

Special Report 1088-E

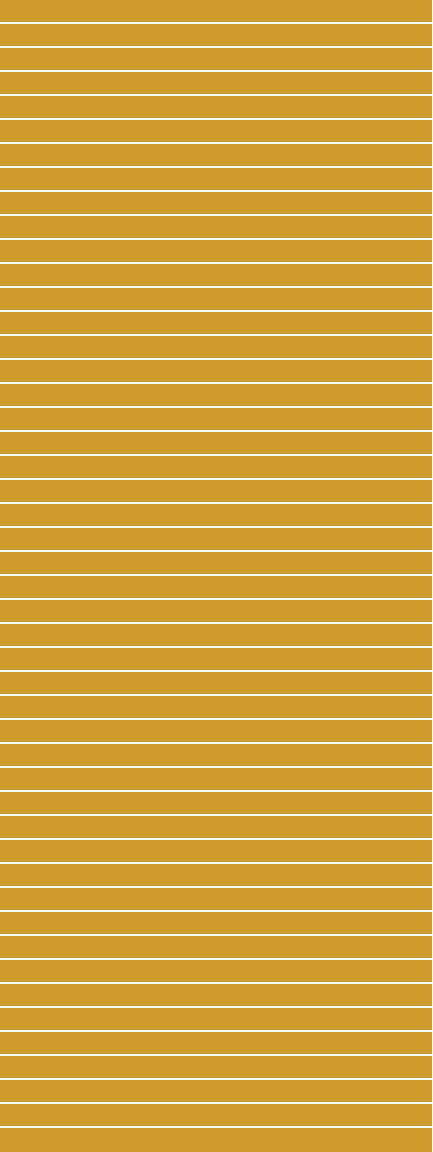
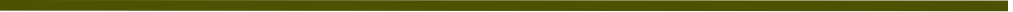
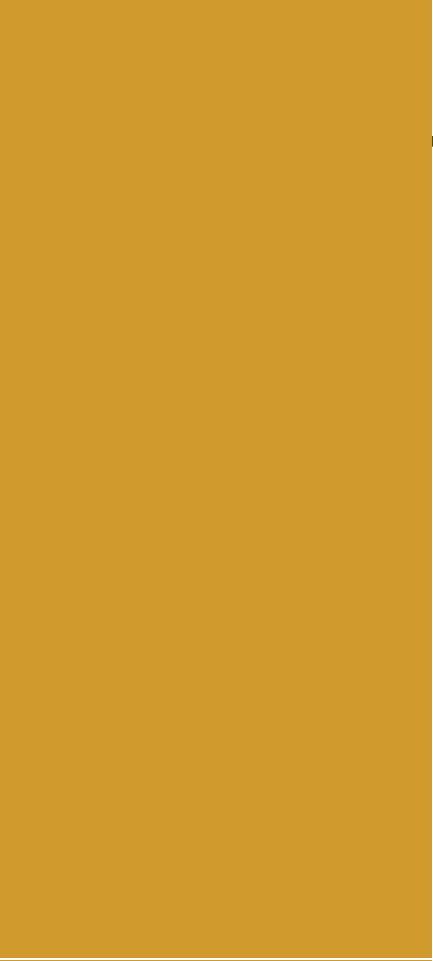
Originally published in this format in 2002

Oregon Small Farms Technical Report No. 6

May 2008

# Tools for Rapid Market Assessments





---

Special Report 1088-E  
Oregon Small Farms Technical Report No. 6  
May 2008

---

# Tools for Rapid Market Assessments

Larry Lev  
Professor  
Extension Marketing Specialist  
OSU Department of Agricultural & Resource Economics

Linda Brewer  
Senior Faculty Research Assistant  
OSU Department of Horticulture

Garry Stephenson  
Associate Professor  
Extension Small Farms Specialist  
OSU Department of Crop and Soil Science

**Photo credits:** All photos are by the authors.

This publication represents the sixth update and revision of the original manual. The techniques described were developed and adapted for use in farmers' markets beginning in 1998 and were first presented in two publications by Lev and Stephenson:

*Analyzing Three Farmers' Markets in Corvallis and Albany, Oregon*, Oregon State University Small Farms Technical Report Number 2 (October 1998).  
<http://smallfarms.oregonstate.edu/sites/default/files/publications/techreports/TechReport2.pdf>

*Dot Posters: A Practical Alternative to Written Questions and Oral Interviews*, Journal of Extension (October 1999).  
<http://www.joe.org/joe/1999october/tt1.html>

---

## CONTENTS

Attendance counts.....	1
Who is counted and when.....	2
Organizing the counting process .....	2
Dot surveys .....	2
Eight steps to successful market research using dot posters ....	4
Rapid Market Assessment process: Recruiting teams and Constructive Comments and Observations (CCO).....	9
Appendix A: Questions used successfully .....	13
Appendix B: Data analysis examples .....	15

---

## Tools for Rapid Market Assessments

**M**ost farmers' markets lack information to make effective changes and improvements. We have designed three simple, low-cost methods to address the information gaps.

The first two—attendance counts and dot surveys—are quantitative and can be used independently by markets.

The third method is the more complete Rapid Market Assessment (RMA), which combines the two quantitative methods and a qualitative method called Constructive Comments and Observations (CCO). An RMA is a collaborative learning process in which a team of market managers and others study a host market in another area. The learning is two-way: both the host market and the visiting RMA team members gain knowledge and experience. The RMA team members—through new collaborative relationships with their peers—learn the data-gathering methods and how to examine their own markets more analytically.

All three methods make efficient use of time and money, which are generally in short supply.

### Attendance counts

Knowing how many people shop at a market is valuable information few markets collect. Attendance counts allow vendors to estimate their sales. Markets can document their role as social centers and estimate spillover sales for neighboring businesses.

Because most markets have multiple entry points, an accurate attendance estimate requires both planning and personnel. Although greater accuracy would be achieved by counting everyone entering the market, that approach is quite labor intensive. However, counting all who enter the market during a specified 20-minute period each hour requires a much-reduced time commitment and provides an accurate estimate. Also acceptable, but somewhat less accurate, is a 10-minute count. When the count is part of an RMA, team members are available for other RMA activities during the balance of the hour.

Estimating market attendance without a formal process is difficult.





Entering shoppers are counted for 10 or 20 minutes.

Also, the 20-minute and 10-minute periods are more easily staffed than when a count is taken throughout the market's duration.

### Who is counted and when

Collecting the data requires clear communication and cooperation. Key elements for an accurate counting process are:

- Counting only adults
- Not counting shoppers re-entering (ideally, counters recognize those re-entering)
- Making counting periods consistent. For markets that open on the hour (such as 9 a.m.), the count should take place every hour from 20 minutes after the hour to 40 minutes after and from 25 minutes after to 35 minutes after for a 10-minute count.

### Organizing the counting process

- Tally counters, available at stationery stores, provide easy and accurate counts.
- Determine all market entrances; manager input may be valuable. In some cases, one person can count people coming in through multiple entrances.
- Some shoppers enter the market between booths rather than through established entrances. Because it is important that these shoppers are counted only once, count takers must agree on boundaries between their "zones of responsibility."
- At each entrance, determine an exact line where people are considered to have entered the market. It is important to establish this for accurate counts.
- Multiplying the 20-minute per hour totals by 3 or the 10-minute per hour totals by 6 provides hourly estimates. The sum of the hourly estimates provides a market attendance estimate for that date.
- **Whenever attendance estimates are published, it should be made clear that they are for a specific day. Seasonality, weather, and other factors have a significant influence on attendance.**

### Dot surveys

A Dot Survey is a simple but effective data collection method in which a limited number of questions are posted on easels and consumers indicate their responses using colorful, stick-on labels ("dots").

---

Conducting consumer research in farmers' markets presents significant challenges. Face-to-face interviews and written questionnaires have poor accuracy and response rates. The Dot Survey approach significantly increases both the number of consumers surveyed and the percentage who agree to participate. Consequently, this approach provides more accurate assessments of consumer preference and behavior. It also is well liked by customers and therefore adds to the market atmosphere.

