



# **Agricultural Economics Report**

**No. 618**

**May 2003**

**Michigan Apple Committee Winter 2003 Grower Survey:  
Summary of Results  
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The authors gratefully acknowledge the invaluable assistance of Mike Evans, Patrick O'Connor, Dr. Donald Ricks, and the Michigan Apple Committee Board in the design and completion of this project. Financial assistance was provided by the Michigan State University Department of Agricultural Economics. The Michigan Apple Committee provided physical and financial assistance for survey mailing.

## **Abstract**

The Michigan Apple Committee (MAC) is a commodity organization comprised of approximately 1000 apple growers in Michigan. The objective of this study was to evaluate growers' perceptions about the effectiveness of past MAC programs and solicit their opinions about future directions for MAC in order to provide one source of input for Board decisions. In addition, this study provided growers with some information about the broad programmatic areas that are covered under MAC guidelines. In Winter 2003 a mail survey was sent to the entire MAC mailing list (1,123 growers); 282 surveys were returned (25 percent). Overall results of the survey indicate that Michigan apple growers are generally satisfied with the performance of the MAC, but perhaps equally importantly, that many members do not fully understand the function of the MAC. Response to questions about specific programming areas provides more details concerning grower beliefs. Although differences in opinion were generally not identified by grower age or scale of operation, the survey results did highlight some distinct regional differences of opinion within the Michigan apple industry.

## Purpose and Scope of the Survey

The Michigan Apple Committee (MAC) is a commodity organization comprised of approximately 1000 apple growers in Michigan. The objective of this study was to evaluate growers' perceptions about the effectiveness of past MAC programs and solicit their opinions about future directions for MAC in order to provide one source of input for Board decisions. In addition, this study provided growers with some information about the broad programmatic areas that are covered under MAC guidelines.

In Winter 2003 a mail survey was sent to the entire MAC mailing list (1,123 growers); 282 surveys were returned (25 percent). The majority of responses to the survey came from growers in the Southwest and Ridge regions of the state (Figure 1). Although numerical differences can be observed in all the results reported in subsequent sections of this report, it is customary to describe a survey finding as statistically significant only when the obtained difference would occur by chance no more than 5 times out of 100.

