over the dissemination, publication, and presentation of the statewide RDD sample and a combined RDD and list sample (Blue Cross members de-identified). Responders to this RFP understand and agree that all rights, title, and interest in the data, code book, and documentation of the data file, analysis, and results which the responder conceives or originates either individually or jointly with others, and which arises out of the performance of the contract, shall be the exclusive property of MPAAT and MATS III Advisory Panel. MPAAT, Blue Cross and the Minnesota Department of Health must both agree and at their option may, upon written request, allow the selected vendor to utilize the data collected during the agreement in its reporting, analysis, and/or publications.

DATA OWNERSHIP STATEMENT: Blue Cross list sample

Blue Cross and Blue Shield of Minnesota will have complete and exclusive control over the dissemination, publication, and presentation of the list sample survey data. Responders to this RFP understand and agree that all right, title, and interest in the data, code book, and documentation of the data file, which the responder conceives or originates either individually or jointly with others, and which arises out of the performance of the contract, shall be the exclusive property of Blue Cross. Blue Cross at its option may, upon written request, allow the selected vendor to utilize the data collected during the agreement it its reporting, analysis, and/or publications.

CONFIDENTIALITY:

MPAAT, Blue Cross, and the Minnesota Department of Health expect the respondent/contracting organization to fully respect the privacy of any identifiable data, and to observe all relevant state and federal rules concerning data privacy. The contracting organization will handle confidential and proprietary information in accordance with the terms of the Minnesota Fair Information Reporting Act and Health Insurance Portability and Accounting Act. The parties will jointly determine measures to ensure compliance with HIPAA requirements. Please note that for work conducted under contract with MPAAT, the selected vendor is subject to MPAAT's policy related to the Minnesota Data Practices Act in Appendix B.

RESPONDING TO THE RFP

Applicants are instructed to use the format described below in preparing the proposal. Failure to do so may result in a reduced rating by the review panel.

Proposal Checklist and Response Format

- Applicant shall submit one (1) unbound original and 10 (10) copies of the response to this RFP to the MPAAT offices by **August 30, 2006 at 5:00 p.m. Central Time**
  - Late proposals will NOT be accepted.
  - Fax and email submissions will NOT be accepted.
  - Proposals must be submitted to:

    Ann St. Claire, MPH
    Research Program Manager
    MPAAT
    Two Appletree Square, Suite 400
    8011 34th Avenue South
    Minneapolis, MN 55425

- Applicant must follow the format outlined below:
  - The proposal must be printed in 12-point font, single-spaced, with one-inch margins or greater.
  - Pages must be printed on one side of the paper only.
  - Page limits for each section are indicated below.
  - If the proposal does not meet spacing, font, number of copies or page limit (number of pages and one side only) requirements, it may be disqualified.

- Proposals must include the following sections in the order listed here:

1. Signed statement confirming the following qualifications (1 page maximum):

- Cover letter confirming the applicant's name, address, contact person, phone/fax numbers and e-mail address. An authorized representative of the applicant organization must sign the cover letter in ink.
- Applicant is aware of and in compliance with MPAAT policies and directives as laid out in Appendix B.

2. Organizational Capacity (6 pages maximum)

Provide a current description of your organization, including its history and a description of activities similar to or relevant to your proposal. The narrative should demonstrate your ability to conduct the MATS at a reasonable cost while meeting the timeline and quality outcomes desired by the project. Responders should be as specific as possible when describing previous projects and outcomes achieved, including survey response rates. The description should include past experiences and results using mixed survey research methods, surveying young adults, African Americans, and/or health plan members. The application should

also describe any experiences working with a collaborative advisory panel in conducting similar studies.

If the responder plans to subcontract services or activities, an organizational history, statement of effectiveness, and a complete description of activities to be subcontracted must be provided for each subcontractor.

3. **Detailed Workplan** (15 page maximum)

   Provide a detailed workplan and timeline that identifies all major activities and deliverables to be provided to MPAAT and Blue Cross. MPAAT and the MATS III Advisory Panel encourage proposals that look for opportunities to propose and support the use of techniques to reduce survey error and/or its measurement. The applicant should discuss the tradeoffs they considered and provide support for their recommendations. This narrative should also address each activity and product defined in the scope of work and deliverables (outlined on pages 4-11 of this RFP). Details should include: a plan for conducting a mixed mode design; proposed approaches for assuring the comparability of the data to MATS II; proposed actions for achieving the expected response rates; procedures for obtaining the samples; recommendations of sample size, a description of the vendor's CATI system; pilot testing procedures; a description of calling and interview protocols; interviewer training and monitoring activities; procedures for ensuring data quality; involvement and communications with MPAAT and Blue Cross; data analysis procedures; report writing, a description of all required deliverables; and a timeline for activities and deliverables.

4. **Project Administration** (3 page maximum, excluding organizational charts, resumes, and other supporting material)

   Applicants should provide a description of the physical operations of their survey research center including hardware, software, and security systems to support this project. Applicants must describe their organization's administrative structure and systems. Applicants should include an organization chart and job descriptions. Resumes should be included for key project staff. Applicants should describe their accounting and financial systems, and discuss their experience in providing timely, accurate and complete financial reports and other required deliverables.

