ANNUAL SYNAR REPORT

42 U.S.C. 300x-26

OMB № 0930-0222

FFY 2012

State: MN

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INTRODUCTION

The Annual Synar Report (ASR) format provides the means for States to comply with the reporting provisions of the Public Health Service Act (42 U.S.C. 300x-26) and the Tobacco Regulation for the SAPT Block Grant (45 C.F.R. 96.130 (e)).

Public reporting burden for the collection of information is estimated to average 15 hours for Section I and 3 hours for Section II, including the time for reviewing instructions, completing and reviewing the collection of information, searching existing data sources, and gathering and maintaining the data needed. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to SAMHSA Reports Clearance Officer; Paperwork Reduction Project; 1 Choke Cherry Road, 7th Floor Rockville, Maryland 20857.

An agency may not conduct or sponsor and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB control number for this project is 0930-0222 with an expiration date of 05-31-2013.

How the Synar report helps the Center for Substance Abuse Prevention

In accordance with the tobacco regulations, States are required to provide detailed information on progress made in enforcing youth tobacco access laws (FFY 2011 Compliance Progress) and future plans to ensure compliance with the Synar requirements to reduce youth tobacco access rates (FFY 2012 Intended Use Plan). These data are required by 42 U.S.C. 300x-26 and will be used by the Secretary to evaluate State compliance with the statute. Part of the mission of the Center for Substance Abuse Prevention (CSAP) is to assist States[1] by supporting Synar activities and providing technical assistance helpful in determining the type of enforcement measures and control strategies that are most effective. This information is helpful to CSAP in improving technical assistance resources and expertise on enforcement efforts and tobacco control program support activities, including State Synar Program support services, through an enhanced technical assistance program involving conferences and workshops, development of training materials and guidance documents, and onsite technical assistance consultation.

How the Synar report can help States

The information gathered for the Synar report can help States describe and analyze substate needs for program enhancements. These data can also be used to report to the State legislature and other State and local organizations on progress made to date in enforcing youth tobacco access laws when aggregated statistical data from State Synar reports can demonstrate to the Secretary the national progress in reducing youth tobacco access problems. This information will also provide Congress with a better understanding of State progress in implementing Synar, including State difficulties and successes in enforcing retailer compliance with youth tobacco access laws.

[1]The term "State" is used to refer to all the States and territories required to comply with Synar as part of the Substance Abuse Prevention and Treatment Block Grant Program requirements (42 U.S.C. 300x-64 and 45 C.F.R. 96.121).

Getting assistance in completing the Synar report

If you have questions about programmatic issues, you may call CSAP's Division of State Programs at (240) 276-2413 and ask for your respective State Project Officer, or contact your State Project Officer directly by telephone or email using the directory provided in the FY 2012 Uniform Application, Appendix A. If you have questions about fiscal or grants management issues, you may call the Grants Management Officer, Office of Program Services, Division of Grants Management, at (240) 276-1422.

Where and when to submit the Synar report

The Annual Synar Report (ASR) must be received by SAMHSA no later than December 31, 2012. The ASR must be submitted in the **approved OMB report format.** Use of the approved format will avoid delays in the review and approval process. The chief executive officer (or an authorized designee) of the applicant organization must sign page 1 of the ASR certifying that the State has complied with all reporting requirements.

The State must upload one copy of the ASR using the online WebBGAS (Block Grant Application System). In addition, the following items must be uploaded to WebBGAS:

- FFY 2012 Synar Survey Results: States that use the Synar Survey Estimation System (SSES) must upload one copy of SSES Tables 1–5 (in Excel) to WebBGAS. States that do not use SSES must upload one copy of ASR Forms 1, 4, and 5, and Forms 2 and 3, if applicable, (in Excel) to WebBGAS.
- Synar Inspection Form: States must upload one blank copy of the inspection form used to record the result of each Synar inspection.
- Synar Inspection Protocol: States must upload a copy of the protocol used to train inspection teams on conducting and reporting the results of the Synar inspections.

Each State SSA Director has been emailed a login ID and password to log onto the Synar section of the WebBGAS site.

Additionally, the State must submit one signed original of the report (including the signed Funding Agreements/Certifications), as well as one additional copy of the signed Funding Agreements/Certifications, to the Grants Management Officer at the address below:

Grants Management Officer
Office of Program Services
Division of Grants Management
Substance Abuse and Mental Health Services Administration

Regular Mail:	**Overnight Mail:**
1 Choke Cherry Road, Rm.7-1091 Rockville, Maryland 20857	1 Choke Cherry Road, Rm.7-1091 Rockville, Maryland 20850

FFY 2012: FUNDING AGREEMENTS/CERTIFICATIONS

The following form must be signed by the Chief Executive Officer or an authorized designee and submitted with this application. Documentation authorizing a designee must be attached to the application.

PUBLIC HEALTH SERVICES ACT AND SYNAR AMENDMENT
42 U.S.C. 300x-26 requires each State to submit an annual report of its progress in meeting the requirements of the Synar Amendment and its implementing regulation (45 C.F.R. 96.130) to the Secretary of the Department of Health and Human Services. By signing below, the chief executive officer (or an authorized designee) of the applicant organization certifies that the State has complied with these reporting requirements and the certifications as set forth below.
SYNAR SURVEY SAMPLING METHODOLOGY
The State certifies that the Synar survey sampling methodology on file with the Center for Substance Abuse Prevention and submitted with the Annual Synar Report for FFY 2012 is up-to-date and approved by the Center for Substance Abuse Prevention.
SYNAR SURVEY INSPECTION PROTOCOL
The State certifies that the Synar Survey Inspection Protocol on file with the Center for Substance Abuse Prevention and submitted with the Annual Synar Report for FFY 2012 is up-to-date and approved by the Center for Substance Abuse Prevention.
State: Minnesota
Name of Chief Executive Officer or Designee: Lucinda Jesson
Signature of CEO or Designee:
Title: Commissioner Minnesota Department of Human Services **Date Signed:**
If signed by a designee, a copy of the designation must be attached.

SECTION I: FFY 2011 (Compliance Progress)

YOUTH ACCESS LAWS, ACTIVITIES, AND ENFORCEMENT

42 U.S.C. 300x-26 requires the States to report information regarding the sale/distribution of tobacco products to individuals under age 18.

1. Please indicate any changes or additions to the State tobacco statute(s) relating to youth access since the last reporting year. If any changes were made to the State law(s) since the last reporting year, please attach a photocopy of the law to the hard copy of the ASR and also upload a copy of the State law to WebBGAS. *(see 42 U.S.C. 300x-26).*

a. Has there been a change in the *minimum sale age* for tobacco products?

☐ **Yes** ☒ **No**

*If **Yes,** current minimum age:* ☐ 19 ☐ 20 ☐ 21

b. Have there been any changes in State law that impact the State's *protocol for conducting Synar inspections?* ☐ **Yes** ☒ **No**

*If **Yes,** indicate change. (Check all that apply.)*

☐ Changed to require that law enforcement conduct inspections of tobacco outlets
☐ Changed to make it illegal for youth to possess, purchase or receive tobacco
☐ Changed to require ID to purchase tobacco
☐ Other change(s) *(Please describe.)* _____

c. Have there been any changes in the law concerning *vending machines?*

☐ **Yes** ☒ **No**

*If **Yes,** indicate change. (Check all that apply.)*

☐ Total ban enacted
☐ Banned from location(s) accessible to youth
☐ Locking device or supervision required
☐ Other change(s) *(Please describe.)* _____

d. Have there been any changes in State law that impact the following?

