

Oregon Small Farms Technical Report



Tools for Rapid Market Assessments

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Introduction

Most farmers' markets lack the information required to make effective changes and improvements. We have designed three simple, low-cost methods to address these information needs. The first two, attendance counts and dot surveys, are quantitative methods that can be used independently by individual markets. They are discussed in the first two sections of this report.

The third section discusses the more complete Rapid Market Assessment (RMA) approach, which consists of the two quantitative methods plus an additional qualitative method, Constructive Comments/Observations (CCO). In our experience, an RMA works best as a collaborative learning process in which a team consisting of external market managers (and others) visits and studies a host market. The learning is two-way: the host market and the visiting RMA team members both gain knowledge and experience.

- *The host market benefits from the results of the three data gathering methods. It must be noted, however, that the host market manager is generally so consumed with managing the market that he/she learns little about the data collection methods themselves.*
- *The RMA team members gain in three ways:*
 - *They learn to use the data gathering methods.*
 - *Liberated from their hectic market day routines, they learn through the constructive observation process how to examine their own markets more analytically.*
 - *They establish collaborative relationships with and learn from their peers.*

All three methods make efficient use of two resources, time and money, that are generally in short supply for markets and market managers.

Attendance Counts¹

Knowing how many people shop at your market is a valuable piece of information few markets collect. Attendance counts allow:

- Vendors to estimate their potential sales.

¹ These procedures are an adaptation of the approach presented in Sptizer, T.M. and Baum, H. 1995. Public Markets and Community Revitalization. Washington, DC: Urban Land Institute and the Project for Public Spaces, page 107.

- The market to estimate potential spillover sales for neighboring businesses.
 - The market to document for community leaders its role as a social center.
- 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 very labor intensive. In our experience, counting all who enter the market during a specified ten-minute period each hour provides an acceptable estimate. When the attendance count is part of a broader RMA, team members are available for other RMA activities during the balance of the hour. When attendance counts are



Estimating market attendance without a formal process is difficult

part of a stand-alone activity, the ten-minute periods are much more easily staffed than a full count.

Collecting this data requires clear communication and cooperation among the individuals involved. Here are the key elements for an accurate counting process.

Who is counted & when are they counted?

- Only adults are counted.
- Only shoppers **entering** the market during the counting period are included in the count. If possible, counters will recognize shoppers who have placed

purchases in their cars and are returning to the market. *These re-entering shoppers should not be counted again.*

- For markets that open on the hour (e.g., 9:00), the count should take place every hour from 00:25 to 00:35. Consistency and precision in timing the counting periods yields a more accurate estimate.



Entering shoppers are counted for 10 minutes per hour.

How should the counting process be organized?

- Determine lines of sight in the market between and among all entrances. This will determine how many counters you need.
- At each entrance, determine the exact line separating people who have entered the market from those who have not. It is important to establish this so that all counters stay true to the ten-minute counting period.
- Some shoppers enter the market between booths rather than through established entrances. Since it is important that these shoppers be counted only once, count takers at opposite ends must agree on a boundary between their zones of responsibility.
- The use of tally counters, available at stationary stores, results in easier and more accurate counts.
- Multiplying the ten-minute hourly totals by 6 provides individual hourly estimates for the number of shoppers who entered the market. The sum of these 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.

What Are Dot Surveys?

Conducting consumer research in farmers' markets presents significant challenges. Traditional survey techniques, such as interviews and written questionnaires, are not well suited to this venue. Small sample size and bias introduced by the non-representativeness of those agreeing to be interviewed reduce the accuracy of face-to-face interviews. Written questionnaires, whether to be completed in the market or returned by mail, have very poor response rates, once again biasing the sample.

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. The Dot Survey technique is "self-service" research approach that asks a limited number of questions displayed on easels in the market. We call the individual questions "Dot Posters" because consumers indicate their responses using colorful, round, self-stick labels or "dots".

Dot Posters are quick and easy for respondents.



This survey technique differs from other approaches in that respondents can see how others have responded. This is both a strength and a weakness. It is a strength because respondents view the process as much less extractive – they appreciate inclusion in the research process. It is a weakness because respondents may be influenced by what they observe on the posters. This is not a concern for the majority of questions. For example, people don't change their answer to, "Where do you live?" based on answers they observe. For a few question this may be an issue and it is important to be sensitive to this point when crafting the survey questions.

These two steps will reduce this potential source of bias:

- "Seed" posters with randomly placed dots (later removed) so that the crowd doesn't follow the early answers;
- Replace the poster sheets with fresh sheets at intervals throughout the day. Fresh posters reduce prior information given to respondents and allow the data to be analyzed by time period.

Eight Steps to Successful Market Research Using Dot Posters

1. Identify information needs and carefully craft up to four closed-ended 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 of the question and answers is a priority.
 - Through careful wording, 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 quite 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 for use at the market.

