

*METHODOLOGICAL REPORT*

MICHIGAN STATE UNIVERSITY  
STATE OF THE STATE SURVEY  
[MSU SOSS-48]

Spring 2008 Round

*Prepared by:*

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## **NOTE TO THE READER**

The State of the State Survey [SOSS] is administered by the Institute for Public Policy and Social Research of Michigan State University.

For the benefit of sponsors, consumers and users of SOSS data, we have prepared this guide to the purpose, design, methods, and content of the survey.

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# 1. PURPOSE OF SURVEY

Dr. Jack H. Knott, former Director of the Institute for Public Policy and Social Research [IPPSR], made the Michigan State University State of the State survey [MSU SOSS] a reality by promoting the idea throughout the University and convincing the key sponsors to contribute funds to get the survey off the ground. With funding assured for the first year, planning began in June 1994. After completing 19 rounds of SOSS, there was a brief period of inactivity between the Fall of 1999 and the Winter of 2001 when, for budgetary reasons, no rounds of SOSS were conducted. However, with the appointment of Dr. Carol Weissert as the Director of IPPSR in the Fall of 2000, there was a resurgence of both interest and funding for the resumption of SOSS as a longitudinal survey of the state's adult population on policy-relevant issues.

SOSS is a quarterly survey of the citizens of Michigan. It employs Computer Assisted Telephone Interviewing (CATI) technology to interview a stratified random sample of Michigan citizens. Conducted by the Office for Survey Research, a division of the Institute for Public Policy and Social Research, SOSS was inaugurated in October 1994.

Although dozens of surveys are conducted in Michigan every year, none is designed to provide a regular systematic monitoring of the public mood in major regions of the state. SOSS is designed to fill this information gap. SOSS has five principal objectives.

**1. To Provide Information about Citizen Opinion on Critical Issues.** In keeping with MSU's role as the premier Land Grant University in the United States, MSU seeks to inform the public about the state of the state. Although statistics from censuses, public records, programs, and services provide important information about the state of the state, there is no substitute for gathering information directly from the citizens. By conducting a State of the State survey at regular intervals, IPPSR hopes to monitor the public's mood about important aspects of Michigan's public life. This information should be useful not only to citizens at large but also to policy-makers in the public sector and to other groups and organizations that take an active interest in the state of the state of Michigan.

By disseminating this information through the mass media and in special studies, IPPSR hopes to provide baselines for assessing change in the people's sources of satisfaction and dissatisfaction with the quality of life, the performance of public institutions, the impact and efficacy of public policy, and the opinions about various aspects of life in Michigan, such as confidence in the economy and the climate for business, protection of the environment, freedom from crime, family life, and the vitality of ethnic groups and communities.

**2. To Provide Data for Scientific and Policy Research by MSU faculty.**

MSU's faculty will use the data from the State of the State Survey to address a wide variety of issues in public policy. What are the factors associated with the declining levels of confidence in governmental institutions? To what extent does social and economic status affect tolerance and mutual trust between ethnic and racial groups? Are subjective perceptions of environmental quality related to "objective" measures of environmental quality in Michigan's counties? These are only a few examples of the types of questions that the principal researchers will address using the SOSS results. To serve the interests of a wider scientific community, the SOSS data is deposited in an international data archive.

**3. To Provide Useful Information for Programs and Offices at MSU.** IPPSR has conducted a wide variety of studies for the use of MSU administrators and faculty. SOSS will also develop data for such internal use as well as provide data for use by the MSU Extension, the Vice Provost for University Outreach, and other offices. Generally, the Winter rounds of the survey will assess the public image of higher educational institutions, which will be useful to many offices at MSU.

**4. To Develop Survey Methods.** The computer-assisted telephone interviewing (CATI) technology lends itself to experiments in question wording, question order, and formatting of response categories. By varying the wording and sequences of questions and responses, the investigators can study the sensitivity of answers to the format of questions. Although survey research demands creative skills and remains to some extent an "art," the scientific study of survey methods is a well established discipline. Contributing to the scientific literature on survey methods is an important goal of the OSR; hence, a variety of experiments are built into some of the survey instruments.