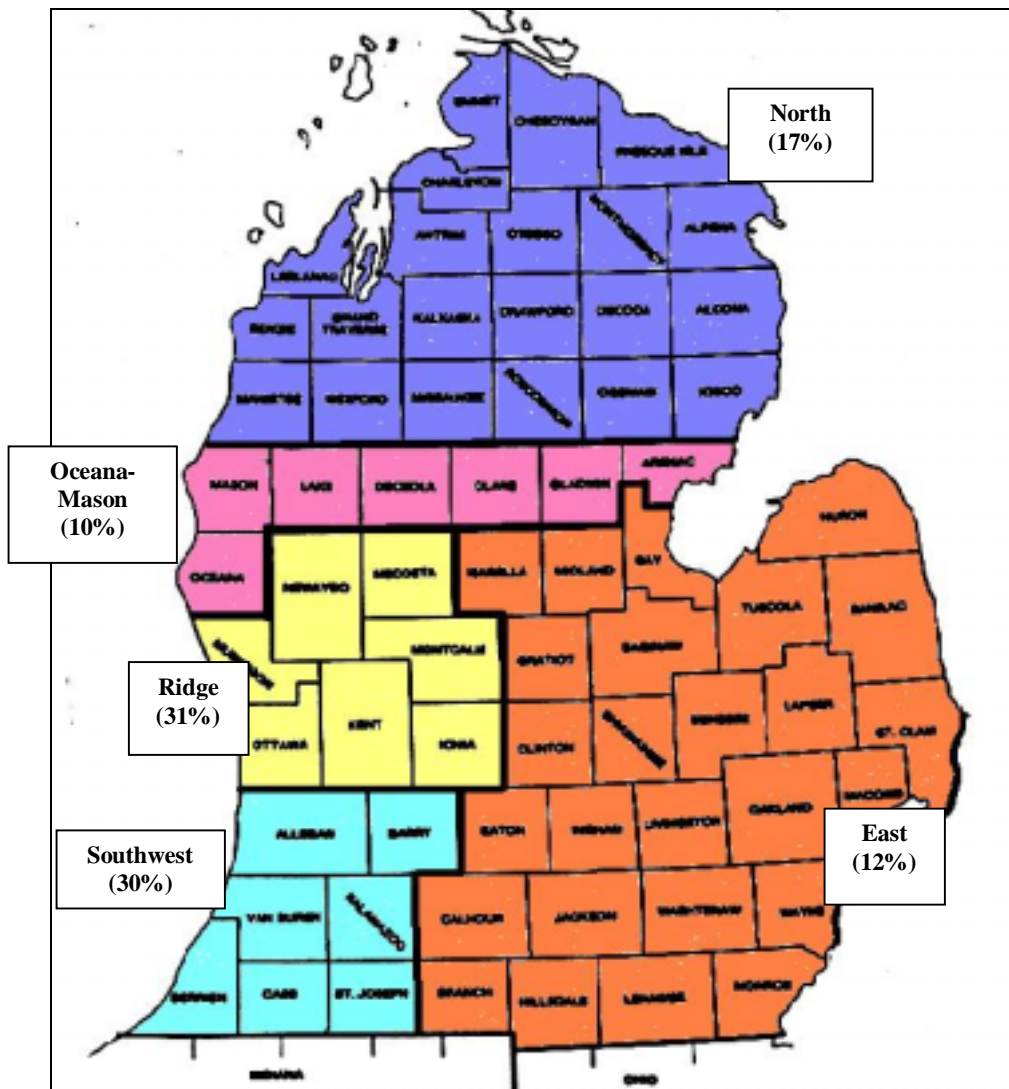


Figure 1. Grower response rates by region

Information was collected on the age of Michigan apple growers, the scale of their operation, whether they plan to increase or decrease production in the future, and which apple market (fresh or processed) they primarily target. A profile of growers who responded was developed based on answers to these questions. The average apple acreage among growers who responded was 86 acres; however, in the Ridge region the average size was 146 acres, which was significantly different from averages in the North, East, and Southwest regions. Fifty-seven percent of respondents to the survey were between the ages of 40 and 60 years old, 13 percent were under 40 years old, and 30 percent were over 60. There were no statistically significant differences in acres of apples grown between the age classifications. Only 17 percent of respondents said they plan to plant more apples in coming years, 38 percent expect their acreage to decrease, and 44 percent said they expect it to remain the same. Of the 282 growers who responded to the survey, 47 (17 percent) indicated that they were no longer growing apples. These former growers were not included in the subsequent analysis.

Sixty-one percent of respondents said their primary target was the fresh market, 32 percent primarily target the processing market, and 7 percent said they target both markets equally. Regionally, 93 percent of growers in the East said they primarily target the fresh market and 89 percent of growers in the Oceana-Mason region target the processing market. Statewide, for growers who target the fresh market, average apple acreage was 105.7 acres while for growers who target the processing market, average apple acreage was 58.3 acres.

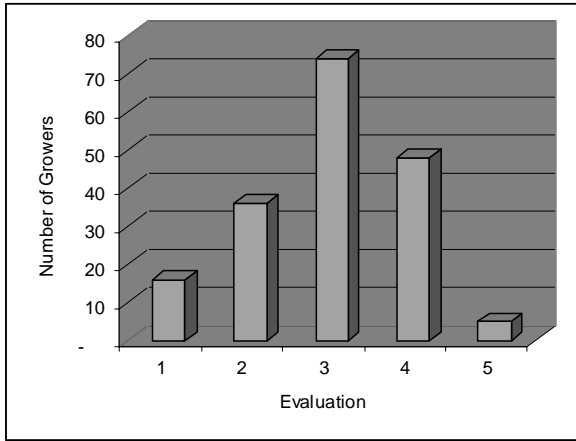
## **Evaluation of Past Michigan Apple Committee Programs**

Growers were asked to rank the effectiveness of past Michigan Apple Committee programs.<sup>1</sup> Growers ranked each of the programs on a scale of 1 (poor) to 5 (excellent) where a score of 3 indicated an average ranking. An additional option was provided for growers to indicate they were not sure of the past effectiveness in a program area. The ranking by those respondents who provided a numerical score averaged 3.03 across all of the MAC program areas. The number of respondents who indicated they were not sure about past effectiveness was varied. For example, just 63 percent of the respondents evaluated the Export Program. The program area that more growers felt comfortable assessing was the Public Relations Program, addressed by 80 percent of the total respondents.