While many markets choose to collect attendance data regularly throughout the season, Dot Surveys take much more effort and, if done too frequently, can fatigue shoppers. Many markets conduct a single Dot Survey per season. Few will conduct more than three surveys. As discussed in greater detail below, Dot Surveys ask many fewer questions than a traditional survey. Markets must focus on essential, "need to know" questions rather than on "nice to know" questions.

This survey technique allows respondents to see how others have responded and to feel included in the research process. One concern is whether or not some respondents may be influenced by what they observe on the posters. This is very unlikely for the majority of questions, such as, "Where do you live?" Still, it is important to be sensitive to this possibility when crafting the survey questions and answers.

**These two steps will reduce the potential bias:**

- "Seed" posters with randomly placed dots (removed later) so that the crowd is not influenced by previous answers.
- Replace the poster sheets with fresh sheets at intervals throughout the day. Fresh posters reduce access to prior information and allow the data to be analyzed by time period. As the posters are removed, note the portion of the market day the data represents, e.g., "early" or "late."

Dot Posters are quick, easy and fun for respondents.



## **Eight steps to successful market research using dot posters**

### **1. Identify information needs and carefully craft up to four closed-ended, multiple-choice questions.**

- Develop questions with the market manager and/or market board to address their most urgent concerns.
- Each question should be clear and succinct. The number of answers should be as few as possible while still providing the information needed. Respondent comprehension is the priority.
- One poster may accommodate two closely related questions. Example: “Will you be doing any additional shopping or eating in the downtown district this morning? If yes, indicate how much you anticipate spending.”
- In general, consumers are willing to answer four questions; more questions may reduce the response rate. Each additional question also increases the space needed in the market to conduct the research.
- Questions that have been successfully used as dot posters are listed at the end of this article in Appendix A.

### **2. Prepare the dot posters.**

- Write each question at the top of a large flipchart sheet. Legibility is critical. Print very clearly or paste large-font, typed questions on the flipchart sheet.
- Define the answers and place them in a horizontal line across the top and bottom of the sheet.
- Divide the answer scale with vertical lines extending the length of the sheet. When dividing the space, recognize that while it is preferable to divide the space evenly so that space allocation does not influence responses, it is often necessary to allot more space to more frequent responses. For example, when asking, “How much did you spend?” respondents will answer \$10, \$20, and \$30 more often than \$60, \$80, or \$100.



- For quantitative questions the lines between answers can serve as additional responses. For example, the line between \$20 and \$30 represents \$25. **Note, however, that *within* a column all the responses are treated as the same value.**
- Ordering the answers for subjective questions is less clear-cut. There is no logical order for the answers to the question, “Why did you come to the market today?” Also, respondents cannot split their votes between two-category combinations. Note: a few respondents will tear dots in half to split their vote.

### 3. Prepare sufficient color-coding labels or dots.

- The  $\frac{3}{4}$ -inch self-stick dot is easiest to handle; however, the  $\frac{1}{2}$ -inch dots fill less space on the posters. In a crowded market, using the  $\frac{3}{4}$  inch dots will require changing the posters more frequently.
- Cut the dot strips into pieces with the number needed, **providing exactly one dot per question.** Because as many as five respondents per minute will be placing dots on posters, it is important to keep the task as simple as possible.
- If possible, use just one dot color to reduce confusion and unwarranted conclusions about the significance of colors.
- You can change the dot color at a set time during the market day to determine if early shoppers respond differently than later shoppers. (As mentioned above, changing to a fresh poster sheet provides the same opportunity.)

### 4. Position the dot posters in the market.

- Confer with the market manager in advance to understand traffic patterns through the market.

Note concrete block in photo lower right. This market is situated in the Columbia Gorge, famous for windsurfing.

Be prepared for the effect of wind on the posters. Canopies can provide rain protection.



Dot posters become a center of interest.



If possible, select a high-traffic site that does not interfere with sales of surrounding vendors.

- Set up the flip charts in a row.
- Use your institution's signage to identify yourself to the public. A canopy will blend into market culture and provide protection from rain and sun.
- **Be prepared for wind and rain on the easels.** Large binder clips and tape will eliminate blowing paper. In very windy sites, concrete blocks or other weights may be necessary to stabilize the easels.

