

Commercial Mobile Office and Modular Building Industry

1999 Statistical Survey



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I. INTRODUCTION

A. Modular Building Institute: Annual Survey

The Modular Building Institute ("MBI" or the "Association") is the industry trade association representing manufacturers, suppliers and dealers of commercial factory built structures. During spring 2000, the MBI prepared and distributed survey questionnaires to both member and non-member manufacturers and dealers (the "1999 Statistical Survey"). The 1999 Statistical Survey is the eighth survey conducted by the Association. In each of the six prior years, a similar survey was conducted by the Association covering calendar years 1993 to 1998 and on October 1, 1991, results of a comprehensive 1990 industry survey were released. The MBI intends to conduct an annual survey of manufacturers and dealers as a device to chart industry growth and as a tool to benefit member organizations.

B. General Industry Description

Commercial Modular Buildings are non-residential factory built structures generally designed to meet federal, state and local building codes and are capable of being relocated. The commercial modular building industry is comprised of four distinct participants:

- * Independent **Manufacturers**;
- * **Integrated** companies (dealers with captive manufacturing capabilities);
- * Independent **Dealers**; and
- * **Suppliers** to the dealers and manufacturers.

The vast majority of **manufacturers** are private, independent single-location facilities. Manufacturers generally operate as wholesale suppliers of modular buildings to industry dealers. The wholesale manufacturers respond to dealer requests for quotations and build both mobile offices and customized modular buildings. Manufacturers that either maintain their own lease fleet or sell new and used mobile offices and modular buildings directly to retail customers are referred to as **integrated** companies.

Independent **dealers** respond to retail customer requirements for mobile and modular space. The dealers lease or sell new and used modular buildings and mobile offices. Dealers generally work with a customer to complete a space plan, order a new building from a manufacturer and arrange for delivery and installation of the building. Dealers may subcontract the delivery and installation or perform the work with their own personnel. Dealers range in size from single location sales operations with little or no lease fleet to large, well-capitalized lessors with sales offices nationwide.

Suppliers include component suppliers such as plywood, steel, heating and air conditioning systems, frames, chassis, plumbing and electrical fixtures as well as freight companies, installation crews, financing, insurance and bonding companies.

The mobile and modular building industry, with its roots in construction trailers, has expanded over the years to include a multitude of uses where speed of occupancy, relocatability and the temporary need for space are primary market drivers. The industry responds to an ever increasing need to provide timely delivery of flexible and complex commercial structures. An end user's annual budgeting or appropriation process fits squarely with the primary market drivers of the industry: flexibility of design and the ability to rapidly deliver temporary space in a cost-effective manner. The modular buildings and mobile offices are not "land attached" and can generally be moved from one site to another site that later becomes more usable or profitable. Shifting demographics play a significant role in the relocatability of these structures, particularly for the educational markets.

The modular building industry can be divided into two major segments: single and doublewide factory built buildings generally leased on a short-term basis (together referred to herein as "Mobile Offices") and multi-unit (three or more) modular buildings ("Modular Buildings") typically leased for longer terms. The Mobile Office and Modular Building segments will be referred to collectively as the "modular building industry."

Individual **Mobile Offices** vary in size, with the smallest measuring 8' x 16' and the largest 18' x 84'. Typical construction is wood frame mounted on a steel chassis, with fixed or removable axles and hitches. These offices are generally built to the same model building code as those built on-site. With normal maintenance a Mobile Office will last indefinitely. While generally built to one of three national model building codes, mobile offices may be land-locked in the state(s) in which they bear a state seal indicating compliance with that states current version of the building codes. Mobile Offices intended for rental on construction sites are deemed to be "temporary" and generally do not have a state seal. Mobile Offices intended for use at a site other than a construction site generally do have a state seal(s). Building code enforcement procedures are assumed by state agencies which may contract their duties to independent third party inspection agencies. While state codes and procedures differ, there is growing state to state code compliance reciprocity. The typical rental period for single mobile offices other than classrooms is between three and eighteen months. Classrooms usually remain on lease with a single lessee for periods well in excess of thirty-six months.

In addition to construction site offices, individual Mobile Offices are used as classrooms, in-plant offices and general commercial offices. Specialty mobile units function as office/storage combinations, toilet units, showers, decontamination units, change units, restaurants, diners, fast food buildings, equipment shelters and branch banks.

Unlike Mobile Offices, which generally offer standard floor plans and standard features, **Modular Buildings** are often designed and built to meet the specific requirements of the initial end user. Modular Buildings provide high quality, rapidly built, relocatable or permanent solutions to the space demands of a broad client base. Simultaneous manufacturing and site work often allows modular building occupancy to occur much faster than traditional methods of construction. A shorter construction period can reduce both construction period financing and supervision costs and can put the building to work sooner. Nearly all engineering, design, and architectural disciplines are part of the manufacturing team, thereby eliminating the time consuming involvement of outside engineers and consultants.

Combining the design flexibility of traditional building methods with the quality of controlled manufacturing, the industry has refined a construction process which provides speed, economics, and architectural aesthetics. Historically, Modular Buildings have been used as hospital and diagnostic health care facilities, educational facilities, daycare centers, correctional facilities, banks, commercial office buildings and in a variety of high tech fast-growth industries. These practical, time and money saving alternatives to site-built buildings effectively meet the specialized needs of diverse businesses. Customers served by Modular Buildings include federal, state and local governments, school boards, corporations, non-profit organizations, Indian tribes, quasi-government entities like the U.S. Postal Service, as well as individuals, partnerships, and sole proprietorships. Other uses include medical facilities, airport facilities, military installations, restaurants, retail businesses and remote telecommunications switch stations. Some facilities are used as an adjunct to existing buildings while others are stand-alone buildings. Flexibility and reutilization are the hallmarks of modular buildings. Unlike structures built on-site which generally have fixed utilization and occupancy design, modular units fulfill a unique function of reutilization that is not site specific. It is not unusual to have a Modular Building serve a wide variety of users during its long life span.

