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How Many Hungry Oregonians? Measuring Food Insecurity and Hunger

by Michael Leachman

People are not supposed to go hungry in America or in Oregon, but they do. The U.S. Department of Agriculture (USDA) estimates that 5.8 percent of all Oregon households live with hunger due to insufficient money for food. This is the worst rate in the country. Moreover, according to the USDA, an *additional* 6.8 percent of households in the state survive on the verge of hunger, even in these times of good economic health.

The more precisely food insecurity and hunger in Oregon is measured, the more effectively public policy can address the problem. This paper examines the available measurement options and makes recommendations about which measures would be best to use on the Oregon Population Survey (OPS). It also uses the 1998 Oregon Population Survey and the USDA's findings to demonstrate the seriousness of Oregon's hunger problem, and the importance of precise measurements.

This analysis of the federal and state efforts to date to measure food security and hunger in Oregon finds that:

- Existing measurements of food insecurity and hunger in Oregon, including the USDA report, suggest a very serious problem in the state. The levels are especially high in low income, minority, and renters' households.
- The Oregon Population Survey, which does not reach households too poor to own a phone, estimates that 119,000 Oregonians do not have enough to eat, and that 592,000 are not eating the kinds of food they want.
- The USDA report concludes that some 400,000 Oregonians are going hungry or facing such economic hardship that they may be going hungry if the economy worsens.
- The research methodology employed on the USDA's report is the most sophisticated and carefully designed measure available.

This report recommends that the Oregon Population Survey in 2000 should include a measure that is as similar as possible to that used by the USDA. Three alternatives are proposed to improve the Oregon Population Survey and limit the costs of the improvements. In addition, this report recommends that the 2000 Oregon Population Survey incorporate a supplement to reach households without telephone service.

Oregon Center for Public Policy

204 North First Street, Suite C

P.O. Box 7, Silverton, OR 97381-0007

Telephone: 503.873.1201 Facsimile: 503.873.1947

e-mail: info@ocpp.org www.ocpp.org

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People are not supposed to go hungry in America or in Oregon, but they do. The U.S. Department of Agriculture (USDA) estimates that 5.8 percent of all Oregon households live with hunger due to insufficient money for food. This is the worst rate in the country.¹ Moreover, according to the USDA, an *additional* 6.8 percent of households in the state survive on the verge of hunger, even in these times of good economic health.

The State of Oregon is committed to ending hunger. In 1991, the Legislative Assembly established a State policy that all Oregonians have a "right to be free from hunger,"² and a goal of "food security by the year 2000."³ Released on the cusp of the legislature's deadline, the USDA report suggests that the State's progress has been poor.

In fact, Oregon's food bank network has reported an *increase* in demand for services. The network served emergency food boxes to 15.5 percent more people in fiscal year 1998-1999 than in the previous year. All told, 463,842 people received an emergency food box in 1998-1999.⁴ Since Oregon law defines "hunger" as "being unable to obtain a nutritionally adequate diet *from nonemergency food channels*," and defines "food security" as "the means to obtain a nutritionally adequate food diet *through conventional food sources at all times*," the increasing use of food banks is of direct concern to those keeping track of the state's progress.⁵

The more precisely food insecurity and hunger in Oregon is measured, the more effectively public policy can address the problem. This paper examines the available measurement options and makes recommendations about which measures would be best to use on the Oregon Population Survey (OPS).⁶ It also uses the 1998 OPS and the USDA's findings to demonstrate the seriousness of Oregon's hunger problem, and the importance of precise measurements.

The State-of-the-Art in Measuring Hunger

In 1984, the President's Task Force on Food Assistance concluded that researchers needed a new measure of hunger in America. The clinical and medical definitions closely associated hunger with malnutrition. The President's Task Force pointed out that such definitions do not provide the information policy makers need to address the causes of the problem. Once people, and especially children, were clinically and medically defined as "hungry," their situation was already dire. Policy makers needed a measure that would identify people going hungry or at risk of hunger, not one that located people already in need of medical assistance. In the United States, where many people go hungry but few become seriously malnourished, a broader measure is especially important. As the President's Task Force wrote:

To many people hunger means not just symptoms that can be diagnosed by a physician, it bespeaks the existence of a social, not a medical, problem: a situation in which someone cannot obtain an adequate amount of food, even if the shortage is not prolonged enough to cause health problems. . . . It is easy to think of examples of this kind of hunger: children who sometimes are sent to bed hungry because their parents find it impossible to provide for them; parents, especially mothers, who sometimes forego food so that their families may eat; the homeless who must depend on the largess of charity or who are forced to scavenge for food or beg; and people who do not eat properly in order that they save money to pay rent, utilities, and other bills.⁷

The President's Task Force challenged nutrition researchers to develop a reliable measure of hunger that would respond to the American reality and would help policy makers overcome disagreements resulting from insufficient information about the extent of hunger in the United States.

Responding to this challenge, researchers at various federal agencies, public policy institutes, and universities began collaborating to create a sophisticated set of survey questions that could adequately measure what was happening in the country. In support of the researchers' efforts, Congress in 1990 officially requested a standardized measure of food insecurity that could be used by federal agencies, and by state and local researchers.⁸ Over the next few years, analysts at the USDA, the U.S. Public Health Service, the U.S. Bureau of the Census, and the National Center for Health Statistics collaborated with leading academic experts and other private researchers through the Food Security Measurement Project.

After extensive testing and refinements, the Measurement Project introduced a survey with 18 core questions. The questions used were first included on the Food Security Supplement to the Census Bureau's national Current Population Survey (CPS) in April 1995. Since that time, other national surveys, including the fourth National Health and Nutrition Examination Survey, the Survey of Program Dynamics, the Continuing Survey of Food Intake by Individuals, and the Early Childhood Longitudinal Study have planned to adopt the Measurement Project's survey questions.⁹

The most recent USDA report, *Prevalence of Food Insecurity and Hunger, by State, 1996-1998* ("the USDA report") drew its data from the Food Security Supplement to the Current Population Survey administered by the Census Bureau. All of the questions on the Food Security Supplement are designed and pre-tested to limit confusion. The Census Bureau administers the supplement according to rigorous data collection guidelines. The resulting data underlies the most carefully tested and sophisticated measurement of food insecurity and hunger designed to date. As its widespread adoption on a wide variety of surveys suggests, the 18-question measure is respected by researchers outside of the USDA.

Researchers analyze the standardized measure using a sophisticated technique that allows them to place households on a scale. Based on answers to the 18 core questions, households are scored along a continuum of food insecurity and hunger. This continuum is broken into four categories: (1) food secure, (2) food insecure without hunger, (3) food insecure with moderate hunger, and (4) food insecure with severe hunger.

The design of the scale is based on research into how households tend to respond when they do not have enough money for food. According to the research literature, hunger is a "managed process" of economic decision-making.¹⁰ That is, households tend to follow a typical pattern of response to inadequate money for food. In the least severe economic situations, adults begin to notice that their food supply is seriously inadequate, to worry that their food supply will not be adequate to meet their household's needs, and to adjust the kinds of foods they eat and prepare. In more severe situations, adults eat less and go hungry, but keep the children fed. Finally, faced with extreme conditions, children will be fed less and go hungry, and adults will more dramatically decrease their food consumption.

The Food Security Supplement Questions

Drawing on this research, the 18 core questions of the Food Security Supplement are designed to capture a range of responses to inadequate

resources for food. To do so, respondents answer very specific questions about their household's food situation. Each of the questions makes clear that the household's food insecurity must result from a lack of money. Because the questions are designed to place households along a scale, the events they ask about gradually grow in severity. For example, one early question asks if the respondent could "afford to eat balanced meals" in the last 12 months.

A later question asks:

"In the last 12 months, did (you/you or other adults in your household) ever not eat for a whole day because there wasn't enough money for food?"

And the final question asks:

"In the last 12 months, did (name of child/any of the children) ever not eat for a whole day because there wasn't enough money for food?"

To be classified as "food insecure without hunger," a household would have to answer questions on the less severe end of the scale affirmatively, and questions on the more severe end of the scale negatively. To be classified as "food insecure without hunger" connotes a serious household problem. While individuals in such households may have eaten regularly enough to avoid hunger during the year, they have not had the money to assure access to enough food to meet their basic needs. Adults in such a household may have cut the size of their meals or skipped meals because of inadequate funds for food during the year, though if this happened often, their household would rank as "food insecure with hunger." Households classified as hungry have faced such severe economic hardship that adults, or even children, have often skipped meals or not eaten for whole days (with varying amounts of frequency).