**5. To Provide Opportunities for Student Training and Research.** Data from SOSS will be made directly available to professors and students for use in instruction and research in classes at MSU. The availability of up-to-date information on public opinion and individual perceptions and experiences of the Michigan population will increase the sense of immediacy and relevancy of educational projects.

## **2. CALENDAR**

People's experiences and the public mood change not only from year to year but also with the seasons. It is important to establish baselines for understanding what is a "normal" seasonal fluctuation and what is a more permanent change. For

this reason, SOSS is conducted at regular quarterly intervals. Roughly one-fourth of the questions are repeated in each quarterly round.

SOSS has seasons itself, however, by focusing the main theme of each round of the survey on topics that correspond with the annual cycle of major events in Michigan and at Michigan State University. In general, the intended cycle is as follows:

**Fall.** The Fall round in even-numbered years focuses on elections, political participation, and political attitudes and orientations. In odd-numbered years, the Fall round tends to focus on health and the environment.

**Winter.** The Winter round in each year focuses on the state of the state of Michigan, in particular on the performance of governmental institutions at all levels, on the subjective quality of life of Michigan's citizens (satisfaction with public education, work, protection from crime, environmental preservation, and so forth), and on the desire for reform in Michigan's political economy. This information should help to inform the public discussion around the time of the Governor's annual budget message. In addition, questions on the public's perceptions of Michigan's higher educational institutions should help to inform public discussion around the time of the annual "State of MSU" address by the President of the University.

**Spring.** The Spring round has as its main theme the state of Michigan families, the role and status of women, and the status of children. Assessments of public opinion concerning issues of women's rights, the status of children, and related issues will help to inform policy debates.

**Summer.** The Summer round focuses primarily on the state of ethnic Michigan, i.e., the vitality and diversity of Michigan's ethnic and racial communities. SOSS assesses the strength of ethnic ties and identities, perceptions of various ethnic groups (tolerance, stereotyping), and experiences of intolerance or discrimination. In addition, the extent of attachment to and vitality of wider communities (towns and cities) is an important mark of the quality of life in Michigan.

From time to time, SOSS may depart from this thematic plan when particular sponsorship or pressing issues make it necessary or desirable. Beyond the core set of interview items, SOSS-48 focused on respondents' beliefs about the impact of business income taxes and their relative preferences among the four major tax sources of state revenues. Another set of questions explored the Real ID Drivers License and respondents' willingness to provide various types of documentation need to obtain a Real ID and the preference between it and the

proposed Enhanced Drivers License. Several other questions addressed the respondents' concerns about security at the Michigan-Canadian border crossings. Another set of questions explored respondents' familiarity with bovine tuberculosis, its presence in both cattle and deer herds, and the lengths to which respondents would be willing to take to eliminate bovine tuberculosis in each animal population.

### 3. STRUCTURE OF THE QUESTIONNAIRE

The questionnaires for each round of the survey are designed by a different set of principal investigators, who are usually faculty and students at MSU, but other staff or clients also. Each survey instrument consists of three main parts: a demographic core, a non-demographic core, and the main substantive theme or themes.

The demographic core contains questions on the social background and status of the respondents (age, sex, education, employment status, type of community, marital status, number of children, size of household, income, ethnic identity, etc.). This bloc of questions is repeated in each round, though more detailed questions on some of the dimensions (e.g., the number and ages of children) might be included in certain rounds.

The non-demographic core contains additional questions that are repeated in every round of the survey in order to gauge broad shifts in the economic, social, and political orientations and status of the population. These include questions about consumer confidence, self-identification on a liberal-conservative scale, partisan identification, assessments of presidential performance and gubernatorial performance, and other issues.

Together the demographic and non-demographic core of the questionnaire take an average of about 5 minutes of interviewing time to complete.

The remainder of the interview is timed to last an average of 15 minutes, so that on average the interviews take about 20 minutes of the respondent's time.

The questionnaire consists almost entirely of closed-ended questions. Verbatim responses are used and open-ended coding are required for these questions.

A word of caution is in order on the use of the data. Because of the inclusion of question-order and question-wording experiments, the codebook for the survey, containing the raw or weighted frequency distribution of responses, may be difficult to interpret and must be used carefully. Often, alternative variants of questions

will be combined into composite measures in the final data that are distributed, but the original questions also remain in the codebook and data set. Although OSR will do its best to document such situations, it is the responsibility of the data users and analysts, not of the OSR, to assure that the appropriate variants of questions are used in analyses and reports. A copy of the CATI interview program with the skip patterns indicated by "[goto ...]" commands and "[if ...]" commands accompanies the codebook to help clarify the paths particular respondents would take through the interview.