Since users of the relocatable buildings are diverse, specific industry slowdowns do not significantly impact sales and leasing companies. The flexibility of these buildings makes them a secure investment. During severe economic downturns, these conditions allow lessors to enjoy cash flows adequate to service debt. This flexibility is further enhanced by the ability to relocate buildings to more prosperous cities or industries as opportunities arise. Certain market segments of the industry are counter-cyclical. This is particularly true of education, prisons, and governmental agencies that want to transfer funding for facility needs from capital expenditures to operating budgets. This concept also applies to industries which may want to expand, but are uncertain about the long-term strength of their growth. Budget driven companies often opt for leased facilities. In such cases Modular Buildings offer benefits and options without long-term capital commitments.

In late 1993 the Florida Department of Education released the results of a comprehensive study of The Use of Relocatable Classrooms in the Public School Districts of Florida. This research report from the Florida Office of Education Facilities was prepared based on the results of surveys sent to superintendents and facility planners in all 67 counties, over 1,300 teachers, site visits to schools and factories as well as meetings with industry representatives. Over sixteen thousand (16,000) relocatable classrooms were reported to be in use in Florida in 1993. The average age of those units was reported as 19 years. Each of the 67 counties had some relocatable classrooms. Facilities planners expected a service life of 23 years with many in place beyond 40 years. "This study has found that the **primary advantages** of the relocatable classroom are its ability to **provide flexible, suitable short-term accommodation** for Florida's growing student population and its ability to **provide that accommodation incrementally, in a timely and cost efficient manner.**" (Emphasis added.)

C. Survey Methodology

The MBI Membership Committee in cooperation with the Board of Directors maintains an updated list of industry participants. During May 2000, the MBI prepared survey questionnaires for all member and prospective-member dealers, integrated companies and

manufacturers. Prior to 1998, integrated companies (those that manufacture, lease and sell directly to retail customers) received both dealer and manufacturer questionnaires. This is the second year that integrated companies received their own questionnaire. As a result, for the first time, separate integrated company results can be compared to prior year results. Questionnaires were mailed by the MBI to the following number of industry participants:

	<u>Dealers</u>	<u>Integrated</u>	<u>Manufacturers</u>
MBI Members	54	22	30
Prospective Members	171	72	135
Total	225	94	165

These recipients represent all companies engaged in business in our industry which are included in the MBI database. Responses were received from twenty (20) dealers, nine (9) integrated manufacturing companies and twenty-one (21) wholesale manufacturers. Thus, the response rate based on the number of questionnaires mailed was 8.9% for dealers, 9.6% for integrated companies and 12.7% for manufacturers. Weighted response rates based on size of the respondents could not be calculated as the MBI received only averages or totals without the benefit of individual company information.

PFS Corporation, an independent company providing quality control, testing, inspection and certification services for the modular building industry tabulated the results. The survey was conducted on a double blind basis. PFS did not have company names associated with the responses and the MBI did not receive the individual responses. The original survey responses will be held by PFS Corporation and are not available to the public or to MBI officers, members or management staff.

Only those responses answering the specific question(s) were included in any tabulation. "Zero" responses were counted as non-responses and were not included in the sample for calculating averages and other statistics.

D. Review of Descriptive Statistics

PFS Corporation tabulated the questionnaire results and provided the MBI with totals and number of responses for each total. PFS Corporation also provided certain range and concentration data as requested.

An "average" can be calculated using three different methods. The mean is the numerical average, which is the sum of the responses divided by the number of responses. "Mean" is the most commonly understood meaning of average. The median is the response that lies in the middle of a sequence, i.e., the value above and below which there are an equal number of responses (regardless of the values of those responses). The mode is the most frequently occurring response. The mean and median are provided throughout this report. The mode is reported when meaningful.

In a sample or population that has a normal or "bell-shaped" frequency distribution, the mean, median and mode all have the same value. This generally occurs when there are a large number of similar responses. "Similar" is a relative term. Similarity among observations is

reported as a standard deviation, which measures the dispersal or scatteredness of the observations. A sample population with a normal distribution has 68% of the observations within one standard deviation of the mean, and 95% of the observations within two standard deviations of the mean. When a small number of atypical observations distort the mean relative to the median and mode, the distribution is skewed. This generally occurs when there are a small number of responses or when the responses contain a significant outlier. By way of example, if survey results provide significantly different measures of average lease fleet size, then the population has a wide distribution (lots of dealers with 400 units and one dealer with 60,000 units). WHEN THE POPULATION IS SKEWED, A MEDIAN AVERAGE GENERALLY PROVIDES A BETTER ESTIMATE OF THE “AVERAGE” RESPONDENT.

Calculation of the appropriate “average” is essential in the quest to ascertain the size of the commercial modular building industry. If we were curious as to the total number of Mobile Offices and Modular Buildings in active lease fleets, the most accurate measure would be if all industry participants would truthfully disclose the number of units in their own lease fleet at a given point in time. Since this is not feasible, a reasonable method to estimate the total number of units in domestic lease fleets is to calculate a reliable average and multiply by the number of active industry participants. Accuracy of this estimate is a function of numerous factors including clarity of the questions asked, veracity of the responses, confidence in the measure of the calculated averages and estimate of the total number of industry participants.

II. MANUFACTURER RESULTS

The 1999 Manufacturer Questionnaire requested total number of floors produced and shipped in 1999 together with break-out detail over various size categories; total square footage shipped in 1999; 1999 gross sales; and both 1999 and 1998 warranty expenses.

A. Floors Shipped in 1999

Twenty-one (21) respondents reported 21,541 total floors shipped in 1999. The mean (mathematical average) was 1,026 floors and the median average (middle of the ordered responses) was 548 floors. The 1998 mean average was 1,158 and the median was 686. Thus, both measures of average decreased in 1999. The largest respondent in terms of 1999 floors shipped was 18.6% of the total while the five largest accounted for 62.7% of the total.