A Two Minute Survey

Few respondents are actually asked all 18 questions. Two "screens" operate within the survey to reduce the number of questions most households are asked.¹¹ As a result, the majority of respondents answer just three to five questions, and administering the survey takes on average about 2 minutes.¹² Only households with children facing the most severe forms of hunger are asked all eighteen questions.

As a result, the majority of respondents answer just three to five questions, and administering the survey takes on average about 2 minutes. Only households with children facing the most severe forms of hunger are asked all eighteen questions.

Nevertheless, recognizing that time and financial constraints often make use of the full scale difficult, researchers at the National Center for Health Statistics (NCHS) developed and tested a 6-question version of the standard 18-question scale. Like the full scale, this shorter version allows researchers to reveal a range of household responses to inadequate resources for food. The 6-question module, however, is unable to separate the most severe cases in which children are going hungry from those cases in which adults have cut their food consumption. Like the longer version, the module contains a screen, so that not all respondents are asked the full battery of questions. Accordingly, the average amount of survey time for the 6-question scale is approximately 1 minute 30 seconds.¹³

A Review of the Oregon Population Survey's Single Question

Surveys in the U.S. have used single-question measures of food sufficiency for many years. Such measures are unable to capture the range of responses households tend to exhibit when they don't have enough money for food. Single question measures leave many unanswered questions: Are both children and adults going hungry? Are adults skipping meals occasionally or going without food for more than a full day at a time? Has the family staved off hunger by eating nutritionally inadequate foods? The information gleaned from a single question is not adequate to assess the extent of the problem. Nevertheless, they provide data that is better than nothing.

The single question used on the Oregon Population Survey is a typical example. The OPS question asks:

"Which of these statements best describes the food situation in your household during the last 12 months, that is, since May of last year?"

Respondents are then offered four possible answers:

- a) We always have enough to eat and the kinds of food we want.
- b) We have enough to eat but not the kinds of food we want.
- c) Sometimes, we do not have enough to eat.
- d) Often, we do not have enough to eat.

Note that the potential answers generally correspond to the categories created by the Food Security Measurement Project. “Food secure” households might be expected to answer (a): “We always have enough to eat and the kinds of food we want.” Households categorized as “food insecure without hunger” might be expected to answer (b): “We have enough to eat but not the kinds of food we want.” And “food insecure with [moderate or severe] hunger” households might be expected to answer (c) or (d).

It is not clear whether the single question measure and the 18-question USDA tool actually correspond in this way. An analysis is possible, since the Census Bureau has included a question nearly identical to the OPS single question above on the Food Security Supplement (the same survey that asked the 18-question module). Preliminary analysis of the issue by Mark Nord at the Economic Research Service of the USDA suggests that the single question does moderately correlate to the Food Security Measurement Project’s scale. That is, Mr. Nord’s preliminary research suggests that respondents to the national CPS answer the single question in ways that roughly correspond to their placement on the scale. At the same time, the preliminary research suggests, the single question overstates the percentage of households who appear to be “food insecure” and understates the percentage of households whose members are going hungry.

Moreover, researchers at the National Center for Health Statistics tested a question nearly identical to the one used on the Oregon Population Survey to determine how survey respondents typically understood it. The NCHS researchers found that many respondents were confused by the question because it asked them to report about both the *quality* of the food their household consumed (“kinds of food”) and the *quantity* of food consumed.¹⁴ As a result, they recommended use of a different question, which asked only about the quantity of food available, and employed a follow-up question to capture those households who were not eating the kinds of food they wanted.

Comparing the Findings of the USDA Report and the OPS

Answers to the 1998 Oregon Population Survey question on food sufficiency were different to some extent from the USDA's findings on Oregon. The OPS gathered answers to the single question described above from 4,816 households representing 12,665 individuals. Of households, 16 percent reported that they "have enough to eat but not the kinds of food they want," and a total of three percent said they "sometimes" or "often" did not have enough to eat. For individual Oregonians, the numbers are slightly higher. The OPS estimates that 18.2 percent of individuals in the state are not eating the kinds of food they want, even though they are not going hungry. An additional 3.7 percent of all Oregonians do not always have enough to eat.

