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A Management Survey of the New York State Food Industry: Results and Empirical Findings

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PREFACE AND ACKNOWLEDGEMENTS

This report summarizes the results of a management survey of New York food industry firms. The study was initiated as part of a broader coordinated effort by the New York State Departments of Commerce and Agriculture and Markets, the College of Agriculture and Life Sciences at Cornell University, and the New York Sea Grant Institute, designed to analyze strategies for economic development in the State's agricultural and food industries.

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Finally, although this report may appear to represent a composite or consensus view of problems and opportunities in the industry, it would be incorrect to attribute the results or recommendations to any specific firm or individual. The conclusions reported here, then, do not necessarily reflect opinions held by any individual industry manager or firm interviewed nor Cornell University.

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A MANAGEMENT SURVEY OF THE NEW YORK STATE FOOD INDUSTRY

I. INTRODUCTION

This paper reports the results of a survey of senior management officials of New York State food industry firms. Industry executives were asked for their views on a wide range of factors pertaining to the overall economic environment in New York State, the specific concerns of their respective industries, and future problems and opportunities for agribusiness development in New York. In reporting the survey results, industry views are presented along with available empirical data to compare common perceptions to New York's actual competitive position in certain key areas. The purpose of this report is to assist both public and private decision makers in evaluating the overall economic climate for food industry firms in New York State, and to present certain recommendations arising from the management survey which might be undertaken to increase economic activity and development in New York State's varied agribusiness industry.

Although the literature in economic development and location theory is rich with studies examining the factors affecting industrial location (see, for example: Fuchs, 1962; Hunker and Wright, 1963; McMillan, 1965; Moriarty, 1977), most of these studies emphasize the manufacturing sector almost exclusively. This emphasis is not surprising; in many cases, the economic contribution of the manufacturing sector has dominated that of the non-manufacturing sector. Moreover, definitions of manufacturing industry activity have been fairly well-established and data have been generally available. By contrast, many of the non-manufacturing economic subsectors, particularly those in agricultural-related industries, have had neither the benefit of precise industrial classification nor, in many cases, broadly available historical data. Finally, the focus of most research on the effect of economic climates on business firms appears to have been on either all business firms or on firms in a certain horizontal industry classification (e.g., all manufacturers). Relatively little analysis has been devoted to how a particular economic environment might create problems and opportunities for a specific vertically organized industry, for example, the allied agricultural and food industries.

This study represents an attempt to address this latter issue as it relates to the economic concerns of the food industry in New York. Through discussion of the survey results and the accompanying empirical data, this report tries to focus attention on the problems and prospects facing New York's food industry in a changing economic environment.

II. PROCEDURES

The management survey reported here was one component of an integrated study of New York's food and agricultural industries coordinated by the New York State Department of Commerce and including the New York State Department of Agriculture and Markets, the College of Agriculture and Life Sciences at Cornell University, and the New York Sea Grant Institute.

The survey was designed with the broad policy-oriented goals of the overall project in mind. Thus, rather than being asked to respond to a specific survey instrument, food industry executives were asked to give a broad assessment of issues relevant to their specific industries and the concerns of the New York food industry, in general. Management officials were specifically asked to identify what they viewed as the primary inhibitors to and opportunities for increased economic activity in their firm and industry. Views regarding potential actions on the part of state government and possible collaborative governmental-university-industry efforts to encourage economic growth in the food industry were also elicited.

The firms interviewed in the survey were selected on a non-random basis and the results from the survey must be interpreted with this in mind. Nevertheless, an effort was made to cover a considerable range of sectors within the food industry, although because of the industry's size and diversity, no attempt at total industry coverage was made. A total of thirty-eight firms were interviewed, representing a geographic as well as a sectoral cross-section of the industry. The list of participating companies (see Appendix) demonstrates that a reasonably representative sample of New York's food industry was included. With only a few exceptions, the survey was conducted by personal interview during the period from September, 1983 to January, 1984.

Many of the primary findings of the survey reflect the perceptions of New York agribusiness executives regarding the overall business environment in New York. In order to compare these perceptions to actual levels of state taxes, energy and labor costs, etc., each of the major sections presented below includes some additional data from other secondary sources. These sources include government publications, consultant reports, and academic research studies. The implications of these data for the business environment surrounding the food industry in New York, and the comparability between the actual data and management perceptions are discussed.

III. PROBLEMS AND OPPORTUNITIES FOR ECONOMIC DEVELOPMENT IN THE NEW YORK STATE FOOD INDUSTRY

The constraints and opportunities for increased economic activity in the New York food industry as identified by management officials are reviewed in this section. Following each subsection is a brief discussion bringing to bear additional empirical findings on the specific economic issue at hand. These issues are presented in approximate order of priority, depending on the frequency with which they were identified. It should be pointed out that while many of these elements are discussed in terms of the extent to which they are problems or barriers to economic development, clearly, they also represent areas in which opportunities may exist for change and expanded business activity.

The "Costs of Doing Business" in New York

Certainly the most frequently cited constraints to economic growth mentioned by food industry executives were what were felt to be the high "costs of doing business" in New York. Some of the costs most commonly cited were: (1) taxes; (2) labor costs; (3) costs due to regulatory compliance; (4) energy costs; and (5) capital costs.

(1) Taxes

(a) Industry Views: Many managers felt that tax levels in New York, relative to other states, were exceedingly high in a number of different areas. Most often mentioned were high personal income taxes. The level of these taxes was perceived as creating two primary problems. First, because New York firms must compete with firms outside the state for qualified technical, professional, and managerial personnel, the high level of personal income taxes in New York requires local firms to offer higher competing salaries to successfully attract personnel from out-of-state. One food processing plant manager put this required differential at around 20 percent (not only due to higher income taxes, but sales taxes, etc.). These higher personnel costs, of course, show up in higher costs of operation.

Second, those who fare poorest in a highly progressive tax structure (including many food industry executives) are precisely the same individuals who make the crucial decisions concerning plant location, plant expansion, additional capital investments, and related decisions affecting employment and business activity. Thus while the number of individuals who are most seriously affected by high personal income tax rates may not be especially high, these individuals have by far a disproportionate influence in creating the economic climate within the state through the decisions they make. Many executives interviewed indicated that high personal income tax rates would lead and have led them to seriously consider relocation or plant expansion in alternative locations where tax rates were less severe.

