

**CITY OF COTTAGE GROVE SURVEY
OREGON ECONOMIC AND COMMUNITY
DEVELOPMENT DEPARTMENT**

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SURVEY METHODS AND RESULTS



OREGON SURVEY RESEARCH LABORATORY
5245 UNIVERSITY OF OREGON
EUGENE, OR 97403-5245
TELEPHONE: 541-346-0824
FACSIMILE: 541-346-5026
E-MAIL: OSRL@oregon.uoregon.edu
WEB: <http://OSRL.uoregon.edu>

BY PATRICIA A. GWARTNEY, PH.D., DIRECTOR/PROFESSOR
DEREK DARVES-BURNOZ M.A., PROJECT DIRECTOR

I. INTRODUCTION

This document reports the results of the “City of Cottage Grove Survey,” a random-digital sample telephone survey of 344 adults in Cottage Grove, Oregon, conducted by the University of Oregon Survey Research Laboratory (OSRL) June 2003. The survey’s purpose was to assess low-moderate income thresholds in Cottage Grove for the Oregon Economic and Community Development Department (OECD) and to provide the community with public opinion data about how citizens believe it could improve. Our final analysis demonstrates that 48% of persons in this community live in families with 2002 incomes below the low-moderate income thresholds.

Working closely with David Kavanaugh of OECD, OSRL planned, pretested and implemented the survey. This report summarizes the survey methods and results.

II. SURVEY METHODS

A. SURVEY INSTRUMENT

The survey’s goals were to obtain valid and reliable information from adults in Cottage Grove on the following topics:

1. **Household and family size**, including the presence of multiple families within households;
2. **Family income threshold**, with family income from all sources falling above or below specified levels contingent on family size, as provided by OECD, and separately analyzing multiple families within households;
3. Opinion on the **one best thing** about living in Cottage Grove, and
4. Opinion on **how the community could be improved** to make it a better place to live.

The key survey questions on household/family size and family income thresholds replicate those used in several previous community income surveys that OSRL has completed with OECD (although the exact income thresholds vary over time and from community to community). OSRL developed, tested, and implemented the community improvement question especially for this project.

Project Director Derek Darves-Burnoz programmed the survey instrument into OSRL's computer-aided telephone interviewing system (WinCATI) and research assistants pre-tested it. A facsimile of the survey instrument is provided in Section 2 of the final report binder. All interviews were completely *anonymous*, and Human Subject's approval was obtained as required by federal law.

B. SAMPLE

Census 2000 reports show that Cottage Grove's population comprised 8,445 persons in 3,264 households. The survey sample size needed for standard 95% confidence intervals for this population of households is 344 (see <http://osrl.uoregon.edu/papers/sampler/>). OSRL recommended 368 completed interviews with valid answers to the key income question.

OSRL employed random digit dialing (RDD) to select this survey's sample. The Project Director randomly generated 1,324 telephone numbers for Cottage Grove and loaded into them WinCATI. Interviewers used 1,321 of those random telephone numbers to complete the required 368 interviews. A summary of interviewers' dial attempts and their outcomes may be found in the sample report in Section 4 of the report binder.

To ensure that all survey respondents resided in Cottage Grove, OSRL interviewers screened to determine their homes' geographical location using the following question, which directly followed the survey introduction:

“Do you live in Cottage Grove [in Lane County]?”

PROBE: Can you vote in city elections for mayor or city council?

One potential bias to the Cottage Grove study sample is that a certain percentage of homes lack telephones. Since this study is based on a telephone survey, it necessarily excluded households lacking telephones from the study sample. Needless to say, poor persons most often lack home telephones. However, Census 2000 reports show that 95% of Cottage Grove households have telephones and 5% lack them – exactly the same figures found for Oregon state as a whole. This percentage of households without telephones is too small to affect this study's final outcome. Thus, we conclude that telephone subscribership rates do not affect this study's ultimate results.

C. DATA COLLECTION

Only experienced OSRL interviewers conducted this survey. Section 3 of the report binder provides example Interviewer Instructions used in project-specific training. Interviewing was conducted between 9 AM and 9 PM June 5-23, 2003 until the target sample size was achieved. Up to 20 calls were made to each valid telephone number. Altogether, OSRL interviewers made 4,898 telephone calls to complete 368 interviews with adults age 18 and over. Of those, six were conducted in Spanish. Interviews averaged 3 minutes; interviews in Spanish averaged slightly longer. Overall, OSRL achieved a 75% response rate and 4.9% refusal rate.

Although interviewers completed 368 interviews, 7 respondents did not know their family income or refused to answer. (Specifically, 6 refused and 1 did not know.) Thus, the sample size for the key income question is effectively n=360 – more than the 344 needed to meet the minimum sample requirements for 95% confidence intervals. In presenting results for income thresholds, we use data for n=368. For all other results, we use n=368.

III. SURVEY RESULTS

A. OPINIONS ON COMMUNITY IMPROVEMENTS

As a service to the Cottage Grove area, OSRL began each survey interview with two open-ended questions related to the community. The exact questions and probe were:

COMMUN1

In your experience, what is the one best thing about living in Cottage Grove?