5. **Budget** (8 page maximum)

   Proposals should include costs for each major project task and deliverable. Applicants are free to itemize project tasks areas as appropriate to their proposals and present budget options as applicable. Proposals should also include a listing of staff members hours dedicated to each project task area and deliverable. Justification of all fees, including hourly rates, contractual services, travel and other direct costs, and indirect costs should be fully explained in a separate budget narrative. All cost estimates will be considered as "not to exceed" quotations.

The proposed budgets are subject to change during the contract award negotiations. While applicants need only prepare a single budget in the final proposal, two contracts will be executed (one with MPAAT, one with Blue Cross) to conduct the survey. Allocation of expenses to MPAAT and Blue Cross will occur during contract negotiations with the selected vendor.

6. **Applicant Financial Questionnaire** (no maximum length)

   Please complete all questions on the attached Applicant Financial Questionnaire. Please note, additional financial information will be required by Blue Cross during contract negotiation by the selected vendor.

7. **One sample surveillance report** (no maximum length)

   This surveillance report should provide the reviewers with an example of previous surveillance work and (to the extent possible) illustrate how results were communicated to the client and/or external parties.

8. **List of surveillance projects completed** (1 page maximum).

   Please indicate projects that have a clear and specific focus on surveillance of behavior, large-scale data management components, or complex statistical analysis.

9. **References** (1 page maximum)

   Provide three references including: name, title, organization, contact phone number, and email, project title and brief description.

Bidder Meetings

Applicants may set up individual meetings (by phone or in-person) with MPAAT and Blue Cross staff between July 31 through August 4, 2006 to address any and all questions regarding MPAAT, Blue Cross, and this RFP. In lieu of meeting, questions may be directed to:

Ann St. Claire, MPH
Research Program Manager
MPAAT
Two Appletree Square, Suite 400
8011 34th Avenue South,
Minneapolis, MN 55425
952-767-1416 (direct line)

E-mailed questions are preferred and can be sent to: astclaire@mpaat.org

Evaluation Criteria
Proposals will be reviewed by MPAAT, Blue Cross, the MATS II Advisory Panel, and external reviewers. MPAAT's financial staff will conduct a thorough review based on the Applicant Financial Questionnaire, proposed budgets, and budget narratives.

Reviewers will assess each proposal based on how well the applicant addressed each area outlined in the proposal format with particular attention paid to the applicant's capacity and workplan.

Proposals will be scored competitively using a 100-point scale against the evaluation criteria described below. These criteria will be used in conjunction with other expectations, priorities, and requirements set forth throughout this RFP.

1. Organizational Capacity, 25 points

    - Evidence of success on similar projects—on time and within budget
    - Evidence of success in employing multiple survey modes and maintaining high response rates
    - Evidence of previous survey response rates and data quality
    - Evidence of success surveying young adults and African Americans
    - Evidence of previous experience with health plan members
    - Evidence of success coordinating with other data collection firms
    - Ability to provide a full range of services from survey design, data collection, analysis and reporting

2. Workplan, 50 points

    - Workplan represents sound, workable and cohesive plan of action.
    - Workplan addresses specific actions to reach numerical goals of the project.
    - Workplan identifies specific actions to successfully survey young adults and African Americans.
    - Workplan presents sound quality control plan covering all aspects of the project, including survey training, interviewing, and data-entry.
    - Workplan demonstrates capacity to conduct required number of surveys in time required.
    - Workplan develops plan for communication with and training of staff at outside data collection firm.

3. Project Administration, 10 points

    - The extent to which key staff demonstrate competence and experience
    - The extent to which staffing is adequate to ensure the project is completed successfully
    - Adequacy of accounting and management systems
    - The extent to which key staff demonstrate willingness, ability and experience of staff to coordinate with other research firms
    - The extent to which key staff will be willing to conduct training off at outside data collection firm

4. Budget, 15 points

   - Budget form and narrative evaluation
   - Extent to which proposed costs are reasonable and funds are allocated appropriately across component areas
   - Extent to which the proposed budget is sufficient to accomplish the goals of the project

Applicants will be notified in writing when a decision has been made.

MINNESOTA PARTNERSHIP FOR ACTION AGAINST TOBACCO

Applicant Financial Questionnaire

The purpose of this Financial Questionnaire is to verify that the applicant's current financial position allows it to complete the MPAAT project.

Fill out the following Questionnaire as it applies to your organization and provide the materials requested.

Organization Name: _____

Name and Title of Person Completing Questionnaire:

_____

Date: _____

Name and title of the Top Financial Representative of the Organization:

_____

Please respond to each question.

1. Please provide a resume of the top financial representative of the organization. Please verify that s/he has never been convicted nor is a charge pending for fraud, misrepresentation, or theft.

2. Are there any lawsuits, judgments, or liens pending against your organization, or is it currently under investigation by any entity?
   ___ Yes ____No

   If yes, please provide details (attach a sheet if necessary and please distinguish those suits that directly impact the ability to administer the grant funds if awarded):

   _____

   _____

3. Please attach bank references and a list of three trade references.
   (Applicant agrees to provide to the bank authorization to release information if required).