The level of other state taxes was also cited as a major disincentive to expanded business activity. Other taxes frequently mentioned as excessively high were the state sales tax, real property taxes, corporate income taxes, unemployment compensation taxes, workmen's compensation taxes, etc. While most managers did not question the legitimacy of such taxes, many felt that it was the combined effect of high rates of taxation in all these areas that created significant disincentives. While a number of managers expressed concern over what they perceived as the "welfare state" existing in New York State, most felt that the primary negative effect of high levels of taxation at all levels was to create the impression in the national business community of New York as a state which has a unfavorable business climate. This perception makes retaining existing businesses and attracting new businesses from out-of-state that much more difficult.

Several interviewees questioned the effectiveness and equity of specific taxes which affected their particular segment of the food industry. One such example, cited a number of times, is the proposed "trellis and orchard assessment" which essentially would tax grape vineyards and fruit

orchards as if they were capital equipment. One fruit and vegetable packer/processor estimated that this legislation would double his taxes in real terms. This manager felt that taxing such assets while not extending such legislation to vegetable growers and grain producers would be unfair and differential treatment.¹

In several other instances, retailers reported that the New York State sales taxes in supermarkets are needlessly complex. One executive stated the following: "No one, not even the state regulator, really understands what is to be taxed and what is exempt." Consequently, what results are confusion and frequent state sales tax audits, along with associated higher costs for the entire system -- retailers, government, and ultimately, consumers.

(b) Additional Empirical Findings: That taxes are a critical constraint for New York State agribusiness firms emerges as a widely held belief from the interviews conducted with industry managers. This belief underlies a more general state-wide concern that business firms have continued to migrate from New York to regions with lower overall tax rates. Indeed, comparison of New York State taxes to other states in the Northeast (in this case, broadly defined to include New England and Mid-Atlantic states) reveals that New York clearly has a higher overall state and local tax burden than neighboring states (Table 1). In 1981-82, per capita taxes in New York were over 32 percent higher than the second ranked state in the Northeast, Massachusetts. This pattern has persisted over time. In 1981-82, when compared to the tax levels of all of the 48 contiguous states, New York's per capita taxes (\$1790.9) were exceeded only by Wyoming (\$2546.4). It must be noted, however, that this per capita figure includes special taxes for New York City residents and workers which are not applicable elsewhere in the state.

Table 1. Tax Levels Per Capita for State and Local Governments, Northeastern U.S., 1981-82.

State	Property	Other	Total	Overall Ranking
New York	574.1	1215.9	1790.9	1
Connecticut	564.9	759.1	1324.0	4
Delaware	184.4	1031.4	1215.7	7
Maine	383.5	639.3	1022.7	10
Maryland	339.4	933.6	1272.9	5
Massachusetts	509.9	843.1	1353.1	2
New Hampshire	572.2	353.4	925.6	12
New Jersey	591.1	761.9	1353.0	3
Pennsylvania	291.5	824.4	1115.9	8
Rhode Island	513.2	709.5	1222.7	6
Vermont	453.7	652.7	1106.4	9
West Virginia	159.9	794.8	954.7	11

Source: U.S. Department of Commerce, Bureau of the Census, Government Finances in 1981-82.

While the perception that New York State tax levels are high relative to other states is supported by empirical data, an equally important question is, are high taxes a significant deterrent to economic and agribusiness development in New York?

In fact, considerable literature devoted to this question does not support this belief. Research on the effect of state and local taxes on business location decisions reveals that tax differences may play a role in specific decisions and may sometimes be influential in the final stages of the decision process when the choice has been narrowed to a few locations that meet more basic criteria. However, the overall effect of tax levels has not been shown to be a significant factor in most industrial location decisions. This conclusion is, no doubt, particularly applicable to agricultural-related industries where climate, soils, seasonal characteristics, and, in particular, proximity to sources of productive inputs and markets are generally of overriding importance in business location.

Considerable economic research supports the proposition that markets, sources of raw material and labor supply are the major determinants of location decisions, while state and local taxation have only secondary effects. As indicated above, most business location studies have examined the location decisions of general manufacturing firms rather than farming enterprises or food retail, wholesale, and service firms (e.g., brokers and exporters). Since food processors and manufacturers are a subset of the general manufacturing sector, many of the same conclusions from these studies would be expected to obtain for a substantial portion of the agribusiness industry in New York. Due (1961), for example, reviewed 17 studies of various types that "suggest strongly that tax effects cannot be of major importance" in location decisions. In a survey of 503 manufacturing firms in 6 southwestern states, Poole (1970) found that taxes ranked twenty-fourth in importance as a factor affecting location decisions.

Stinson (1968) reviewed 26 additional studies assessing the impact of local tax concessions and public industrial financing programs, and based on this review and five other survey studies,² found that, less than ten percent of the respondents thought that the tax situation in an area is important enough to consider as a major factor in the location of a new plant -- and that even among those that consider taxes in deciding where to locate their plants, taxes do not strongly influence the decision (1968, p. 4). All three of these studies, then, while somewhat dated, did not find taxes to be primary determinants of plant location.

A central tenet of location theory holds that firms select locations to maximize total profits (see Alonso). Taxes, as one cost of doing business, obviously affect profit levels, but as a number of studies have pointed out (Fulton and Williams, for example), state and local taxes generally represent such a small percentage of total costs that most companies would seldom consider taxes as a factor of primary significance. Another reason that taxes may have only minor importance in location decisions is that they are, under normal circumstances, deductible on income tax returns, thus reducing even further their initial impact. Lastly, some firms, especially those not located near the border of a lower taxation state, may regard taxes lightly since they may be able to pass along the burden to their customers or suppliers through higher (lower) prices

(costs). Even in cases where firms ship their products across state borders, such as common in the Northeast, firms may be able to effectively shift the tax burden to out-of-state customers (N.Y. Dept. of Commerce, January, 1983).

In spite of the substantial evidence that taxes (and other development inducements) affect business location decisions, at the most, only at the margin, the results of surveying agribusiness leaders in this study demonstrated that a strong impression persists that the combined effects of taxes in New York are serious impediments to economic expansion. There may be several explanations for this.

First, to the extent that general tax incidences have increased over the past two decades, the relative importance of tax levels in affecting business location decisions has likely increased concomitantly. Second, it is likely that many local business executives, as well as state officials, are simply not aware of the empirical evidence which suggests the relative lack of efficacy of using tax concessions as attractions for industry as a general practice; thus, the belief -- and practice -- persists. Third, tax policy may be confused with other current economic realities. The Northeast, for example, has witnessed a continuing migration of industry to the Sunbelt states due to the population growth in those markets, low wages and absence of unions, improvements in highways, generally lower energy costs, and other factors (Moriarity). It also happens, however, that these states tend, on average, to have lower overall tax burdens than Northeastern states, and this, of course, is one contributing factor to business migration. But it is only one factor, and industrial relocation may have been mistakenly attributed to tax differentials rather than a confluence of many related economic phenomena.