The OPS data on individual Oregonians may be a better comparison to the USDA figures, since USDA gathered data on individuals within households in determining where households would place on the food security scale. Comparing the two data sets by household, though, is less confusing.

Some differences in the OPS results and the USDA findings are evident. The three percent of Oregon households reporting that they sometimes or often don't have enough to eat is nearly half the 5.8 percent of households the USDA found to be "food insecure with hunger." At the same time, the 16 percent of households reporting to the OPS that they aren't eating the kinds of food they want is more than twice as large as the 6.8 percent of households the USDA estimated to be "food insecure without hunger" in Oregon.

The differences between the two surveys may partly result from differences in how the two sets of questions tend to behave. For example, if the single OPS question tends to overestimate the percentage of food insecure households and to underestimate the percentage of households whose members go hungry, as preliminary research indicates, then the results are somewhat less surprising.¹⁵

The difference, however, may also be the result of distinctly different samples. The OCPP will be able to comprehensively assess the two samples once the federal data is publicly available.

Statistics

All surveys of sample populations are inexact. Statistical theory, though, allows researchers to compute how confident they are of their findings using a computation known as the standard error. The authors of the USDA report, for instance, can say with 90 percent confidence that Oregon's food insecurity rate (which includes households going hungry and those on the verge of hunger) lies between 10.7 and 14.5 percent, and that the hunger rate lies between 4.8 and 6.8 percent. Even accounting for sampling error, Oregon's level of food insecurity is significantly higher than the national average (9.7 percent).

Percentage of Food Insecure Households in Oregon

	Percentage	Standard error (90 % confidence)
Food insecure with and without hunger	12.6	1.9
Food insecure with hunger	5.8	1.0

Source: USDA Report

The OPS has not precisely calculated the OPS standard error, but does provide an estimation. Using this estimation suggests that the percentage of Oregon households with enough to eat, but not eating the kinds of food they want, ranges from 15 to 17 percent. Further, the percentage of households whose members sometimes or often don't have enough to eat may be estimated to range from 2.5 percent to 3.5 percent.

Percentage of Households Whose Food Situation is Less Than Adequate

	Percentage	Standard error* (90% confidence)
Aren't eating the kinds of food they want	16.0	1.0
Sometimes or often don't have enough to eat	3.0	0.5

Source: 1998 Oregon Population Survey

* Estimate. The standard error for the OPS food sufficiency responses has not been precisely calculated.

Important differences in how the two surveys were administered may partly explain the differences in the results of the State and federal surveys. For instance, the consulting firm conducting the 1998 Oregon Population Survey determined who to contact based on a telephone list; people known to be without phones are not in the sample pool. Those respondents who cannot be reached by phone after repeated attempts are dropped from the survey, further limiting the nature of the sample pool. Thus, people without phones or who had phones disconnected due to limited resources are not surveyed.

By contrast, the initial contact list for the Census Bureau's Food Security Supplement did not exclude households without phones. All respondents were contacted through a home visit, so that people without phones and those with disconnected phones are surveyed. It is reasonable to believe that the Census Bureau's survey, for this reason, more successfully reaches poor households and other households in financial trouble.