4. Has your organization ever been denied a surety bond, filed for bankruptcy or been insolvent?
   ___ Yes ____No (If yes, please attach an explanation)

5. a) Please provide the most recent audited financial statements for the applicant entity proposed to complete this project. (If you don't conduct an audit please submit the latest IRS tax filing for the applicant entity.)
   b) Please provide contact names and contact information for three clients that you have done similar work for as contemplated by this request.

6. Is your organization in good standing with your Secretary of State's Office?

____ Yes _____No ____N/A

If yes, please attach a copy of your Certificate of Good Standing. Please provide an explanation if it is not available or is not applicable to your organization. MPAAT must be notified if there is a change in your good standing status.

_____ _____

Signature of person completing questionnaire Date

APPENDIX A
ORGANIZATIONAL BACKGROUNDS: MPAAT AND BLUE CROSS

MPAAT

MPAAT is an independent, nonprofit organization that improves the health of Minnesotans by reducing the harm caused by tobacco. MPAAT serves Minnesotans through its QUITPLAN^{SM} stop-smoking services, grant-making programs and statewide outreach activities. It was funded with three percent of the state's tobacco settlement and is governed under a plan approved by the Ramsey County District Court. The MPAAT Board of Directors is composed of 19 members: 11 at-large members and eight appointed by the Governor, Attorney General, Speaker of the House and Senate Majority Leader.

In 2004, MPAAT's Board of Directors adopted the following vision, mission and values for MPAAT to guide the organization's future:

Vision: Eliminate the harm tobacco causes the people of Minnesota.

Mission: Enhance life for all Minnesotans by reducing tobacco use and exposure to secondhand smoke through research, action and collaboration.

Values:

Commitment to Excellence
Vigorously pursue the best possible outcome in all areas of our work.

Knowledge-Based Innovation
Design and put into practice the most effective plan of action, basing our priorities on the most relevant and current evidence and knowledge.

Integrity, Honesty and Accountability
Remain consistently loyal to our public mandate, maintain the highest ethical standards, and operate with openness and transparency.

Safe and Respectful Environment
Provide a safe haven for diverse opinions and show equal respect for all Minnesotans' views.

The current MPAAT Strategic Plan is based on sound science, court directives and effective partnerships. Its comprehensive approach provides the four pillars for effective tobacco reduction among Minnesota adults:

- Research to keep MPAAT efforts innovative and science-based.
- Stop-smoking services for individuals (QUITPLAN services).
- Public policies to reduce exposure to secondhand smoke.
- Tailored programs for populations disproportionately harmed by tobacco.

BLUE CROSS AND BLUE SHIELD OF MINNESOTA CENTER FOR PREVENTION

Blue Cross and Blue Shield of Minnesota (Blue Cross), with headquarters in the St. Paul suburb of Eagan, was chartered in 1933 as Minnesota's first health plan and continues to carry out its charter mission today: to promote a wider, more economical and timely availability of health services for the people of Minnesota. A not-for-profit, taxable organization, Blue Cross is the largest health plan based in Minnesota, covering 2.6 million members in Minnesota and nationally through its health plans or plans administered by its affiliated companies. Blue Cross and Blue Shield of Minnesota is an independent licensee of the Blue Cross and Blue Shield Association, headquartered in Chicago. Blue Cross' Center for Prevention oversees the work of Prevention Minnesota.

Prevention Minnesota is Blue Cross and Blue Shield of Minnesota's long-term initiative to tackle preventable heart disease and cancers by addressing their root causes—tobacco use, physical inactivity and unhealthy eating. Employing a comprehensive approach that includes effective policies, treatment options, and prevention strategies, initiatives are designed to improve the health of all Minnesotans, not just Blue Cross members.

Supported with funds from Blue Cross' lawsuit against the tobacco companies, Prevention Minnesota's long-term goals include:

- Cut tobacco use rates in half
- Eliminate exposure to secondhand smoke in public places
- Increase levels of physical activity by 50 percent
- Double fruit and vegetable intake

Prevention Minnesota is a coordinated series of clinical initiatives, community initiatives, outreach to high-risk groups, public awareness campaigns, and research. Blue Cross manages these programs through its Center for Prevention.

APPENDIX B
MPAAT POLICIES AND DIRECTIVES

MPAAT TOBACCO-RELATED POLICIES

Foundational Principles

- Tobacco causes harm to the people of Minnesota.
- MPAAT is dedicated to reducing that harm.
- MPAAT must be as effective as possible in reducing that harm but MPAAT will, at times, sacrifice potential effectiveness to avoid giving benefits, or to avoid the perception of giving benefits, to the tobacco industry.

MPAAT Policy on Smoke-Free Workplaces

Organizations receiving funding from MPAAT must provide a statement indicating that the worksite of the organization is smoke-free unless tobacco use is an explicit component of a research treatment center.

MPAAT Policy on Interactions with the Tobacco Industry and Related Businesses

It is MPAAT's intention to avoid any real or perceived conflicts of interest. Agencies, and any subcontractors, therefore must not have any contractual relationship with any tobacco company or any other organization that is working in conflict with MPAAT's mission and goals. Any relationship by the Grantee/agency and/or its proposed subcontractors and their parent subsidiaries with any affiliates or subsidiaries of a tobacco company must be disclosed as part of the submission to this request.

