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Estimating the Cost of an Extension Event *Extension Economics Notes # 2012-3*

This *Note* first describes ways to estimate the costs of delivering an event. Second, the note describes the costs of developing programs and events and ways to reduce these. Third, it explores ways to estimate the cost per person and how this changes as the scale of the program increases.

Successful implementation of cost recovery policies depend on knowing your costs for Extension programs and events. The process of assessing costs can also lead to new approaches for reducing delivery costs per person, making it feasible to reach more people and create greater impacts. Knowing the costs of developing a program can help your team evaluate the pros and cons of licensing a program package from another state versus developing it from scratch. Having reasonably solid estimates of the costs of doing programs are essential for grants, contracts, and sponsorships and can help stakeholders understand and support user fees.

Estimating the Delivery Costs of a Program Event

While program development costs happen first, I start with delivery costs because they are more commonly included in program cost estimates.

It is best to start with estimating the cost of an educational event or service rather than the estimating the cost of the entire program. An *educational event* is an activity that happens on a specific date, time, location, and venue. It has specific resource people and an estimated number of participants. In contrast, a *program* includes all of the statewide educational events, activities, services, publications, websites, newsletters, or other means to achieve a set of educational objectives with a defined audience. Events happen on a specific date and programs often extend over several years. Estimating the cost of an entire program is possible, but it should be done latter.

Delivery costs refer to the costs of presenting the program event or service to a group or an individual.

1) *What should be included in the delivery cost calculation?*

Everything. Start with the biggest cost – your time. Then include travel, materials, meals, speakers, and other direct costs. (But don't jump to the conclusion that you need to set prices high enough to cover all costs. In 95% of the cases you will charge less than full cost).

Extension Economics Notes may not reflect the views of the University of Minnesota or its units. I appreciate the feedback from several colleagues but any errors or omissions are my responsibility. From 1974 to 2002 I was a faculty member and Extension economist at South Dakota State University, Ohio State University, and University of Minnesota. From 2002 to 2007 I served as the Associate Dean and Director for the University of Minnesota Extension.

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2) *What are direct costs (or incidental costs)?*

Direct costs include: food/beverages, materials, meeting facilities, delivery technologies, and expenses for external presenters, publicity, travel expenses, and presentation materials. If you wish to be comprehensive, also include charges for accounting services, and other system support fees. Direct costs do not include the salaries of faculty or staff that are paid with Smith-Lever funds from USDA. Table 1 gives an example of the delivery costs.

Table 1: Program Event Delivery Cost Estimates

Cost Item	Quantity Used	Cost/Unit	Total Cost
Staff Time on USDA Smith-Lever Funds			
State specialist	20 hours	\$48/hour	\$ 960
Regional educator	20 hours	\$30/hour	600
Total staff time			1,560
Direct Costs			
Staff on program funding	20 hours	\$30/hours	600
Travel	200 miles	.50/mile	100
Meals	50	\$10/meal	500
Materials	50 booklets	\$5/booklet	250
Direct costs			1,450
Total costs per event			\$3,010
Estimated attendees at this session	45		
Total Delivery Cost Per Person (total costs per event/estimated attendees)			\$66.89
Direct Costs per Person (direct costs per event/estimated attendees)			\$32.22

Estimating Program and Event Development Costs

Development costs are the expenses that go into program needs assessment, market research, program network development, logic model and background research, curriculum development, program and event promotion, program and event feedback and evaluation. They are very important because often as much time goes into this as in the actual delivery of the program. These costs might be spread over several years and often over many different people.

Again, the development costs should include all costs (whether or not you have to pay cash for them). Your time is the biggest cost (and taxpayers have to pay for it – even if you don’t have to pay for it out of your immediate program budget).

While every program is different, it is not uncommon for new programs to require two or three times as much time in development as in delivery. Hence, in the Table 2 example sixty hours is used for the development time.

The development cost requires an estimate of the number of sessions for the program or event because the more sessions with the same curriculum, the lower the development costs per person. In this example, 10 sessions were assumed. However, it is clear that the development cost per person would be cut in half with 20 sessions.

In theory estimating the development costs is easy, but in practice it is very difficult. First, the time put into many of the development phases often occurs over many months or even several years. Second, when you estimate the cost in advance of the program being delivered, you often do not know exactly

how many participants you will have. Naturally, if you only had 15 participants per session in this example, the cost per person would be three times as high or \$43.20. While it is difficult to do with precision, the discussions that this exercise sparks on your team will be very fruitful.