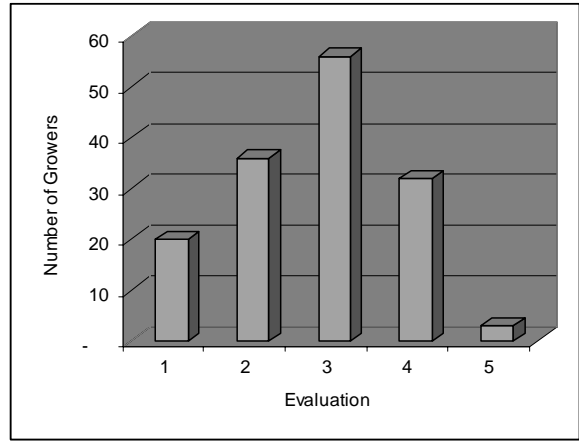
According to the survey results the program that received the highest score was Research with an average grade of 3.37. The program area receiving the lowest score was Exports with an average grade of 2.74 on the same scale. The Advertising Program, the program that respondents believed should receive the largest portion of future budgets, was graded relatively low, on average 2.94. It should be noted that the mean scores in each of the six program areas are not statistically different from each other. That indicates a lack of consensus among respondents at the moment of assessment (Figure 2 –Figure 7). Perception of members about any single program area varied widely but, on average, all program areas were ranked at or around a score of 3.

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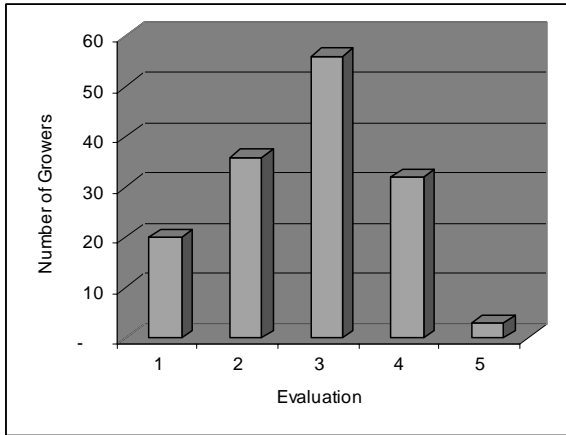
<sup>1</sup> Program areas were defined in the survey as Advertising (for consumers and trade buyers such as grocery, food service, manufacturing), Merchandising (promotion and incentive programs for trade buyers), Exports (development of international marketing opportunities), Public Relations (working with news media to generate positive stories for Michigan apples), Industry Information Services (grower, shipper & processor communications and information) and Research (supported by the Michigan Apple Research Committee).