Wholesale Manufacturer Floors Produced

Year	Total	Mean	Median
1999	21,541	1,026	548
1998	18,534	1,158	686
1997*	23,243	830	498

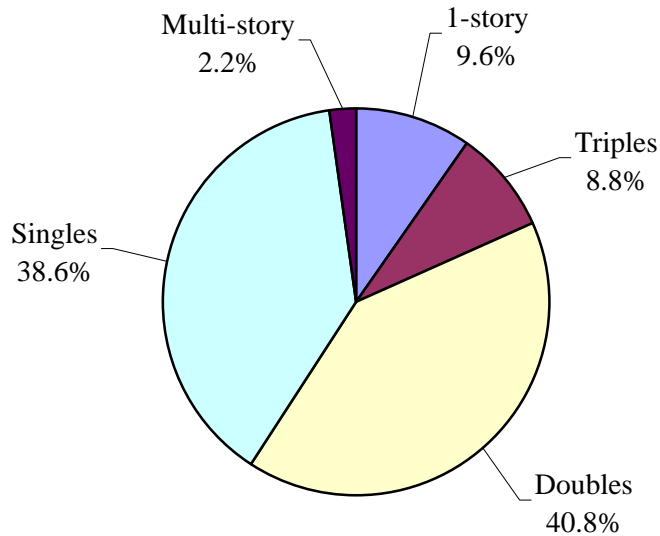
*1997 figures include integrated manufacturers.

The 1999 MBI mean and median floors shipped were checked for reasonableness by comparing the computed averages with those generated by the 1999 survey of special unit producers conducted by Automated Builder magazine (see March 2000 issue). Special unit producers that manufacture modular or panelized commercial buildings reported 1999 production to Automated Builder of 10,384 floors with a mean of 692 floors and a median of 400 floors. The 1999 averages are down from the 1998 Automated Builder mean of 822 and median of 570.

<u>1999</u>	Floors Shipped <u>MBI Survey</u>	Automated <u>Builder</u>
Mean	1,026	692
Median	548	400

Total floors shipped by category in 1999 were calculated on the basis of the floors for which category information was provided. Seventy-nine percent (79.4%) shipped were Mobile Offices (singles and doubles) while twenty-one percent (20.6%) were Modular Buildings divided between triples (8.8%), single story complexes (9.6%) and multi-story complexes (2.2%). In 1998, singles accounted for 47%, doubles 29.7% (together 76.7%); triples 10.1%, single story complexes 12% and multi-story complexes 1.2%. Thus, although the Mobile Office percentage increased from 1998 to 1999, the composition was skewed to the doublewide. Interestingly, the percentage of multi-story complex units reported doubled from 1998 to 1999.

**Wholesale Manufacturers
1999 Floors Produced by Type**



In 1997, Mobile Offices accounted for 83% of total floors shipped and in 1996, Mobile Offices accounted for 78% of total floors shipped. Category information for the prior three years is set forth below. 1997 and 1996 percentages include integrated manufacturers.

Percent of Floors Shipped by Wholesale Manufacturers

Category	1999	1998	1997	1996
Single	38	47	29	43
Doublewide	41	30	54	35
Triplewide	9	10	6	6
One Story Complex	10	12	11	13
Multi-Story Complex	<u>2</u>	<u>1</u>	<u>0</u>	<u>3</u>
	100%	100%	100%	100%

1999 respondents to the manufacturing survey reported shipping significantly more doublewide units than in the prior year. The increase in doublewide unit shipments was offset by the decrease in single unit shipments from 47% in 1998 to 38% in 1999.

B. Total Square Feet

Sixteen (16) respondents reported a total of 8.16 million square feet shipped in 1999 up from 7.98 million in the prior year. The 1999 mean was 510,110 square feet and the median was 352,031. Both are well below prior year averages of 665,148 (mean) and 438,342 (median). Once again, 1999 responses were widely scattered with a large standard deviation indicating the presence of significant outliers in the sample.

Based on median square feet of 352,031 and an MBI estimated 165 domestic wholesale manufacturers, the wholesale industry shipped approximately 58 million square feet of new commercial factory built Mobile Offices and Modular Buildings in 1999, a 25% decrease from 1998 survey results.

Wholesale Manufacturers* Square Feet Shipped (000's)

	Total	Averages	
	Reported	Mean	Median
1999	8,162	510	352
1998	7,982	665	438
1997	12,371	476	286
1996	9,030	311	181
1995	8,800	353	268
1994	7,000	259	198

*1997-1994 figures include integrated manufacturers.

C. 1999 Gross Sales

Twenty-one (21) respondents reported 1999 gross sales attributable to floors shipped was \$293.6 million. The mean average per respondent was \$14.0 million while the median average was \$10.7 million. A high standard deviation indicates the responses were widely scattered. 1999 mean average gross sales were down from \$17.8 million in 1998 while the median average declined from \$14.3 million in the prior year.

Wholesale Manufacturer Gross Sales (in Millions)

Year	Total	Mean	Median
1999	\$293.6	\$14.0	\$10.7
1998	267.5	17.8	14.3
1997*	403.9	14.4	8.0

*1997 includes integrated manufacturers.

If the reported 1999 gross sales for each respondent were divided by the number of floors produced for that respondent, we can look at a rough measure of sales price per floor. The range of prices per floor was a low of \$2,230 to a high of \$54,688 with a mean average of \$13,628 and a median average of \$18,350. Caution must be used in analyzing this data as the reported gross sales figures may include revenues from items other than sales of floors and the percentage of other revenues included for each respondent may be different. In addition, this survey treats all floors alike although there is certainly a dramatic price difference between a stock 8' x 16' and a custom floor which can be as large as 18' x 84'. In light of these caveats, the range of prices per floor is understandable. Moreover, the calculated price per average floor correlates very highly with the percentage of custom floors reported by each manufacturer. Lower average prices per floor are generally stock units while higher prices are custom buildings.