#### 4. MANAGEMENT AND ORGANIZATION

**IPPSR.** In the summer of 2007, IPPSR Director Dr. Douglas Roberts named **Dr. Charles Ballard** (Department of Economics) as the overall Director of the SOSS program, replacing **Dr. Brian Silver** (Department of Political Science) who had served as the SOSS Director since its beginning in 1994. Overall responsibility for the execution and management of the SOSS rests with the Office for Survey Research (OSR) of the Institute for Public Policy and Social Research. The Principal OSR staff for SOSS consists of **Dr. Larry Hembroff**, Survey Director and Methodologist, **Karen Clark**, Programmer and Project Manager, and the Director of Survey Operations **Linda Stork**.

OSR staff is responsible for the technical work of programming the CATI survey instrument, training and supervising interviewers, selection and administration of the sample, coding of data, and preparation of the final data set and documentation. In addition, OSR staff works with and advises the principal investigators and other researchers in the design of the sample and the survey instrument. However, final approval of the survey and sample design rests with the principal investigators, not OSR staff.

For each round of the survey, a small working group of principal investigators is responsible for the design of the instrument for that round, subject to final approval by the SOSS Director and OSR staff. The working groups consist primarily of "principal investigators" for the given round who will conduct the major initial analyses of the data, provide a public briefing, and have priority in analyzing the data for publication for the six-month period following the end of the field period for that round (more on data access below).

The Working Group for the Spring 2008 survey was comprised of:

**Dr. Edmund F. McGarrell**, Professor and Director of the School of Criminal Justice, Michigan State University

**Brig. Gen. Michael C. McDaniel**, J.D., M.S.S., M.A., Governor's Advisor on Homeland Security and Assistant Adjutant General for Homeland Security, Department of Military and Veterans Affairs

**Dr. Shawn Riley**, Assoc. Professor, Fisheries and Wildlife, Michigan State University

**Dr. Charles Ballard**, Professor, Department of Economics, Director, State of the State Survey, Michigan State University

**Dr. Paul Menchik**, Professor, Department of Economics, Michigan State University

## 5. FUNDING

The following organizations and units on campus have provided funding for SOSS during the 1995-2008 series of surveys:

### Organizations

Area Agencies on Aging Association of Michigan  
Aspen Institute  
Community Foundation for Southeastern Michigan  
C. S. Mott Group for Sustainable Food Systems  
Dept. of Political Science, Florida State University  
Dept. of Political Science, Tufts University  
Nonprofit Michigan Project  
University of Michigan  
United Way of Michigan  
State of Michigan  
Department of Military Veteran Affairs  
Gerald R. Ford School of Public Policy, University of Michigan  
Muhlenberg College  
The Center for Michigan  
Michigan Department of Information Technology, Bureau of Strategic Policy

### Michigan State University

Applied Policy Grants Initiative  
Center for Health Care Studies  
Center for Health Promotion and Disease Prevention



College of Communication Arts & Sciences  
College of Human Ecology  
College of Human Medicine  
College of Osteopathic Medicine  
College of Social Science  
Department of Economics  
Department of Political Science  
Department of Psychology  
Department of Radiology  
Department of Sociology  
Education Policy Institute  
Institute for Public Policy and Social Research  
Julian Samora Research Institute  
Land Use Policy Institute  
Legislative Leadership Program  
Managed Care Institute  
Michigan Agricultural Experiment Station  
MSU Extension  
MSU Institute for Children Youth and Families  
Office of the Provost  
Office of the Vice President for Research and Graduate Studies  
Office of the Vice Provost for University Outreach  
School of Criminal Justice  
School of Labor and Industrial Relations  
School of Social Work

## **6. DISSEMINATION OF RESULTS**

To assure timely dissemination of the results and timely and fair access to the data, early in its deliberations the Advisory Committee approved certain principles.