Licensing of tobacco vendors ☐ **Yes** ☒ **No**
Penalties for sales to minors ☐ **Yes** ☒ **No**

2. Describe how the Annual Synar Report *(see 45 C.F.R. 96.130(e))* **and the State Plan** *(see 42 U.S.C. 300x-51)* **were made public within the State prior to submission of the ASR.** *(Check all that apply.)*

☒ Placed on file for public review
☒ Posted on a State agency Web site *(Please provide exact Web address.)*

http://www.dhs.state.mn.us/main/groups/disabilities/documents/pub/dhs16_165990.pdf

☐ Notice published in a newspaper or newsletter

☐ Public hearing

☐ Announced in a news release, a press conference, or discussed in a media interview

☐ Distributed for review as part of the SAPT Block Grant application process

☐ Distributed through the public library system

☐ Published in an annual register

☒ Other *(Please describe.)* *Distributed by the Minnesota Prevention Resource Center on their list serve, placed on MN Department of Health's website, placed on the MN Regional Prevention Coordinator's website and provided to the MN Citizens Advisory Council. News release is pending.*

3. Identify the following agency or agencies *(see 42 U.S.C. 300x-26 and 45 C.F.R. 96.130).*

a. The State agency(ies) *designated by the Governor for oversight of the Synar requirements:*

Minnesota Department of Human Services - Alcohol and Drug Abuse Division

Has this changed since last year's Annual Synar Report? ☐ **Yes** ☒ **No**

b. The State agency(ies) *responsible for conducting random, unannounced Synar inspections:*

Minnesota Department of Human Services - Alcohol and Drug Abuse Division

Has this changed since last year's Annual Synar Report? ☐ **Yes** ☒ **No**

c. The State agency(ies) *responsible for enforcing youth tobacco access law(s):*

Municipal Police Departments and County Sheriffs' Departments

Has this changed since last year's Annual Synar Report? ☐ **Yes** ☒ **No**

4. Identify the State agency responsible for tobacco prevention activities (the agency that receives the Centers for Disease Control and Prevention's National Tobacco Control Program funding).

Minnesota Department of Health

Has the responsible agency changed since last year's Annual Synar Report?

☐ **Yes** ☒ **No**

a. Describe the coordination and collaboration that occur between the agency responsible for tobacco prevention and the agency responsible for oversight of the Synar requirements. *(Check all that apply.)* **The two agencies**

☐ Are the same

☐ Have a formal written memorandum of agreement

☒ Have an informal partnership

☒ Conduct joint planning activities

☐ Combine resources

☒ Have other collaborative arrangement(s) *(Please describe.)* *Minnesota has created a Synar Work Group and held planning meetings with the Departments of Health, Human Services, Public Safety, Public Health, Revenue and private not for profit tobacco control entities around the issues of youth access.*

5. Please answer the following questions regarding the State's activities to enforce the youth access to tobacco law(s) in FFY 2011 *(see 42 U.S.C. 300x-26 and 45 C.F.R. 96.130(e)).*

a. Which one of the following describes the enforcement of youth access to tobacco laws carried out in your State? *(Check one category only.)*

☒ Enforcement is conducted exclusively by local law enforcement agencies.

☐ Enforcement is conducted exclusively by State agency(ies).

☐ Enforcement is conducted by both local *and* State agencies.

b. The following items concern penalties imposed for violations of youth access to tobacco laws by LOCAL AND/OR STATE LAW ENFORCEMENT AGENCIES. Please fill in the number requested. If State law does not allow for an item, please mark "NA" (not applicable). If a response for an item is unknown, please mark "UNK." The chart must be filled in completely.

PENALTY	OWNERS	CLERKS	TOTAL
Number of citations issued	228	363	591
Number of fines assessed	287	292	579
Number of permits/licenses suspended	19		19
Number of permits/licenses revoked	0		0
Other *(Please describe.)* *Minors cited/fined: 1,456/891* *Minors warned in writing: 47*			2,394

c. Which one of the following best describes the level of enforcement of youth access to tobacco laws carried out in your State? *(Check one category only.)*

☐ Enforcement is conducted only at those outlets randomly selected for the Synar survey.

☐ Enforcement is conducted only at a subset of outlets not randomly selected for the Synar survey.

☒ Enforcement is conducted at a combination of outlets randomly selected for the Synar survey and outlets not randomly selected for the Synar survey.

d. Did every tobacco outlet in the State receive at least one enforcement compliance check in the last year?

☐ Yes
☒ No

MN. Statute 461.12, subd. 5 states; "A licensing authority shall conduct unannounced compliance checks at least once each calendar year at each location where tobacco is sold to test compliance with section 609.685." However, 20% of the 226 Police Chiefs and Sheriffs who responded to our Tobacco Enforcement survey indicated every tobacco outlet in their jurisdiction will NOT receive at least one enforcement compliance check during the 2011 calendar year.

e. What additional activities are conducted in your State to support enforcement and compliance with State tobacco access law(s)? *(Check all that apply.)*

☒ Merchant education and/or training
☐ Incentives for merchants who are in compliance (e.g., nonenforcement compliance checks in which compliant retailers are given positive reinforcement and noncompliant retailers are warned about youth access laws)
☐ Community education regarding youth access laws
☐ Media use to publicize compliance inspection results
☒ Community mobilization to increase support for retailer compliance with youth access laws
☒ Other activities *(Please list.)* *Contact with state Police Chiefs and Sheriffs to emphasize the activities of tobacco compliance enforcement.*

Briefly describe all checked activities:

Merchant education and/or training: is made available via county efforts and Health Department, as well as We Card availability. Community mobilization to increase support for retailer compliance with youth access laws: ATOD prevention grants have multi area focus including tobacco control efforts. Contact with state Police Chiefs and Sheriffs to emphasize the outcomes.

f. Are citations or warnings issued to retailers or clerks who sell tobacco to minors for inspections that are part of the Synar survey? ☐ Yes ☒ No

If "Yes" to 5f, please describe the State's procedure for minimizing risk of bias to the survey results from retailers alerting each other to the presence of the survey teams:

g. Please describe the relationship between the State's Synar program and the Food and Drug Administration-funded enforcement program:

The Minnesota Department of Human Services, Alcohol and drug Abuse Division was awarded a contract by the FDA to conduct undercover buy and advertising and labeling inspections in Minnesota on June 30, 2011. Although ADAD oversees both programs we are advised at this time Synar and FDA inspections need to be done seperately because Synar askes one additional question not asked by FDA

inspections. We are hopeful Synar and FDA will work this issue out, so one compliance check per retailer can accomplish both Synar and FDA requirements.

SYNAR SURVEY METHODS AND RESULTS

The following questions pertain to the survey methodology and results of the Synar survey used by the State to meet the requirements of the Synar Regulation in FFY 2011 (see 42 U.S.C. 300x-26 and 45 C.F.R. 96.130).

6. Has the sampling methodology changed from the previous year? ☐ Yes ☒ No

The State is required to have an approved up-to-date description of the Synar sampling methodology on file with CSAP. Please submit a copy of your Synar Survey Sampling Methodology (Appendix B). If the sampling methodology changed from the previous reporting year, these changes must be reflected in the methodology submitted.

7. Please answer the following questions regarding the State's annual random, unannounced inspections of tobacco outlets *(see 45 C.F.R. 96.130(d)(2)).*

a. Did the State use the optional Synar Survey Estimation System (SSES) to analyze the Synar survey data? ☒ Yes ☐ No

*If **Yes,** attach SSES summary tables 1, 2, 3, and 4 to the hard copy of the ASR and upload a copy of SSES tables 1–5 (in Excel) to WebBGAS. Then go to Question 8. If **No,** continue to Question 7b.*

b. Report the weighted and unweighted Retailer Violation Rate (RVR) estimates, the standard error, accuracy rate (number of eligible outlets divided by the total number of sampled outlets), and completion rate (number of eligible outlets inspected divided by the total number of eligible outlets).