In order to eliminate the bias created by different floor sizes, reported 1999 gross sales were divided by square feet produced for each respondent to generate sales per square foot. Sales per square foot ranged from \$12.39 to \$46.44 with a mean average of \$29.48 and a median average of \$29.84. In 1998, sales per square foot ranged from \$12.59 to \$41.43 with a mean of \$28.81 and a median of \$28.22.

Average sales multiplied by the estimated number of domestic wholesale manufacturers in the MBI database generates an estimate of 1999 sales.

Mean \$14.0 million x 165 = \$2.31 billion
 Median \$10.7 million x 165 = \$1.77 billion

Given a large standard deviation, the 1999 median average is probably a more reliable statistic. Thus, estimated industry sales by wholesale manufacturers is approximately \$1.77 billion in 1999, an decrease of 33% from the prior year's estimate.

In the Automated Builder 1999 survey, nineteen respondents reported aggregate gross revenue of \$258 million with a mean average of \$13.6 million and a median average of \$6.6 million. The 1999 Automated Builder mean differs by only 2.9% from the MBI mean while the median differs by 62% from the MBI result.

1999 Gross Sales

	<u>MBI Survey</u>	<u>Automated Builder</u>
Respondents	21	19
Total Gross Revenue	\$ 293.6 million	\$ 258.0 million
Mean Average	\$ 14.0 million	\$ 13.6 million
Median Average	\$ 10.7 million	\$ 6.6 million

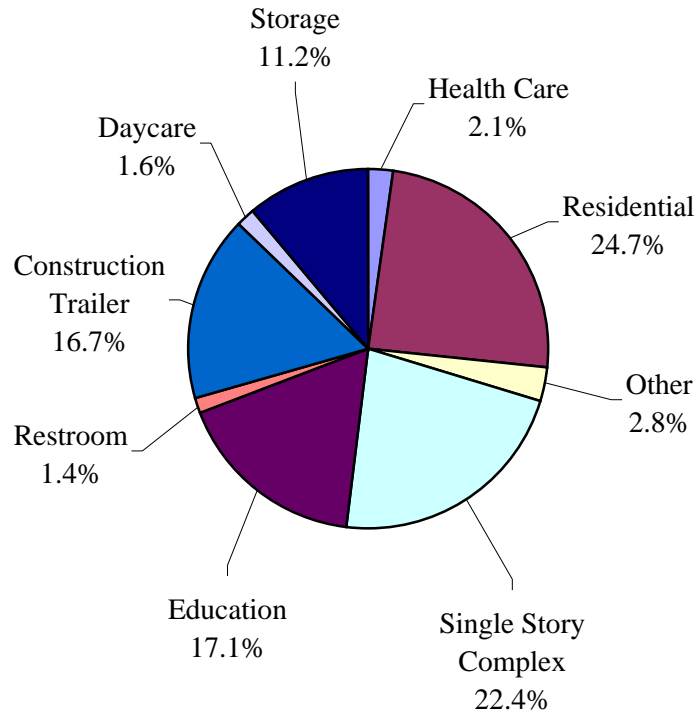
D. Warranty Expense

Seventeen (17) respondents reported 1999 warranty expenses ranged from .2% to 3% of gross revenues with a mean average of 1.3% and a median average of .9%. The same respondents reported 1998 warranty expenses ranged from .2 to 3% of gross revenues with a mean average of 1.1% and a median average of .7%.

E. Sales by Market Segment

Manufacturers were asked to break out the percentage of gross sales by end use market segment for 1999. The percentages were multiplied by the number of units produced for each manufacturer to get a unit weighted distribution.

1999 Sales by Market Segment



F. Other Data

Manufacturers were asked to provide responses to the following questions:

- average number of employees in 1999;
- estimated total production hours in 1999;
- % of units shipped on time as promised at order;
- slowest month of production as a percent of largest month;
- shipments were made into how many states;
- ninety percent (90%) of business conducted within how many miles of plant; and
- five largest customers constitute what percent of business.

The mean and median averages for 1997 to 1999 are set forth below:

	Mean Average			Median Average		
	1999	1998	1997	1999	1998	1997
Total Employees	120	135	101	92	86	85
Production Hours (Thousands)	221	243	216	157	132	84
On Time Delivery	87%	88%	83%	90%	90%	88%
Slow Month/High Month	42%	40%	44%	40%	31%	40%
Number States Shipped	8	13	6	8	9	4
Average Ship Radius (Miles)	305	383	329	250	275	250
Five Largest Customers	67%	65%	68%	80%	79%	80%

The mean average number of employees decreased from 135 in 1998 to 120 in 1999 while the median average increased from 86 to 92. The trend was the same for total production hours year to year; the mean average decreased from 243,000 to 221,000 while the median average increased from 132,000 to 157,000.

The percentage of units shipped “on time” remained constant at 90% (87% mean average) while the slowest month production as a percentage of largest month production increased to 40% (42% mean average). The five largest customers accounted for 80% of the wholesale manufacturer’s business based on the median average and two-thirds based on the mean average. While these figures were not production weighted, the larger manufacturers exhibited greater customer diversity.

Manufacturers were also asked to list the “biggest problems” encountered in 1999. The problems listed by manufacturers together with the frequency of responses (a manufacturer could list more than one problem) were:

Labor Shortage	6
Managing Production Volume	3
Inconsistent Backlogs	3
Regional/Stock Order Slowdowns	2

Summary—Wholesale Manufacturers

	1999 MBI Averages	
	<u>Mean</u>	<u>Median</u>
Gross Sales (millions)	\$14.0	\$10.7
Floors Shipped in 1999	1,026	548
Square Feet Produced	510,110	352,031
Gross Sales/Floors Produced	\$13,628	\$18,350
Gross Sales/Square Feet	\$29.48	\$29.84

III. DEALER RESULTS

The 1999 Dealer Questionnaire requested total floors in the lease fleet at December 31, 1999 together with break out information by various size categories; fleet utilization by category; average sales price (as % of original cost) of used units together with the average age; 1999 gross revenue detail and market segment information.