COMMUN2

If there were one thing about living in Cottage Grove that you could change or improve, what would that be?

PROBE: Please think of something that could make the community a better place to live for everyone.

Interviewers recorded respondents' open-ended answers verbatim. Section 6 of the report binder provides these answers. While OECD did not ask OSRL to categorize or code these narratives, clear patterns emerged.

In answer to COMMUN1, respondents said that the best thing about living in Cottage Grove is that it's a small town, a friendly community, and people's willingness to help each other. Answers to COMMUN2 clearly indicated the city's need for more activities for youth, improvements to city infrastructure, and better schools. Careful reading of respondents' thoughtful answers should provide very useful guidance to the community's representatives.

The survey instrument then turned to the key part of the study – family income keyed to household and family size.

B. HOUSEHOLD AND FAMILY SIZE

OECD requires income information on *persons within families*. Getting there requires an intricate set of survey skip logic around household and family questions, as well as careful interviewer training. It results in interviews that flow quickly and smoothly for respondents.

In order to ascertain household and family sizes, interviewers first asked:

“How many people live in your household at this point in time, including yourself?”

Interviewers typed in the exact number. The survey instrument defined household membership using standard U.S. Census conventions, that is:

Definition:

Include everyone who usually lives there half time or more, including: family, boarders, roommates, foster children, live-in employees, newborn babies still in the hospital, children at boarding school, persons with no other home who stay there, persons temporarily away (business, vacation, military service, or in a general hospital).

Exclude everyone who usually lives somewhere else, persons in institutions [prison, nursing home, mental hospital], military personnel who live elsewhere, people who stay somewhere else most of the week while working, and college students who live at college during the school year.

Definition:

A family is defined as people who are related by blood or marriage.

In the Cottage Grove survey, the number of persons in households ranged from one to nine, as shown in answers to the question labeled HHNUM (see Section 2 “Toplines,” page 2). Respondents’ answers to this question represented 967 persons, including themselves. All persons distributed across household sizes as follows: 23% in one-person households, 33% in two-person households, 22% in three-person households, 12% in four-person households, 6% in five-person households, 3% in six-person households, 1% in seven-person households, zero in eight-person households, and 0.3% in nine-person households.

Only respondents with more than one person in the household were asked the next question (78% of respondents). It asked:

“Are all of these people in your household members of your family?”

Or, if only one other person was in the household,

“Is the other person in your household a member of your family?”

As needed, interviewers probed using the same family definition as in the prior question.

Seventy percent of those in multi-person households answered this question “yes,” indicating that their household contained just one family. Seven percent answered this question “no,” meaning that their household contained more than one family. The survey instrument instructed respondents in multi-family households to answer the following income question for their family only. For example, an unrelated boarder living with a family answered the income question for himself or herself only.

The survey showed the average number of persons per family as 2.5 and the number of persons per household as 3.0. These sample survey estimates for Cottage Grove closely match Census 2000 family and household reports for Cottage Grove, which were 2.5 and 3.0, respectively.

C. FAMILY INCOME THRESHOLD

To establish low-to-moderate family incomes, the telephone survey asked respondents:

“Was your total family income from all sources in 2002 above or below _____?”

A specified amount contingent upon family size automatically appeared on each interviewer’s computer screen. The survey instrument defined family income as:

Definition:

Money from jobs (wages, salary, tips, bonuses, commissions), interest, dividends, child support, alimony, welfare, social security, disability, unemployment, and retirement payments, net income from a business, farm or rent, rent, royalties, trust, or estate; and any other money income regularly received by members of your family. Do not include lump-sum payments, such as money from an inheritance or sale of a home.

For Lane County, Oregon, OECD defined the 2002 low-to-moderate family income thresholds by family size as shown in Table 1.

Table 1: Low-Moderate Income Thresholds, by Family Size

<u>Family Size</u>	<u>Family Income</u>
1	\$28,500
2	\$32,600
3	\$36,650
4	\$40,700
5	\$44,000
6	\$47,250
7	\$50,500
≥8	\$53,750

OECD requires income information on *persons within families*. OSRL extracted the needed data from specially constructed cross-tabulations using SPSS (see Appendix). The information also can be gleaned from the banner tables in Section 5 of the report binder. Table 2 summarizes the results.

The data in Table 2 are presented in panels for each family/household type, as Column 1 defines one-person families, one family with multiple persons, and respondents' families in multi-family households. The bottom panel provides pertinent column totals. Column 2 shows the low-to-moderate income thresholds for families of specified sizes. Column 3 shows the number of persons in families.