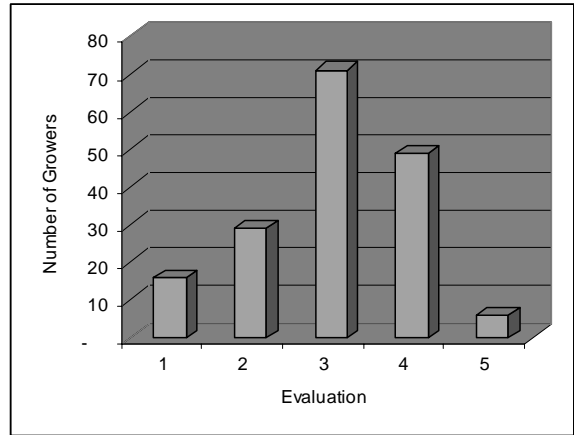
**Figure 2. Advertising programs**



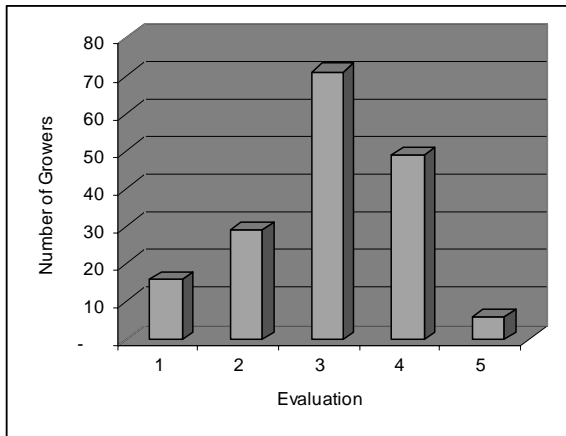
**Figure 3. Merchandising programs**



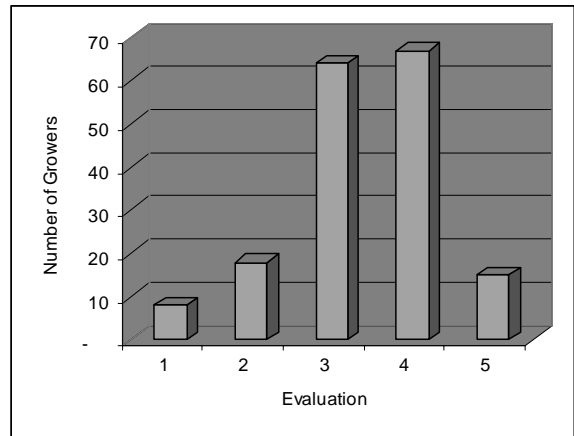
**Figure 4. Export programs**



**Figure 5. Public Relations programs**



**Figure 6. Industry Information Services**

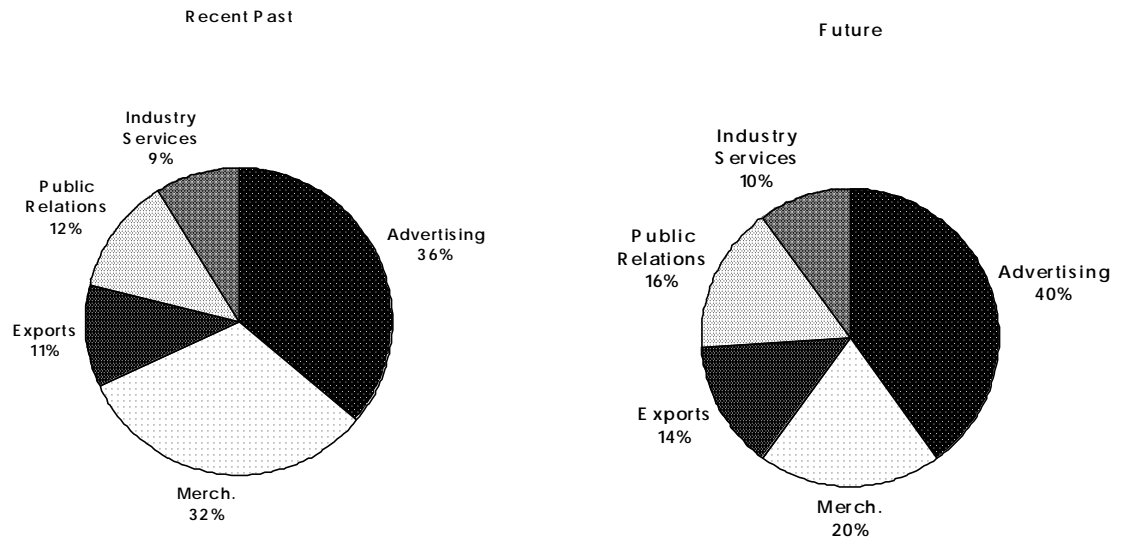


**Figure 7. Research programs**

## Allocation of Michigan Apple Committee Resources

Growers were asked their opinions about how MAC should allocate its budget among program areas in the future, as well as their belief about how the budget had been allocated in the past.<sup>2</sup> Figure 8 represents, on average, the perception of the respondents on this topic. Less than 25 percent of the respondents (33) could give an opinion regarding past MAC program allocations. Those that did respond believed that MAC has given almost the same importance to Advertising (36%) and Merchandising (32%) with relatively less resources devoted to Exports (11%), Public Relations (12%), and Industry Services (9%).

In contrast to the very small response from growers about past MAC allocations, almost 70 percent of the respondents (161) offered their opinion about how MAC resources should be allocated in the future. On average, respondents indicated that the highest proportion of expenditures should be directed towards Advertising; they would like to see 40 percent of the budget allocated in this area. Respondents indicated that they would like to see, on average, 20 percent of expenditures directed towards Merchandising Programs. Sixteen and 14 percent of expenditures would be directed towards Public Relations and Export Programs, respectively although it should be noted that a statistically significant difference could not be established between the allocations to these two areas. Respondents would allocate 10 percent of resources towards Industry Services.



**Figure 8. Percentage of the budget that respondents\* believe has been allocated to MAC program areas in the recent past and should be allocated in the future**

\* The same respondents did not always answer both questions

<sup>2</sup> Allocations for research were not included in this question, since they have historically been administered separately by the Michigan Apple Research Committee Board.

If the results of how respondents believe MAC has allocated past resources and should allocate future resources are compared, as is illustrated in Table 1, it can be seen that the growers consider that MAC has assigned more resources in Merchandising (32 percent) than what they would like to see in the future (20 percent). Although one can observe smaller differences in the percentage allocation results for the other programs, these change were not large enough to identify a statistical difference, due to the few responses about past allocations and the variability in responses in each question.