A. 1999 Dealer Gross Revenue

Twenty (20) dealers reported total 1999 gross revenue of \$560.7 million, down from \$807.5 million reported by twenty-five (25) dealers in 1998. The decrease in total dealer gross revenue from 1998 to 1999 is attributable solely to the composition of respondents in each sample. The total figures are essentially meaningless. Mean 1999 dealer gross revenue was \$28.0 million while median revenue was \$5.2 million. The data contains a large standard deviation which indicates widely scattered responses wherein median revenue is generally a more accurate measure of average.

Dealer Average Gross Revenue (in Millions)

<u>MBI Survey</u>	<u>Mean</u>	<u>Median</u>
1999	\$28.0	\$5.2
1998	32.3	2.8
1997	7.0	5.0
1996	16.7	4.4
1995	11.2	2.9
1994	12.0	3.2

The 1999 mean average of \$28.0 million is below the 1998 mean of \$32.3 million. The 1999 median average is well above both the 1998 median of \$2.8 million and the 1997 median of \$5.0 million. The 1999 sample has a smaller dispersion of responses resulting in a tightening of the averages. The 1998 sample included two disproportionate responses on the top side which inflated the mean while the 1999 sample included only one of the two.

Despite the “averages” coming closer together than in 1998, the large discrepancy between the mean and the median 1999 dealer gross revenue averages indicates a small sample with a wide variance in the responses. The highest reported total gross revenue figure is more than 2,459 times the smallest. Even more startling, the highest reported 1999 gross rent figure is 41,613 times the smallest. The composition of total dealer revenue (in thousands) by type together with the 1999 mean average and the 1999 median average is set forth on the following page.

1999 Dealer Gross Revenues (in Thousands)

	<u>Reported Total</u>	<u>Mean Average</u>	<u>Median Average</u>
Rental Income	263,525	15,501	2,150
Sales, New	127,420	6,706	2,375
Sales, Used	34,147	2,439	684
Freight In/Out	32,218	2,014	225
Set-Up/Dismantle	57,261	4,090	511
Service	4,856	405	185
Other	<u>41,299</u>	<u>4,130</u>	<u>325</u>
Total	560,726	28,036*	5,185*

*Average columns do not add up as number of respondents differed for each category.

Rental income accounted for 47% of total reported 1999 dealer revenue, down from 50% in 1998 but well over the 38.5% from 1997. While mean rental income was \$15.5 million, down from \$20.2 million in 1998, median rental income increased threefold from 700 thousand in 1998 to \$2.15 million in 1999. Sales of new units rose from 17.9% of 1998 total dealer revenue to 22.7% of 1999 total revenue. Both measures of average also increased year to year with the mean moving from \$6.0 million to \$6.7 million and the median from \$2.0 million in 1998 to \$2.38 million in 1999.

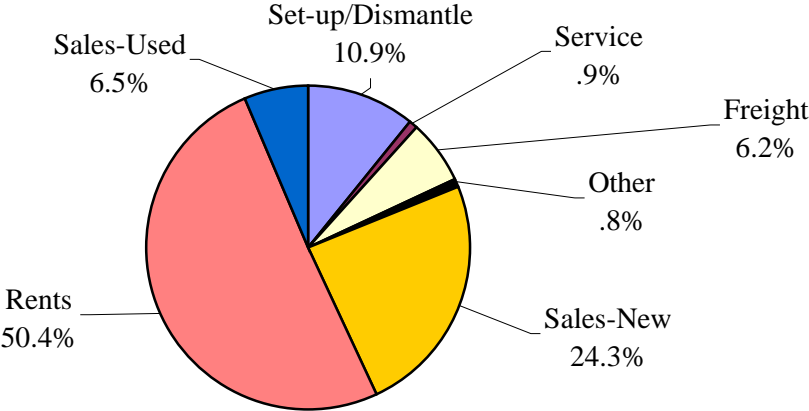
Set-up and dismantle revenue as a percentage of total 1999 dealer revenue more than doubled from 4.9% in 1998 to 10.2% in 1999. Not surprisingly, both measures of average dealer set-up and dismantle rose significantly with the mean rising from \$2.5 million in 1998 to \$4.1 million in 1999 and the median from 225 thousand to 511 thousand over the same period.

The increase in set-up and dismantle revenue was absorbed by large decreases in sales of used units, freight revenue and service and maintenance revenue. Sales of used units declined from 10.1% of total 1998 revenue to 6.1% of total 1999 revenue. Although the mean average declined from \$3.7 million to \$2.4 million, the median actually rose from 231 thousand to 684 thousand. Likewise, freight revenue declined from 9.6% of 1998 total dealer revenue to 5.7% of 1999 revenue. Just as with used sales, the mean average declined (\$4.3 million to \$2.0 million) while the median increased (\$74 thousand to \$225 thousand). Service and maintenance revenue dropped from 2.9% of total 1998 revenue to only .9% of 1999 total revenue with the same impact on both measures of average.

“Other” increased substantially in terms of overall percentage and for both averages. This is probably due to the inclusion of one substantial abnormal response which heavily skewed the results. If this outlier were eliminated, mean other revenue drops to \$437 thousand from \$4.1 million and the median declines from the reported \$325 thousand to \$150 thousand. In addition, if the single deviant “other” response is eliminated, the overall composition of total 1999 dealer gross revenue is impacted; rental income rises to 50.4% of the adjusted total, new sales 24.3%; used sales 6.5%; freight 6.2%; set-up 10.9%; service .9%; and other drops to .8%.

