Staff Paper

Cost By Milk Sold and Herd Size, 1995

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This staff paper presents the 1995 financial and production results of a sample of Michigan dairy farms in two ways. First, the sample is divided into groups by size of herd; averages for each group of several costs and factors are shown. Second, the sample is divided by milk sold per cow; factors that vary with milk production are discussed. Appendix tables give all the cost data available from the accounting summary.

A major conclusion from this data is that neither size nor production per cow consistently explains much about the major variability in profits that occur from farm to farm, given the analysis done. Average results on a few farms with over 300 cows may be of cursory interest.

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Introduction

This staff paper presents the 1995 financial and production results of a sample of Michigan dairy farms in two ways. First, the sample is divided into groups by size of herd; averages for each group of several costs and factors are shown. Second, the sample is divided by milk sold per cow; factors that vary with milk production are discussed. Appendix tables give all the cost data available from the accounting summary.

A major conclusion from this data is that neither size nor production per cow consistently explains much about the major variability in profits that occur from farm to farm, given the analysis done. Average results on a few farms with over 300 cows may be of cursory interest.

The data source is Michigan State University's Telfarm accounting system. It is supported by extension field staff. Farmers either mail in forms to be processed, or keep monthly records on personal computers and mail monthly balances on disk to the university. Farms in the system were included if milk made up 70 percent or more of income, and if the records were complete. This is not a random sample. For the size groups in Table 1, going from small to large, the number of farms were 32, 34, 31, 40 and 9, respectively. Six of the 9 farms in the 300 or more group are also among the 40 farms in the 150 or more group. Data from the other 3 were not received in time to process with 150 or more group. The 150 or more group had an average of 253 cows. The 300 or more group averaged 528 cows.

Variations with Size

Table 1 shows the average management income for each size group. This is a profit measure. Income includes inventory changes. Costs include a noncash charge of about 6.5 % interest on equity, plus $6.70 per hour for unpaid operator and family labor. For this sample of farms, Table 1 indicates size groups did not correlate well with management income in 1995.

Table 1. MANAGEMENT INCOME AND PRODUCTION FACTORS
Michigan Telfarmers, 1995

Number of Cows	Management Income	Milk Sold Per Cow	Production Cost/Cwt.	Acres Farmed
	$ Per Farm	lbs.	$ Per Cwt.	Per Cow
Less than 65	(20,294)	16,285	14.46	7.0
65 - 99.9	11,269	18,845	11.71	5.5
100 - 149.9	(1,326)	20,729	12.38	5.7
150 or more	(27,885)	20,322	12.55	3.3
300 or more	46,332	21,732	11.28	2.6

The 9 farms with 300 or more cows made a lot more money in 1995, on the average, than did the smaller farms. They also sold the most milk per cow, had the lowest cost of producing a hundred pounds (cwt.) of milk, and farmed the least acres per cow. The acres farmed are owned plus rented. Also, the 300 or more group averaged to sell over $50,000 of cash crops including corn, soybeans and wheat. Those with fewer than 65 cows had about $10,000 of cash crop sales.

Table 2 shows the livestock costs, summarized into major categories, resulting from averaging all the farms together. Note that feed costs, in this special ranking, are 53 percent of total costs. For this paper, it is assumed all farm grown feeds are purchased from the crops enterprises on the farm. In other words, cost allocation has been done so as to identify only the costs directly associated with livestock. The cropping activity costs are left out of Table 2. The percent of total pertains only to the livestock costs.

Table 2. AVERAGE COSTS PER FARM, LIVESTOCK ONLY
137 Dairy Telfarmers, 1995

Category	Total Farm	Per Cow	Percent of Total
	dollars		%
Feed Fed	186,564	1,403	53
Livestock Services	69,369	522	19
Labor	49,116	369	14
Power & Equipment	20,249	152	6
Buildings, Improvements	15,642	118	4
Other Costs	10,972	83	3
Land Charges	1,298	10	1

The per cow columns in Table 3 pertain only to the milk producing side of the business. Feed cost includes purchased feed plus "buying" the farm produced feed at a conservative market value. Management income for the whole farm in Table 1 was split between cows and crops in Table 3. It appears dairy farmers lose money on their cropping enterprises. Most recover it on the cow side. This has been the case for over 2 decades in Michigan State University's farm accounting summaries.