Each round of the survey has an identified set of Principal Investigators (PI's) who have priority in access to the data for that round but also certain obligations. The PI's have exclusive right to prepare scientific papers for publication from the data for that survey for a period of six months after the end of the field date.

All data for the survey, however, are made available to offices within MSU for internal use as soon as the data are available and documentation is prepared.

All data for the survey are made available to instructors in courses at MSU to use the data for instructional purposes as soon as the data are available and documentation prepared.

Six months after completion of the field date, the survey data are made available on an unrestricted basis to all MSU faculty and students.

Originally, it was planned that one year after completion of the field date, the data and documentation will be deposited at the Inter-University Consortium for Political and Social Research (ICPSR) in Ann Arbor. However, beginning in the Spring of 2002, each individual SOSS data set, interview instrument, and methodological report have been posted in “universally” readable formats to the SOSS section of IPPSR’s webpage for downloading by any interested party. Such a deposition of the data is intended to facilitate dissemination and use of the data by the wider scientific and policy community as well put a certain seal of approval on the data quality to enhance the possibilities for researchers to publish from the data.

## 7. SAMPLE DESIGN

The referent population is the non-institutionalized, English-speaking adult population of Michigan age 18 and over. Since the survey was conducted by telephone, only persons who lived in households that had landline telephones had a chance of being interviewed.

**Stratification.** To assure representation of major regions within Michigan, the sample was stratified into six regions, each consisting of a set of contiguous counties, plus the City of Detroit. The grouping of counties corresponds to that used by MSU Extension prior to July 2005 with Detroit separated out from the Southeast region.

The six regions are defined as follows (counties listed within regions):

1. Upper Peninsula (Alger, Baraga, Chippewa, Delta, Dickinson, Gogebic, Houghton, Iron, Keweenaw, Luce, Ontonagon, Mackinac, Marquette, Menominee, Schoolcraft)
2. Northern Lower Peninsula (Alcona, Alpena, Antrim, Benzie, Charlevoix, Cheboygan, Crawford, Emmet, Grand Traverse, Iosco, Kalkaska, Leelanau, Missaukee, Montmorency, Ogemaw, Oscoda, Otsego, Presque Isle, Roscommon, Wexford)

3. West Central (Allegan, Barry, Ionia, Kent, Lake, Manistee, Mason, Mecosta, Montcalm, Muskegon, Newaygo, Oceana, Osceola, Ottawa)
4. East Central (Arenac, Bay, Clare, Clinton, Gladwin, Gratiot, Huron, Isabella, Midland, Saginaw, Sanilac, Shiawassee, Tuscola)
5. Southwest (Berrien, Branch, Calhoun, Cass, Eaton, Hillsdale, Ingham, Jackson, Kalamazoo, St. Joseph, Van Buren)
6. Southeast (Genesee, Lapeer, Lenawee, Livingston, Macomb, Monroe, Oakland, St. Clair, Washtenaw, Wayne [excluding Detroit])
7. Detroit City

To allow reclassification of the place of residence (county) into alternative regional groupings, each respondent's county of residence is also coded on the data set.

In July 2005, the MSU Extension reconfigured its regions from six to five. The only region that did not change in terms of the counties comprising it was the Upper Peninsula. The new regional configuration is as follows:

Region 1 Upper Peninsula: Menominee, Delta, Chippewa, Luce, Mackinac, Schoolcraft, Alger, Marquette, Dickinson, Iron, Gogebic, Baraga, Ontonagon, Keweenaw, Houghton.

Region 2 North: Emmet, Cheboygan, Presque Isle, Alpena, Montmorency, Otsego, Charlevoix, Leelanau, Benzie, Grand Traverse, Kalkaska, Crawford, Oscoda, Alcona, Iosco, Antrim, Manistee, Missaukee.

Region 3 Central: Kent, Ottawa, Gratiot, Montcalm, Newaygo, Midland, Isabella, Mecosta, Oceana, Bay, Arenac, Gladwin, Clare, Osceola, Lake, Mason, Ogemaw, Roscommon, Wexford.

Region 4 Southwest: Lenawee, Hillsdale, Branch, St Joseph, Cass, Berrien, Jackson, Calhoun, Kalamazoo, Van Buren, Ingham, Eaton, Barry, Allegan, Shiawassee, Clinton, Ionia, Muskegon.