By eliminating the outlying “other” response and focusing on median averages, it is possible to get a good look at the revenue sources for an “average” dealer. The average dealer generated \$6.3 million gross revenue in 1999 from rental income (34.3%); sales of new units (37.8%); sale of used units (10.9%); freight (3.6%); set-up and dismantle (8.1%); service (2.9%); and other (2.4%).

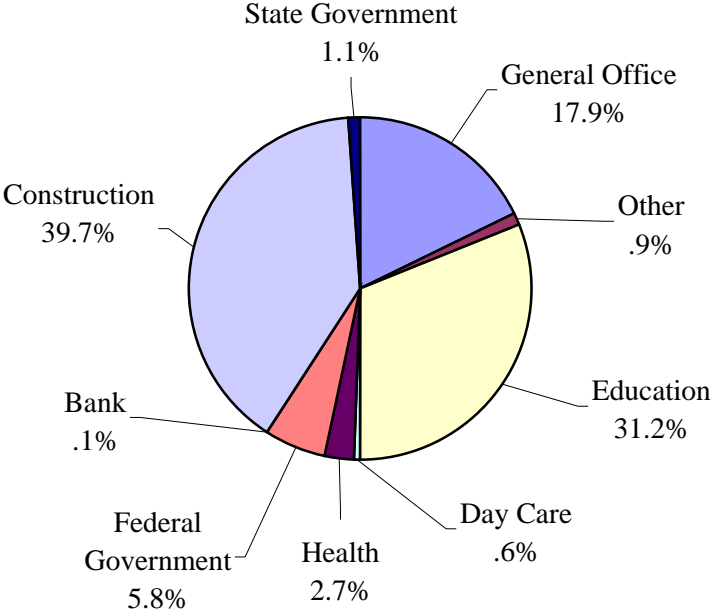
Source of 1999 Gross Revenues, Percent of Total*



*Data adjusted for one abnormal “other” response.

Survey respondents were asked to allocate total 1999 gross revenues over nine market segments. The percentages from each respondent were then multiplied by that respondents reported total revenue in order to provide the appropriate weight to each response. This weighting of responses provides a better picture of market participation than in prior years surveys.

Dealer Market Segments, Median 1999 Averages



Field offices for construction sites remains the largest market segment for dealers in 1999. Nearly 40% of 1999 dealer revenues were derived from the construction marketplace. Dealers reported a wide range of dependence on this segment, from a low of 0% of annual gross revenues to a high of 100% with a mean of 34% and a median of 24%. Education provided 31.2% of total reported 1999 dealer gross revenue with a mean of 19%, a median of 19% and a range of 0 to 100% of annual gross revenues. General office constituted 17.9% of 1999 dealer revenues. Coupled with construction and education, the three largest markets accounted for nearly 90% of annual dealer revenue.

Gross Dealer Revenue was derived from the following markets in the past three years.

<u>Revenue Source*</u>	<u>1999 Percent</u>	<u>1998 Percent</u>	<u>1997 Percent</u>
Construction	40	34	29
Education	31	26	29
General Office	18	17	17
Health Care	3	3	2
Other	1	6	5
Federal Government	6	3	5
State Government	1	4	5
Banks	-	4	6
Day Care	—	—3	—2
Total	100%	100%	100%

*1998 and 1999 figures are unweighted.

B. Lease Fleet Composition

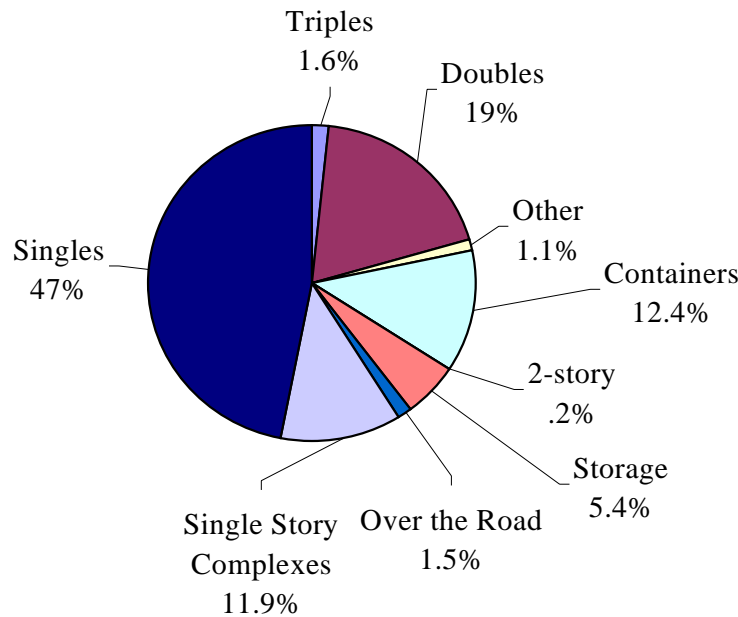
Dealers reported a total of 108,827 units in their lease fleets at December 31, 1999, down from 154,366 reported last year. The mean average was 6,402 units per dealer down from 11,877 in 1998 while the median average was 675, up from 480 the prior year. The data indicates a large standard deviation which implies that the individual responses were widely scattered with significant outliers. The median was very low relative to the mean indicating that relatively few respondents had very large numbers of modular units in their lease fleets. The lease fleet of the two largest respondents in 1999 comprised more than 84% of the total floors in the sample indicating a substantial skew. Indeed, the largest reported fleet was 26,449 times larger than the smallest in 1999. Thus, the median is a far better estimate of the size of a typical industry participant's lease fleet.

Units Per Dealer Lease Fleet

	<u>1999</u>	<u>1998</u>	<u>1997</u>	<u>1996</u>
Mean (weighted average)	6,402	11,877	4,069	3,718
Median (middle response)	675	480	627	624

The single unit, leased for a variety of uses including a construction site field office, classroom, sales office or bank building, accounted for 47% of total 1999 dealer lease fleets, while containers, storage units and over the road trailers accounted for 19.3% of total units. Together, the containers, storage units, over the road trailers and singles represented nearly two-thirds of total reported units. Doublewides accounted for 19.0% of dealer fleets, down from the 1998 share of 19.6%. Triples were fairly level with prior years at 1.6% while single story complexes increased from 5.3% in 1998 to 11.9% in 1999.