#### 5. Actively recruit participants.

- **Most people will not participate without a direct, personal invitation to do so.**
- Limit respondents to one set of dots per "shopping group." A shopping group is a group of adults who are shopping together and managing their money in common. The shopping group concept is particularly important for questions about purchases, both inside the market and at surrounding businesses.
- From scripted comments, explain the market research, and ask for a minute or two of the participant's time. **Be brief!** Examples of introductory lines: "Do you have just a minute to help the market?" or, "Have you had a chance to do the dots?" People tend to associate the word "survey" with something more time-consuming; avoid its use.
- Distribute strips of dots to willing participants. Our university prohibits distribution of dots directly to minors, although parents can instruct children to place their dots. Offer to place dots for customers whose hands are full. The loss of anonymity does not appear to effect participation.

#### 6. Be prepared to provide guidance on the process, as needed.

- Most shoppers have not participated in this type of data collection before. It is important that each

---

member of the interview team be familiar with the process and able to answer questions.

- Instruct participants to **place only one dot per poster** “where it makes sense.” Team members must monitor the posters. Gently stop participants who are placing more than one dot on a poster. Some will miss a poster and have an extra dot; they may need help determining which poster was missed. **It is important that team members monitor the posters and supervise dot placement. In crowded markets with many shoppers, it is advisable to have a team member dedicated to this task.**
  - The question, “How much did you spend in the market today?” will be handled in various ways by participants. While it is best to poll shoppers as they leave the market, that isn’t always possible. Some will save a dot and return after shopping. The dots are removable; shoppers can return and move a dot if their actual spending differs from the initial estimate.
  - **Encourage participants to indicate their actual expenditures on the day of the survey, rather than what they “usually” spend at the market.** Markets vary week by week; consumer spending is a reflection of what is in season. The survey is a snapshot of a specific market day rather than an indicator of average shopping practices.
  - **Setting out unsupervised, “self-serve” dot posters will yield few responses and unreliable data.** This attempt to reduce personnel is not a good idea.
7. **Invite the local newspaper or “weekly shopper” to write an article about the dot posters and the contribution of customers to market decision-making.** The visual nature of dot posters appeals to news photographers. See page 12 for an expanded discussion of this opportunity to gain publicity.

## 8. Analyze and interpret the data.

- Data analysis is simple and straightforward. **Be sure to double-check all counts and calculations as you proceed.**
- Remove the “seed” dots you may have placed to reduce bias.
- Count the dots assigned to each answer.
- To ensure count accuracy, (1) leave a small mark on each dot as it is counted and (2) have a second person repeat the count. Don't worry if the counts differ by five or less. If they differ by more, recount.
- Although each question should have the same total number of responses, they will not. In all surveys, some respondents fail to answer a question. Conversely, some will have used two dots for one question. It's not possible to make corrections during data analysis. The variation in responses will be small if posters were effectively monitored over the course of the market. Tables 1, 2, and 3 in Appendix B show dot-poster results from the same market on the same day. They illustrate acceptable response variation.
- Compute response counts as percentages of total poster responses. These initial quantitative data can be further analyzed. For example, calculating mean spending per shopping group or total spending per time segment may be of interest to a market manager. Have someone check your calculations. Tables 1 and 2 in Appendix B show responses as percentages of total responses. Table 3 shows a typical distribution for consumer spending.
- The sampling unit in this technique is the “shopping group,” not the individual (although some shopping groups will be individuals). The average shopping group size varies by market and is best determined by asking a dot-poster question. We have found the average shopping group size to be 1.6 to 2.0 people for most markets.

Carefully train RMA team members.

- **To determine total spending in the market for the survey day:**

- Divide the market count by the average shopping group size to estimate the number of shopping groups.
- Multiply the number of shopping groups by the average purchase amount.
- Recognize that an estimated market total based on the simple market count would result in a significant overestimation of market sales.



- Analysis of identical or similar questions across markets may be undertaken to compare and contrast locations.
- **Be careful not to “go beyond the data” in your interpretation of the results. Always be clear that the results are for a single market day on a specific date. It is inappropriate to assume that the data from a single day represents what takes place over an entire market season.** Counts, average spending, and total sales are sensitive to influences such as weather, sports events, and crop seasonality.
- Examples of results are provided in Appendix B.