Region 5 Southeast: Monroe, Wayne, Washtenaw, Livingston, Oakland, Macomb, St Clair, Lapeer, Genesee, Sanilac, Saginaw, Tuscola, Huron.

Particularly for purposes of maintaining the longitudinal value of the State of the State Survey data sets, OSR elected to continue using the original regional configuration as the basis for the stratified sampling design of each survey. OSR

will continue to calculate caseweights that will allow generalizations to these regions that take full advantage of the disproportionate sampling design. However, to maintain the utility of the SOSS data sets for MSU Extension purposes, as of SOSS 38, we have constructed a variable (MSUE2005r5) aggregating counties into the new MSUE regional groupings and have constructed a separate set of caseweights appropriate for these regions.

**Sampling.** Until SOSS-35, all previous respondents were derived only from random-digit dial samples. Beginning with SOSS-35, a change was made in the sampling strategy for the State of the State Surveys. The overall intent of the change was to reduce costs, increase response rates, and shorten the field period needed to complete each survey. The revised strategy is similar to that used on the University of Michigan's Survey of Consumer Attitudes. A portion of the sample of interviews is derived from a new random-digit dial sample of phone numbers in the state. The details of this are described below. The other portion of the sample of completed interviews (roughly 40%) is derived from re-interviews of individuals who had been interviewed in the previous round of SOSS and who had agreed to be re-contacted. Roughly 90% of all respondents in each round of SOSS agree to be re-contacted. Re-interviewing individuals who constituted a representative random sample of the state's adults should still constitute a representative random sample several months later if adjustments for any non-response are made. Limiting the portion of SOSS-48's sample of completed interviews derived from re-interviews with SOSS-47 participants to less than half of the total number of SOSS-48 interviews ensures that there should be sufficient numbers of respondents who will be willing to be re-contacted and will be reachable for the next round of SOSS. In addition to the three benefits listed above as reasons for making the change in sampling strategy, having a portion of each round of SOSS derived from re-interviews with individuals from a previous round enables a part of the SOSS sample to constitute a panel so that change can be measured at the individual level from quarter to quarter – a distinct benefit.

Respondents' households newly enlisted to participate for SOSS-48 were selected using list-assisted random-digit dial sampling procedures. Those being re-interviewed had been sampled and selected in this same manner when they were first recruited to participate in the previous round of SOSS. Ordinarily, the initial sample of randomly generated telephone numbers is purchased from Survey Sampling, Inc (SSI). SSI begins the process of generating phone numbers with the list of all working area code and phone number exchange combinations. In the case of this study, the universe was constrained to include only those telephone numbers that are active in the state of Michigan. From within this list of possible phone numbers, SSI eliminates those banks of numbers represented by the 4-digit suffix that are known to be unused or are known to be used only by institutions. To improve the efficiency of the calling, we have begun to have SSI stratify this

sampling frame into two strata initially, one comprised of all phone numbers that are listed in phone directories, and the other comprised of all phone numbers that are not listed in directories but which are members of banks in which at least one phone number is listed. We then request that SSI over-sample phone numbers from the listed stratum. Telephone numbers are selected at random in proportion to the number of households in each county from all those remaining telephone numbers until the quantity needed within a particular geographic grouping of counties is obtained.

As a final step, SSI screens the phone numbers generated. The resulting sample is then checked against SSI's database of business phone numbers and checked for known disconnected numbers. Ordinarily, these numbers are removed from the sample and not called.

To determine the total number of telephone numbers to have SSI generate in order to achieve the desired sample sizes within regions of the state, OSR divided the number of completed interviews desired by the product of (a) the proportion of numbers expected to be working household numbers (the Hit Rate), (b) the proportion of household numbers that would contain an eligible respondent (the Eligibility Rate), and (c) the proportion of households with eligible respondents who would complete the interview in the time period available (the Completion Rate). For SOSS-48, 6,527 phone numbers were used, 543 in the re-contact segment and 5,984 in the new RDD segment. The working phone number rate was 84.9% in the re-contact segment and 61.3% in the new RDD segment.

The sampling design for the State of the State Survey is a stratified sample based on regions of the state with the regions sampled somewhat disproportionate to the actual sizes of the populations within each region. The purpose of the stratification is to assure a sufficient minimum number of respondents from each of the strata to permit detailed analysis.