Finally, it is probable that both state officials and business managers recognize that many factors of primary importance to economic activity are largely external to their short-run control (e.g., climate, water availability, skilled labor, nearness to markets, etc.). Hence, importance is often placed by both industry and state government on changes in areas such as tax policy which are more controllable. And, in specific instances, abatements may indeed provide the marginal difference that is effective in retaining an existing firm or attracting a new firm to a specific region.

(2) Labor Costs

(a) Industry Views: Food industry officials identified two categories of labor costs that contribute in different ways to the perceived high costs of doing business in New York: direct costs and indirect costs.

Direct labor costs, that is, wage and salary levels, are largely conditioned by firms' locations within the state. Firms in the metropolitan New York City area often cited high hourly wage rates, frequently related to the presence of powerful labor unions, as a significant competitive disadvantage. On the other hand, several upstate firms cited moderate local wage levels as important factors in keeping costs down. The alternative job opportunities available to workers, both hourly and technical, were often mentioned as important determinants of wages paid and, thus,

costs of operation. These opportunities tend to be fewest in many upstate localities relative to the New York City area. The disappearance of several supermarket chains from New York State in recent years, Acme and Loblaws, for example, and the decline of A & P, was attributed by a number of interviewees to high wages and strong labor unions.

A considerable number of respondents, however, pointed to a second category of indirect labor costs as creating serious competitive disadvantages relative to other states. These costs, largely imposed on firms through state law, were generally felt to be more burdensome than actual wage rates. These indirect costs include such categories as payroll taxes, unemployment insurance, medical costs and particularly workmen's compensation.

Many specific examples were cited. New York, one executive noted, is one of only six states that makes disability insurance mandatory for employers. One multistate operator determined that the total labor costs per hour were 22 percent higher in his New York State operation than in comparable operations in Vermont and New Hampshire. These higher costs in New York boosted the retailer's total wage bill by 1.5 percent of sales above cost levels in the New England divisions. Another multistate operator indicated that the workmen's compensation rates established for a fruit and vegetable processor (laborer, food manufacturing class) were more than twice as high in New York (\$5.76 per \$100 of wages) than in the firm's Wisconsin facility (\$2.35 per \$100).

(b) Additional Empirical Findings: Despite labor's importance to economic development, it appears that few reliable standards have been developed to evaluate the labor resources of a particular area. Given the criteria mentioned by interviewees in this study, however, several cost-related labor indices, compared across Northeastern states, can serve to shed light on the relative accuracy of some of the positions summarized above.

Table 2 shows that 1982 average hourly wages in New York's manufacturing sector, at \$8.52 per hour, ranked fourth within the twelve Northeastern states. In addition, the Northeast region no longer has the uniformly high wage structure it once had. Average hourly manufacturing earnings in New York, for example, have been lower than the national average every year since 1976, amounting to 98 percent of the U.S. average in 1981 (U.S. Bureau of Labor Statistics, 1982). Moreover, during this same period, New York State's direct wage rates have been lower than two of its largest and closest competitors, Pennsylvania (\$8.72 per hour in 1982) and New Jersey (\$8.80 per hour). It must be noted that these data refer to the overall manufacturing sectors of New York and other states; to the extent that the wage structure in food manufacturing differs from that in general manufacturing, the resultant conclusions would also differ.

Focusing on average wage rates, however, may obscure considerable variation that occurs within New York State. Table 3 shows that manufacturing wage rates (again, for general manufacturing) varied with location in New York from \$7.47 per hour in Westchester County to \$11.07 per hour in Monroe County in 1982. This observation runs counter to the perception reported by agribusiness executives who reported that upstate wage rates

Table 2. Average Hourly Manufacturing Earnings, Northeastern U.S., November, 1982.

State	Average Hourly Earnings
West Virginia	\$ 9.84
New Jersey	8.80
Pennsylvania	8.72
New York	8.52
Connecticut	8.42
Delaware	8.36
Massachusetts	7.82
Maine	7.58
Vermont	7.55
New Hampshire	7.19
Rhode Island	6.73
Maryland	3.95

Source: U.S. Dept. of Labor, Bureau of Labor Statistics, Employment and Earnings, Washington, DC. Jan., 1983.

Table 3. Gross Average Hourly Earnings of Production Workers on Manufacturing Payrolls, New York, November, 1982.

Area	Average Hourly Earnings
Monroe County	\$ 11.07
Buffalo	10.79
Rochester	10.42
Syracuse	9.22
Albany-Schenectady-Troy	8.84
Elmira	8.68
Rockland County	8.55
Nassau-Suffolk	8.32
Poughkeepsie	8.23
New York and Nassau-Suffolk	7.86
Utica-Rome	7.86
New York SMSA	7.71
New York City	7.71
Binghamton	7.59
Westchester	7.47
New York State	\$ 8.52

Source: U.S. Dept. of Labor, Employment and Earnings, January 1983.

are more attractive. Table 3 suggests, for general manufacturing, at least, that the opposite is true. This can be explained partly by the concentration of low-wage, non-union, soft-good industries in New York City while Buffalo and Rochester, for example, tend to be homes to higher-wage, more highly unionized industries such as chemicals, steel, auto manufacturing, and high technology. Of course, geographic wage differentials in the food manufacturing industry may differ from those pertaining to general manufacturing.

While the total number of labor union members in New York State has steadily decreased over the past decade, New York still has the highest percentage of union members as a part of its nonagricultural labor force in the Northeast, as well as in the U.S. overall (Table 4). Measures of unionization must be interpreted with caution, however. They do not necessarily indicate the extent of unionization for a given firm or industry, nor are these measures necessarily highly correlated with other economic measures (wage rates, etc.). Union membership is, then, highly dependent on industrial classification and regional location. In fact, some of New York's largest employers -- including significant portions of the food and agricultural industries -- are not heavily unionized. In addition, a major factor contributing to the high number of union employees in New York is the large government unions in New York State (New York State Dept. of Commerce, 1982).

More often than direct wage rates, however, agribusiness executives in the survey pointed to high perceived indirect costs of labor -- unemployment compensation and workmen's compensation, principally -- as major areas of concern. In the case of unemployment compensation, Table 5 shows that while New York State falls approximately in the middle (5 of 12) of the range of Northeastern states with respect to average state unemployment

Table 4. Labor Organization Membership Totals and Percent of Nonagricultural Employment, Northeastern U.S., 1980.