Table 2: Persons in Families below Low-Moderate Income Thresholds, Cottage Grove, Oregon, June 2003

1. Family / Household type	2. Low-moderate income thresholds	3. Number of persons in families	4. Number of survey respondents	5. Respondents above income threshold*	6. Respondents below income threshold*	7. Persons in families above income threshold*	8. Persons in families below income threshold*	9. Total persons in families*	10. Percent of persons in families below	11. Respondents who don't know or refuse	12. Persons in families who dk/ref income	13. Total persons in families (including dk/ref)
<i>Formulas, by column number</i>						(3*5)	(3*6)	(7+8)	(8/9*100)		(3*11)	(9+12)
One person families	\$28,500	1	83	28	48	28	48	76	63.2%	7	7	83
One family, with multiple persons	\$32,600	2	111	63	46	126	92	218	42.2%	2	4	222
	\$36,650	3	75	40	33	120	99	219	45.2%	2	6	225
	\$40,700	4	41	22	18	88	72	160	45.0%	1	4	164
	\$44,000	5	17	10	6	50	30	80	37.5%	1	5	85
	\$47,250	6	9	3	5	18	30	48	62.5%	1	6	54
	\$50,500	7	4	2	2	14	14	28	50.0%	0	0	28
	\$53,750	8	0	0	0	0	0	0	0.0%	0	0	0
	\$53,750	9	1	0	1	0	9	9	100.0%	0	0	9
Respondent's family in multiple-family households	\$28,500	1	17	5	10	5	10	15	66.7%	2	2	17
	\$32,600	2	5	1	3	2	6	8	75.0%	1	2	10
	\$36,650	3	0	0	0	0	0	0	0.0%	0	0	0
	\$40,700	4	2	1	1	4	4	8	50.0%	0	0	8
	\$44,000	5	2	1	1	5	5	10	50.0%	0	0	10
	\$47,250	6	1	0	1	0	6	6	100.0%	0	0	6
Totals			368	176	175	460	425	885	48.0%	17	36	921
Percent of persons in families in Cottage Grove below low-to-moderate income thresholds: 48.0%												
* Numbers exclude respondents who did not know (dk) or who refused (ref) the income question.												
** Note: One respondent answered the first four questions only and is excluded from these calculations.												

Column 4 shows the number of respondents who answered each combination of family/household type and number of persons in families. Columns 5 and 6 provide the number of respondents who answered their family income above the low-to-moderate income threshold (n=176) and below it (n=175). Their sum shows that the income data represent 351 families in Cottage Grove.

Columns 7-10 show this study's key statistics. Columns 7 and 8 provide the number of *persons in respondents' families* above and below the low-to-moderate income thresholds specific to family size. Column 9 sums Columns 7 and 8 by row. Column 9's total shows that respondents who answered the income questions represent 885 persons in families in Cottage Grove, for 10.5% of the entire population. Column 10 shows the percent of families below the low-to-moderate income threshold by family size, which tended to increase with family size.

Note that these key columns exclude respondents who “did not know” or “refused” to answer the family income question. Columns 11 and 12 show that 17 families, representing 36 persons, failed to answer the income question. They represent just 0.4% of Cottage Grove’s population.

In all, the 2002 family incomes of 48.0% of persons in families in the Cottage Grove had incomes below the low-to-moderate thresholds (368 out of 885). The confidence interval for this percentage based on persons is $\pm 3.0\%$ percentage points (see <http://osrl.uoregon.edu/papers/sampler/>). This means analysts can be 95% sure that the true population result (if OSRL had interviewed the entire population of families in Cottage Grove) is between 45.0% and 51.0%. The 48.0% result is well within these confidence intervals.

IV. CONCLUSIONS

This representative, scientific survey indicates shows that 48.0% of persons in families in the Cottage Grove, Oregon, had 2002 family incomes below the low-to-moderate thresholds. This result is statistically robust, within standard statistical confidence intervals, and not subject to any known biases. OECDD needs this data to determine whether Cottage Grove qualifies for certain OECDD-administered grants.

While OSRL intended mainly to assess low-to-moderate family income levels in Cottage Grove for OECDD, as a courtesy to the community, we also included two open-ended questions concerning what citizens like most about their community and what improvements they would like to see. We hope that Cottage Grove’s governing bodies find good use for the detailed and careful answers citizens provided.

APPENDIX

TABLE 1

Table 1

Count		2002 INCOME ABOVE OR BELOW \$28,500 (SINGLE PERSON HOUSEHOLDS)				Total
		ABOVE	BELOW	REFUSED	DON'T KNOW	
NUMBER OF PEOPLE IN HOUSEHOLD	1	28	48	4	3	83
Total		28	48	4	3	83

TABLE 2

Table 2

Count		2002 FAMILY INCOME ABOVE/BELOW THRESHOLD (MULTI-PERSON HOUSEHOLD)				Total
		ABOVE	BELOW	REFUSED	DON'T KNOW	
NUMBER OF PEOPLE IN HOUSEHOLD	2	63	46	2		111
	3	40	33	1	1	75
	4	22	18	1		41
	5	10	6	1		17
	6	3	5	1		9
	7	2	2			4
	9		1			1
Total		140	111	6	1	258

TABLE 3

Table 3

Count		2002 FAMILY INCOME ABOVE/BELOW THRESHOLD (MULTI-FAMILY HOUSEHOLD)				Total
		ABOVE	BELOW	REFUSED	DON'T KNOW	
NUMBER OF PEOPLE IN HOUSEHOLD	2	3	6			9
	3		6			6
	4	2				2
	5	2	2	1	2	7
	6	1	2			3
Total		8	16	1	2	27