Unweighted RVR _____

Weighted RVR _____

Standard error (s.e.) of the (weighted) RVR _____

Fill in the blanks to calculate the <u>right limit</u> of the right-sided 95% confidence interval.

_____	+	(1.645	×	_____)	=	_____
RVR Estimate	**plus**	(1.645	**times**	**Standard Error)**	**equals**	**Right Limit**

Accuracy rate _____

Completion rate _____

c. Fill out Form 1 in Appendix A (Forms1–5). *(Required regardless of the sample design.)*

d. How were the (weighted) RVR estimate and its standard error obtained? *(Check the one that applies.)*

☐ Form 2 (Optional) in Appendix A (Forms 1–5) *(Attach completed Form 2.)*

☐ Other *(Please specify. Provide formulas and calculations or attach and explain the program code and output with description of all variable names.)*

e. If stratification was used, did any strata in the sample contain only one outlet or cluster this year? ☐ Yes ☐ No ☐ No stratification

*If **Yes,** explain how this situation was dealt with in variance estimation.*

f. Was a cluster sample design used? ☐ Yes ☐ No

*If **Yes,** fill out and attach Form 3 in Appendix A (Forms 1–5), and answer the following question.*

*If **No,** go to Question 7g.*

Were any certainty primary sampling units selected this year? ☐ Yes ☐ No

*If **Yes,** explain how the certainty clusters were dealt with in variance estimation.*

g. Report the following outlet sample sizes for the Synar survey.

	Sample Size
Effective sample size (sample size needed to meet the SAMHSA precision requirement assuming simple random sampling)	
Target sample size (the product of the effective sample size and the design effect)	
Original sample size (inflated sample size of the target sample to counter the sample attrition due to ineligibility and noncompletion)	
Eligible sample size (number of outlets found to be eligible in the sample)	
Final sample size (number of eligible outlets in the sample for which an inspection was completed)	

h. Fill out Form 4 in Appendix A (Forms 1–5).

8. Did the State's Synar survey use a list frame? ☒ Yes ☐ No

*If **Yes,** answer the following questions about its coverage.*

a. The calendar year of the latest frame coverage study: 2010

b. Percent coverage from the latest frame coverage study: 90.8%

c. Was a new study conducted in this reporting period? ☐ Yes ☒ No

*If **Yes,** please complete Appendix D (List Sampling Frame Coverage Study) and submit it with the Annual Synar Report.*

d. The calendar year of the next coverage study planned: 2013

9. Has the Synar survey inspection protocol changed from the previous year?

☐ Yes ☒ No

The State is required to have an approved up-to-date description of the Synar inspection protocol on file with CSAP. Please submit a copy of your Synar Survey Inspection Protocol (Appendix C). If the inspection protocol changed from the previous year, these changes must be reflected in the protocol submitted.

a. Provide the inspection period: From 08/18/2011 **to** 09/15/2011
MM/DD/YY MM/DD/YY

b. Provide the number of youth inspectors used in the current inspection year:

12

NOTE: If the State uses SSES, please ensure that the number reported in 9b matches that reported in SSES Table 4, or explain any difference.

c. Fill out and attach Form 5 in Appendix A (Forms 1–5). *(Not required if the State used SSES to analyze the Synar survey data.)*

SECTION II: FFY 2012 (Intended Use):

Public law 42 U.S.C. 300x-26 of the Public Health Service Act and 45 C.F.R. 96.130 (e) (4, 5) require that the States provide information on future plans to ensure compliance with the Synar requirements to reduce youth tobacco access.

1. **In the upcoming year, does the State anticipate any changes in:**

   Synar sampling methodology ☐ **Yes** ☒ **No**
   Synar inspection protocol ☐ **Yes** ☒ **No**

   If changes are made in either the Synar sampling methodology or the Synar inspection protocol, the State is required to obtain approval from CSAP prior to implementation of the change and file an updated Synar Survey Sampling Methodology (Appendix B) or an updated Synar Survey Inspection Protocol (Appendix C), as appropriate.

2. **Please describe the State's plans to maintain and/or reduce the target rate for Synar inspections to be completed in FFY 2012. Include a brief description of plans for law enforcement efforts to enforce youth tobacco access laws, activities that support law enforcement efforts to enforce youth tobacco access laws, and any anticipated changes in youth tobacco access legislation or regulation in the State.**

- MN passed the Freedom to Breath Act, implemented 10/01/07, restricts smoking in public places.
- Continued compliance checks from Counties and Municipalities as per state law.
- Continued Department of Human Services Synar tobacco compliance checks using contracted inspectors.
- Continued survey of Enforcement Agencies to access violation activity.
- Distribute the Synar results for the FFY10 to the Synar Workgroup members, media, Regional Prevention Coordinators, state preventionists.
- Continue to meet with the Synar workgroup for the purpose of gathering enhancement ideas and prevention planning around youth access to tobacco.

  Begin FDA Compliance checks
- No changes in youth access legislation are anticipated

3. **Describe any challenges the State faces in complying with the Synar regulation.** *(Check all that apply.)*

   ☐ Limited resources for law enforcement of youth access laws
   ☐ Limited resources for activities to support enforcement and compliance with youth tobacco access laws
   ☐ Limitations in the State youth tobacco access laws
   ☐ Limited public support for enforcement of youth tobacco access laws
   ☐ Limitations on completeness/accuracy of list of tobacco outlets

☐ Limited expertise in survey methodology
☐ Laws/regulations limiting the use of minors in tobacco inspections
☐ Difficulties recruiting youth inspectors
☐ Geographic, demographic, and logistical considerations in conducting inspections
☐ Cultural factors (e.g., language barriers, young people purchasing for their elders)
☐ Issues regarding sources of tobacco under tribal jurisdiction
☐ Other challenges *(Please list.)*_____

Briefly describe all checked challenges and propose a plan for each, or indicate the State's need for technical assistance related to each relevant challenge.

APPENDIX A: FORMS 1–5

FORM 1 (Required for all States not using the Synar Survey Estimation System (SSES) to analyze the Synar Survey data)

Complete Form 1 to report sampling frame and sample information and to calculate the unweighted retailer violation rate (RVR) using results from the current year's Synar survey inspections.

Instructions for Completing Form 1: In the top right-hand corner of the form, provide the State name and reporting Federal fiscal year (FFY 2012). Provide the remaining information by stratum if stratification was used. Make copies of the form if additional rows are needed to list all the strata.

Column 1: *If stratification was used*:

1(a) Sequentially number each row.
1(b) Write in the name of each stratum. All strata in the State must be listed.

If no stratification was used:

1(a) Leave blank.
1(b) Write "State" in the first row (indicates that the whole State is a single stratum).

Note for unstratified samples: For Columns 2–5, wherever the instruction refers to "each stratum," report the specified information for the State as a whole.

Column 2: 2(a) Report the number of over-the-counter (OTC) outlets in the sampling frame in each stratum.
2(b) Report the number of vending machine (VM) outlets in the sampling frame in each stratum.
2(c) Report the combined total of OTC and VM outlets in the sampling frame in each stratum.

Column 3: 3(a) Report the estimated number of eligible OTC outlets in the OTC outlet population in each stratum.
3(b) Report the estimated number of eligible VM outlets in the VM outlet population in each stratum.
3(c) Report the combined total estimated number of eligible OTC and VM outlets in the total outlet population in each stratum.

The estimates for Column 3 can be obtained from the Synar survey sample as the weighted sum of eligible outlets by outlet type.