The typical sampling design for SOSS calls for approximately 150 interviews from the East Central Region, the Southwest Region, and the combined Upper Peninsula and Northern Lower Peninsula Regions. Approximately 200 interviews are to be completed in the West Central Region and the Southeast Region. And approximately 150 interviews are to be completed from the City of Detroit. The total sample size is to be approximately 1,000.

**Sample Weights.** Because of the split sample approach, we have weighted each segment regarding selection probabilities and then combined them into a single file. The combined data file is then weighted to be representative of the geographic regions and the state as a whole. The details for weighting each segment are provided below.

Because of the stratification (i.e., geographic strata, listed vs. not-listed phone number strata) and the unequal sampling rates across the strata, it is necessary to use "weights" to bring the characteristics of the sample into line with those of each region, or with those of the state as a whole (depending on the purpose of the analysis). Accordingly, the data files contain weights for the original six MSU Extension regions, for the new Extension regions, as well as for the state as a whole.

As indicated above, the initial frame was stratified into listed numbers and not-listed numbers in 1+ banks and then listed numbers were over-sampled. Other information from SSI indicates that 65% of households with phones have listed numbers. An initial weight, listwt, was constructed to adjust representation of listed and unlisted numbers in the data file so that listed numbers comprised only 65% of all data records.

To construct the remaining weights, characteristics of the population of the regions were drawn from 2000 census data. To make generalizations about individuals' views and behaviors, it is necessary to ensure that each respondent in a survey sample has an equal probability of selection or is represented in the data set as having had equal probabilities of being selected. However, since households with multiple phone lines have more chances of being selected into the sample than those with only one phone line, this source of unequal chances has to be adjusted for in analyzing the data. Consequently, the SOSS interview included a question asking respondents how many separate phone numbers the household has. In the event of item non-response, the number of phone lines was assumed to be one. Each case was then weighted by the reciprocal of the number of phone numbers and then adjusted so that the total number of cases matched the actual number of completed interviews. In the data set this weight is named PHWT.

Similarly, an adult in a two-adult household would have half the chance of being selected to be interviewed as would the only adult in a single adult household. This, too, requires adjustment to correct for unequal probabilities of selection. The interview included a question as to the number of persons 18 years of age or older living in the household. In the event of item non-response, the household was assumed to have only one adult. Each case was then weighted by the inverse of its probability of selection within the household, or by the number of adults in the household. This was then also adjusted so that the total number of weighted cases matched the actual number of completed interviews. In the data set, this weight is named ADLTWT.

At this point, the adjustment was intended primarily to facilitate accurate weighting to adjust for non-response based on age, gender, and race within SOSS regions. It is common for some groups of individuals to be more difficult to reach or

more likely to refuse in RDD (random-digit dialing) surveys. For making generalizations about the population from which the sample was drawn, the accuracy of the results can be distorted by these non-response patterns. Consequently, it is common to weight cases in the sample to adjust for non-response. This is accomplished by weighting each case so that cases of each type appear in the sample proportionately to their representation in the general population.

For the State of the State Survey, cases are weighted so that the proportions of white males, African American males, other racial group males, white females, African American females, and other racial group females in the sample for each region matched the proportions each of these groups represent in the adult population of each of the original MSU Extension regions and the City of Detroit based on the 2000 Census. In the data set, this weighting factor is named RACGENCT. Furthermore, within each of the original MSU Extension regions and the city of Detroit, the cases were additionally weighted so that the proportion of cases falling into each of the following age groups matched the proportions in the 1990 Census for each region: 18 - 24 years old, 25 - 29, 30 - 39, 40 - 49, 50 - 59, 60 - 64, and 65 or older. In the data set, this weighting factor is named AGEWT (since rounding and missing data sometimes result in the weighted number of cases differing slightly from the actual number, AGEWT is adjusted slightly with ADJWT to ensure that the number of cases for each region in the weighted data set is the same as the actual number of interviews completed). Detroit continues to be a separate stratum to this point, but a new variable MSUEREGR was constructed to fold Detroit proportionately into the Southeast region within that variable. A new weighting variable (MSUEWT) was constructed to represent Detroit proportionately correctly within the southeast MSUEREGR.