Table 2. Program Event Development Costs Estimates

Cost Item	Quantity Used	Cost/Unit	Total Cost
Staff Time			
State specialist	60 hours	\$48/hour	\$2,880
Regional educator	60 hours	\$30/hour	1,800
P&A state specialist	60 hours	\$30/hours	1,800
Total development costs per program			\$6,480
Estimated attendees per session	45 persons		
Estimated number of sessions	10 sessions		
Total estimated attendees	450 persons		
Development cost per person = \$6,480 / 450 =			\$14.40

Estimating the Cost per Person

An estimate of the cost per person is useful for all cost recovery options but essential for user fees. Next we explore the relationship between costs per person and fees per person.

In our example, the event has direct costs of \$32.22 per person (\$1,450 / 45), total delivery costs of \$66.89 per person (\$3,010/45), and total costs per person of \$81.29 per person (\$14.40 + \$66.89) as shown in Column A of Table 3. User fees, however, might vary widely, depending on the costs covered by other funding sources (row 7 of Table 3).

Table 3: Costs per Person and Fees with Different Funding Options
(Assumes 450 total attendees in all sessions as in Table 2)

	Funding A	Funding B	Funding C
Development Costs (from Table 2)	\$14.40	\$14.40	\$14.40
Delivery Costs			
Extension Staff	\$34.67	\$34.67	\$34.67
Direct Costs	\$32.22	\$32.22	\$32.22
Total Delivery (from Table 3)	\$66.89	\$66.89	\$66.89
Total Costs per Person	\$81.29	\$81.29	\$81.29
Costs covered by other funding sources	\$81.29	\$65.18	\$49.07
User Fee/Participant	\$0	\$16.11	\$32.22
User Fee as Percent of Total Costs	0 %	20 %	40%

At 45 people per event and ten events, the costs per person are identical regardless of how the events are funded as shown in rows 1 to 5. But if either public funds or non-user fees completely cover the costs of these events, as in funding option A, the user fees are zero. At the other extreme, funding option C, assume all of the development costs (\$14.40 in row 1) and the Extension staff costs (\$34.67 in row 3) are paid from public funds and no other cost recovery methods are used, then the user fee must be \$32.22 to break-even. In the middle, funding option B, assume half of the direct costs are paid by one of the other cost recovery methods, and then the fee would only need to be \$16.11.

Costs per Person Fall as More People Participate

The development costs per person fall as the total number of people participating in a program increases while the delivery costs stay roughly the same. That is, if you can use the same curriculum, or even the same core curriculum with local adaptations, in many different locations, there are no new development costs. Hence, each time you double the number of people the cost per person falls by half.

In our example, the total cost per person drops from over \$196 per person if there are only 50 total participants to about \$74 per person with 900 participants (Table 4). All of this decrease in cost per person comes from the fact that the \$6,480 development cost remains the same and is divided by larger number of participants. Keep in mind that the number of sessions might be done in one year or in some cases over several years. *The bottom line is that the cost per person of state-wide programs with a common curriculum is less than reinventing the wheel in each county.*

Table 4: Costs per Person as Participation Changes

	Very Low Participation	Low Participation	Medium Participation	High Participation
Participants/session	10	22	45	45
Number of sessions	5	10	10	20
Total Number Participants	50	220	450	900
Total Development Costs	\$6,480	\$6,480	\$6,480	\$6,480
Development Costs/ Person	\$129.60	\$29.45	\$14.40	\$7.20
Delivery Costs/ Person	\$66.89	\$66.89	\$66.89	\$66.89
Total Costs per Person	\$196.49	\$96.34	\$81.29	\$74.09

Sharing Cost Estimates

Few stakeholders realize the time and cost that goes into the preparation of an Extension program. If audiences think Extension staff time includes only the time spent at an event, this ignores the larger costs of developing, marketing, reporting and evaluating the program. Hence, both development and delivery costs should be included. Once cost estimates are reasonably accurate, it is wise to share them with a short statement such as the following:

This educational event was developed and delivered to you by the __ (Name of State) __ University Extension at a cost of \$__ per person. It is funded by a combination of public funds, sponsorship support from __ (Name of Firm or Agency) __ and user fees. Scholarships are available by calling __ (phone) __.

However, do not assume that an estimate of the costs per person, no matter how accurate, is the final work in setting fees. *Extension Economics Notes # 2012-4 and # 2012-5* describe how to estimate the willingness to pay, which sets the upper limit on fees.

Program Team Discussion Questions

1. Who is willing to provide initial estimates of the delivery costs for our event?
2. Who is willing to develop estimates of the development costs for our event?
3. Who is willing to put these into a spreadsheet and generate costs per person?

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