Column 4: 4(a) Report the number of eligible OTC outlets for which an inspection was completed, for each stratum.
4(b) Report the numbers of eligible VM outlets for which an inspection was completed, for each stratum.
4(c) Report the combined total of eligible OTC and VM outlets for which an inspection was completed, for each stratum.

Column 5: 5(a) Report the number of OTC outlets found in violation of the law as a result of completed inspections, for each stratum.
5(b) Report the number of VM outlets found in violation of the law as a result of completed inspections, for each stratum.
5(c) Report the combined total of OTC and VM outlets found in violation of the law as a result of completed inspections, for each stratum.

Totals: For each subcolumn (a–c) in Columns 2–5, provide totals for the State as a whole in the last row of the table. These numbers will be the sum of the numbers in each row for the respective column.

FORM 1 (Required for all States not using the Synar Survey Estimation System [SSES] to analyze the Synar Survey data.)

Summary of Synar Inspection Results by Stratum

State: _____

FFY: 2012

(1)		(2)			(3)			(4)			(5)		
STRATUM		NUMBER OF OUTLETS IN SAMPLING FRAME			ESTIMATED NUMBER OF ELIGIBLE OUTLETS IN POPULATION			NUMBER OF OUTLETS INSPECTED			NO. OF OUTLETS FOUND IN VIOLATION DURING INSPECTIONS		
(a) Row #	(b) Stratum Name	(a) Over-the-Counter (OTC)	(b) Vending Machines (VM)	(c) Total Outlets (2a+2b)	(a) Over-the-Counter (OTC)	(b) Vending Machines (VM)	(c) Total Outlets (3a+3b)	(a) Over-the-Counter (OTC)	(b) Vending Machines (VM)	(c) Total Outlets (4a+4b)	(a) Over-the-Counter (OTC)	(b) Vending Machines (VM)	(c) Total Outlets (5a+5b)

RECORD COLUMN TOTALS ON LAST LINE (LAST PAGE ONLY IF MULTIPLE PAGES ARE NEEDED).

FORM 2 (Optional)
Appropriate for stratified simple or systematic random sampling designs.

Complete Form 2 to calculate the weighted RVR. This table (in Excel form) is designed to calculate the weighted RVR for stratified simple or systematic random sampling designs, accounting for ineligible outlets and noncomplete inspections encountered during the annual Synar survey.

Instructions for Completing Form 2: In the top right-hand corner of the form, provide the State name and reporting Federal fiscal year (FFY 2012).

Column 1: Write in the name of each stratum into which the sample was divided. These should match the strata reported in Column 1(b) of Form 1.

Column 2: Report the number of outlets in the sampling frame in each stratum. These numbers should match the numbers reported for the respective strata in Column 2(c) of Form 1.

Column 3: Report the original sample size (the number of outlets originally selected, *including* substitutes or replacements) for each stratum.

Column 4: Report the number of sample outlets in each stratum that were found to be eligible during the inspections. Note that this number must be less than or equal to the number reported in Column 3 for the respective strata.

Column 5: Report the number of eligible outlets in each stratum for which an inspection was completed. Note that this number must be less than or equal to the number reported in Column 4. These numbers should match the numbers reported in Column 4(c) of Form 1 for the respective strata.

Column 6: Report the number of eligible outlets inspected in each stratum that were found in violation. These numbers should match the numbers reported in Column 5(c) of Form 1 for the stratum.

Column 7: Form 2 (in Excel form) will automatically calculate the stratum RVR for each stratum in this column. This is calculated by dividing the number of inspected eligible outlets found in violation (Column 6) by the number of inspected eligible outlets (Column 5). The State unweighted RVR will be shown in the Total row of Column 7.

Column 8: Form 2 (in Excel form) will automatically calculate the estimated number of eligible outlets in the population for each stratum. This calculation is made by multiplying the number of outlets in the sampling frame (Column 2) times the number of eligible outlets (Column 4) divided by the original sample size (Column 3). Note that these numbers will be less than or equal to the numbers in Column 2.

Column 9: Form 2 (in Excel form) will automatically calculate the relative stratum weight by dividing the estimated number of eligible outlets in the population for each stratum in Column 8 by the Total of the values in Column 8.

Column 10: Form 2 (in Excel form) will automatically calculate each stratum's contribution to the State weighted RVR by multiplying the stratum RVR (Column 7) by the relative stratum weight (Column 9). The weighted RVR for the State will be shown in the Total row of Column 10.

Column 11: Form 2 (in Excel form) automatically calculates the standard error of each stratum's RVR (Column 7). The standard error for the State weighted RVR will be shown in the Total row of Column 11.

TOTAL: For Columns 2–6, Form 2 (in Excel form) provides totals for the State as a whole in the last row of the table. For Columns 7–11, it calculates the respective statistic for the State as a whole.

FORM 2 (Optional) Appropriate for stratified simple or systematic random sampling designs.

Calculation of Weighted Retailer Violation Rate State: _____ FFY: 2012										
(1) Stratum Name	(2) **N** Number of Outlets in Sampling Frame	(3) **n** Original Sample Size	(4) **n1** Number of Sample Outlets Found Eligible	(5) **n2** Number of Outlets Inspected	(6) **x** Number of Outlets Found in Violation	(7) **p=x/n2** Stratum Retailer Violation Rate	(8) **N'=N(n1/n)** Estimated Number of Eligible Outlets in Population	(9) **w=N'/Total Column 8** Relative Stratum Weight	(10) **pw** Stratum Contribution to State Weighted RVR	(11) **s.e.** Standard Error of Stratum RVR
Total										

N - number of outlets in sampling frame
n - original sample size (number of outlets in the original sample)
n1 - number of sample outlets that were found to be eligible
n2 - number of eligible outlets that were inspected
x - number of inspected outlets that were found in violation
p - stratum retailer violation rate (p=x/n2)
N' - estimated number of eligible outlets in population (N'=N*n1/n)
w - relative stratum weight (w=N'/Total Column 8)
pw - stratum contribution to the weighted RVR
s.e. - standard error of the stratum RVR

FORM 3 (Required when a cluster design is used for all States not using the Synar Survey Estimation System [SSES] to analyze the Synar survey data.)

Complete Form 3 to report information about primary sampling units when a cluster design was used for the Synar survey.

Instructions for Completing Form 3: In the top right-hand corner of the form, provide the State name and reporting Federal fiscal year (FFY 2012).

Provide information by stratum if stratification was used. Make copies of the form if additional rows are needed to list all the strata.

Column 1: Sequentially number each row.

Column 2: *If stratification was used*: Write in the name of stratum. All strata in the State must be listed.

If no stratification was used: Write "State" in the first row to indicate that the whole State constitutes a single stratum.

Column 3: Report the number of primary sampling units (PSUs) (i.e., first-stage clusters) created for each stratum.

Column 4: Report the number of PSUs selected in the original sample for each stratum.

Column 5: Report the number of PSUs in the final sample for each stratum.

TOTALS: For Columns 3–5, provide totals for the State as a whole in the last row of the table.

Summary of Clusters Created and Sampled

State: _____

FFY: 2012

(1) Row #	(2) Stratum Name	(3) Number of PSUs Created	(4) Number of PSUs Selected	(5) Number of PSUs in the Final Sample
Total				

FORM 4 (Required for all States not using the Synar Survey Estimation System [SSES] to analyze the Synar Survey data)

Complete Form 4 to provide detailed tallies of ineligible sample outlets by reasons for ineligibility and detailed tallies of eligible sample outlets with noncomplete inspections by reasons for noncompletion.

Instructions for Completing Form 4: In the top right-hand corner of the form, provide the State name and reporting Federal fiscal year (FFY 2012).