Table 3. DAIRY INCOME PER COW AND PER ACRE
Michigan Telfarmers, 1995

Number of Cows	Dairy Income	Feed Cost	Non-Feed Costs	Management Income	
	Per Cow	Per Cow	Per Cow	Per Cow	Per Acre
Less than 65	$2,343	$1,385	$1,211	($253)	($26)
65 - 99.9	2,701	1,354	1,139	208	(12)
100 - 149.9	2,874	1,472	1,291	111	(21)
150 or more	2,770	1,392	1,283	95	(61)
300 or more	3,028	1,292	1,352	384	(114)

The feed costs are split up in Table 4. "Other feeds" are nearly all cash purchases. They include heifer feed, minerals, grain and protein supplements for the milking herd. It appears the 300 or more group tends to feed more corn silage and less hay crops, while buying more of their high energy feeds. Remember, size is somewhat related to production per cow, which in turn influences feed costs. Oats and barley typically make up less than 8 % of the costs in their column.

Table 4. BREAKDOWN OF DAIRY FEED COSTS
Michigan Telfarmers, 1995

Number of Cows	Corn, Oats, & Barley	Corn Silage	Hay and Pasture	Other Feeds
		$ Per Cow		
Less than 65	223	142	582	438
65 - 99.9	184	152	570	448
100 - 149.9	289	142	532	509
150 or more	235	186	309	662
300 or more	119	229	210	734

Table 5 shows operator labor per cow is quite high on the smaller farms, while hired labor becomes a more important factor on the larger farms. On smaller dairies it appears that how well the operators manage their own time is a big factor in labor efficiency. More management attention is needed on bigger farms to supervise the hired labor force if labor costs are to be kept in check and efficiency maintained. Operator and unpaid family were charged a noncash $6.70 per hour.

Table 5. LABOR COST PER COW BY SOURCE
Michigan Telfarmers, 1995

Number of Cows	Operator	Unpaid Family	Hired	Total
		$ per cow		
Less than 65	242	115	99	456
65 - 99.9	122	75	165	362
100 - 149.9	78	71	233	382
150 or more	33	43	281	357
300 or more	9	19	351	379

Table 6 shows the machinery and annual costs assigned to crops or dairy production. The trend shows that larger farms have larger machinery investments per acre, and per cow. In 1995, the annual operating costs were also higher on the larger farms. Building investment and annual costs show a pattern similar to Table 6 (see Appendix Tables A and B).

Table 6. MACHINERY: CROPS VERSUS DAIRY
Michigan Telfarmers, 1995

Number of Cows	Crops Machinery Invested	Crops Machinery Costs	Dairy Equipment Invested	Dairy Equipment Costs
	$ Per Acre		$ Per Cow	
Less than 65	91	65	170	136
65 - 99.9	88	92	163	143
100 - 149.9	103	91	161	151
150 or more	159	112	243	160
300 or more	151	118	231	150

Managers invest in machinery to reduce labor costs and physical effort. The average dairy labor cost (operator + unpaid family + cash hired) going from small to large groups was $456,

$362, $382, $357, and $379 per cow, respectively. It's tempting to say the 300 or more group invested (231-170) = $61 more in dairy equipment per cow than did those with less than 65 cows, and thereby saved (456-379) = $80 per cow in annual dairy labor costs. Do the same calculation comparing the 100-149.9 group and the 300+ group, and size advantage is not as clear!

Table 7 shows 2 cost items that tend to be higher per cow on the larger farms. Health care is made up of veterinary, medicine and drug costs. Telfarm assigns BST expenses to health cost. Bedding makes up most of the right most column in Table 7.

Table 7. VETERINARY AND BEDDING COSTS PER COW
Michigan Telfarmers, 1995

Number of Cows	Health Care	Bedding, DHI & Registrations
	$ Per Cow	
Less than 65	52.03	52.45
65 - 99.9	63.54	51.06
100 - 149.9	105.29	57.81
150 or more	102.80	63.57
300 or more	100.98	79.82

Few costs per cow in 1995 trended downward as size groupings increased. Table 8 shows insurance costs did go down. This includes insurances other than vehicle insurance.