### **The Rapid Market Assessment process: Recruiting teams and Constructive Comments and Observations (CCO)**

As mentioned earlier, in an RMA, a small group of outside market managers or others study a host market, which benefits from the insights provided by “fresh” eyes. The RMA team members benefit from relationships and learning with their peers. They begin to view and analyze their own markets in new ways.

The RMA consists of market counts, dot posters, and a third research technique, Constructive Comments and Observations (CCO). Whereas attendance counts and dot surveys can be



Touring the market site the night before an RMA

stand-alone exercises undertaken by individual markets, a CCO is a part of a complete RMA.

The RMA process requires intense participation by the team members on the day of the study. For a morning market, they may travel to the market the night before or early on market day, conduct the study components, hand in their worksheets, and participate in a phone debriefing several weeks later.

After the RMA, the host market receives an attendance count, dot-survey results and a report that focuses on market strengths and suggested changes and improvements. **The RMA process should not, however, be regarded as a comprehensive market assessment or evaluation.**

**Here is a six-step RMA process, which focuses on the requirements for the CCO portion:**

1. Recruiting team members
  - Form ad-hoc teams of a minimum of 4 to 5 managers or board members from markets around the state. The teams will evaluate a specific market on a specific date and collect qualitative and quantitative information. Markets drawing over 5,000 customers require larger teams.
  - If possible, in advance collect and share with team members whatever market information is available. This might include the market's history, reasons for being, and changes in day, time, site, and manager.
  - For morning markets, a pre-market dinner the evening before for the team and the host market's manager and board encourages relationship building. Additional market history, current situation, and goals for the next 5 years are shared at this time.
  
2. Market day responsibilities
  - On market day, team members are responsible for three things:
    - Attendance counts
    - Dot surveys
    - Completing a CCO sheet based on their observations of the marketSometimes a fourth element is added—interviews with community and business leaders on their market interactions.

- 
- The team leader establishes a schedule to ensure that each member has a chance to participate in all activities and that the RMA is completed. The leader also confirms that team members are engaged in the activities as scheduled and collects market attendance data throughout the study.

### 3. Completing the CCO worksheet

- Team members' constructive comments and observations focus on three major themes.
  - **Physical characteristics of the market site:** access, flow of people and traffic, liability issues, and organization
  - **Vendor and products:** product mix, product quality, signage, display, and customer service. Although in busy markets it may not be feasible, it is useful to interact with vendors.
  - **Market atmosphere:** the “feel” of the market, shopper demographics, interactions and conversations, and educational and community activities
- Team members record their comments on the worksheet, noting what is effective in the market and what could be changed or improved. Also, team members are encouraged to record observations of ideas they will apply in their own markets. They are instructed to observe shoppers, listen to conversations, initiate conversations, and investigate the neighborhood to find out how the market operates.
- Team members often find it useful to spend 20 or 30 minutes “shadowing” the market manager. This provides an additional insight into differences between the host market and their own markets.
- As they complete their process of observation, members review their worksheets and select:
  - Three to five key suggestions or comments for the host manager
  - Key ideas or observations they will take to their own markets
  - Observations that should be excluded from the public report

Debriefing after  
the market.



4. The RMA team should use the research to generate goodwill for the market in its home community and with the vendors.
  - The dot poster technique is visual, and the RMA participants have the mystique of “experts from afar.” Consider inviting a reporter from the local newspaper to the market for photos and interviews with RMA participants or the market manager. The goodwill generated by favorable press exposure can be valuable in influencing the attitude of local retailers and politicians. Vendors benefit from the exposure.
  - For vendors, prepare an informational half-sheet handout explaining the RMA process and including the list of dot-poster questions. Emphasize that the RMA is conducted at the request and with the input of the market board and manager. Invite the vendors to visit the RMA team and view the dot posters.
5. End-of-market activities
  - At the end of the market, the team debriefs for a short time by posting and discussing key comments from their individual worksheets on flipchart sheets. Invite the host manager to participate.
6. Report writing
  - The collated report combines the comments of team members. No attempt is made to provide a single view of the market; individuals may submit conflicting comments. Nor is there a separate report for each participant. The guarantee of anonymity reduces the potential for tension between team members and the host market.
  - Distribute attendance counts and dot-survey reports to the host market and to the team members within 3 or 4 days of the RMA study. **This rapid turnaround is a key strength of the research process.**
  - The compiled CCO is distributed within 2 weeks of the RMA. At the end of the RMA report, three to five suggested discussion questions are presented.
  - A phone debriefing is arranged for the RMA team members and the host market manager. The discussion questions form the focus for the conference call. The debriefing looks at major issues rather than touching on everything that occurred during the RMA.