Vendors

- MPAAT will not directly contract with a tobacco company, its parent or subsidiaries.
- MPAAT will actively seek to contract with individuals and companies that provide the best possible service and have no present or anticipated relationships with tobacco companies, their parents or subsidiaries.
- MPAAT will generally not contract with an individual or company that currently provides mission-related services to a tobacco company, its parent or its subsidiaries. Mission-related services include public relations, advertising, legal services, consulting and educational services. MPAAT may choose to contract with a company that currently provides mission-related services to a tobacco company, its parent or subsidiaries, if the quality of service is deemed significantly better than that provided by its competitors, and if the individuals working on the MPAAT project have not worked directly with the tobacco company in the last 12 months, and agree that they will not work directly with the tobacco company while working on the MPAAT project.

Grantees

- MPAAT will not give a grant to a tobacco company, its parent or subsidiaries.
- MPAAT will actively seek to give grants to individuals and institutions that have no present or anticipated relationships with tobacco companies, their parents or subsidiaries and that are approved by the MPAAT review panel.
- MPAAT will not give a grant to an individual or organization who currently receives funding, who has received funding in the previous 12 months, or who would accept funding during the MPAAT grant's lifetime from a tobacco company or its subsidiaries.
- MPAAT may choose to give a grant to an individual(s) within an institution that currently receives funding from a tobacco company, its parent or subsidiaries(in Minnesota) if the individual(s) working on the MPAAT grant are clearly and demonstrably free of any current or anticipated involvement with tobacco-related funding, if the quality of research or service is deemed significantly better than that provided by competitors, and if the grant is tied to the individual(s) and not the institution.

Special Circumstances

Because the tobacco industry has targeted, manipulated or sought to exploit certain populations, MPAAT may choose to give a grant to an institution or treatment centers that has received funding from a tobacco company, its parent or subsidiaries in Minnesota if the MPAAT grant is clearly and demonstrably used for work unrelated to that done with the tobacco funding and if the institution is deemed uniquely better qualified than its competitors to use the MPAAT grant.

MPAAT CONFLICT OF INTEREST POLICY

MPAAT has adopted a policy that helps Grantees to identify, report, and monitor potential conflicts of interest which may occur during the grant process.

1) Direct conflict: A direct conflict exists whenever there is any proposed transaction involving MPAAT in which a director or employee has any direct financial or personal relationship involvement or interest.

2) Other conflicts: Other conflicts of interest exist whenever:

a) a "party to the transaction"[1] is a "relative"[2] of the MPAAT director or employee, or

[1] A "party to the transaction" includes a person or entity with a "material financial or personal relationship" in the transaction.

[2] MPAAT defines "relative" to include all of the following individuals: spouses, domestic-partners-in-fact, parents, children, children's spouses or children's domestic-partners-in-fact, siblings, spouses or domestic-partners-in-fact of siblings, aunts, uncles, first cousins, step-parents and step-children. ["Domestic-partner-in-fact" is used with respect to those designated as the intended life partner of an individual or otherwise identified as being related to that individual through intended long-term ties of love, affection, responsibility and commitment common to those undertaken in marriages recognized by the State, regardless of whether such relationship is defined by or otherwise recognized by any governmental authority.]

b) a party to the transaction is an entity in which the director, employee or relative has a "material financial interest"[3], or
c) the director, employee or relative is a member of the governing body, office, employee or partner of a party (individual or organization) to the transaction, or
d) a party to a transaction has a relationship with a director or employee, whether friendship, business or otherwise, which may in fact or perception cause the decisions or actions of the director or employee to be, or to be viewed as being, other than objective or independent.

MPAAT's definition of "relative" in this Policy is broader than the definition of immediate "family member." Conflicts involving immediate "family members" should be subject to a higher level of scrutiny by the Board of Directors than those involving "relatives" or other relationships generally, although each situation involves individual circumstances to be weighed by the Board.

3) Possible conflict or appearance of conflict: A possible conflict or appearance of conflict occurs when the interests or concerns of any director or employee, or their relationship with relatives and other persons and entities, *may be seen as affecting the interests or concerns of MPAAT*.

Examples: In accord with the preceding text's enumeration of "indirect conflict" and "potential conflict," such a situation would exist in the following instances (provided for illustrative purposes only and not intended to be all-inclusive):

- A situation in which MPAAT considers a grant to an organization for which an MPAAT Board member has served as a Board member in the past.

- A situation in which an appointed MPAAT Board member's allegiance, or perceived allegiance, to his or her appointing authority may be perceived as compromising the objectivity of the Board member regarding an issue before the MPAAT Board.

- A situation in which a staff member or their spouse has a close friend (who is not otherwise included in the definition of "relative" used in this Policy) who has a "material financial interest" in an MPAAT vendor.

If your organization discovers any form of a conflict of interest, before you submit a grant, during the review process, or after a grant or contract has been awarded, contact the MPAAT staff to discuss the potential conflict. MPAAT staff can help you determine if you have a conflict of interest, and what steps can be taken to resolve the matter.

[3] A "material financial interest" exists when an MPAAT employee or director, or a relative of either, has rights (whether or not yet vested) to receive value, as compensation or otherwise, in connection with a transaction.