Since the sample was drawn disproportionately across the original six MSUE regions of the state (with Detroit in the Southeast region), statewide estimates of the citizenry's opinions require post-stratification weights to adjust for the over-sampling of some regions and the under-sampling of others. Thus each case was weighted so that the proportion of cases from each region in the total sample matched the proportion of adults from the corresponding region in the state's population based on 2000 Census data. The weighting factor for this post-stratification weighting in the data set is named STATEWT.

It is important to note that these weight factors were constructed sequentially and build on the earlier steps. Thus, AGEWT weights cases adjusting for the number of phone lines, the number of adults in the household, the number of respondents from each county, the gender x race category proportions within the region, and the age category proportions within regions. STATEWT weights cases by all of those adjustments implied by AGEWT and adjusts the proportions of cases

across regions. **For developing statewide results**, the user should use the data weighted by STATEWT and select only those cases for which the value of the variable SAMPLE is less than 3. **For comparing the results among regions** -- if Detroit is to be separate -- the user should use the data weighted by ADJWT, again selecting only cases for which SAMPLE is less than 3. **To compare directly the original MSUE regions**, the data should be weighted by MSUEWT and cases selected for which SAMPLE is less than 3.

As we noted above, beginning with SOSS-38, we have constructed an alternative set of weights based on the new MSU Extension regions. To identify regions, we grouped cases based on the respondent's county of residence into one of six regional groupings (including Detroit as a separate region) in a variable named MSUE2005. The race x sex x age profile of the sample (weighted by adlwt) was then compared to the corresponding profile in the 2000 U.S. Census for each region and the city of Detroit. For this comparison, respondents' ages were collapsed into one of four categories: 18-29, 30-44, 45-64, and 65 or older. This variable is labeled AGE4. A weight value (NEWADJWT) was calculated for each case that is intended to adjust the cases within each region to match the race x sex x age profile while keeping Detroit separate from the new Southeast Extension region. Another region variable (MSUE2005r5) was constructed representing only the five new Extension regions with Detroit included in the Southeast region and then an additional weighting adjustment was made for cases in the Southeast region so that Detroit cases were proportionately represented within the region and the total number of weighted cases in each region equaled the actual number of interviews. This weight variable, **MSUE2005WT**, should be used when the new Extension regions are to be compared to each other. **NEWADJWT** should be used if the new Extension regions are to be compared to each other with Detroit separated out for comparison to other regions of the state.

Table A in the Appendix presents the characteristics of the unweighted respondents on several characteristics, in comparison with the population in each region and in the state of Michigan as a whole.

**Sampling Error.** The sampling error can be estimated for each region and for the state as a whole at the 95% confidence level as follows:

$$\text{ConfidenceInterval} = \pm 1.96 \sqrt{(P \times Q / (n - 1))}$$

where n is the number of cases within the region or the total sample and P is the proportion of cases giving a particular response and Q is 1-P. While this may vary from question to question depending on the pattern of answers, the largest margin of error would occur when P is .5 and Q is .5. Therefore, the margins of



error for each region and the total statewide sample excluding the supplemental Hispanic/Latino segment of the sample can be estimated as:

<u>REGION</u>	<u>Number of Cases</u>	<u>Margin of Sampling Error</u>
Upper Peninsula	62	± 12.5%
Northern Lower Peninsula	83	± 10.8%
West Central	197	± 7.0%
East Central	156	± 7.9%
Southwest	161	± 7.7%
Southeast	197	± 7.0%
Detroit	152	± 8.0%
Statewide Total	1,006	± 3.1%

## 8. FIELD PROCEDURES

**CATI System.** Interviews were conducted using the Computer Assisted Telephone Interviewing system (CATI) of IPPSR's Office for Survey Research (OSR). OSR uses the CASES (version 4.3.7) software for its CATI system. CASES was developed by the University of California–Berkeley, the U.S. Census Bureau, and the U.S. Department of Agriculture. In a CATI system, the completed interview is scripted and then programmed so that, when executed from a computer workstation, each question or instruction is presented on the computer screen in order to the interviewer. The program then indicates what numeric codes or text the interviewer is allowed to enter as responses to each of the questions. When entered, the responses are stored directly into the data set for the study.