Table 8. INSURANCE COSTS PER COW BY FARM SIZE
Michigan Telfarmers, 1995

Number of Cows	Insurance Per Cow
	$
Less than 65	28.69
65 - 99.9	25.44
100 - 149.9	22.58
150 or more	19.06
300 or more	17.91

Size Versus Production Level

Up to this point, I have shown how per unit dairy farm costs vary by size of farm. Rather than get bigger to get more profit, some would rather get better. Better usually means more milk sold per cow. Using this measure, the next few tables show how higher producing herds control their various costs.

Management income per cow tends, although not smoothly, to go up as pounds of milk sold per cow increases. The 26 farms with under 15,000 pounds of milk sold per cow lost $-120 per cow in 1995. Those 25 farms with over 23,000 pounds of milk made $373 per cow and earned 18.8 percent on their dairy investment. Table 9 shows both these measures of ecnomic profit.

Table 9. MANAGEMENT INCOME AND RETURN ON INVESTMENT, PER COW
137 Michigan Telfarmers, 1995

Pounds of Milk Sold Per Cow	Management Income	Return on Owned Capital
	$ per cow	
Under 15,000	-120	0.6
15,000 - 16,999	-182	-2.1
17,000 - 18,999	-133	0.3
19,000 - 20,999	66	8.9
21,000 - 22,999	379	20.8
23,000 or More	373	18.8

Although the trend is again not smooth, the farms in Table 10 with higher production per cow also tend to be larger. Net worth appears not to be associated with production level per cow, which is a change from previous years.

Table 10. COWS AND NET WORTH POSITION, TOTAL FARM
137 Michigan Telfarmers, 1995

Pounds of Milk Sold Per Cow	Number of Farms	Number of Cows	Net Worth as % of Assets
Under 15,000	26	81	73
15,000 - 16,999	25	106	73
17,000 - 18,999	23	152	81
19,000 - 20,999	20	144	75
21,000 - 22,999	18	144	79
23,000 or More	25	180	76

Cost control does not always mean cost minimization. Table 11 shows that as milk per cow went up, feed costs also tended to go up. The return above feed costs is more dramatic, suggesting income sources other than milk, such as cow sales and inventory changes may differ by production level.

Table 11. FEED COSTS AND RETURN ABOVE FEED COSTS, PER COW

137 Michigan Telfarmers, 1995

Pounds of Milk Sold Per Cow	Feed Disappearance	Return Above Feed Costs
		$s per cow
Under 15,000	1,179	902
15, - 16,999	1,362	847
17, - 18,999	1,260	1,042
19, - 20,999	1,420	1,331
21, - 22,999	1,347	1,771
23,000 or More	1,665	1,841

Unlike variation in size, the labor cost per cow did not go down very much as milk per cow increased. The labor was highest for the highest milk production group, but did not correlate well with production changes.

Livestock services did go up with production, as shown in Table 12. Some, but not all, of the livestock services components are shown. Marketing and trucking are left out; they go up directly with the amount of milk sold. Not so obvious is why breeding, and health care, and supplies, tend to increase per cow as production per cow goes up. Again, it appears cost control is better than cost elimination.

Table 12. SELECTED LIVESTOCK COSTS PER COW

137 Michigan Telfarmers, 1995

Pounds of Milk Sold Per Cow	Semen Breeding	Health Care	Supplies	Total Livestock Services
		$s per cow		
Under 15,000	12.13	55.47	46.59	365
15, - 16,999	13.58	62.98	42.24	424
17, - 18,999	17.41	94.60	68.84	499
19, - 20,999	25.73	100.34	80.93	540
21, - 22,999	37.51	91.69	67.78	550
23,000 or More	34.95	124.32	106.06	642

Figure 1 shows the livestock costs on a per hundred weight (Cwt) basis. The curves both increase and decrease going from the lower to higher levels of milk sold per cow. Of these selected cost items, marketing is the largest. It is made up of milk hauling, assessments, marketing dues and cattle trucking charges.

The remaining cost items you might think about were not closely related to production per cow. The substantially higher net income levels earned by dairy farmers in this sample seemed more related to knowing where to spend their operating funds as opposed to trying to minimize all costs. It appears that to get more milk per cow, one needs to judiciously spend more on feed, semen, health care, and marketing services while holding other costs about average.

Figure 1.

Source: Roger Betz

Appendix

Appendix Tables A, B, C, and D contain a full listing of the livestock and crop cost categories output by the Telfarm system. Only selected items were summarized in the above paper. The reader is invited to peruse the appendix for further understanding of dairy farm cost structures and variations in this sample for 1995.