State	Total (1000)	Percent of Employment
New York	2,792	38.7
Pennsylvania	1,644	34.6
West Virginia	222	34.4
Rhode Island	113	28.4
New Jersey	784	25.6
Delaware	65	25.1
Massachusetts	660	24.9
Maine	101	24.2
Connecticut	327	22.9
Maryland	527	22.6
Vermont	36	18.0
New Hampshire	61	15.8

Source: U.S. Bureau of Labor Statistics, Directory of National Unions and Employee Associations, 1981.

Table 5. Selected Indirect Labor Cost Indices, Northeastern U.S., 1979-81.

	Average Unemploy- ment Compensation Paid Per Covered Worker: 1979 ¹	Average Weekly State Unemploy- ment Benefits as a Percent of Weekly Wage ²	Workmen's Compensation Payments, 1980 (Million \$) ³	Average Workers' Compensation Insurance Rates, Per \$100 of Pay- roll, Selected Manufacturing Industries, 1982 ¹
New York	\$166	29.1	608.3	\$3.94
Connecticut	101	35.7	129.7	7.80
Delaware	155	34.7	19.9	4.97
Maine	140	39.2	81.3	5.95
Maryland	97	36.2	186.8	5.57
Massachusetts	122	36.8	295.8	5.66
New Hampshire	54	34.2	45.6	4.13
New Jersey	230	34.2	316.4	5.50
Pennsylvania	213	42.4	575.7	3.48
Rhode Island	189	38.0	55.3	7.54
Vermont	129	39.8	15.3	2.84
West Virginia	201	38.0	176.2	3.12

Sources: ¹ Alexander Grant, General Manufacturing Business Climates, 1982.

² U.S. Bureau of Labor Statistics, Employment and Wages, 1981.

³ These payments, cash, and medical benefits are in addition to net disbursements of state funds, include insurance losses paid by private insurance carriers, and some benefits paid under Longshoremen's and Harbor Workers' Compensation Act. Thus, these payments are not strictly comparable across states. Source: U.S. Social Security Administration, Social Security Bulletin, Sept. 1981.

compensation paid per worker covered in 1979, it in fact recorded the lowest average weekly state unemployment benefits paid, as a percentage of weekly wage in the Northeast. While unemployment compensation rates in New York are still substantially higher than the national average (\$110 per worker), it appears that these costs are not drastically out of line with neighboring states.

Despite the appearance of high indirect labor costs, food processing firms may also benefit from the method of financing unemployment insurance. While paying maximum unemployment insurance premiums, processors, which hire many seasonal laborers, are nevertheless generally deficit contributors to the system, which is to an extent subsidized by low premium/low claims industries.

Workmen's compensation payments present a similar, mixed picture. In the aggregate, these costs are clearly quite substantial, judging from the total payment levels in column 3 of Table 5. However, measured as a percent of payroll costs (column 4), workmen's compensation rates in New York are the fourth lowest of the twelve Northeastern states and are below the national average (\$4.23 per \$100 of payroll). Workmen's compensation figures in particular, however, must be interpreted with extreme caution. Considerable reporting complications render averages such as those in Table 5 often noncomparable across states. In addition, variation across industries can be enormous. In 1982, for example, workmen's compensation payment rates in New York State varied from \$.22 per \$100 of wages for office and clerical workers, to \$1.75 per \$100 for electrical assemblers, to \$5.91 per \$100 for workers in steel rolling mills (New York State Dept. of Commerce, 1982). Hence, one must clearly look beyond state averages to how rates affect specific industries.

(3) Regulatory Costs

(a) Industry Views: With few exceptions, those industry officials involved with food processing and manufacturing cited the costs of conforming with state and Federal regulations as significant, and in some cases critical, concerns for the operations. Many managers agreed with the need for these regulations but felt that inconsistency in their enforcement, duplication of plant inspection efforts (both state and Federal, as well as several different state agencies), and a less than constructive attitude on the part of some state regulatory bodies often created an unfavorable business climate. Managers voiced regulatory concerns more frequently in the environmental (especially waste disposal) area than in any other. Again, as with labor costs, geographic location made a difference here, as some individuals expressed satisfaction with their working relationships with certain local and regional officials, while others expressed dissatisfaction, especially at the state level.

Several of those officials interviewed objected strongly to the promulgation of state regulations stricter than the related Federal standards. They reasoned that such legislation builds little loyalty from consumers who are the intended ultimate beneficiaries, but instead works against producers who are forced to meet higher standards, and thus incur higher costs, than those in competing regions. In a similar vein, many managers stressed the need for consistent standards across state bound-

aries. Federal standards may be needed, for example, to deal with issues concerning food additives, nutritional labeling, product inspections, and beverage container deposit laws.

Many New York State regulations were perceived as being outdated. One such regulation often cited is the prohibition of wine sales in New York supermarkets. This law was seen by a variety of firm types -- growers, as well as selected wineries and wholesale/retailers -- as presenting a formidable barrier to the significant expansion of wine sales in New York State. Another example of obsolete legislation noted by several companies was the set of sanitation requirements for both processing facilities and supermarkets. In general, the disagreement centered not around whether sanitation was necessary, it clearly was; rather, the concern was that the rules were perceived as being unrealistically enforced.

Several food retailers pointed to the uneven treatment they felt they received from state food inspectors. While complying with food inspection regulations increases costs, it disadvantages unionized firms much more due to their higher wage structure. Since not all New York food distribution firms are unionized, a differential effect is evident. Similarly, many retailers cited the "item pricing law" in New York State as a serious impediment to efficiency improvements now that electronic Universal Product Code scanning systems at checkout have, they feel, eliminated the need for the labor-intensive task of pricing each individual item. Certain other technological issues were similarly questioned. For example, one manager argued that as technology improves to the point where increasingly minute portions of bacteria (e.g., "mold content in canned tomato products") can be detected, it is not appropriate (or necessary) to correspondingly tighten the product standard and grade specifications.

(b) Additional Empirical Findings: Although the regulatory area is a complex one, encompassing far more than can be addressed here, certain evidence indicates that New York State may compare favorably to its other Northeastern competitors in terms of overall regulatory issues. One study, for example, conducted for the New York State Department of Commerce in 1983, interviewed Chief Executive Officers in a representative sample of 504 business establishments in New York State (New York State Dept. of Commerce, 1983). The study found that these senior executives viewed New York on a par with other states in terms of its regulatory burden and overall state government responsiveness (Table 6).

With regard to regulations perceived as particularly burdensome, the Dept. of Commerce study found many parallels with the problem areas cited by the agribusiness executives in this survey (Table 7). Workmen's compensation payments, unemployment insurance rates, along with a variety of regulations and taxes were, perhaps predictably, most commonly mentioned as burdensome in New York.