MPAAT DATA PRACTICES POLICY

NOTE: This policy relates only to the data and procedures conducted under the MPAAT contract with the selected vendor.

MPAAT is subject to the provisions of the Minnesota Government Data Practices Act (MGDPA) and the provisions of the Open Meeting Law (OML). Although MPAAT is not a state agency, the Ramsey County District Court issued a ruling on December 30, 2002, finding that MPAAT would benefit from the public accountability imposed by the MGDPA and the OML.

The MGDPA has a presumption that all data is public, unless specifically classified. MPAAT Grantees and contractors understand that grant applications and project information are public records, and that information must be provided to any member of the public upon request. MPAAT Grantees and contractors agree that they will notify MPAAT immediately if they receive a MGDPA information request.

All of the data created, collected, received, stored, used, maintained, or disseminated by the Contractor under this agreement, hereinafter referred to as the "agreement data," is subject to the requirements of the Minnesota Government Data Practices Act, Minn. Stat. Chapter 13, hereinafter referred to as "the Act." Contractor agrees to comply with those requirements with respect to the agreement data as if it were a government entity. Pricing and Service Agreements of any proposal are considered public information, unless the applicant can demonstrate that the information is a "trade secret" pursuant to Minn. Stat. §13.37, subd. 1 or "nonpublic business data" pursuant to Minn. Stat. §13.591, subd. 1. MPAAT will not release "trade secret" or "nonpublic business data" to the public; however, Contractor assumes all liability for and costs related to litigation arising from non disclosure of "trade secrets" or "nonpublic data." Contractor understands that pursuant to Minn. Stat. §13.05, subd. 11, the remedies provided in §13.08 of the Act apply to the Contractor. Contractor agrees to notify MPAAT immediately upon request for any agreement data.

APPENDIX C
MATS III RESEARCH QUESTIONS

Previous research questions (MATS II):

- What is the smoking prevalence among adults and young adults in Minnesota?
- When do Minnesotans start smoking and how long do they smoke?
- What tobacco products do Minnesotans use?
- How many quit attempts do smokers make?
- What methods do Minnesota smokers use to try to quit smoking and are those methods helpful?
- What percentages of smokers are thinking about quitting, ready to quit, or in a quit attempt?
- How often do healthcare provides ask, advise, and assist smokers to quit?
- Do Minnesotans ask others not to smoke around them?
- How often are Minnesotans exposed to SHS and where?
- Do Minnesotans prefer smoke-free policies in restaurants?
- How many Minnesotans are covered by smoke-free polices in the workplace?
- Do Minnesotans see a health benefit to quitting smoking?
- Do Minnesotans perceive exposure to SHS to be harmful?
- How is smoking perceived by Minnesotans?
- Are Minnesotans likely to start smoking?

Proposed additional research questions (MATS III):

- Are Minnesotans aware of tobacco control media messages?
- Are Minnesotans supportive of expanding smoke-free policies to all workplaces?
- What has been the impact of price increases?
- What is the impact of regional smoking bans on smoking prevalence/norms?
- What has changed since the last MATS survey?

APPENDIX D
MATS II WEIGHTS

Sampling and Weighting of the Minnesota Adult Tobacco Survey

The Minnesota Adult Tobacco Survey (MATS) set out to estimate smoking prevalence rates for a representative sample of people living in Minnesota and for a representative sample of individual members of the Blue Cross and Blue Shield of Minnesota (BCBS) health plan. The MATS survey set a goal of interviewing 10,000 people from Minnesota drawing 5,500 from a state-wide random digit dial sample (RDD sample) and 4,500 from an enrollee list of BCBS members (BCBS list sample). The MATS survey team desired an over-sample of 18-24 year olds within the state of Minnesota as well as representative samples from each of four major under-writing pools of BCBS members: (1) Senior Medicare supplemental insurance (Medicare), (2) Medicaid enrollees under the age of 65 (PMAP) (3) Minnesota Care enrollees (MN Care), and (4) those covered through commercial BCBS health plans (Commercial).[4]

The RDD sample consisted of a random sample of the state's telephone numbers. The RDD sample used screening during the interview to make households with an 18-24 year old slightly more likely to be selected (a ratio of 1 to .95).[5] If there was both an 18-24 year old and a person over the age of 24, then an 18-24 year old was selected 90 percent of the time and a non-18-24 year was selected 10 percent of the time.[6] These two adjustments made 18-24 year olds more likely to be selected than non-18-24 year olds.

The BCBS list sample was divided into 7 strata in order to ensure the selection of a greater number of 18-24 year olds. The 7 strata were; (1) Medicare, (2) PMAP over 24 years of age and under 65 years of age, (3) MN Care over 24 years of age, (4) Commercial over 24 years of age, (5) 18-24 year old PMAP, (6) 18-24 year old MN care, and (7) 18-24 year old commercial. The number of people in each strata and the number of people sampled is listed in Table 1.

[4] The BCBS list sample also had a secondary goal of interviewing a sufficient number of people enrolled in the BCBS "Blue Plus" plans. This was easily achieved as most of the sampled BCBS members were also Blue Plus members.
[5] These ratios were developed by Clearwater Research to reach our desired number of 18-24 year old interviews.
[6] These ratios were developed by Clearwater Research to reach our desired number of 18-24 year old interviews.