APPENDIX TABLE A.
Telfarm Dairy Averages, 1995, By Size

		Less than 65 Cows	65-100 Cows	100-150 Cows	150 or more Cows	300 or more Cows
Number of farms		32	34	31	40	9
Net Worth		$357,940	$496,689	$694,353	$1,196,228	$2,001,913
Net worth as % of assets		80%	79%	81%	72%	65%
Total Tillable Acres	324.4	447.0	705.3	828.9	1,371.5	
Number of Cows		46.51	81.13	124.78	252.56	527.55
Milk sold per cow, lbs.		16,285	18,845	20,729	20,322	21,732
FEED COSTS ($ Per Cow):						
Corn		196	168	275	231	119
Corn silage		142	152	142	186	228
Oats		17	3	5	2	1
Barley		10	13	9	2	0
Hay equivalent		547	554	517	306	209
Pasture		35	16	15	3	1
Other feed cost		428	448	509	662	734
Total Feed Fed		$1,375	$1,354	$1,472	$1,392	$1,292
LIVESTOCK COSTS ($ Per Cow):						
Operator labor		241.85	121.61	77.98	32.89	8.80
Family Labor		115.32	75.48	71.09	42.55	18.86
Hired labor		98.92	164.73	232.87	281.24	350.98
Total Labor		456.09	361.82	381.94	356.68	378.64
Repairs & vehicle maint.		66.27	74.04	84.79	76.50	73.55
Fuel, oil, grease		6.04	6.16	7.25	7.92	6.82
Depreciation		54.00	52.95	48.99	60.35	55.08
Interest on machines		10.14	9.66	9.55	15.03	14.41
Total Machinery		136.45	142.81	150.58	159.80	149.86
Repairs		6.79	13.33	11.73	15.08	17.34
Insurance		28.69	25.44	22.58	19.06	17.91
Depreciation		38.30	40.63	45.04	71.82	75.88
Interest, buildings		12.50	15.11	13.52	32.80	37.52
Total Buildings		86.28	94.51	92.87	138.76	148.65
Semen & breeding		21.64	20.92	27.29	25.26	25.30
Vet., med., drugs		52.03	63.54	105.59	102.80	100.98
Marketing, trucking		151.53	158.44	180.34	163.70	172.59
Livestock supplies		52.39	52.75	94.45	73.96	89.08
DHIA, reg., bedding		52.45	51.06	57.81	63.57	79.82
Interest, livestock		101.79	103.24	109.12	105.07	104.04
Total Livestock		431.83	449.95	574.60	534.36	571.81
Land taxes		4.72	5.44	3.95	13.70	23.21
Interest on land		1.27	1.06	0.60	0.57	0.26
Land rent		0.00	0.00	0.00	0.00	0.00
Total Land		5.99	6.50	4.55	14.27	23.47
Utilities		73.42	64.32	69.70	62.52	62.10
Miscellaneous		20.90	19.11	16.75	16.43	17.64
Total Other		94.32	83.43	86.45	78.95	79.74