Along with inconsistent regulatory enforcement, one of the most frequently voiced concerns of agribusiness executives was the level of environmental regulations in New York. Although this perception is partly subjective and thus difficult to evaluate, Table 8 demonstrates that New York State is not out of line with other Northeastern states, at least as far as environmental quality control expenditures are concerned. In fact,

Table 6. New York State Chief Executive Officer Attitudes Toward New York State Government

Compared to Other States, New York is:	"Burdensome Regulations"		"Overall Responsiveness"	
	1981	1982	1981	1982
	(percent)		(percent)	
Better	9	5	11	8
About the same	64	71	63	63
Worse	19	13	17	16
Uncertain	8	11	9	13
Total	100	100	100	100

Source: New York State Department of Commerce, 1983.

Table 7. Specific Regulations Cited as Burdensome by New York State Chief Executive Officers, 1977-82.¹

Burdensome Regulations	1977 (%)	1979 (%)	1981 (%)	1982 (%)
Bookkeeping/red tape	31	41	47	48
Workers' compensation	3	--	12	11
Labor laws	10	22	11	12
Environmental regulations	6	30	10	5
OSHA regulation	6	14	8	10
Individual industry regulation	25	13	7	5
Tax laws	21	N/A	N/A	5
Payroll taxes	N/A	23	29	16
Corporate business taxes	N/A	37	22	25
Unemployment insurance	N/A	35	22	20
Real estate taxes	N/A	29	11	12
Sales taxes	N/A	N/A	N/A	14
Personal income taxes	N/A	N/A	N/A	5

¹ Multiple answers accepted; base is proportion of respondents who replied that regulations are burdensome, in general.

Source: New York Dept. of Commerce, 1983.

New York falls approximately in the middle of the group. Again, however, caution must be exercised in attributing too strong a conclusion to this measure; to a certain degree, annual expenditures on environmental quality control confuse current operation with long-run capital investment. Bearing this in mind, though, these data do not appear to support the

Table 8. State Expenditures on Environmental Quality Control: Per Capita and Percent of Total State Expenditures, Northeastern United States, 1978, 1980.¹

State	Expenditures Per Capita (\$)	As a Percent of Total State Expenditures
New Hampshire	29.52	1.72
Vermont	19.24	.87
Maryland	10.09	.62
Rhode Island	9.75	.70
Massachusetts	8.89	.62
Maine	8.37	.56
New York	7.42	.43
Connecticut	7.21	.36
Delaware	6.08	2.11
Pennsylvania	4.75	.34
New Jersey	3.90	.32
West Virginia	3.12	.40

¹Environmental quality control, as used here, refers to expenditures for water, land and air quality control, with occasional additional amounts for "other" environmental measures (e.g., noise, pollution, etc.)

² Fiscal year 1977-78.

Source: U.S. Dept. of Commerce, Environmental Quality Control, 1980, 1981.

contention, sometimes heard, that New York spends relatively more to protect its environmental quality than neighboring Northeastern states. In fact, on a national basis, state environmental control expenditures in New York are close to national average rates.

(4) Energy Costs

(a) Industry Views: Many firms in the food industry are heavy users of energy, especially electricity. A number of executives surveyed mentioned that what they perceived as the high costs of energy in New York added one more disadvantage to the competitiveness of their operations in New York.

(b) Additional Empirical Findings: Table 9 compares Bureau of Census data from its 1982 Annual Survey of Manufacturers, for "Fuels and Energy Consumed," for different Northeastern states. These data show that New York State fuel and electrical energy costs for manufacturers ranked fifth out of the twelve Northeastern states. As with other indicators mentioned here, however, caveats are necessary when statewide averages are being considered. New York City and Westchester County -- served by Consolidated Edison -- have among the highest utility rates in the nation, yet Con Ed provides service to only 3 percent of the land area in New York State (New York State Dept. of Commerce, 1983). In the rest of the state, rates are considerably lower.

Table 9. Fuel and Electric Energy Costs per Million BTU's For Manufacturers, Northeastern United States, 1980.

State	Cost Per Million BTU's
Rhode Island	\$ 5.37
Connecticut	5.30
Massachusetts	5.03
Vermont	4.80
New Jersey	4.45
New Hampshire	4.34
Delaware	4.12
New York	4.00
Maryland	3.58
Pennsylvania	3.55
Maine	3.51
West Virginia	2.75

Source: Alexander Grant, General Manufacturing Business Climates, 1982.

A higher proportion of New York's energy needs is provided by oil than the U.S. in general. Thus, lower predicted relative prices for oil in the future should provide an additional advantage to New York, and the entire Northeast, relative to the rest of the country. Furthermore, new supplies of low-cost hydroelectric power from Quebec may ease energy costs still further (Business Week, January 23, 1984). On the other hand, the considerable uncertainty presently surrounding the pricing of nuclear-generated electricity (in New York and nationwide) and the future allocation of State hydropower resources may have adverse consequences for New York electricity users.

(5) Capital Costs

(a) Industry Views: The high cost of new capital equipment is a problem shared by most businesses, including New York State food companies. Many firm managers mentioned the lack of long-term, low-interest rate loans in New York to assist them in upgrading their plants. Moreover, several food exporting companies pointed to the additional capital support they require in an increasingly competitive and volatile international marketplace. They felt that minimum levels of financing, credit subsidies, and risk insurance should be available from New York State (especially New York City) banks which is not currently forthcoming.

(b) Additional Empirical Findings: As noted above, high capital costs are often a problem confronting all areas of business. Given the mobility of capital, isolating specific reasons why these costs might be higher in New York State or higher in New York's food sector in particular would be difficult. Referring again to the New York Dept. of Commerce study of 504 of New York's Chief Executive Officers, nearly half reported intentions to expand their businesses in 1982. More than four out of five of those with plans to expand intend to do so within New York State (Table 10). This finding is consistent with a substantial body of literature which clearly shows that few firms simply move to a new location; most location changes

Table 10. Expansion Plans/Behavior of New York State Chief Executive Officers, 1981-82.

	1981 (%)	1982 (%)
Considering Expansion	45	48
At this location	54	50
Within New York State	29	31
Outside New York State	11	13
Uncertain	6	6
Not considering expansion/ Uncertain	55	52

Source: New York State Dept. of Commerce, 1983.

are due to new companies, plant closings, and contractions of previous expansions (see, for example, Miller, Birch, and New York Legislature, as cited in Young, 1983). This report also notes that in terms of actual business expansion, 25 percent of the New York State businesses surveyed had more employees in 1982 than they did in 1981.