Table 1: Blue Cross Blue Shield of Minnesota List Sample

Strata	Total Stratum Population*	Random Sample Within Stratum
PMAP >24 & <65	11412	7666
MNCare > 24	32181	3498
Medicare > 24	163298	759
Commerical > 24	590451	4720
18-24 year olds		
18-24 PMAP	6051	910
18-24 MNCare	9630	955
18-24 Commercial	84843	2916
Total	897866	21425

*Atrium members were excluded.

Weighting the RDD Sample

The aim of this part of the study was to weight the respondents selected to take part in the MATS survey to represent the entire population of the state of Minnesota. This is accomplished by weighting respondents relative to their probability of selection into the sample. This process is made more difficult by the fact that not all the respondents have the same probability of inclusion into the sample. The probability of selection varied by; (1) (1) whether there was an 18-24 year old living in the household, (2) whether the respondent was 18-24 years old, (3) how many phone lines were connected to a household, and (4) the number of adults living in a household (each of these is discussed in more detail below). Weighting the respondents relative to their probability of selection into the sample accomplishes two key goals: (1) having the sampled respondents represent the entire population of Minnesota, and (2) controlling for the fact that the respondents did not all have the same probability of selection into the sample.

The MATS RDD sample design did not draw actual people, but rather it randomly drew phone numbers. Phone numbers consist of three pieces: XXX-YYY-ZZZZ. The XXX is called an "area code," the YYY is called an "exchange," and the ZZZZ is called a "stem." The RDD Samples were drawn from phone numbers that are in active area code plus exchange groupings within the state of Minnesota. The stems within an active area code plus exchange group are divided into 100 groups of 100 consecutive telephone numbers (called 100 banks) and telephone numbers are randomly drawn from 100 banks with at least one listed telephone number in the

interval. There were a total of 44,558 such 100 banks at the time of sampling in the state of Minnesota.

In the MATS survey there are two additional considerations. The first is a screening mechanism that screened out 5 out of every 100 households that did not contain an 18-24 year old. The second was that in households that had both an 18-24 year old and a person over the age of 24, the 18-24 year old was chosen 90 percent of the time and the non-18-24 year old was chosen 10 percent of the time.

Basic Probability

An important assumption in our weighting scheme is that each randomly generated phone number has an equal probability of selection. Then the basic probability is equal to:

> *Probability of selecting a phone number (PSPN)=(Total number of phone numbers selected into the sample)/(Total number of phone numbers from which the sampled numbers were drawn)*

The total number of phone numbers from which the RDD sampled numbers were drawn is determined by how many "100 banks" were used by the vendor (Genesys). All possible numbers from an (area code + exchange) combination are broken down into intervals of 100 (for example, 651-625-0000 to 651-625-0099). If there is a listed telephone number within the block of 100 numbers, then all the numbers within the 100 bank are eligible to be sampled. The denominator is, therefore, the number of 100 banks used for sampling within the state multiplied by 100. The total number of phone numbers selected into the sample is determined by counting the number of numbers actually called as part of the survey.[7]

Response Rate Adjustment

The probability of selecting a phone number is further adjusted by the response rate. *For the purpose of weighting, the response rate is defined as the total number of completed surveys, divided by the total number of phone numbers in the sample.*

[7] Genesys' screening process screens out business numbers through cross listing the numbers with listed businesses, and Genesys dials the numbers to screen out disconnected numbers as well.

Response rate adjusted probability of selecting a phone number=(Response rate) (Probability of selecting a phone number)*

Phone Line Adjustment

The response rate adjustment is not equal to the probability of selecting any one household because households have an unequal number of phone lines leading to them. We can use the number of phone lines connected to a household to adjust a household's probability of selection into the sample.[8] Information regarding the number of residential phone lines in each respondent's home is collected as part of the interview and it is used to make the following adjustment to the response rate adjusted probability of selecting a phone number:

Probability of selecting a household=(number of phone lines within a selected household)(Response rate adjusted probability of selecting a phone number)*

Household Screening

Five out of one hundred households without an 18-24 year old living within it were screened out of the survey.[9] Thus the probability of selecting a household needs to be adjusted by whether the household contained at least one 18-24 year old at the time of screening.

Screen adjusted probability of selecting a household=(Probability of selecting a household)(.95 if household does not have an 18-24 year old living in it)*

Basic Person Probability

The purpose of the weighting scheme was to develop person weights. Within each household only one person was selected for an in depth interview. In general, people in larger households have a smaller probability of being included than people in smaller households. For households that did not have both an 18-24 year old and someone over 24 living within it, the probability of

[8] This number was not be allowed to exceed three, even though some households have more than 3 phone lines.
[9] The number of 18-24 year olds in the household and the number of adults older than 24 was determined at the beginning of the interview by Clearwater Research.

selection for any person is the household varies by the number of adults residing in the household.[10] For these households, the ultimate probability of selecting a person is equal to:

Probability of selecting a person=(Screen adjusted probability of selecting a household)(1/The number of adults living in the household)*

For households that had both an 18-24 year old and someone older than 24 living within it the selection process was more complicated. In these "mixed" households, an 18-24 year old was selected 90 percent of the time and a non-18-24 year old 10 percent of the time. Thus, the probabilities of selection for these mixed households depends on the age of the person selected.