Column 1(a): Enter the number of sample outlets found ineligible for inspection by reason for ineligibility. Provide the total number of ineligible outlets in the row marked "Total."

Column 2(a): Enter the number of eligible sample outlets with noncomplete inspections by reason for noncompletion. Provide the total number of eligible outlets with noncomplete inspections in the row marked "Total."

Inspection Tallies by Reason of Ineligibility or Noncompletion

State:

FFY: 2012

(1) INELIGIBLE		**(2) ELIGIBLE**	
Reason for Ineligibility	**(a) Counts**	**Reason for Noncompletion**	**(a) Counts**
Out of business		In operation but closed at time of visit	
Does not sell tobacco products		Unsafe to access	
Inaccessible by youth		Presence of police	
Private club or private residence		Youth inspector knows salesperson	
Temporary closure		Moved to new location	
Unlocatable		Drive-thru only/youth inspector has no driver's license	
Wholesale only/Carton sale only		Tobacco out of stock	
Vending machine broken		Ran out of time	
Duplicate		Other noncompletion reason(s) *(Describe.*)	
Other ineligibility reason(s) *(Describe.)*			
Total		**Total**	

FORM 5 (Required for all States not using the Synar Survey Estimation System [SSES] to analyze the Synar survey data)

Complete Form 5 to show the distribution of outlet inspection results by age and gender of the youth inspectors.

Instructions for Completing Form 5: In the top right-hand corner of the form, provide the State name and reporting Federal fiscal year (FFY 2012).

Column 1: Enter the number of attempted buys by youth inspector age and gender.

Column 2: Enter the number of successful buys by youth inspector age and gender.

If the inspectors are age eligible but the gender of the inspector is unknown, include those inspections in the "Other" row. Calculate subtotals for males and females in rows marked "Male Subtotal" and "Female Subtotal." Sum subtotals for Male, Female, and Other and record in the bottom row marked "Total." Verify that that the total of attempted buys and successful buys equals the total for Column 4(c) and Column 5(c), respectively, on Form 1. If the totals do not match, please explain any discrepancies.

Synar Survey Inspector Characteristics **State:** _____ **FFY:** 2012		
	(1) Attempted Buys	(2) Successful Buys
Male		
15 years		
16 years		
17 years		
18 years		
Male Subtotal		
Female		
15 years		
16 years		
17 years		
18 years		
Female Subtotal		
Other		
Total		

APPENDIXES B & C: FORMS

Instructions

Appendix B (Sampling Design) and Appendix C (Inspection Protocol) are to reflect the State's CSAP-approved sampling design and inspection protocol. These appendixes, therefore, should generally describe the design and protocol and, with the exception of Question #10 of Appendix B, are not to be modified with year-specific information. Please note that any changes to either appendix must receive CSAP's advance, written approval. To facilitate the State's completion of this section, simply cut and paste the previously approved sampling design (Appendix B) and inspection protocol (Appendix C).

APPENDIX B: SYNAR SURVEY SAMPLING METHODOLOGY

State: MN
FFY: 2012

1. **What type of sampling frame is used?**

   ☒ List frame *(Go to Question 2.)*
   ☐ Area frame *(Go to Question 3.)*
   ☐ List-assisted area frame *(Go to Question 2.)*

2. **List all sources of the list frame. Indicate the type of source from the list below. Provide a brief description of the frame source. Explain how the lists are updated (method), including how new outlets are identified and added to the frame. In addition, explain how often the lists are updated (cycle).** *(After completing this question, go to Question 4.)*

   Use the corresponding number to indicate **Type of Source** ***in the table below.***

   1 – Statewide commercial business list
   2 – Local commercial business list
   3 – Statewide tobacco license/permit list
   4 – Statewide retail license/permit list
   5 – Statewide liquor license/permit list
   6 – Other

Name of Frame Source	Type of Source	Description	Updating Method and Cycle
Minnesota Department of Revenue	3	Statewide list of all licensed tobacco outlets	This list is updated periodically with new and expiring license information.

3. **If an area frame is used, describe how area sampling units are defined and formed.**

   a. Is any area left out in the formation of the area frame? ☐ **Yes** ☐ **No**

   *If **Yes,** what percentage of the State's population is not covered by the area frame?*
   _____%

4. **Federal regulation requires that vending machines be inspected as part of the Synar survey. Are vending machines included in the Synar survey?** ☒ **Yes** ☐ **No**

   *If **No,** please indicate the reason they are not included in the Synar survey.*

   ☐ State law bans vending machines.
   ☐ State law bans vending machines from locations accessible to youth.

☐ State has SAMHSA approval to exempt vending machines from the survey.

☐ Other *(Please describe.)*

Special Note under Question #4: MN State law bans vending machines in locations accessible to youth. Minnesota's tobacco permit list does not indicate whether the product is sold over the counter or through a vending machine Therefore, if an outlet chosen for the Synar sample happens to be a vending machine outlet, it is inspected in order to determine compliance with State law.

5. Which category below best describes the sample design? *(Check only one.)*

☐ **Census** *(STOP HERE: Appendix B is complete.)*

Unstratified statewide sample:

☒ Simple random sample *(Go to Question 9.)*

☐ Systematic random sample *(Go to Question 6.)*

☐ Single-stage cluster sample *(Go to Question 8.)*

☐ Multistage cluster sample *(Go to Question 8.)*

Stratified sample:

☐ Simple random sample *(Go to Question 7.)*

☐ Systematic random sample *(Go to Question 6.)*

☐ Single-stage cluster sample *(Go to Question 7.)*

☐ Multistage cluster sample *(Go to Question 7.)*

☐ **Other** *(Please describe and go to Question 9.)* _____

6. Describe the systematic sampling methods. *(After completing Question 6, go to Question 7 if stratification is used. Otherwise go to Question 9.)*

7. Provide the following information about stratification.

a. Provide a full description of the strata that are created.

b. Is clustering used within the stratified sample?

☐ **Yes** *(Go to Question 8.)*

☐ **No** *(Go to Question 9.)*

8. Provide the following information about clustering.

a. Provide a full description of how clusters are formed. *(If multistage clusters are used, give definitions of clusters at each stage.)*

b. Specify the sampling method (simple random, systematic, or probability proportional to size sampling) for each stage of sampling and describe how the method(s) is (are) implemented.

9. Provide the formulas for determining the effective, target, and original outlet sample sizes.

the effective sample size is given by

ne = 1 / { (se)2 / [p (1 - p)] }+ 1 / N

where

ne = effective sample size, and

(se)2 is intended to denote the square of the standard error, where the standard error is prescribed by SAMHSA/CSAP to be set at 0.182

p = the RVR from the previous year's survey, and

N = the total number of outlets in the universe, and

The target sample size is the same as the effective sample size since the design effect is one (1.0) for the state-wide simple random sample design.

The original sample size is given by the formula

no = 1.50 * ne / (AR * CR)

where

no = original sample size, and

ne = effective sample size, and

AR = accuracy rate from the previous year's survey, and

CR = completion rate from the previous year's survey

10. Provide the following information about sample size calculations for the current FFY Synar survey.

a. If the State uses the sample size formulas embedded in the Synar Survey Estimation System (SSES) Sample Size Calculator, please provide the following information:

Inputs for Effective Sample Size:
RVR: 4. 06
Frame Size: 5473

Input for Target Sample Size:
Design Effect: 1. 0

Inputs for Original Sample Size:
Safety Margin: 50

Accuracy (Eligibility) Rate: 61. 19
Completion Rate: 98. 57

b. If the State does not use the sample size formulas embedded in the SSES Sample Size Calculator, please provide all inputs required to calculate the effective, target, and original sample sizes as indicated in Question 9.