Summary

The principal impediments to increased business activity for many of the firms interviewed in the food industry survey were some or all of the above cost-related concerns which, together, added up to the generally perceived high "costs of doing business" in New York. As reviewed above, when compared to actual empirical data, specific cost elements are indeed high in New York, while other costs are in line with regional and national averages. For example, the total per capita tax incidence in New York is nearly the highest in the nation, while New York State expenditures on environmental control (as a percent of total state expenditures) are close to the national average. Overall, the "costs of doing business," while high relative to national averages, are generally in line with major competing states in the Northeast.

Many of the food industry managers interviewed recognized that many of the problems outlined above are long-standing and extremely difficult to solve. Yet, a common view was that a number of these concerns (tax levels, regulatory enforcement, etc.) are indeed addressable through public sector initiatives, particularly at the state level. Moreover, a number of business officials surveyed expressed the view that until these fundamental elements are addressed, other remedial actions on the part of state government to aid business development in New York would be of only secondary importance.

Other Issues

The remainder of this section reports the views of industry managers with respect to four other broad areas of concern: research, technology

and education; marketing-related issues; infrastructural needs; and other problems and opportunities. Because the issues presented here are somewhat less "measurable" than in the preceding section dealing with costs, the relevant empirical data are incorporated into the discussion rather than set apart in a separate section.

Research, Technology, and Education

The food industry has traditionally been a low margin business. Because of this fact, as well as the relatively limited sales growth potential for many food products (compared to consumer durables, etc.), keeping unit production costs down is of paramount importance in the food industry. Many firms indicated that the development of new technologies in food processing and distribution played an important role in cutting unit costs, while enabling them to enter new promising markets when the occasion presented itself. Larger firms are often able to develop new technologies through their own research and development units and internally provide training to their workers. Smaller firms, however, often must turn to public institutions for assistance in research, technological development and training. This is especially true given the increasing rate at which scientific advances render state-of-the-art technology obsolete and current cost levels noncompetitive.

Many of the firm managers interviewed felt that cutbacks in state and Federal funding of research, education, training, and extension activities of public institutions only exacerbated an already critical situation. One official mentioned that long-term economic growth was being sacrificed for short-term purposes. Another said that we know what will stimulate expansion of the food industry in New York and that all we have to do is to have the continued commitment to spend the money in the most productive areas (research, technological development, etc.). Several managers stressed the fact that small firms must have somewhere to go to seek assistance in adapting new technologies, in analyzing developing markets for their products, and for related purposes. One executive said that his firm generally went to the University of California for assistance since it was not available within New York.

Overall, many of those interviewed expressed a concern over the state's dedication to research, technological development, and training and education in the food industry. While they were supportive of past efforts, most felt that levels of commitment must increase significantly in order to assure continued business growth. The new food processing laboratory at Cornell University, included in the Governor's 1984 legislative budget proposal, should, when completed, make strides in closing this technology and training gap.

Marketing-Related Issues

A large number of the food industry officials interviewed felt that problems related to the marketing of products currently or potentially grown in New York were critically important to the food industry. Many mentioned that, unlike California, for example, many of the agricultural

and food industries in New York are not "market-oriented." Problems were identified at both the farm and processor levels. At the farm (and packer) level, those interviewed cited such factors as: an orientation excessively geared to production, rather than marketing, on the part of growers; a reluctance of producers and initial handlers to work together to assure superior and consistent product quality and continued supply; and a reluctance in adapting to new technologies, compared to West Coast producers.

Wholesale-retail buyers drew attention to their reluctance to regularly promote New York grown products, particularly fresh fruit and vegetables, for a variety of reasons. First, they emphasized the likelihood that these products might not be in acceptable grade or condition due to any number of possibilities: mishandling in harvesting or packing, poor cleaning and trimming, often minimal product inspection, insufficient precooling or storage, and, often, inadequate packaging. Second, retailers also mentioned the increased difficulty of working with the larger number of small suppliers necessary to meet the volume requirements of large wholesale-retail operations. Third, one retailer felt that promotional support in the forms of media advertising and merchandising support (e.g., in-store demonstrations and point-of-purchase material) was not available in adequate quantities from New York State producers. Several producers echoed this concern as well; one grower related that although he supported the "Grown in New York" campaign, he was allocated what he considered too little free promotional material by the State Department of Agriculture and Markets. Finally, retailers generally agreed that producers do not fully understand the exigencies of retail advertising programs and associated pricing. Several firms, both packer-shippers and retailers, felt that the educational program recently sponsored by the Department of Agriculture and Markets to bring buyers and sellers together to discuss these concerns needs to be conducted on a regular basis.

At the processor level, managers cited the need to: identify new markets and determine the distribution strategies to effectively reach these markets; develop and market new product forms; understand the impacts of changing demographic trends on product demand; and finally, to understand how to meet existing consumer demands with regionally produced foods. Once again, smaller firms without marketing departments often have particular difficulties in assessing and adapting to changing market conditions.

Several other specific areas were identified most often in discussions of marketing problems and opportunities. The importance of understanding and being able to more effectively penetrate the New York City market was stressed. Some emphasized the identification of export opportunities as an important concern, especially in the long run. Exporters cautioned, however, that domestic producers require much education with regard to the different requisites of packaging, labeling, pricing and product specifications typical of foreign markets. One marketing executive said that the key was to consistently produce and sell sufficient amounts of a given product to have some influence over the market for that product. Although a principal objective of marketing orders is to assist in providing this consistency and stability, only two marketing orders (apples and sour cherries) currently exist in New York State (excluding milk). While marketing orders tend not to be warmly embraced by many in New York, it is

possible that a lack of understanding of the potential benefits of orders, rather than their necessarily being a poorly designed or inappropriate concept, may be one element underlying their relative lack of use.

Clearly, a wide variety of marketing-related issues was identified as important to the New York State food industry. Most of these issues revolve around one of three areas: market identification; the assurance of consistent product quality and supply; and openness and sensitivity to economic change, whether that change originates with demographic trends, consumer tastes and preferences, or technological developments. In summary, one food executive's words seem appropriate: "the key is to find out what we in New York do well and concentrate on doing that, not on what someone else does better."

Infrastructural Needs

A number of food industry leaders called attention to selected infrastructural problems in New York State, especially those associated with aging physical plants. For example, one manager cited what he felt to be the inadequate maintenance of the Hunts Point Terminal produce market. This official pointed to the exodus of firms (from Hunts Point to New Jersey locations) that these poor market conditions are causing and which he felt would accelerate if improvements are not soon accomplished. Other managers felt that New York State food processing plants and equipment were, in general, more antiquated than those in many other competing states.