If selected person is 18-24 years old, then:

> *Probability of selecting a person=.9*(Probability of selecting a household)*(1/The number of 18-24 year olds living in the household)*

If selected person is older than 24 years of age:

> *Probability of selecting a person=.1*(Probability of selecting a household)*(1/The number of people over 24 years of age living in the household)*

Basic Person Weight

The basic person weight is equal to the inverse probability of selecting a person, or:

> *Basic person weight=1/Probability of selecting a person*

Post-stratification

The goal of post-stratification is to adjust the person weights to match known population distributions of a given group.

> *Post-stratified weight=(Basic person weight of the person in a group)*((Known population distribution for group)/(Sum of the basic person weights in a post-stratified grouping))*

[10] This number is limited to 8 to avoid large amounts of variance in the weights due to very large household sizes.

Post-stratifying the basic person weights ensures that the sum of person weights will equal known population distributions. For the MATS survey, we post-stratified by two age groups (18-24 year olds versus those older than 24), gender (male versus female) and two geographic groupings (Twin Cites Metropolitan Area and non-Twin Cities Metropolitan Area). The post-stratification adjustments were made using the 2002 and 2001 Current Population Survey's Annual Demographic Supplements (CPS-ADS) to estimate of the number of adults living in Minnesota by age group, sex and geographic location.

Weighting of the BCBS List Sample

Developing person weights for the BCBS list sample is a relatively simple procedure; the basic person weight differs by which stratum a respondent is in. The weights are equal to:

Probability of selecting a person=(Number of sampled persons in a stratum)/(Total number of people in the stratum)

Response Rate Adjustment

The probability of selecting a person is further adjusted by the response rate within each stratum. Again, for weighting purposes the response rate is defined as the number of completed interviews within a stratum divided by all the sampled elements within the stratum.

Response rate adjusted probability of selecting a person=(Response rate within a stratum)(Probability of selecting a person within a stratum)*

Basic Person Weight

The basic person weight is equal to the inverse probability of selection.

1/(Response rate adjusted probability of selecting a person)

Post-stratification

The goal of post-stratification is to adjust the person weights to match known population distributions of a given group.

Post-stratified weight=(Basic person weight of the person in a group)((Known population distribution for group)/(Sum of the basic person weights in a post-stratified grouping))*

The basic person weight is post-stratified so that the survey totals for key variables are equal to the control totals from the BCBS administrative data. The post-stratifying variables are the total number of adults in each of the seven strata, gender (male versus female) and whether or not the person lived in the Twin Cities Metro Area, another Metro Area within Minnesota, or a non-metro area within Minnesota.

Merging the BCBS List Sample With the Statewide RDD Sample

The MATS survey consisted of two general sampling strategies. The first was a stratified random sample of Blue Cross Blue Shield (BCBS) members, and the other was a random digit dial (RDD) sample of the entire state of Minnesota. In order to merge the two samples, we have to deal with the fact that everyone within the BCBS list sample was also eligible to be sampled through the RDD. However, we have no way of knowing whether an RDD respondent is a member of BCBS. All we know is that all the members of BCBS were eligible to be sampled through the RDD.

The general framework for the merging of the Blue Cross list sample with the RDD sample is achieved through a process of statistical matching. The statistical matching procedure "matches" up respondents in the BCBS list sample with similar people in the RDD sample using a probabilistic matching algorithm. The matched RDD sample respondent is assumed to have been eligible to be in both samples. To account for the dual probability of selection of the matched RDD respondent, the total RDD respondent weight is divided up proportionately between the matched RDD respondent and the BCBS list respondent. Because the BCBS members are matched to RDD respondents with replacement, more than one BCBS member can

be matched to a single RDD respondent. The RDD sample weight is then divided up among the BCBS respondents(s) and the RDD respondent in proportion to their initial weights.

The key assumption for the statistical matching is that we match together like individuals who have no systematic differences from the BCBS members they are matched to, even though the matched RDD respondent may not have actually been a Blue Cross member. In order to assure this assumption works in practice, we used several different matching criteria. In order to be matched, a RDD respondent and a BCBS list respondent had to share the following characteristics:

1. Type of reported health insurance coverage (public, private, uninsured)
2. Smoking status (current smoker versus former smokers and non-smokers)
3. Twin City metropolitan residence (Twin Cities versus all else)
4. Gender (male versus female)
5. Listed telephone number (all BCBS list sample respondents had a listed telephone number and were only matched to RDD respondents with a listed number)
6. Age group (18-24, 25-64, and over 64 years of age)

We merged the BCBS Senior, Commercial and Minnesota Care populations in with the statewide RDD population. We did not attempt to merge in the BCBS PMAP population with the statewide RDD because of concerns regarding significant population differences between the BCBS PMAP population and the state Medical Assistance and PMAP population. For example, the majority of statewide disabled Medical Assistance participants are not enrolled in PMAP. We felt that this kind of systematic selection into BCBS PMAP based on some variable not explicitly used to match cases (e.g., disability status, age, etc.) in our matching process would produce invalid results.