- 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 the respondents) it is often necessary to allot more space to the more frequent responses. For example, when asking, “How much did you spend?” we know more respondents will answer \$10, \$15, and \$20 than \$40, \$60, or \$80.
 - For quantitative questions, the order of the answers is straightforward. For these 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 answers are counted as the same.
 - 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?” As a result, respondents cannot split their votes between all two-category combinations. Note: some respondents do tear dots in half to split their vote. This makes the counting process more difficult so it should not be encouraged.
3. Prepare sufficient color-coding labels or dots.
- The $\frac{3}{4}$ inch size self-stick dot is most easily handled, however, the $\frac{1}{2}$ inch size dots fill much less space on the posters. In a crowded market using the $\frac{3}{4}$ inch dots will necessitate changing the posters more frequently.
 - Cut the dots into strips, providing exactly one dot per question. Participants are limited to one response per question. Since this high volume survey technique permits as many as 4 respondents per minute, it is important to keep the respondent’s task as simple and clear-cut as possible.
 - Use of a single dot color reduces participant confusion. Individuals receiving multiple colors frequently ask, “Does it make any difference which color I use for which question?” Individuals receiving one color and observing that others have used a different color may draw conclusions regarding the demographic significance of the colors.

- Changing the dot color at a set time during the market day permits time analysis of market activity (are the responses from early in the market different than those from late in the market?) 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 the traffic pattern through the market. If possible, select a high-traffic site, but one 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 provide protection from rain and sun, and better blend into market culture.
- Be prepared for the effect of wind and rain on the easels. Large binder clips and tape will eliminate paper blowing. In very windy sites, concrete blocks or other weights may be necessary to keep the easels erect and in place.

Note concrete block in photo below. 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.

5. Actively recruit participants

- **Most people will not participate without a direct, personal invitation to do so.** Approach potential participants, giving visual cues that you're part of the market's business.
- Limit respondents to one set of dots per "shopping group." A shopping group is defined as 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 we have used: "Do you have just a minute to help out the market?" or, "Have you had a chance to do the dots?" People tend to associate the word, "survey" with something much more time-consuming; avoid its use.



Actively recruit participants

- Distribute strips of dots to willing participants. Our university prohibits distributing dots directly to minors, although parents can have children place their dots. Offer to place dots for customers whose hands are full. The loss of anonymity does not appear to effect participation.

6. Provide guidance on how the process works

- Most shoppers have never participated in this type of data collection before. It is important that each team member is familiar with the process and is able to answer questions about it.
- Instruct participants to **place only one dot per poster** “where it most makes sense”. Team members must monitor the posters. Gently stop participants who are placing more than one dot on a single poster. A percentage will miss a poster, and have an extra dot; they may need help determining which poster was missed. **It is important that team members keep an eye on the posters, to supervise dot placement. In crowded markets with many shoppers, it is advisable to have a team member dedicated to watching dot placement.**
- 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.

7. Invite the local newspaper to write an article about the dot posters and the involvement of customers in making key market decisions. The very visual nature of dot posters will appeal to news photographers. See # 4 in the next section for an expanded discussion of this opportunity to gain valuable publicity.

8. Data analysis and interpretation

- The data analysis process is simple and straightforward. **Be sure to double-check all counts and calculations as you proceed.**
- Tabulate the data by counting the dots assigned to each answer.
- Ensure accuracy of the count by (1) leaving a small mark on each dot as it is counted and (2) having a second person repeat the count. Don't worry if the two counts differ by five or less. If the counts differ by more, recount.
- While each question should have the same total number of responses, this won't happen. In all surveys, some respondents fail to answer a specific question. Conversely, some will have used two dots for one question. It's not possible to correct for either of these problems during data analysis. The variation in total responses across questions will be quite 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. These tables show acceptable variation in the numbers of responses.
- Compute responses as percentages of total responses. Quantitative data can be further analyzed. For example, 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 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 size of a shopping group will vary by market and is best determined by asking a dot poster question. From results to date, we have found the average shopping group size to be 1.5 to 1.8 people for most markets.
- To determine total spending in the market for the survey day:
- Divide the market population count by the average shopping group size to get an estimate of 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 population count would result in a significant overestimate of market sales.



Dot posters become a center of interest.

- Analysis of identical or similar questions across markets is often 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 all sensitive to transitory influences such as weather, sports events and crop seasonality.
- Examples of results are provided in Appendix B.

The Rapid Market Assessment Process: Recruiting Teams & Constructive Comments and Observations (CCO)

As mentioned in an earlier section, in an RMA, a small group of outside market managers or others study a specific market. The host market benefits from the



Carefully train RMA team members.

insights provided by “fresh” eyes. The RMA team members gain from establishing relationships with, and learning from 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 stand-alone exercises undertaken by individual markets, we have always conducted a CCO as a part of a complete RMA. Organizing and conducting an RMA requires substantially more preparation and coordination than does making use of either or both of the stand-alone techniques.