APPENDIX C: SYNAR SURVEY INSPECTION PROTOCOL

State: MN
FFY: 2012

Note: Upload to WebBGAS a copy of the Synar inspection form under the heading "Synar Inspection Form" and a copy of the protocol used to train inspection teams on conducting and reporting the results of the Synar inspections under the heading "Synar Inspection Protocol."

1. How does the State Synar survey protocol address the following?

a. Consummated buy attempts?

☒ Required
☐ Not permitted
☐ Permitted under specified circumstances
☐ Not specified in protocol

b. Youth inspectors to carry ID?

☐ Required
☒ Not permitted
☐ Permitted under specified circumstances
☐ Not specified in protocol

c. Adult inspectors to enter the outlet?

☒ Required
☐ Not permitted
☐ Permitted under specified circumstances
☐ Not specified in protocol

d. Youth inspectors to be compensated?

☐ Required
☐ Not permitted
☐ Permitted under specified circumstances
☒ Not specified in protocol

2. Identify the agency(ies) or entity(ies) that actually conduct the random, unannounced Synar inspections of tobacco outlets. *(Check all that apply.)*

☐ Law enforcement agency(ies)
☐ State or local government agency(ies) other than law enforcement
☒ Private contractor(s)
☐ Other

List the agency name(s): **The Minnesota Department of Human Services Alcohol and Drug Abuse Division through contracts with private vendors.**

3. Are Synar inspections combined with law enforcement efforts (i.e., do law enforcement representatives issue warnings or citations to retailers found in violation of the law at the time of the inspection?)?

☐ Always ☐ Usually ☐ Sometimes ☐ Rarely ☒ Never

4. **Describe the methods used to recruit, select, and train youth inspectors and adult supervisors.**

The personnel who will be the adult inspectors of the youth inspectors carry out recruitment of youth inspectors. Adult inspectors are instructed to recruit youth using the following guidelines: youth inspectors must be 15 or 16 years old, be equally divided in gender, and not attempt to alter their appearance to attempt to appear younger or older than their actual age.

The adults that accompany the minors on the compliance checks come from a variety of backgrounds. They are selected based upon their responses to a request for proposals issued by the Alcohol and drug Abuse Division. They are trained by the Alcohol and Drug Abuse Division staff on the protocols of Synar checks and agree to follow the protocols and provide the training to the youth.

5. **Are there specific legal or procedural requirements instituted by the State to address the issue of youth inspectors' immunity when conducting inspections?**

   a. **Legal** ☒ **Yes** ☐ **No** *(If **Yes,** please describe.)*

   Minnesota Statute 609.685 Sub 3 states; "whoever possesses, smokes, chews, or otherwise ingests, purchases, or attempts to purchase tobacco or tobacco related devices and is under the age of 18 years is guilty of a petty misdemeanor."

   Exceptions: The use of minors to conduct tobacco compliance checks in Minnesota remains allowable under Minnesota Law. Minnesota Statutes 609.685 Sub 5(b) which states; "The penalties in this section do not apply to a person under the age of 18 years who purchases or attempts to purchase tobacco or tobacco-related devices while under the direct supervision of a responsible adult for training, education, research, or enforcement purposes."

   b. **Procedural** ☐ **Yes** ☒ **No** *(If **Yes,** please describe.)*

6. **Are there specific legal or procedural requirements instituted by the State to address the issue of the safety of youth inspectors during all aspects of the Synar inspection process?**

   a. **Legal** ☐ **Yes** ☒ **No** *(If **Yes,** please describe.)*

   b. **Procedural** ☒ **Yes** ☐ **No** *(If **Yes,** please describe.)*

   Procedurally adult inspectors are instructed the inspection should not be conducted if the adult or youth inspector perceive the site as unsafe. For safety reasons all inspections are to be conducted during daylight hours. The adult inspector is to enter the site prior to the youth to assess the safety of the environment and not leave until the youth has safely left.

7. **Are there any other legal or procedural requirements the State has regarding how inspections are to be conducted (e.g., age of youth inspector, time of inspections, training that must occur)?**

a. Legal ☒ **Yes** ☐ **No** *(If **Yes,** please describe.)*

Compliance checks must involve minors over the age of 15, but under the age of 18 with the prior written consent of a parent or guardian.

b. Procedural ☒ **Yes** ☐ **No** *(If **Yes,** please describe.)*

Compliance checks are conducted during daylight hours. Compliance checks are conducted in accordance to the state set protocol.

APPENDIX D: LIST SAMPLING FRAME COVERAGE STUDY

(LIST FRAME ONLY)

State: MN for FFY 2012
FFY: _____

1. **Calendar year of the coverage study:** 2010

2. a. **Unweighted percent coverage found:** 90.8496**%**
   b. **Weighted percent coverage found:** 90.8427**%**
   c. **Number of outlets found through canvassing:** 153
   d. **Number of outlets matched on the list frame:** 139

3. a. **Describe how areas were defined.** *(e.g., census tracts, counties, etc.)*

The areas were the 1,300 federal census tracts which together cover 100% of the state.

   b. **Were any areas of the State excluded from sampling?** ☐ **Yes** ☒ **No**

   *If **Yes,** please explain.*

4. **Please answer the following questions about the selection of canvassing areas.**

   a. **Which category below best describes the sample design?** *(Check only one.)*

   ☐ **Census** *(Go to Question 6.)*

   Unstratified Statewide sample:

   ☐ Simple random sample *(Respond to Part b.)*
   ☐ Systematic random sample *(Respond to Part b.)*
   ☐ Single-stage cluster sample *(Respond to Parts b and d.)*
   ☐ Multistage cluster sample *(Respond to Parts b and d.)*

   Stratified sample:

   ☒ Simple random sample *(Respond to Parts b and c.)*
   ☐ Systematic random sample *(Respond to Parts b and c.)*
   ☐ Single-stage cluster sample *(Respond to Parts b, c, and d.)*
   ☐ Multistage cluster sample *(Respond to Parts b, c, and d.)*
   ☐ **Other** *(Please describe and respond to Part b.)* _____

   b. **Describe the sampling methods.**

We divided the state into an urban stratum and a rural stratum (described more below.) We drew a simple random sample of 17 census tracts from the urban stratum and we similarly drew a simple random sample of 15 census tracts from the rural stratum

c. Provide a full description of the strata that were created.

There were two strata: an urban stratum and a rural stratum.

(1) The urban stratum was defined as the seven counties comprising the Twin Cities (Minneapolis and St. Paul) metropolitan area. This is a very standard convention for Minnesota. These seven counties (Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington) have a population of 2,835,082 (54% of the total). They have 689 (53% of the total) federal census tracts.

(2) The rural stratum was defined the remaining 80 counties in Minnesota that are not part of the Twin Cities 7-county metro area. These 80 counties have a population of 2,431,132 (46 % of the total). They have 611 (47% of the total) federal census tracts.

Together, the 2 strata cover 100% of the state of Minnesota.

See the response to question 12 for a description of how the weights for each of the strata were calculated.

d. Provide a full description of how clusters were formed.

not applicable.

5. Were borders of the selected areas clearly identified at the time of canvassing?

☒ **Yes** ☐ **No**

6. Were all sampled areas visited by canvassing teams?

☒ **Yes** *(Go to Question 7.)* ☐ **No** *(Respond to Parts a and b.)*

a. Was the subset of areas randomly chosen?

☐ **Yes** ☐ **No**

b. Describe how the subsample of visited areas was drawn. Include the number of areas sampled and the number of areas canvassed.