Many food processors import considerable quantities of raw materials and other production inputs into New York State. Industry officials identified a variety of problems specific to their particular industries: the regulatory structure surrounding natural gas pricing; the local availability of both agricultural and nonagricultural inputs; etc. Crosscutting specific industries, however, was a concern over often poor (or, in some locations, non-existent) rail service which placed some firms at a major competitive disadvantage. A final element of physical infrastructure often mentioned as important and needing improvement or upgrading in many localities was waste water treatment facilities.

Considerable uncertainty currently surrounds infrastructural questions in New York. First, the impending sale of Conrail and the conditions under which the sale occurs have major implications for the future of New York's rail system. Those agribusiness firms located on branch lines and on lightly used portions of the Conrail system have a major stake in the maintenance of the present Conrail system as an integrated operation. Second, the ultimate allocation of funds from the recently passed \$1.25 billion infrastructure bond issue will have consequences for food industry firms in the locations in which these funds are spent, as well as those locations which do not receive assistance. The ultimate outcome is, at this point, uncertain.

Whatever the changes in the transportation infrastructure system in the near future, New York's food industry still has to confront the problems associated with aging manufacturing plants. Employment in food

manufacturing in New York decreased nearly 50 percent between 1958 and 1977 (Census of Manufacturers). The average number of workers per food manufacturing plant in New York remained roughly constant at around 41 persons per plant over this period, compared to a nationwide increase of over 80 percent, from 41 to 74 workers per plant. Finally, capital investment in food manufacturing in New York, while increasing from \$83.6 million in 1958 to \$191 million in 1977, fell as a proportion of total U.S. food manufacturing capital investment, from 8.7 percent in 1958 to 4.5 percent in 1977. Clearly, then, the problems associated with adequate capital investment in plant and equipment in New York's food industry are real ones, and must be addressed if New York firms are to remain competitive with those in other states.

Other Problems and Opportunities

Industry management identified a large number of other concerns which are relevant to the economic success of the food industry in New York. While it is impractical to discuss all of these concerns, several which arose with some frequency include the following:

(1) Business development in New York. Two, somewhat opposing, points were often made by the food industry executives interviewed with respect to New York State's efforts to attract new businesses. First, many felt that the "I Love New York" campaign should be expanded to more directly include business clients. At the same time, one, perhaps extreme, view was that the current campaign actually deters businessmen since it is targeted toward tourists and is thus associated with frivolity, rather than with a sound business environment. With fine roads and many good airports, high quality and plentiful water, the availability of skilled labor and proximity to excellent markets, many managers suggested that campaigns to highlight the positive attractions of New York's industrial climate be expanded.

A second view, however, was of a somewhat contrasting nature: many industry officials felt that resources would be much more effectively allocated to the support of existing businesses rather than to the development of new businesses. They reasoned that efforts to mitigate the high operating costs of existing companies in New York State would have a far greater economic impact than short-run development incentives granted to often small, and often risky new business ventures from out of state. This view is supported by the fact that the majority of business expansion tends to occur in locations near original plant sites, rather than in the unfamiliar environment of another state (Young, 1983).

(2) State purchases of New York grown products. State (and Federal) government food purchasing requirements probably represent underutilized markets for New York's food industry. While the current level of New York sales to these markets is unknown, food annually purchased by the Defense Department within a feasible range for delivery from New York State was \$1.1 billion in 1982. In addition, the State of New York annually purchases over \$41 million in food for its institutions (New York State Dept. of Commerce, Dec., 1983). Several interviewees felt that largely because of the induced economic effects (greater tax revenues, additional jobs,

etc.), one step the state could take to help its food industry would be to make a concerted effort to purchase foods grown and produced in New York to fulfill the large demands of public institutions throughout the state. The economic benefits from such a program might even justify price premiums for state produced goods in certain cases. Several managers added that they needed more information regarding how to access these institutional channels. Finally, however, one executive tempered his enthusiasm for serving the institutional market by citing his previous experience with "slow-pay" from state procurement offices.

(3) Expanded promotion of New York State grown products. Two factors were mentioned as justifying such a program. First, meeting the increasing consumer demand for fresh food products compared to highly processed foods suggests a potential for increasing the share of locally grown products relative to those grown in other regions. Second, the induced economic effects (in employment, sales, and tax receipts) of expanded state production would likely pay for such a promotional program many times over if it were successful. In addition, such a promotional program might develop brand or regional awareness among consumers.

Experience to date with promotional programs has demonstrated greatest success in those efforts which have successfully differentiated what are often considered to be relatively undifferentiated food products. Commonly cited examples are Florida citrus products and Idaho potatoes. The potential problems for a broad-scale, statewide commodity promotion program are many. First, consumers are first and foremost sensitive to price, not product origin, so that with few exceptions, locally grown products must be price competitive to result in increased sales. Second, many of the above-mentioned marketing problems related to product quality, grading, and packaging of New York produced products must be solved prior to or in conjunction with a promotional program to guarantee the consumer a superior product. Finally, the potential for increasing sales is largely limited to the (not inconsequential) import substitution potential for various food products. As price and income-inelastic goods, major overall expansions of existing product markets would not be expected. In sum, the enthusiasm over the potential for promotional programs for state grown agricultural products must be tempered by these qualifications.

(4) Canadian subsidies. Several management officials identified Canadian government subsidies in agricultural production and distribution as significant problems. The problem is seen as two-fold. First, production subsidies enable Canadian products to enter the U.S. at lower effective prices, undercutting domestic producers. Second, subsidies for storage and storage facilities enable Canadian wholesalers to buy products in New York and "add value" in Canada, with implications for promising export markets. While the concern over the Canadian subsidy issue is a frequently voiced one, it is not likely that policymakers at the state level can do much to effect significant changes in Canadian government agricultural policies.

IV. SUMMARY AND RECOMMENDATIONS

The preceding sections discussed the principal problems and opportunities existing in the New York State food and agricultural industry as perceived by a number of senior management officials in those industries. Many of the central concerns of those officials relate to the high "costs of doing business" in New York, which many feel lessen the competitiveness of New York's food industry relative to competing states. Food industry executives also identified important issues relating to research, technological development, education and training in the food industry, food marketing and market development, New York's physical infrastructure, and a variety of other concerns. Where possible, additional empirical evidence was cited to help clarify specific aspects of the overall business environment in which the food industry operates.

Although a variety of problems and concerns are discussed in this report, the overriding tone of many of the industry officials interviewed was encouraging. While identifying certain barriers to economic development, management officials also suggested a number of positive aspects of conducting business in New York. Many identified the close proximity of large and diverse markets as a primary advantage. Several executives mentioned that although New York taxes are high, tax payments are often correlated with the value of benefits derived from public services. Thus, if taxes are low but services (water supply, waste water treatment, garbage collection, etc.) are not provided in adequate quantities by the state or locality, the firm may likely incur additional costs in providing these services itself. Beyond these public services, management officials often cited such things as good public education systems and recreational facilities which are often available in New York and which must be generally financed by tax dollars. There are clearly factors affecting the overall environment for business development in New York which are not reflected on a firm's balance sheet.