**Percent of Mobile Offices and Modular Buildings
In Lease Fleets at December 31, 1999**



C. Lease Fleet Utilization

Eighty-five percent (84.7%) of all Mobile Offices and Modular Buildings available for lease were actually on lease at December 31, 1999, an increase from the 81.5% reported at the end of 1998. The results in 1998 were skewed by a relatively large number of “other” units with a low utilization. If the “other” category in 1998 were removed, aggregate weighted utilization rises in 1998 to 84%.

Percent of Mobile Offices and Modular Buildings on Lease at December 31

	<u>1999</u>	<u>1998</u>	<u>1997</u>	<u>1996</u>	<u>1995</u>	<u>1994</u>
Single*	82	84	90	87	82	83
Double	89	76	92	87	83	76
Triple/Quad	83	77	88	84	88	75
Complex	<u>87</u>	<u>88</u>	<u>88</u>	<u>96</u>	<u>95</u>	<u>79</u>
Total**	85	82	90	87	84	83

*1999 includes containers 86%; storage 84%; over-the-road 88%.

**Weighted average.

D. Sale of Used Units

Survey respondents reported that they sold used Mobile Offices and Modular Buildings in 1999 for a mean average 111% of original cost. The median average was 115% of original cost and the sample had a very small standard deviation.

The mean age of used units sold in 1999 was 8 years and the median age was 7 years with a symmetrical but broad distribution.

The 1999 results are very consistent with those reported in prior years. In 1998, used units were reported as sold for 104% (mean) of original cost with a median of 110% of original cost.

<u>MBI Survey</u>	<u>Mean Average Sales Price*</u>	<u>Average Age in Years</u>
1999	111	8.0
1998	104	8.8
1997	102	7.5
1996	99	8.2
1995	97	6.8
1994	85	6.5

*Percent of original cost.

The survey was not designed to provide data to correlate age and sale prices of used modules. While the data might have been so used, there was no significant correlation. Although one might intuitively expect older buildings to sell for less than newer buildings, maintenance and other external factors appear to have a greater impact on the sales prices for used buildings.

Summary 1999 Dealer Lease Fleets

<u>Type</u>	<u>Total Units</u>	<u>Mean</u>	<u>Median</u>	<u>On-Lease</u>	<u>Utilization</u>
Singes	51,141	4,262	833	41,844	81.8%
Doubles	20,646	1,475	135	18,452	89.4%
Triples	1,736	174	22	1,437	82.8%
Containers	13,469	1,684	299	11,546	85.7%
Storage	5,907	1,181	1,012	4,955	83.9%
Over-the-Road	1,620	810	810	1,428	88.1%
1-Story	12,981	1,854	70	11,311	87.1%
2-Story	180	180	180	140	77.8%
Other	1,147	573	573	1,022	89.1%
Total	108,827	12,193	3,934	92,135	84.7%

IV. INTEGRATED RESULTS

A separate Integrated Manufacturer questionnaire was prepared by the MBI in 1998 and 1999. Last year was the first time information was solicited from the Integrated Manufacturers with a questionnaire which differed from that used for the Wholesale Manufacturers and the Dealers. Consequently, comparative data is only available for 1998 and 1999.

A. Manufacturing Data

Integrated manufacturers reported total 1999 gross sales of \$125.2 million with a mean average of \$15.7 million and a median average of \$13.5 million. These figures are up from the \$114.9 million gross sales in 1998 and the 1998 mean of \$10.4 million and median of \$11.0 million. The integrated manufacturers produced 2,790 floors with a mean average of 310 floors and a median average of 266 floors. The floors constituted 1.5 million square feet with a mean average of 186,220 square feet and a median average of 171,000 square feet. The number of floors, total square footage and all averages related thereto are less than 1998 figures. Total gross sales, floors and square footage produced are each significantly less than the wholesale manufacturer results, and the mean and median averages for each are significantly less. This indicates that on average, an integrated manufacturer has less capacity than that of the wholesale manufacturer summarized in Section I above.

Integrated Manufacturers

	1999 Averages		1998 Averages	
	Mean	Median	Mean	Median
Gross Sales (in Millions)	\$15.7	\$13.5	\$10.4	\$11.0
Floors Produced	310	266	397	339
Square Feet Produced	186,220	171,000	246,095	256,069
Gross Sales/Floors Produced	\$52,618	\$53,759	\$34,022	\$24,865
Gross Sales/Square Feet	\$78.77	\$63.41	\$46.26	\$43.51

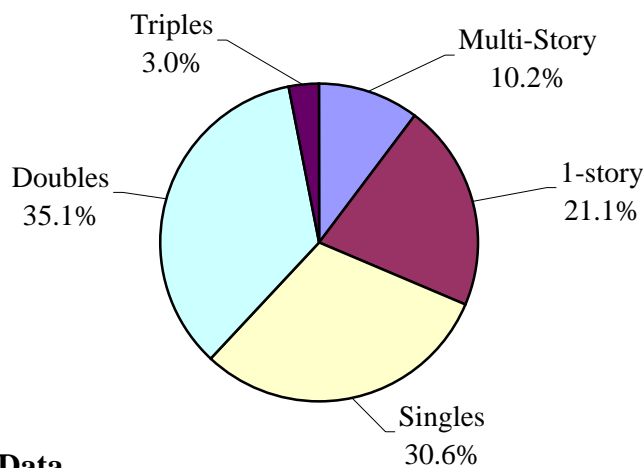
While the capacity may be less for integrated manufacturers, the gross sales per floor and gross sales per square foot are significantly higher than their wholesale counterparts.