7. Were field observers provided with a detailed map of the canvassing areas?

☒ **Yes** ☐ **No**

*If **No,** describe the canvassing instructions given to the field observers.*

8. Were field observers instructed to find all outlets in the assigned area?

☒ **Yes** ☐ **No**

*If **No,** respond to Question 9.*
*If **Yes,** describe any instructions given to the field observers to ensure the entire area was canvassed, then go to Question 10.*

Elaborate pains were taken to provide field observers with detailed paper and electronic maps of every census tract, with borders clearly drawn on both the electronic and paper maps. A GPS tracking device that was part of the electronic mapping software (Microsoft's Streets and Trips, 2010) was used in the vehicle. It marked roads with a blue line as they were driven on by the field observers. This made it extremely clear as to which roads had been canvassed and which still needed to be canvassed. Field observers were explicitly instructed to canvass every mile (every inch, in effect) of every road in the sampled areas. The field observers had a motivation to be comprehensive because they were staff persons at the Department of Revenue, and they are responsible for the collection of special taxes. Tobacco license fees are one these special taxes.

A guidance document received from SAMHSA/CSAP on March 4, 2010, stipulates that "States should indicate whether or not they canvass both sides of roads that act as borders for the selected area and if canvassers are walking or driving."

Accordingly, note that we elected to canvass both sides of roads that formed the borders of selected census tracts. The canvassing teams drove down all roads in the selected tracts, and they walked into any properties where there was any chance that tobacco products might be sold. If the property was closed at the time the canvassing team visited it, the team would return to it later when it was open. If this was not feasible, the team would contact the outlet by phone to get the necessary information.

9. If a full canvassing was not conducted:

a. How many predetermined outlets were to be observed in each area? _____

b. What were the starting points for each area? _____

c. Were these starting points randomly chosen? ☐ Yes ☐ No

d. Describe the selection of the starting points.

e. Please describe the canvassing instructions given to the field observers, including predetermined routes.

10. Describe the process field observers used to determine if an outlet sold tobacco.

When the field observers passed any property where there was any likelihood at all that tobacco products might be sold, they stopped at the property and entered the property and asked if tobacco products were sold. If so, they asked to see the license. They took the name of the outlet, the name of the owner, the tobacco sales license number, and the phone number. All of this information was entered on a spreadsheet provided to the Department of Human Services for coverage-study-analysis purposes.

Types of properties that sell tobacco products in Minnesota include, but are not limited to, convenience stores, gas stations, car washes, drug stores, supermarkets and other grocery stores, big box stores such as Wal-Mart, Target, Costco, and Holiday, other general merchandise store, farmers' coops, hotels, motels, resorts, campgrounds, bait shops, golf clubs, restaurants, cafes, coffee shops, taverns, bars, liquor stores, bowling alleys, tobacco stores, tourist information shops, novelty stores, American Legion Posts, VFW Posts, and so on.

If the property was closed at the time the canvassing team visited it, the team would return to it later when it was open. If this was not feasible, the team would contact the outlet by phone to get the necessary information

11. Please provide the State's definition of "matches" or "mismatches" to the Synar sampling frame? (i.e., address, business name, business license number, etc).

The DHS staff person who analyzed the results developed a set of conventions for determining when an outlet identified in the coverage survey could be defined as having a match on the list frame used for the Annual Synar Survey.

The theory underlying the set of conventions was this: If an outlet found in the coverage study is determined to match an outlet on the list frame, then it must be the case that, if the outlet on the list frame that is said to correspond to the coverage-study-found outlet were drawn into a random sample for Annual Synar Survey purposes, the team that would be charged to do the Synar inspection of that outlet would easily find its way to the outlet identified in the coverage study.

The theory seems hard to state succinctly, but it is easy to illustrate with an example from the 2010 coverage study. The coverage study team found "Sunshine Foods, 7 East Main Street, Madelia, MN." The DHS coverage study analyst determined that the list frame entry "Madelia Foods, 7 East Main Street, Madelia, MN" was an adequate match to the found outlet. The reasoning was: if "Madelia Foods, 7 East Main Street, Madelia, MN" was drawn into a random sample for Synar Survey purposes, the inspection team would easily know that they should inspect "Sunshine Foods, 7 East Main Street, Madelia, MN." In actual practice, the Synar Survey teams encounter such name changes and it is routine for them to proceed to do the inspection. Therefore, this coverage-study outlet was said to have a match on the list frame.

The examples below are from the 2007 coverage study, but they illustrate conventions followed for the 2010 coverage study as well.

If the business name and address of the found tobacco outlet was identical to the business name and address on the list frame, then the found outlet and the list-frame outlet were defined to be a perfect match.

If there was a discrepancy between the found-outlet information and the list-frame information, but it was believed that an annual Synar Survey adult-juvenile inspection team would easily be able to resolve the discrepancy, then the partially discrepant pair of outlets were defined to be a matching pair.

For example, the Coverage Survey found:

Cub Foods, 2410 Pokegama Ave. S., Grand Rapids MN.

but the apparent corresponding entry on the list frame was:

Cub Foods, 2140 Pokegama Ave. S., Grand Rapids MN

Cub Foods is a huge supermarket. There is a Cub Foods at 2410 Pokegama Ave S., and there is not a Cub Foods at 2140 Pokegama Ave. S. It was believed that if they were faced with this discrepancy, a Synar Survey inspection team would easily be able to resolve the discrepancy and perform the compliance check. Therefore, the found outlet and the similar list-frame outlet were defined to be a matching pair.

If there was a discrepancy between the found outlet and a similar-appearing outlet on the list frame, but the DHS staff person comparing the two lists could not feel confident that a Synar Inspection team could easily and positively resolve the discrepancy, then the found-outlet was defined as not matching the list frame outlet.

For example, the coverage study found

Casey's General Store, 11000 57th St NE, Albertville, MN 55301.

There was the following outlet on the list frame:

Casey's General Store, 1100 57th St NE, Albertville, MN 55301

In this case, the true address (using an online phone directory) appears to be 11000 57th Street NE. The list-frame address of 1100 must be a typo. But the DHS staff person could not be confident that an annual Synar survey inspection team could positively know that the list frame address was a simple typo.

Also, Casey's General Store is a franchise with many stores throughout Minnesota. If the list-frame entry shown above was drawn for annual Synar survey purposes, an inspection team might not be able to know with confidence which of possibly several Casey's General Stores in an area might be the one intended for Synar Survey purposes. Therefore, this found outlet was defined as not having a match on the list frame

12. Provide the calculation of the weighted percent coverage (if applicable).

Page 15 of CSAP's "Guide for a Synar Sampling Frame Coverage Study" (January, 2006) provides a formula for calculating percent coverage as follows:

$C = 100 [(\sum wb) / (\sum wn)]$

where: C = percent coverage, and

k = number of sampled areas (Minnesota selected 32 census tracts), and

w = the weight associated with a sample area, based on the stratum the area is in, and

b = "... the number of outlets found from the field canvassing for which a match was found in the frame files for each sample area...", and

n = "...the number of outlets found from the field canvassing for each sample area....".

We used simple random sampling within strata. The "Guide..." advises that for such sampling, the urban sampling weight should be calculated as:

Ku / ku

where Ku = areas in the urban stratum (there were 689 census tracts in the metro area), and

ku = number areas of areas sampled from the urban stratum (we selected 17 urban census tracts).

Thus, the urban sampling weight is: 689 / 17 = 40.529412.

The guidance document advises that the rural sampling weight should be calculated as:

Kr / kr

where Kr = areas in the rural stratum (there are 611 census tracts in the Greater Minnesota area), and

kr = number of areas sampled from the rural stratum (we selected 15 rural census tracts).