APPENDIX TABLE B.
Telfarm Crop Averages, 1995, By Size

	Less than 65 Cows	65-100 Cows	100-150 Cows	150 or more Cows	300 or more Cows
OWNED ACRES of crops:					
Corn	47	76	115	149	235
Corn Silage	26	35	38	104	235
Hay Crops	93	105	118	186	224
Pasture	29	25	20	11	11
Wheat	8	18	16	19	60
Soybeans	12	14	12	26	41
Oats	9	2	4	5	0
Barley	4	1	5	2	0
YIELD PER ACRE, owned crops					
Corn	96.3	112.0	114.9	118.6	103.5
Corn Silage	9.8	14.1	15.2	17.0	18.7
Hay Crops	3.4	4.6	4.6	4.6	5.5
Pasture	2.3	2.0	3.5	2.2	1.9
Wheat	46.0	49.2	51.7	49.9	58.1
Soybeans	40.6	41.4	39.8	38.6	39.3
CROP COSTS ($ per acre)					
Operator labor	29.45	18.78	12.51	6.96	2.15
Family Labor	14.04	11.65	11.40	9.01	4.60
Hired labor	12.05	25.43	37.35	59.52	85.68
Total Labor	55.54	55.86	61.26	75.49	92.43
Repairs & vehicle maint.	17.83	28.59	30.14	30.92	30.95
Fuel, oil, grease	10.28	10.30	12.47	14.40	13.94
Custom hire, lease	5.09	13.29	10.97	14.89	23.08
Depreciation	26.37	34.74	31.34	42.01	40.38
Interest on machines	5.42	5.21	6.14	9.86	9.43
Total Machinery	64.99	92.13	91.06	112.08	117.78
Repairs, conservation	2.18	5.72	4.20	6.27	7.36
Insurance	3.39	3.44	3.20	3.63	3.69
Lease	0.08	0.96	1.79	8.41	20.71
Depreciation	4.09	4.92	5.16	8.09	7.14
Interest, buildings	1.78	2.11	1.75	3.86	3.94
Total Buildings	11.52	17.15	16.10	30.26	42.84
Fertilzer and lime	21.13	27.00	39.28	30.48	40.03
Supplies, packaging	1.07	0.44	1.34	-1.35	-4.39
Seeds, plants	10.75	12.94	17.73	15.21	17.28
Chemicals	11.77	15.02	12.56	19.35	27.75
Other	1.63	2.40	1.28	1.29	0.70
Interest on crops	7.52	10.00	10.86	15.56	19.12
Total Crop Expense	53.87	67.80	83.05	80.54	100.49
Land taxes	8.69	7.63	4.66	10.23	17.16
Interest on land	23.54	20.59	14.92	21.19	24.38
Land rent	8.74	16.00	28.52	30.14	51.61
Total Land	40.97	44.22	48.10	61.56	93.15
Utilities	2.20	1.92	2.07	1.94	1.90
Miscellaneous	2.55	2.95	2.69	3.48	4.31
Total Other	4.75	4.87	4.76	5.42	6.21

APPENDIX TABLE C.
Telfarm Dairy Averages, 1995, By Mik Per Cow

	POUNDS SOLD PER COW: Less than 15,000	15,000 - 16,999	17,000 - 18,999	19,000 - 20,999	21,000 - 22,999	23,000 or more
No. of farms	26	25	23	20	18	25
Net Worth	$425,754	$578,011	$745,994	$685,163	$830,555	$1,055,383
N.W. as % of Assets	73%	73%	81%	75%	79%	76%
Total Tillable Acres	401.3	506.3	563.9	669.2	715.1	731.7
Number of Cows	81.15	105.97	152.40	143.53	143.57	179.91
FEED COSTS ($ Per Cow):						
Corn	169	312	165	265	229	231
Corn silage	132	142	172	137	154	223
Oats	3	4	4	5	4	4
Barley	3	11	8	7	6	3
Hay equivalent	452	436	363	359	417	432
Pasture	30	17	14	3	5	2
Other feed cost	390	440	534	644	532	770
Total Feed Fed	$1,179	$1,362	$1,260	$1,420	$1,347	$1,665
LIVESTOCK COSTS ($ Per Cow):						
Operator labor	134.11	97.99	65.90	70.22	78.83	41.57
Family Labor	80.49	75.00	73.24	45.94	41.63	53.55
Hired labor	158.12	143.97	223.27	265.52	296.24	273.29
Total Labor	372.72	316.96	362.41	381.68	416.70	368.41
Repairs & vehicle maint.	57.39	76.60	67.48	81.66	83.98	85.82
Fuel, oil, grease	7.11	7.69	7.19	6.78	7.24	7.23
Depreciation	34.88	41.21	49.05	44.06	68.11	80.86
Interest on machines	8.92	8.68	9.19	11.12	14.42	18.55
Total Machinery	108.30	134.18	132.91	143.62	173.75	192.46
Repairs	8.99	4.78	12.94	10.18	24.00	16.00
Insurance	24.28	27.14	17.56	23.97	20.46	19.42
Depreciation	28.74	25.48	48.47	56.14	75.79	91.75
Interest, buildings	18.63	12.75	18.64	20.17	21.05	41.53
Total Buildings	80.64	70.15	97.61	110.46	141.30	168.70
Semen & breeding	12.13	13.58	17.41	25.73	37.51	34.95
Vet., med., drugs	55.47	62.98	94.60	100.34	91.69	124.32
Marketing, trucking	126.57	143.16	140.81	157.01	186.26	209.42
Livestock supplies	46.59	42.24	68.84	80.93	67.78	106.06
DHIA, reg., bedding	28.64	54.60	71.11	76.77	57.38	58.20
Interest, livestock	95.71	107.40	106.54	99.49	109.32	109.19
Total Livestock	365.11	423.96	499.31	540.27	549.94	642.14
Land taxes	5.80	4.28	6.53	5.84	16.01	10.56
Interest on land	0.86	0.67	0.67	0.60	0.68	0.77
Land rent	0.00	0.00	0.00	0.00	0.00	0.00
Total Land	6.66	4.95	7.20	6.44	16.69	11.33
Utilities	70.18	62.61	53.63	65.14	72.09	69.75
Miscellaneous	18.72	12.96	20.24	17.73	15.71	17.34
Total Other	88.90	75.57	73.87	82.87	87.80	87.09