The RMA process requires intense participation by the team members on the day of the study and only limited other demands. 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.

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

Here is a six step RMA process with a focus on what is needed to conduct the CCO part of the RMA.

1. Recruit team members

- Form ad-hoc teams of a minimum of 4-5 managers or board members from markets around the state. These teams will study a specific market on a specific date and collect qualitative and quantitative information. Very large markets, over 5,000 customers, require larger teams.
- If possible, collect and share whatever market information is available in advance.
- For morning markets, we try to arrange a pre-market dinner for the team and the host market's manager and board during the evening before. Market history, current situation and goals for the next 5 years are shared at this time. The dinner also allows the RMA team members and host market representatives to form relationships. Often, for afternoon and evening markets the team members travel during the day so this dinner meeting is not possible.

2. Market day responsibilities

- On market day, the team members are responsible for three things:
 - Attendance counts
 - Dot surveys
 - Completing three CCO sheets based on their own observations of the market.
 - Sometimes a fourth element– interviews with community/business leaders on their market interactions - is added.
- 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.



Touring the market site the night before an RMA.

3. Filling out the CCO worksheets

- For the CCO sheets the RMA participants focus on three major themes: site physical characteristics, vendors and products, and atmosphere. Each theme is developed on a separate worksheet.
 - **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. If the market is not too busy, it is useful to spend some time interacting with vendors. In busy markets this may not be feasible.
 - **Market atmosphere:** the “feel” of the market, shopper demographics, interactions/conversations, and educational activities.
- On each worksheet, team members record constructive comments, 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 “Do whatever it takes” -- follow people, listen to conversations, initiate

conversations, investigate the neighborhood, etc. to find out about how the market is operating.

- Team members often find it useful to spend 20 or 30 minutes “shadowing” the market manager. This provides them with 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:
 - Their most important message to the host manager,
 - The most important lesson or observation they will take back to their own markets
 - Any observations that should be excluded from the public report.
4. The RMA team should take advantage of the research to generate goodwill for the market within 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 invaluable in influencing the attitude of local retailers and politicians. Vendors will benefit in the future from the exposure.
 - Prepare an informational half-sheet handout explaining the RMA process for distribution to vendors. Emphasize that the RMA is being 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. Include a list of the dot poster questions.
5. End of market activities
- At the end of the market, the team debriefs for a short time by discussing significant comments on each worksheet. It would ideal to have the host manager participate, but he or she is generally too busy and too tired to absorb much.
 - Before leaving the market, each team member gives his or her worksheets to the person responsible for report preparation.



Debriefing after the market.

6. Report writing

- The collated report combines the comments of individual team members. No attempt is made to provide a single view of the market; individuals may submit conflicting comments. Neither is there a separate report for each participant. The guarantee of individual anonymity reduces the potential for tension between any of the team members and the host market.
- In general, attendance counts and dot survey reports are distributed to the host market and to the team members within three or four days of the RMA. **This rapid turnaround is a key strength of the research process.**
- The compiled CCO is distributed within two weeks of the RMA. At the end of the RMA report, three to five suggested discussion questions are presented.
- At this point a phone debriefing is arranged for the RMA team members and the host market manager. Discussion questions form the focus for this conference call. The debriefing looks at major issues rather than touching on everything that occurred during the RMA.

Appendix A: Questions Successfully Used 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 \$1.00 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 Hillsdale businesses and restaurants more often?

Do markets attract customers? Why? What would make them more attractive?

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 provided a restricted number of potential changes)

If pastured poultry were sold in this market in 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, city or by 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 out 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 out those who have shopped at the market for more than 2 years.)

How did you travel to 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 answers 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?

Appendix B: Data Analysis Examples

TABLE 1. TO INCREASE YOUR SPENDING, THE MARKET SHOULD OFFER MORE (CHOOSE ONLY ONE). [NUMBER OF RESPONDENTS = 535.]	
Product	%
Organic produce	45
Cheese	28
Prepared food	14
Meat	8
Poultry	5

TABLE 2. WOULD YOU SHOP AT A THURSDAY 3-8 PM MARKET IN A DOWNTOWN LOCATION? [NUMBER OF RESPONDENTS = 578.]	
Response	%
Yes frequently	34
Yes, once in a while	30
Probably not	20
No, never	12
I don't know	5

TABLE 3. HOW MUCH HAVE YOU - OR WILL YOU - SPEND AT THE FARMERS' MARKET TODAY?).
[NUMBER OF RESPONDENTS = 557.]

Amount Spent	%
\$0.00	2
\$2.50	0
\$5.00	11
\$7.50	0
\$10.00	22
\$12.50	0
\$15.00	19
\$20.00	26
\$25.00	1
\$30.00	11
\$40.00	5
\$50.00	0
\$60.00	1
(More) \$100.00	1

- Average spending for the market per shopping group was \$18.34.
- 35% of the shoppers spent \$10 or less.

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