Food Insecurity in Oregon: The Oregon Population Survey Results

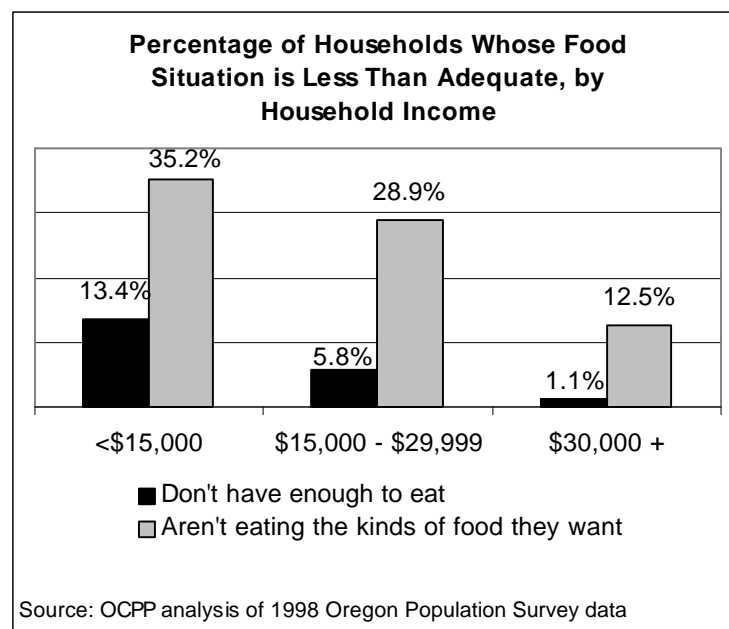
Although not as rigorous as the USDA survey, the results of the Oregon Population Survey offer plenty of justification for the continued and precise measurement of food insecurity and hunger in the state. The OPS data estimates that nearly 119,000 Oregonians live in households that don't have enough to eat, and 592,000 additional people in the State are not eating the kinds of food they want. Of course, it is unlikely that all of those who are not eating the kinds of food they want would classify as food insecure. Using the more precise USDA figure suggests that over 400,000 Oregonians live either in hunger or on the verge of it.

The [Oregon Population Survey] estimates that nearly 119,000 Oregonians live in households that don't have enough to eat, and 592,000 additional people in the State are not eating the kinds of food they want.

The OPS sample is less reliable when broken down into population subgroups, but the findings do *suggest* that hunger is especially prevalent among vulnerable groups in Oregon.¹⁶ As one might expect, people living in households with low incomes are more typically threatened. According to the OPS findings, just 45 percent of Oregonians living in households with incomes under the poverty guideline always have enough to eat and the kinds of food they want. In other words, more than half (55 percent) report an inadequate

household food situation. More than 17 percent of these vulnerable households said that they don't always have enough to eat.

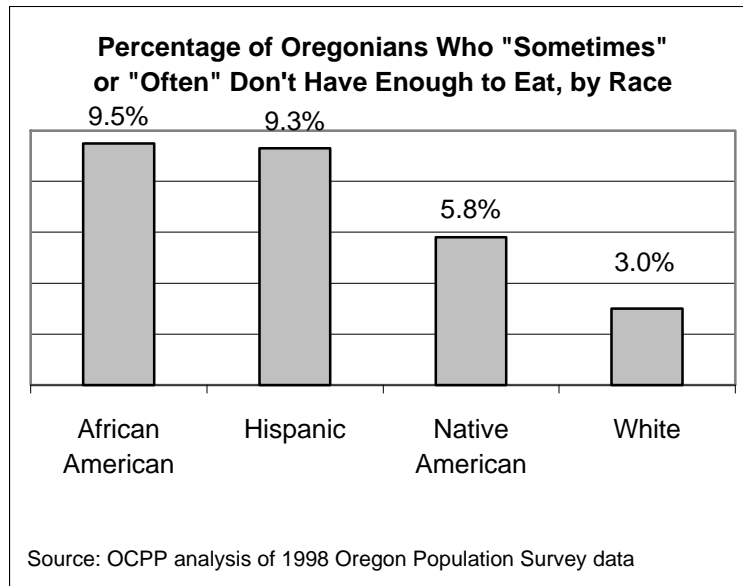
Oregonians with lower household incomes are also more likely to report not having enough to eat and not eating the kinds of food they want. While 86 percent of Oregonians living in households with incomes over \$30,000 report a fully adequate food situation, only 51 percent of Oregonians in households earning under \$15,000 are so fortunate. More than thirteen percent of Oregonians in this lowest income category report that they actually do not have enough to eat.



African Americans, Hispanics, and Native Americans in the OPS sample were especially likely to report not having enough to eat. The sample suggests that 9.5 percent of all African Americans in Oregon are living in hungry households, as are 9.3 percent of Hispanics, and 5.8 percent of Native Americans. The OPS data suggests that renters, too, are especially likely to be hungry. Some 8.4 percent of people living in households that rent report not having enough to eat (compared to 1.6 percent who own their homes).¹⁷

Both the USDA report and the 1998 Oregon Population Survey reveal that Oregon has a serious problem with hunger and food insecurity. Some 400,000 Oregonians are going hungry or facing such economic hardship that they may be going hungry if the state's economy weakens. Even by the OPS estimate, 119,000 of the state's residents do not have enough to eat. The capacity of the

state's policy makers to address this problem will depend on precise measurements.