Thus, the rural sampling weight is: 611 / 15 = 40.733333.

Entering values obtained from the 2010 Minnesota coverage survey into the formula produces the table shown below, in which the parenthesized column headings have the following meanings:

(1) Tract number

(2) Designation of whether the tract is in the urban or rural stratum

(3) Number of census tracts in the stratum

(4) Number of tracts sampled from stratum

(5) Weight associated with the stratum, calculated as shown above

(6) Outlets found in the tract that have a match on the list frame

(7) column 6 multiplied by column 5 = the weighted number of found outlets that have a match on the the list frame

(8) Total number of outlets found in the tract by the field observers

(9) column 8 multplied by column 5 = the wieghted total of outlets found in the tract

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	urban	689	17	40.529412	1	40.52941176	2	81.058824
2	urban	689	17	40.529412	7	283.7058824	7	283.70588
3	urban	689	17	40.529412	1	40.52941176	1	40.529412
4	urban	689	17	40.529412	4	162.1176471	4	162.11765
5	urban	689	17	40.529412	1	40.52941176	3	121.58824
6	urban	689	17	40.529412	13	526.8823529	14	567.41176
7	urban	689	17	40.529412	3	121.5882353	3	121.58824
8	urban	689	17	40.529412	0	0	0	0
9	urban	689	17	40.529412	11	445.8235294	11	445.82353

10	urban	689	17	40.529412	2	81.05882353	2	81.058824
11	urban	689	17	40.529412	4	162.1176471	4	162.11765
12	urban	689	17	40.529412	2	81.05882353	2	81.058824
13	urban	689	17	40.529412	1	40.52941176	1	40.529412
14	urban	689	17	40.529412	4	162.1176471	4	162.11765
15	urban	689	17	40.529412	3	121.5882353	3	121.58824
16	urban	689	17	40.529412	2	81.05882353	2	81.058824
17	urban	689	17	40.529412	4	162.1176471	4	162.11765
18	rural	611	15	40.733333	7	285.1333333	7	285.13333
19	rural	611	15	40.733333	5	203.6666667	7	285.13333
20	rural	611	15	40.733333	5	203.6666667	5	203.66667
21	rural	611	15	40.733333	7	285.1333333	7	285.13333
22	rural	611	15	40.733333	3	122.2	5	203.66667
23	rural	611	15	40.733333	3	122.2	3	122.2
24	rural	611	15	40.733333	4	162.9333333	4	162.93333
25	rural	611	15	40.733333	8	325.8666667	9	366.6
26	rural	611	15	40.733333	8	325.8666667	8	325.86667
27	rural	611	15	40.733333	3	122.2	4	162.93333
28	rural	611	15	40.733333	4	162.9333333	4	162.93333
29	rural	611	15	40.733333	7	285.1333333	8	325.86667
30	rural	611	15	40.733333	1	40.73333333	2	81.466667
31	rural	611	15	40.733333	5	203.6666667	5	203.66667
32	rural	611	15	40.733333	6	244.4	8	325.86667

total outlets found through canvassing that were determined to have a match on the list frame = 139

total outlets found through canvassing = 153

weighted sum of outlets found that have a matchon the list frame = 5649.086275

weighted sum of total outlets found through canvassing = 6218.5373

Weighted Coverage percentage estimate = C = 100 (5649.086275 / 6218.5373)

= 90.84268604

= 91%

APPENDIX E: SSESS SUMMARY TABLES 1,2,3, AND 4

SSES Table 1 (Synar Survey Estimates and Sample Sizes)

CSAP-SYNAR REPORT

State	Minnesota
Federal Fiscal Year (FFY)	2012
Date	09/29/2011 16:07
Data	DATAREADYFORSSES_110929.xlsx
Analysis Option	Stratified SRS with FPC

Estimates

Unweighted Retailer Violation Rate	2.4%
Weighted Retailer Violation Rate	2.4%
Standard Error	1.0%
Is SAMHSA Precision Requirement met?	YES
Right-sided 95% Confidence Interval	[0.0%, 4.0%]
Two-sided 95% Confidence Interval	[0.6%, 4.3%]
Design Effect	1.0
Accuracy Rate (unweighted)	87.1%
Accuracy Rate (weighted)	87.1%
Completion Rate (unweighted)	98.8%

Sample Size for Current Year

Effective Sample Size	115
Target (Minimum) Sample Size	115
Original Sample Size	286
Eligible Sample Size	249
Final Sample Size	246
Overall Sampling Rate	5.2%

SSES Table 2 (Synar Survey Results by Stratum and by OTC/VM) STATE: Minnesota
FFY: 2012

Samp. Stratum	Var. Stratum	Outlet Frame Size	Estimated Outlet Population Size	Number of PSU Clusters Created	Number of PSU Clusters in Sample	Outlet Sample Size	Number of Eligible Outlets in Sample	Number of Sample Outlets Inspected	Number of Sample Outlets in Violation	Retailer Violation Rate(%)	Standard Error(%)
All Outlets											
1	1	5,473	4,765	N/A	N/A	286	249	246	6	2.4%	
Total		5,473	4,765			286	249	246	6	2.4%	1.0%
Over the Counter Outlets											
1	1	5,473	4,765	N/A	N/A	246	246	246	6	2.4%	
Total		5,473	4,765			246	246	246	6	2.4%	1.0%
Vending Machines											
1	1	0	0	N/A	N/A	0	0	0	0	0.0%	
Total		0	0			0	0	0	0	0.0%	0.0%

Note: There are some records with unknown outlet type. Therefore the overall counts may not equal the sum of OTC and VM counts.

SSES Table 3 (Synar Survey Sample Tally Summary)

STATE: Minnesota
FFY: 2012

Disposition Code	Description	Count	Subtotal
EC	Eligible and inspection complete outlet	246	
Total (Eligible Completes)			246
N1	In operation but closed at time of visit	2	
N2	Unsafe to access	0	
N3	Presence of police	1	
N4	Youth inspector knows salesperson	0	
N5	Moved to new location but not inspected	0	
N6	Drive thru only/youth inspector has no drivers license	0	
N7	Tobacco out of stock	0	
N8	Run out of time	0	
N9	Other noncompletion	0	
Total (Eligible Noncompletes)			3
I1	Out of Business	14	
I2	Does not sell tobacco products	16	
I3	Inaccessible by youth	2	
I4	Private club or private residence	1	
I5	Temporary closure	0	
I6	Can't be located	3	
I7	Wholesale only/Carton sale only	0	
I8	Vending machine broken	0	
I9	Duplicate	0	
I10	Other ineligibility (see below)	1	
Total (Ineligibles)			37
Grand Total			286

Give reasons and counts for other ineligibility:

Reason	Count
Outlet ID #11: Only sold cigars and pipe tobacco	1

SSES Table 4 (Synar Survey Inspection Results by Youth Inspector Characteristics)

STATE:
Minnesota
FFY: 2012

Frequency Distribution

Gender	Age	Number of Inspectors	Attempted Buys	Successful Buys
Male	14	0	0	0
	15	3	61	0
	16	3	55	2
	17	0	0	0
	18	0	0	0
	Subtotal	6	116	2
Female	14	0	0	0
	15	3	64	0
	16	3	66	4
	17	0	0	0
	18	0	0	0
	Subtotal	6	130	4
Other		0	0	0
Grand Total		12	246	6

Buy Rate in Percent by Age and Gender

Age	Male	Female	Total
14	0.0%	0.0%	0.0%
15	0.0%	0.0%	0.0%
16	3.6%	6.1%	5.0%
17	0.0%	0.0%	0.0%
18	0.0%	0.0%	0.0%
Other			0.0%
Total	1.7%	3.1%	2.4%