The CASES software enables the interview to be fully programmable. The software integrates both closed-ended questions and open-ended questions. The software allows interviewers to record notes along with responses to closed questions. By default, the software moves directly from one item to the next in the sequence unless specific program commands are inserted to direct the execution path elsewhere. Different skip commands can be associated with separate responses to the same questions. For example, the interview can be directed to a separate battery of follow-up questions if the respondent answers "<1> YES" to a question on smoking cigarettes, and to an entirely different series of questions if the respondent answers "<5> NO." Commands can also be inserted between questions to direct the interview to a particular battery of questions based on the combination

of responses to two or more previously answered questions. The programming features minimize the opportunities for many errors since inappropriate questions will not be asked and, as a result, appreciably less editing is necessary after the interview.

**Interviewers and Interviewer Training.** New interviewers received approximately 15 hours of training, including a shift of practice interviewing. Each interviewer trainee received a training manual with instructions on techniques and procedures, copies of all relevant forms, and descriptions of operations. The OSR telephone interviewing training package was developed using "General Interviewing Techniques: A Self-Instructional Workbook for Telephone and Personal Interviewer Training", authored by P. J. Guenzel, T. R. Berckmans, and C. F. Cannell (1983) of the Survey Research Center, Institute for Social Research, University of Michigan.

Experienced interviewers received approximately two hours of study specific training to acquaint them with the study protocols, the interview instrument, and the objectives of the various questions. New interviewers were also given this information as a part of their training. Approximately 55 different interviewers were involved in data collection on the 48th State of the State Survey.

**Field Period and Respondent Selection in Household.** Interviewing began on May 4, 2008 and continued through July 6, 2008.

In the portion of the sample that involved re-interviewing respondents from the previous SOSS, interviewers asked to speak with that person when they contacted the household. When interviewers successfully contacted a household in the new RDD portion of the sample, the study procedures required them to randomly select an adult from among those residing in the household to be the respondent. The Trohldal-Carter technique was used as the mechanism for choosing a respondent within each household.

Telephone numbers were called across times of the day and days of the week. If after a minimum of nine call attempts, no contact had been made with someone at the number, the call schedule for that case was reviewed by a supervisor to see that it had been tried across a variety of time periods. If it had not, the supervisor would re-release the number for additional calling in time periods that had not been tried. If, after additional calls were made, still no contact was made, the number was retired as a non-working number. If the review of the case indicated that it had been tried at various times and days, the supervisor might finalize the case as non-working or might release it for up to six additional tries. In the case contact was established, the number would continue to be tried until a total of 12 attempts

were made or the interview was completed, the interview was refused, or the case was determined to be ineligible or incapable.

The average interview lasted approximately 16.7 minutes (standard deviation= 1.4) with a median of 16.0 minutes. In the case of an initial refusal, numbers were called back after eight days (although this was shortened as the end of the field period neared). Efforts were made to persuade initially reluctant respondents to complete the interview.

Completion Rate. A total of 1,006 interviews was completed, 283 with participants re-contacted from the SOSS-47 survey and 823 with new RDD participants. The overall completion rate among eligible households for the study was 34.1% (28.7% in the new RDD segment and 66.1% in the re-contact segment).<sup>1</sup>

Of those completing the interview, the mean number of calls required was 4.1 (4.8 among the re-contact cases and 3.8 among the new RDD cases). Interviewers made a total of 36,595 calls to complete the 1,006 interviews.

The refusal rate was 21.7%.

## 9. DOCUMENTATION AVAILABLE

The following documentation is available for this survey:

- a. Methodological Report
- b. Questionnaire (included in Methodological Report)
- c. Codebook (included in Methodological Report)
- d. Coding instructions (included in Methodological Report)
- e. SPSS (windows) commands to read the ASCII data set
- f. SPSS commands for weighting cases in the sample

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<sup>1</sup> This is based on computation and classification coding developed by the advisory team for SOSS. Since then, the American Association of Public Opinion Research has published Standard Definitions as a guide to developing more nearly standard formulas for computing response rates, cooperation rates, refusal rates, and contact rates. Using AAPOR's formula RR4, the response rate for SOSS-48 was 33.4%, the refusal rate (REF2) was 21.2%, the cooperation rate was 61.2%, and the contact rate was 87.2%.