**Table 1. Comparison of respondent beliefs about past and future MAC budget allocations**

<b>Program Areas</b>	<b>Past Percentage of Budget that has been Allocated</b> (Mean % of Budget)	<b>Future Percentage of Budget that should be Allocated</b> (Mean % of Budget)	<b>Change*</b> (Mean % of Budget)
Advertising	35	40	+5
Merchandising <sup>1</sup>	32 <sup>b</sup>	20 <sup>a</sup>	-12
Export Programs	11	14	+3
Public Relations	12	16	+4
Industry Services	9	10	+1
TOTAL	100	100	

<sup>1</sup> Different letters indicate that a statistically significance difference was found between these means

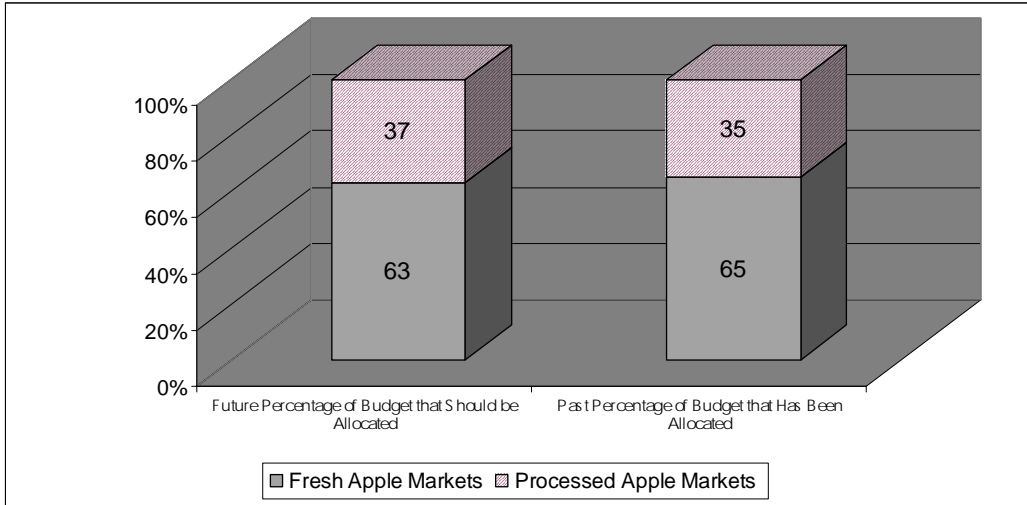
\* Values reported for change are approximations only, as the same respondents did not always answer both questions

## **Fresh and Processed Markets**

In a similar way, growers were asked their perception about the percentage of past MAC budgets had been targeted to fresh versus processed apple markets, and to indicate how MAC should allocate their budget among these two markets in the future. Again, only a small number of respondents (73) could answer the question about past resource allocation. On average, those that did respond estimated that 65 percent of past budgets had been targeted towards fresh markets (Figure 9). In comparison, over 170 growers responded to the question about allocation of future resources. On average they believe that 63 percent of the budget should be allocated in the fresh market area.

When change in allocations are calculated, the perception of past expenditures does not differ much from the proportions that respondents want to see allocated between the fresh and processed markets. However, a large standard deviation for the measure of past allocation indicates more variation in this answer. Not surprisingly, growers that consider themselves as fresh market producers and those that consider themselves as processed market producers have a different opinion about the percentage of budget

that should be allocated between these two areas. Fresh market producers desire to allocate 68 percent of the budget to fresh markets. On the other hand producers that identify themselves primarily with the processed markets want to allocate, on average, 48 percent of the resources to the processed area.

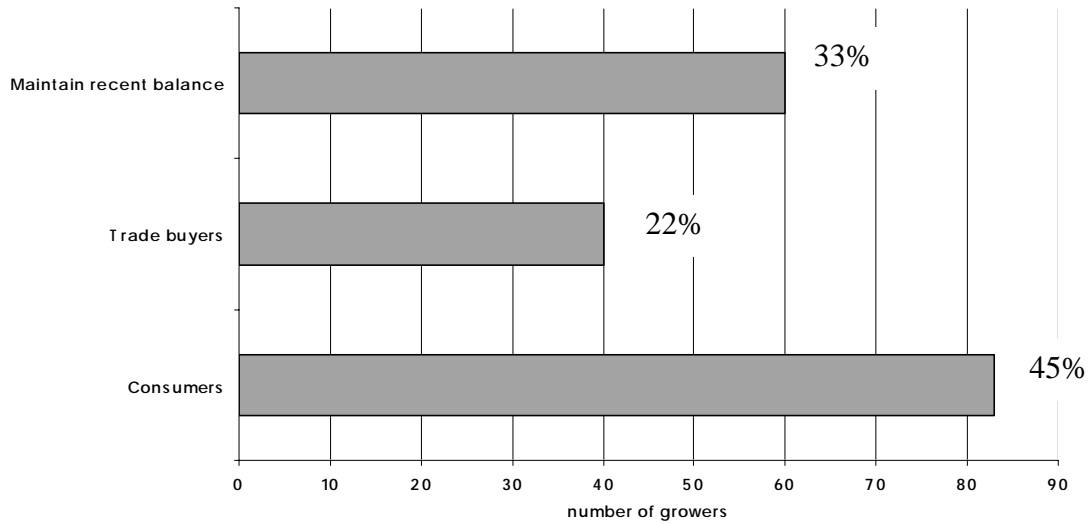


**Figure 9. Percentage of the budget that respondents\* believe has been allocated among fresh and processed markets in the recent past and that should be allocated in the future**