Recommendations to Improve the Oregon Population Survey

The single food sufficiency question employed on the 1998 Oregon Population Survey, while it provides suggestive data, does not provide state policy makers with the details necessary to design the most effective responses. The survey questions, analytical methods, and survey administration techniques used by the USDA and the U.S. Census Bureau provide more comprehensive and precise data. If the OPS used a similar survey tool, Oregon policy makers could effectively and more efficiently address hunger and food insecurity.

The OCPP suggests the following three options, listed in order of preference, to improve the Oregon Population Survey:¹⁸

Option 1: The OPS should employ the set of 18 questions included in the Food Security Supplement of the Current Population Survey since 1995. The single question from the 1998 OPS should also remain on the survey, to serve as a one-question screen to reduce the costs and to allow for more comparability across time.

By using the screening question, households with incomes greater than 250% of poverty who answer that they always have enough food and the kinds of food they want will not be asked any further food security questions. Many Oregonians, then, will answer only one question. Two other screening questions will further reduce the costs and time involved. Thanks to these

screens, administering the questions will take, on average, approximately two minutes.

Option 2: The OPS should use the 6-question version of the Food Security Supplement that was developed by researchers at the National Center for Health Statistics. Again, the one-question screen should be used for households with incomes above 250% of poverty.

Administering this version will require about one and one-half minutes on average. The results will capture something of the range of responses people typically have when they do not have enough money for food. In choosing this option, however, the State should recognize that they will be unable to distinguish the most severe forms of hunger from more moderate cases. This weakness in the measure will make it difficult for policy makers to target programs effectively.

Option 3: The OPS should use the same question it employed in 1998, but add a second question that asks how households cope with food insecurity and hunger. This second question should be: "In the last 12 months, did (you/you or other adults in your household) ever get emergency food from a church, a food pantry, or food bank?"

Adding the second question will clarify answers to the first question. For instance, if people first answer that they "always have enough to eat and the kinds of food" they want, and then answer that they needed emergency food, they will be correctly identified as "food insecure" as defined in Oregon law. Without the second question, persons who chose answer "a" on the single question used by the OPS are categorized as food secure. The second question allows the Oregon Population Survey to better track Oregon's official definitions.

As opposed to the USDA survey, the OPS will continue to suffer from a methodological weakness unless households without phones are included in the sample. **The 2000 Oregon Population Survey should incorporate some means of determining the food situation in households unreachable by phone.** A supplement to the survey based on home visits, for instance, would be effective.

Conclusion

Oregon law defines food security and hunger, and sets goals for the elimination of hunger and food insecurity by 2000. The Oregon Progress Board included a single question on the 1998 Oregon Population Survey to assess the degree to which Oregon was meeting that statutory goal. On the national level, researchers developed an 18-question survey instrument that has been included as a supplement to the Census Bureau's Current Population Survey each year beginning in 1995. The USDA analyzed the last three years' data (1996 through 1998) and found that Oregon has more households categorized as "food insecure with hunger" than any other state in the nation.

The measurement tool employed by the USDA is the most sophisticated and carefully developed measure of food insecurity and hunger yet produced. Experts from around the country participated in its creation. Several national surveys now employ this set of 18 questions as the best measure available. A miniature 6-question version has also been shown to produce valid results, although it cannot distinguish the most severe cases from other households with hunger. Single question measures such as that used in the Oregon Population Survey are not able to catch the range of responses households typically exhibit when they do not have enough money for food, but the typical single-question measures do appear to produce answers that correspond to the more sophisticated scales.

The 1998 Oregon Population Survey's single-question measure produced results different in some ways from the USDA's findings about Oregon. Exactly why this occurred awaits further analysis of data from the USDA which is not yet publicly available. The differences are anticipated by preliminary analysis of how respondents tend to answer the single question. Moreover, the Oregon Population Survey reaches a different sample of Oregonians than does the national survey employed by USDA. Notably, the OPS only reaches households with working telephones.