Many officials also recognized that success in their operations was highly dependent on developments which were largely out of their, and New York State's, control, in particular, monetary and fiscal policy at the national level. Factors such as sustained recession, high interest rates and an overvalued dollar are often of paramount importance to individual firms but are only addressable at the national (or international) level. Moreover, due to the varied nature of the kinds of issues raised in this report, most food industry executives recognized that programs or actions taken to address some of these problems required both public and private sector initiatives.

Each of the problems and opportunities identified in this report either explicitly or implicitly leads to a policy recommendation; corrective policies, programs, or actions are inherent in their mention. There may be some disagreement within the industry about the usefulness of specific proposed solutions and their prioritization. Moreover, given current fiscal and political realities, many of these recommendations would be very difficult to institute -- a fact that is recognized by most industry officials. Yet, others may provide the basis for public or private actions which could lead to enhanced economic development of New York State's food industry. Listed below are the recommendations that arise from this survey of New York food industry management:

1. Lower the "costs of doing business" in New York:

- Lower personal income tax rates and/or the levels of other state taxes (sales, payroll, corporate, real estate, etc.). The sales tax, for example, could be reduced but made more inclusive and thus less confusing. Targeted tax exemptions might be expanded for certain capital equipment investments. Although this report indicated earlier that tax concessions alone are not likely to be the keystone in attracting new industry, they certainly might have a beneficial effect on firm and industry growth in specific instances.
- More closely align the added costs of labor represented by high unemployment compensation and workmen's compensation taxes to levels existing in other Northeastern states.
- Develop a more constructive, less confrontative relationship between the food industry and regulatory agencies.
- Moderate utility costs to help keep New York firms competitive.
- Initiate programs to alleviate the high capital costs of doing business in New York, especially with regard to equipment, construction and general infrastructural needs.

2. Expand state support for research, technological development, training, education, and extension activities in areas relevant to the food industry. Possibilities include: government cost-sharing on approved R&D projects; public sector labor training; expanded continuing education opportunities, especially in technical areas; tax incentives to adopt new production, processing, and marketing technologies.

3. Support new initiatives in the marketing of products grown and produced in New York. Marketing services should also be stressed. Initiatives might include:

- Support for new product development.
- Export marketing development -- expanded New York participation in international trade shows.
- Direct marketing programs.
- Improvement of product quality standards -- cleaning, grading, inspection, handling and packaging.
- Further exploration of the use of commodity marketing orders to enhance product quality, uniformity, etc.
- Development of mechanisms to help attain the "critical mass" of specific products necessary for effective marketing. This might involve both expanded production as well as alternative institutional arrangements to facilitate joint marketing ventures.

- Development of marketing-oriented educational programs; retailers require a better understanding of producers, and producers require a better understanding of marketing requirements.
- 4. Develop a comprehensive state program for the purchase of New York grown and produced foods for public institutions. Such programs need not necessarily legislate preferential treatment to New York State producers; expanded buyer and seller knowledge of New York products and services as well as how to effectively market them might effectively achieve the same purpose.
- 5. Expand the promotional campaign for New York products. Emphasis should be on special products and service characteristics that are price competitive and unique to New York, not on those for which other regions have comparative advantages and have already established a strong image.
- 6. Improve infrastructure facilities in the state, especially rail service, but also road, sewer, water, waste disposal, and market and port facilities.
- 7. Encourage the Federal government to take action to counter the subsidization of Canadian products competing with New York grown products.

Notes

¹For a detailed treatment of taxation issues as applied to orchards and vineyards, see Davenport, Boehlje, and Martin (1982).

²The five studies include: Bergen and Eagen; Hunker and Wright; McMillan; Mueller and Morgan; Business Week Research Report.

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Appendix: Organizations and Firms
Interviewed in Agribusiness Management Survey

<u>ORGANIZATION OR FIRM</u>	<u>COMMODITY SPECIALIZATION OR PRINCIPAL LINE OF BUSINESS</u>
1. A.E. Chew International Co.	Food exporter
2. Agway, Inc.	Farm producer cooperative
3. Beechnut (Nestle)	Baby food processor
4. Bird's Eye (General Foods)	Vegetable and frozen food processing
5. Bison Canning Co., Inc.	Vegetable processing
6. Brewster, Leeds and Co.	Food exporter
7. Brown Cow Yogurt Co.	Yogurt processing
8. Chicago Markets	Grocery retailer
9. Cornucopia Farms (Gerber)	Fresh and processed fruits and vegetables
10. Curtice-Burns (Pro-Fac)	Multi-product food processing
11. D'Arrigo Brothers Co.	Produce wholesaling/import and export
12. Dairylea Cooperative, Inc.	Dairy cooperative
13. Duffy-Mott (Cadbury)	Fruit processing
14. Durkee Foods	Food processing
15. Eastern Milk Producers, Inc.	Dairy cooperative
16. Eggit, Inc.	Egg processing
17. Grand Union Co.	Food wholesaling and retailing
18. Grandma Brown's Co.	Vegetable and food processing (canning)
19. ITT Continental Baking Co.	Milling and baking
20. Indian Summer	Fruit and vegetable processing
21. Milupa Corp.	Baby food processor

22. N.Y.S. Cheese Manufacturers Association (Chairman)	Cheese manufacturers
23. N.Y.S. Wine Grape Growers (President)	Grape growing industry
24. P&C Food Markets, Inc. (Big V)	Food wholesaling and retailing
25. Peavey Grain (Conagra)	Grain milling
26. Plainville Turkey Farms	Integrated turkey operation
27. R.T. French, Inc.	Food processor
28. Ragu Foods (Cheesebrough-Ponds)	Food processing
29. Red Wing Co. Inc.	Fruit, vegetable (tomato) and food processing
30. Rich Products, Corp.	Multi-product food processing (frozen)
31. Russer Foods Co.	Specialty meats purveyor
32. S.M. Flickenger	Grocery wholesaler
33. S.S. Pierce (Seneca Foods)	Fruit and vegetable processing
34. Syracuse Merchandisers	Food brokerage
35. Taylor/Great Western Co., Inc.	Grape growing and winery
36. Venture Vineyards	Table grapes
37. Wakefern Food Corp. (Shop Rite)	Cooperative food wholesaling group
38. Western New York Apple and Cherry Association	Produce trade association