\* The same respondents did not always answer both questions

### Advertising Programs

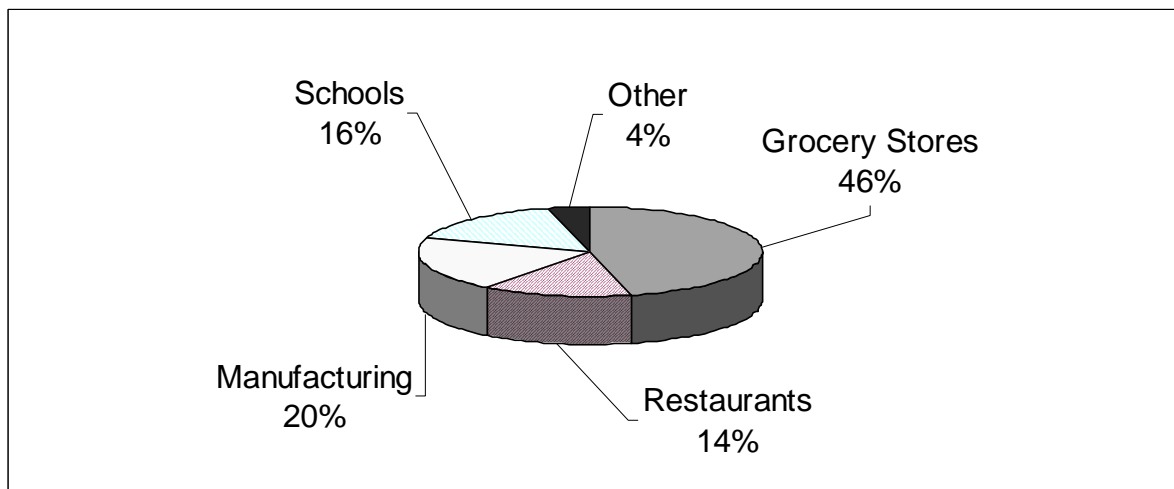
Growers were asked their opinions about whether MAC should increase advertising to consumers, to trade buyers, maintain the recent balance, or were unsure. This question was answered by 78 percent (183) of the respondents, 45 percent of whom believe that MAC should give more emphasis to consumers in the Advertising Program (Figure 10). One-third of the growers are satisfied with the approach that MAC has utilized for this program in the recent past and 40 growers (22%) indicated that more emphasis should be given to the trade buyers (i.e. grocery, food service, and manufacturing). Those growers that would increase the emphasis on consumers would like to see on average, 44 percent of the budget allocated to the Advertising Program. Those growers that preferred more emphasis go to trade buyers would allocate, on average, just 33 percent of the budget to advertising.



**Figure 10. Respondent preferences for future emphasis in advertising programs**

### Merchandising Programs

Growers were asked their opinion on MAC merchandising budget allocations between types of trade customers. The merchandising budget (summed to 100) was divided between grocery stores, restaurants, manufacturers (like Sara Lee), schools, and other outlets (with room to supply a description). On average, respondents allocated almost 50 percent of merchandising expenditures to grocery stores (Figure 11). Manufacturing was identified as the second most ideally targeted trade customer with 20 percent of the resources allocated to this sector on average. Schools and restaurants were considered less important, but not marginal, in fact, together they make up one-third of the budget allocations. Differences that can be observed among the answers to this question are statistically significant. The most frequently mentioned “other” target for merchandising funds was Farm Markets.



**Figure 11. Average budget shares respondents allocated to merchandising targets**

## Export Programs

In this section, growers were asked their opinions on how MAC should allocate resources for export programs, specifically, whether they should give more emphasis to expanding U.S. markets, or more emphasis to expanding export markets, or if they should maintain the recent balance in the program. Almost one-half of those who responded felt that MAC should concentrate its efforts on the U.S. markets. A little more than one-third of the producers that responded to this question believe that the MAC should maintain the current approach, and just 16 percent of would like to see a bigger emphasis in international markets. Those who believe that MAC should give more emphasis to expanding U.S. markets, would allocate just 11 percent of the general budget to export programs. Comparatively respondents that prefer emphasis on expanding export markets believe that MAC should allocate 20 percent of the budget here, on average. As expected, those respondents who indicated they would prefer a change in the current approach ranked MAC's past performance in Export Programs lower that those who would maintain the recent balance (Table 2).