Despite some differences in their results, both the USDA's report and the Oregon Population Survey reveal that a very large number of Oregonians are living with hunger and even more are on the verge of hunger. The levels are especially high in low income, minority, and renters' households.

Oregon can improve the reliability of its assessment of food insecurity by incorporating the tested and refined federal questions into the Oregon Population Survey. If screening questions are also used, a very large percentage of those surveyed will be asked only one question, and others will be asked

only three. If the State chooses to continue using the same single question it employed in 1998, it should add a second question assessing how

families cope with food insecurity. Finally, regardless of the measurement tool chosen, a survey supplement should be conducted to reach households without telephones.

Endnotes:

¹ Nord, Mark, Kyle Jemison, and Gary Bickel. *Measuring Food Security in the United States: Prevalence of Food Insecurity and Hunger, by State, 1996-1998*. Food and Rural Economics Division, Economic Research Service, U.S. Department of Agriculture. Food Assistance and Nutrition Report No. 2. September, 1999. For more information, visit the Food Security and Hunger Briefing Room at www.econ.ag.gov/briefing/FoodSecurity. The USDA merged three years of data (1996-98) to obtain a sample size sufficient to measure food security and hunger at the state level. The full data set has not yet been released to the public, but is expected before the end of the year. When the data does become available, the Oregon Center for Public Policy will be assessing the USDA's results in detail and conducting a thorough study of hunger and food insecurity in Oregon based on all available information.

² ORS 458.530(1)(b)

³ ORS 458.530(1)(d)

⁴ Oregon Food Bank. *1999 Hunger Relief Statistics for Oregon and Clark County, Washington*.

⁵ ORS 458.530(1)(a) and (c) (emphasis added).

⁶ The Oregon Population Survey is a biennial survey coordinated by the Oregon Progress Board to measure the socioeconomic characteristics of Oregonians and their opinions on a variety of policy issues. It was first conducted in 1990. The OPS is used to measure the state's progress at achieving the state benchmarks and other policy objectives.

⁷ President's Task Force on Food Assistance Report. 1984, page 36. Cited in Hamilton, William L., et al. *Household Food Security in the United States in 1995: Summary Report of the Food Security Measurement Project*. September, 1997, page 3.

⁸ National Nutrition Monitoring and Related Research Act of 1990.

⁹ Price, Cristofer, William L. Hamilton, and John T. Cook. *Household Food Security in the United States: Guide to Implementing the Core Food Security Module*. September, 1997. Prepared for Gary W. Bickel, Project Officer, USDA, page 7.

¹⁰ Specific research is cited in Hamilton, et al. 1997, pages 4-8.

¹¹ A single question screen may also be used to reduce further the typical time necessary to conduct the survey. Respondents above a certain income level (say 250% of poverty) and who indicate in the single screener question that they always have enough to eat and the kinds of food they want, may be excused from answering additional questions. The USDA does not employ this screen because “research has shown that a small proportion of the higher-income households screened out by this procedure will register food insecurity if administered the full module.” Mark Nord and Gary Bickel. Memo to users of the “Guide to Implementing the Core Food Security Module” (FCS September 1997). July 6, 1999, page 1.

¹² Telephone conversation with Gary Bickel, Project Officer, Food and Nutrition Service, Office of Analysis, Nutrition, and Evaluation, U.S. Department of Agriculture. November 3, 1999.

¹³ Telephone conversation with Karil Bialostosky, Epidemiologist, National Center for Health Statistics. November 9, 1999.

¹⁴ Telephone conversation with Gary Bickel, November 3, 1999.

¹⁵ As mentioned earlier in the text, Mark Nord of the Economic Research Service at USDA has conducted a preliminary analysis of this question. Mr. Nord generously shared his working paper on the question with the OCPP, although the analysis is not yet complete.

¹⁶ When the national Food Security Supplement data is available, it will provide a cross-check on the OPS findings.

¹⁷ The figure reported for Oregonians who own their homes is for those who have a mortgage. The figure for Oregonians who rent is for those who rent for money. The OPS estimates that 2.6 percent of Oregonians who own their homes free and clear do not have enough to eat.

¹⁸ These suggestions were developed in consultation with staff of the Oregon Hunger Relief Task Force and the Oregon Food Bank.