Weighting Conclusion

The weighted response rate for the final merged cases is 56.53 percent using the AAPOR Response Rate 4 detailed in the Clearwater technical report.

Table 2 contains the smoking rate for all adults and for 18-24 year olds separately and their associated standard errors. The standard errors are calculated using both the RDD sample only and the merged sample to show the reduction in the standard error resulting from merging the two data files.

Table 2: Smoking Rate Standard Error Comparisons Between the RDD Weight and the Merged Weight

Age Group	Smoking Rate	RDD Weight SE	Merged Weight SE
All Adults	18.00%	0.73%	0.71%
18-24 year olds	32.10%	2.13%	2.03%

As expected, the merged weight has the lowest standard error for both estimates in Table 2.

Income Imputation

In survey research there is a substantial amount of missing data for certain types of items (e.g., income) because survey respondents refuse to answer the questions for some reason. If the organization collecting the data decides to not impute missing values, they have made an assumption that the respondents with missing data are no different from the people with reported data. This assumption does not hold up under examination. For example, on average in a recent Colorado Household Survey the respondents with missing data on income had higher levels of education than those without missing income data. Higher levels of education are related to higher levels of income. Thus, the assumption that the respondents with missing data are no different than the respondents with reported data is incorrect and estimates derived from this assumption will be biased.

For the MATS 2003 survey data, we used "hot deck" imputation. Hot deck is a process by which a respondent's valid value for a specific variable is assigned to another respondent who does not have a valid value for this variable. The respondent with the valid value is called a "donor" and a person with a missing value is called a "recipient." For example, if the donor is 35 years old, then the recipient (respondent with missing age) is given a value of 35 and the donor maintains the age of 35.

The process of selecting a donor is the most important component of the "hot deck" procedure. Potential donors are sectioned into homogeneous groups called "cells" defined by many parameters. For example, all white, unemployed, college educated, males over the age of 65 with a valid value for the specific variable can be placed into one cell, while all non-white, unemployed, college educated, males over 65 can be placed into another cell. Recipients are matched to these homogenous cells of donors based on their characteristics. A random donor selected from the matching group supplies his/her value to the recipient.

The characteristics used to group the respondents should be highly correlated with the variable being imputed. For example, when imputing income, donors are matched with recipients based on highest educational level because education is highly correlated with income. The variables chosen to match the donors and the recipients form the basis of a "model" for predicting the imputed variable. A good imputation procedure should provide unbiased estimates of the mean and variance of the variable by correcting for potential distributional differences between people with and without reported data. The basic underlying assumption is that the value of the variable being estimated (such as state rates of health insurance coverage) is not conditional on (i.e., moderated by) the missing data mechanism[11]. For example, all those respondents with missing health insurance data do not have a different relationship between health insurance coverage and covariates than all the respondents with reported data.

Although properly specified imputation can alter basic distributional summary statistics (means and variances) from the statistics calculated using complete cases only, it should not transform the relationships among variables. If there was a relationship between two variables in the reported data it should be the same in the imputed data, and no new relationships should appear after the imputation. The basic idea of model-based (and particularly, "hot deck") imputation is to use the existing relationships within the reported data to adjust for distributional differences among those who are likely to report data and those who are less likely.

The hot deck is limited in the number of "variable levels" it can have. For example, the variable "highest degree attained" can be broken down into three variable levels (or cells) for the hot deck; less than high school, high school diploma and college degree. The number of hot deck cells is equal to the product of the number of variable levels (e.g., covered, not covered) used to match donors with recipients. If there are too many variable levels used in the hot deck, then

[11] Little, R. and Rubin, D. (1987). Statistical Analysis With Missing Data. New York: Wiley.

many of the cells will not be populated with donors. The more variable levels that are used (i.e., the more hot deck cells), the more donors are needed for the hot deck to work.

Implementation of the Hot Deck

We implemented the hot deck using STATA version 7's hot deck imputation procedure (available for download from the STATA web site[12]). The 2003 MATS survey has a categorical income question. If the categorical income question is not answered by the respondent (roughly 7 percent), then a value will be imputed. The imputation is done iteratively with variables removed from the procedure one at a time until each person receives an imputed value. The variables used in the hotdeck are described below:

To impute the RDD categorical income level the following hierarchy for each imputation iteration was used (variables 1-4 were always in the hot deck and the procedure went through 4 iterations). The married variable was the first removed, and so on down the list until only race and insurance coverage remained. By the fourth iteration everyone had an imputed value.

1. Race (1. Black, 2. Other)
2. Insurance Coverage (1. Any Public Coverage, 2. Private Coverage Only)
3. Age (1. 18-30, 2. 31-64, 3. 65 and Over)
4. Education (1. Less Than High School, 2. High School, 3. At Least Some College)
5. Married (Married versus not married)

The Same process was followed for the BCBS list sample categorical income imputation and it also took four iterations to completely impute all the missing values.

[12] www.stata.com

APPENDIX E
MATS II INSTRUMENT

See separate document for Appendix E: MATS II Instrument.

APPENDIX F
MATS II METHODS REPORT

See separate document for Appendix F: MATS II Methods Report