APPENDIX TABLE D.
Telfarm Crop Averages, 1995, By Mik Per Cow

	POUNDS SOLD PER COW: Less than 15,000	15,000 - 16,999	17,000 - 18,999	19,000 - 20,999	21,000 - 22,999	23,000 or more
OWNED ACRES of crops:						
Corn	64	98	97	90	154	108
Corn Silage	29	45	69	44	60	81
Hay Crops	112	109	114	135	175	142
Pasture	39	29	22	11	10	8
Wheat	16	12	11	6	36	15
Soybeans	12	21	17	25	25	6
Oats	5	4	5	9	4	4
Barley	2	1	7	3	5	1
YIELD PER ACRE, owned crops						
Corn	98.3	109.0	112.0	111.6	124.8	119.9
Corn Silage	10.8	12.9	17.7	13.6	15.9	17.3
Hay Crops	3.9	4.2	4.2	4.3	4.7	5.0
Pasture	2.5	2.3	3.4	1.2	3.1	1.3
Wheat	41.0	45.3	52.3	51.4	56.2	49.0
CROP COSTS ($ per acre)						
Operator Labor	19.96	15.06	11.88	13.20	13.49	8.51
Family Labor	11.98	11.53	13.21	8.63	7.12	10.97
Hired labor	23.53	22.12	40.26	49.90	50.68	55.96
Total Labor	55.47	48.71	65.35	71.73	71.29	75.44
Repairs & vehicle maint.	20.33	29.71	30.10	28.92	30.60	30.07
Fuel, oil, grease	11.57	12.78	13.44	11.73	12.94	12.89
Custom hire, lease	7.54	4.62	17.16	15.26	11.32	15.24
Depreciation	25.27	31.47	37.05	33.61	31.14	48.76
Interest on machines	5.96	6.35	7.85	8.63	6.17	8.65
Total Machinery	70.67	84.93	105.60	98.15	92.17	115.61
Repairs, conservation	3.45	1.88	5.80	3.97	9.44	5.67
Insurance	3.39	4.04	3.19	4.13	3.20	2.88
Lease	0.42	0.94	3.27	1.65	0.91	13.19
Depreciation	4.23	5.23	5.66	6.78	7.28	7.16
Interest, buildings	1.99	2.78	2.50	2.68	2.83	3.06
Total Buildings	13.48	14.87	20.42	19.21	23.66	31.96
Fertilzer and lime	20.92	30.10	38.54	27.41	43.95	25.57
Supplies, packaging	0.67	1.23	1.12	(0.16)	(4.11)	1.12
Seeds, plants	11.01	14.50	18.70	17.50	13.93	13.44
Chemicals	12.26	10.03	15.20	17.71	20.83	16.93
Other	2.10	1.26	0.84	2.16	1.94	1.20
Interest on crops	9.24	10.04	14.05	11.23	13.66	13.67
Total Crop Expense	56.20	67.16	88.45	75.85	90.20	71.93
Land taxes	7.82	7.95	7.50	4.88	17.77	5.32
Interest on land	24.30	22.19	19.67	14.66	21.28	18.50
Land rent	9.94	20.73	31.33	25.75	17.63	33.52
Total Land	42.06	50.87	58.50	45.29	56.68	57.34
Utilities	2.13	1.82	1.64	2.03	2.16	2.14
Miscellaneous	2.79	1.99	3.65	3.33	2.69	3.55
Total Other	4.92	3.81	5.29	5.36	4.85	5.69