**Table 2. Respondent preferences for future export program emphasis**

<b>EXPORT PROGRAMS</b> (Give more emphasis to ...)	<b>% of Respondents</b>	<b>Percentage of Budget that Should be Allocated to Exports</b> (Mean % of budget) <sup>1</sup>	<b>Mean Evaluation of the Export Program 1 – 5</b> (Mean Score)
Expanding U.S. markets	49	11 <sup>a</sup>	2.52
Expanding export markets	16	20 <sup>b</sup>	2.33
Maintain the recent balance	35	16	3.15
<b>TOTAL</b>	100		

<sup>1</sup> Different letters indicate that a statistical significance difference was found between these means. This difference was established through a Tukey mean comparison test. (Sig. 0.05)

Further, growers were also asked their opinions on how MAC should shape its future efforts in the domestic market. They were asked whether MAC should give more emphasis to developing new U.S. markets, compared with maintaining the current market, or if they should maintain the recent balance between efforts in new and existing domestic markets. Opinions about the U.S. market strategy are divided. Thirty-eight percent of the producers believe that MAC should maintain the current approach and almost the same number believe MAC should develop new markets within U.S. Just one-fourth indicated that MAC should focus on maintaining current markets (Table 3).

**Table 3. Emphasis in future domestic market programs**

<b>U.S. Markets</b> (Give more emphasis to ...)	<b>Number of Responses</b>	<b>% of Respondents</b>
Maintaining current U.S. markets	47	25
Developing new U.S. markets	68	37
Maintain the recent balance	70	38
TOTAL	185	100

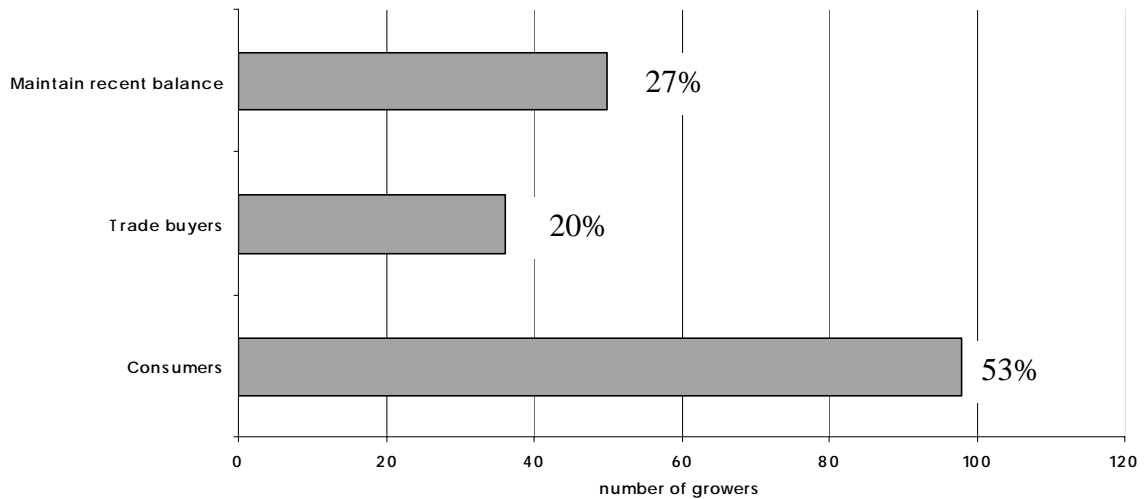
When asked about allocations by varieties, half of the respondents believed that MAC should give more emphasis to promoting Michigan apples without reference to particular varieties. Thirty-two percent would prefer to maintain the recent balance of allocations between newer and well-established varieties (Table 4).

**Table 4. Program emphasis for allocations among varieties**

<b>Varieties</b> (Give more emphasis to ...)	<b>Number of Responses</b>	<b>% of Respondents</b>
Newer varieties	20	10
Well-established varieties	17	8
Maintain the recent balance	66	32
Promote Michigan apples without reference to particular varieties	101	50
TOTAL	204	100

## **Public Relations Programs**

More than three quarters (78%) of the producers provided an opinion on future MAC priorities within the Public Relations Program. According to the responses, 53 percent of the growers believe that MAC should give more emphasis to consumers (Table 12). The growers that hold this opinion, on average, would like to see MAC allocating 20 percent of the overall budget in this area. This average expenditure is definitely larger than that for producers that would increase emphasis on trade buyers. These producers on average would allocate just 11 percent of the general budget to public relations. Less than one-third of the respondents would maintain the recent balance.