Gross sales per floor produced for integrated manufacturers range from a low of \$12,673 to a high of \$82,727 with a mean average of \$52,618 and a median average of \$53,759. These averages are significantly above the 1998 mean of \$34,022 and median of \$24,865. Compare also to a mean of \$13,628 for wholesale manufacturers and median of \$18,350. This indicates integrated manufacturers do not produce stock units in bulk but tend to focus on custom projects. The data also indicates far less dispersion meaning the integrated manufacturers are closer in size to each other than are the wholesale manufacturers. Gross sales per square foot for integrated manufacturers ranged from \$29.09 to \$156.43 with a mean of \$78.77 and a median of \$63.41.

These averages are well in excess of the wholesale manufacturers' mean of \$29.48 and median of \$29.84. There were six integrated manufacturers with calculated sales per square foot in excess of the upper range for the wholesale manufacturers.

The integrated manufacturers reported producing 30.6% singles, 35.1% doubles, 3.0% triples, 21.1% single-story complexes and 10.2% multi-story buildings. Last year integrated manufacturers reported producing 16% singles, 32% doubles, 4% triples, 45% single story complexes and 3% multi-story complexes.

**Integrated Manufacturers
1999 % of Units Produced by Type**



B. Integrated Dealer Data

The results presented in this section are from member and non-member Integrated Manufacturers that have their own lease fleets.

Two integrated dealers reported 1999 gross lease fleet revenue of \$2.5 million with a mean average of \$1.27 million and a median average of \$1.27 million. This is a dramatic reduction from the \$11.6 million total revenue reported by five respondents in 1998 with a mean of \$2.3 million and a median of \$750,000. Rental income accounted for nearly 62% of total 1999 revenue with a mean average of \$787,000 and a median average of \$787,000. Set-up and dismantle constituted 8.4% of revenue in 1999 while sales of used units accounted for 13.2% and freight accounted for 12.3% of revenue.

Integrated dealers reported 1999 lease fleets included 840 floors with a mean average of 280 floors and a median average of 257 floors. Utilization was 83.7% in the aggregate. The reported integrated dealer fleets consist of 363 singles, 176 floors configured into doubles, 24 floors for triples, 51 containers, 4 storage trailers, 172 over the road trailers and 50 floors for single-story complexes.

Used floors sold out of the lease fleets by integrated dealers in 1999 were six years old and were sold for 94% of original cost.

V. CONCLUSIONS

A. Selected Data Recap

Set forth below is a summary of some of the information detailed in sections II and III of this survey.

		---Averages---	
<u>Wholesale Manufacturers</u>	<u>Totals</u>	<u>Median</u>	<u>Mean</u>
Floors Shipped in 1999	21,541	548	1,026
Square Feet Shipped	8.16 million	352,031	510,110
1999 Gross Sales	\$293.6 million	\$10.7 million	\$14.0 million
 <u>Integrated Manufacturers</u>			
Floors Shipped in 1999	2,790	266	310
Square Feet Shipped	1.5 million	171,000	186,220
1999 Gross Sales	\$125.2 million	\$13.5 million	\$15.7 million
 <u>Dealers</u>			
	<u>Totals</u>	<u>Median</u>	<u>Mean</u>
1999 Gross Revenue	\$560.7 million	\$5.2 million	\$28.0 million
1999 Lease Revenue	\$263.5 million	\$2.2 million	\$15.5 million
1999 New Sale Revenue	\$127.4 million	\$2.4 million	\$6.7 million
Lease Fleet (floors)	108,827	675	6,402
Lease Fleet Utilization	--	84.7%	--
Used Units Sold (as % of cost)	--	115%	111%
 <u>Integrated Dealers</u>			
1999 Gross Revenue	\$ 2.5 million	\$1.3 million	\$1.3 million
Lease Fleet (floors)	840	257	280
Lease Fleet Utilization	--	83.7%	--
Used Units Sold (as % of cost)	--	94%	--

B. 1999 Industry Estimates

Using the averages provided by the MBI Survey and the number of dealers, integrated manufacturers and wholesale manufacturers in the MBI database, it is possible to estimate certain information about the domestic industry as a whole. The calculated information is reliable only to the extent the statistical averages are accurate and the estimates of industry participants are accurate.

Based upon **median averages**, the MBI estimates 1999 industry totals as follows:

1. New Floors Shipped in 1999 90,420
2. New Square Feet Shipped in 1999 58,085,115
3. 1999 Gross Sales by Manufacturers \$1,765,500,000
4. 1999 Gross Sales by Integrations \$1,269,000,000
5. 1999 Dealer Gross Revenue \$1,170,000,000
6. Floors in Dealer Lease Fleets 151,875
7. Floors in Integrated Lease Fleets 24,158

Based upon median averages and the number of companies involved in the commercial mobile office and modular building industry, the MBI estimates 1999 aggregate gross revenues of \$4.20 billion.

C. Residual Values

The economic value of a leased mobile office or modular building is determined by comparing the total cost of the asset with the income producing capacity over its useful life. Cost includes the initial manufactured cost plus all expenditures for items such as maintenance and taxes incurred during its useful life. Income includes lease revenue during the buildings useful life and sale value upon disposition. Residual value is understood to be the anticipated “value” of the building at the end of the lease. Dealers were asked the average sales price of units sold from their lease fleet as a percentage of original cost.

Dealers reported eight year old used lease fleet units sold for a mean average of 111% of original cost, and a median average of 115% of original cost. The 1999 figures are once again up over the prior years. The mean average sales price of used fleet units was reported as 103.8% in 1998 and 102% in 1997.

D. Future Surveys

The MBI intends to conduct annual surveys in order to provide information about our dynamic industry to member organizations. A greater number of respondents to future surveys will provide more information. As the number of respondents increases, the level of confidence in the results will increase. Greater reliability of the survey results will promote market efficiencies, which will in turn attract capital. Additional capital will spur growth and contribute to the ever-increasing acceptance and use of our temporary buildings.