---

## Appendix A: Questions used successfully at farmers' markets

### Spending and pricing questions.

How much have you (or will you) spend in the Farmers' Market this morning?

Do you plan on doing additional shopping or eating downtown this morning? If yes, how much do you anticipate spending?

On average, if a specific item costs \$1 in the grocery store, how much would you be willing to pay in the farmers' market for a similar product produced locally?

Has shopping at this farmers' market caused you to shop at neighboring businesses and restaurants more often?

### How markets attract customers. How markets can improve.

Was the Farmers' Market your primary reason for coming downtown this morning?

What is your primary reason for coming to the market today: agricultural products, the atmosphere, prepared foods or crafts?

What products would you buy if they were sold in the market? *[Must provide options.]*

What **one change** would you recommend to improve this market? *[Must provide a restricted number of potential changes.]*

If pastured poultry were sold in this market on a weekly basis would you change the frequency of your visits to the market?

### Geographic pull of the market, interactions with other markets, and distribution channels for local products.

Where do you live? *[Answer indicated by county or city, or zip code in urban areas.]*

What stopped you from buying more at the market today?

This summer, what will be your primary source of purchased locally produced agricultural products?

### **Market attendance questions.**

How often do you shop at this market? [*Either a specific number or categories.*]

What market advertising, if any, influences your attendance at this market?

How did you find out about the market? [*Include an “old-timer” category to separate those who have shopped at the market for more than 2 years.*]

How long have you shopped at this market? [*Include an “old-timer” category to separate those who have shopped at the market for more than 2 years.*]

How did you travel to the market?

How far do you live from the market?

How long have you shopped here?

What other area markets have you shopped this season (select all that apply)?

What area markets did you shop last season (select all that apply)?

How would different hours affect your market attendance?

How would a different day affect your market attendance?

How would a different location affect your market attendance?

### **Miscellaneous.**

What do you prefer—answering a written questionnaire or using **dots** (this technique) to answer questions?

When you have a choice between organic and non-organic produce at the farmers’ market, which do you choose?

This year, have you encouraged anyone to shop at this farmers’ market? If **yes**, what was your one main selling point?

What is the most important factor you use when choosing among competing products in this market?

## Appendix B: Data analysis examples

<b>Table 1. To increase your spending, the market should offer more (choose only one). Number of respondents = 535.</b>		
<b>Product</b>	<b>Number</b>	<b>%</b>
Organic produce	240	45
Cheese	150	28
Prepared food	75	14
Meat	43	8
Poultry	27	5

<b>Table 2. Would you shop at a Thursday 3–8 PM market in a downtown location? Number of respondents = 578.</b>		
<b>Response</b>	<b>Number</b>	<b>%</b>
Yes, frequently	194	34
Yes, once in a while	171	30
Probably not	115	20
No, never	69	12
I don't know	29	5

**Table 3. How much have you—or will you—spend at the Farmers' Market today? Number of respondents = 557.**

<b>Amount Spent</b>	<b>Number</b>	<b>%</b>
\$0.00	11	2
\$2.50	0	0
\$5.00	61	11
\$7.50	1	0
\$10.00	123	22
\$12.50	2	0
\$15.00	106	19
\$20.00	145	26
\$25.00	6	1
\$30.00	61	11
\$40.00	28	5
\$50.00	1	0
\$60.00	6	1
(More) \$100.00	6	1

Lines between columns were \$2.50, \$7.50, \$12.50, and \$25.

Average spending for the market per shopping group was \$18.34.

35% of the shoppers spent \$10 or less.