**Figure 12. Respondent preferences for public relations program emphasis**

### Industry Information Services

Growers were asked their opinions on where MAC should allocate more or less effort in information services. Results are shown in Table 5. The focus and frequency that MAC has given to the different means of communication have satisfied the majority of the growers, except for “visits to individual shippers or packers” and “visits to individual processors”. Forty-five and 46 percent of the respondents consider that MAC should increase their efforts in these two categories, respectively.

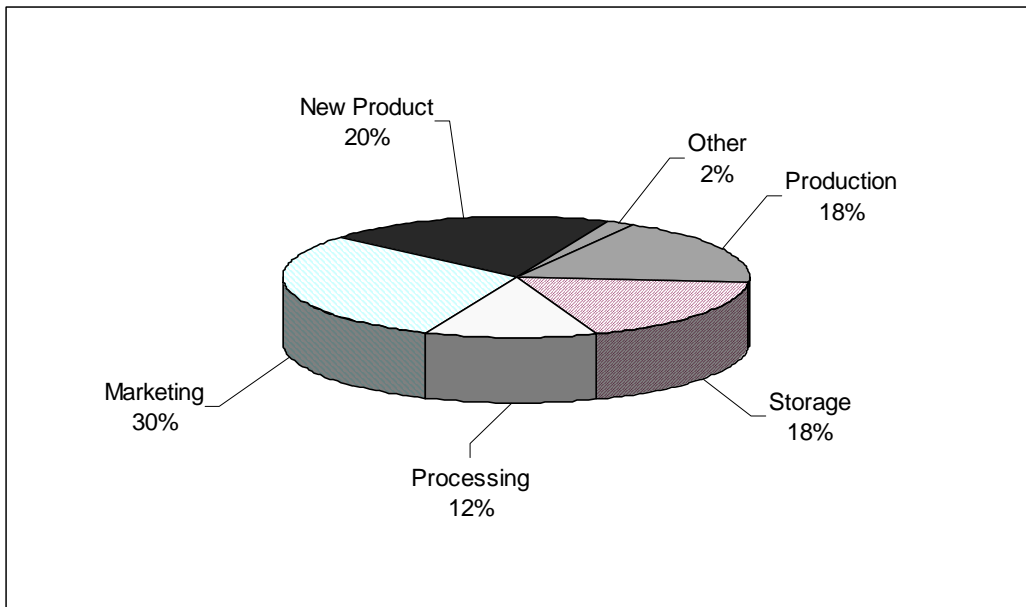
**Table 5. Allocation for future industry information services**

Means of Communicating	No. of Responses	Percentage of Respondents			
		More	Less	No Change	Total
Grower newsletters	175	35	7	58	100
Grower meetings	165	30	10	61	100
Shipper meetings	126	28	16	56	100
Processor meetings	129	37	10	53	100
Columns in grower publications	154	38	4	58	100
Visits to individual growers	146	32	14	54	100
Visits to individual shippers or packers	148	45	14	41	100
Visits to individual processors	145	46	11	43	100

## Research

Although expenditures on research were not included in the questions about allocation of the total MAC budget, growers were asked their opinions about how the separately administered Michigan Apple Research Committee's budget should be allocated among five different research areas: 1) production, orchard, and growing, 2) storage, handling, and apple maturity, 3) processing, 4) marketing, and 5) new product development. This question was completed by a large percentage (79%) of the growers who responded to the survey.

Results indicate producers believe that the MAC should allocate the most resources to marketing (Figure 13). On average, they indicated that MAC should allocate 30 percent of the research budget in marketing. Respondents consider that, on average, 36 percent of the budget should be distributed between research in production (18%), storage and handling (18%). Research in processing received on average less support with respondents allocating 12 percent of the total budget to this category. On average, 20 percent of research funds would be allocated to new product development. In all cases the standard deviations were relatively large, indicating a large diversity of opinion among growers regarding this topic.



**Figure 13. Average budget shares allocated to research areas by respondents**

## **Summary**

Both the Michigan apple industry as a whole and Michigan Apple Committee have undergone some unique challenges since 2000. This survey was designed to elicit the opinions of Michigan's apple growers about the effectiveness of past MAC programmatic efforts at the time of the survey, future directions for MAC programs, and to inform members about the broad programmatic areas that are covered by the MAC.

Overall results of the survey indicate that Michigan apple growers are generally satisfied with the performance of the MAC, but perhaps equally importantly, that many members do not fully understand the function of the MAC. Response to questions about specific programming areas provides more details concerning grower beliefs. Although differences in opinion were generally not identified by grower age or scale of operation, the survey results did highlight some distinct regional differences of opinion within the Michigan apple industry.

Changes continue in the Michigan, U.S., and world apple industries. This survey evaluated Michigan Apple Committee member beliefs at a critical point in time in order to provide one source of input, among many, for future decisions.