



DAVID E. BELL

The Toro Company S'no Risk Program

"I really don't see how we can repeat the program at those rates." It was June 1984 and Dick Pollick, director of marketing for Consumer Products, was reacting to an analysis by Susan Erdahl, programs manager. Susan had used available historical data to perform a rough actuarial calculation that confirmed the appropriateness of the three-fold increase in premiums asked by insurance companies to cover a repeat of Toro's "S'no risk" campaign.

Background

Toro had begun in 1914 by making tractor engines and later branched out into lawn mowers. In the early 1960s they added snowthrowers. By 1984 they offered a full range of products for "outdoor care" to both institutional and residential customers. Residential lawn care products constituted about 40-50% of sales, with snowthrowers accounting for a further 10-15%.

Snowthrower sales were channeled through twenty-six regional distributors who supplied snowthrowers to independent retailers, such as hardware stores and lawn and garden centers, across the snow belt. Toro also sold directly to mass merchandisers, like Marshall Field, whose private labels made up about 30-35% of Toro snowthrower sales. Although snowthrowers were sold throughout the year, 60-70% of sales occurred during November, December, and January, dropping off during the ensuing months and becoming minimal during the summer. Sales were especially strong in a year following a severe winter, presumably because people resolved not to be "caught again."

The Toro product line included the newly-introduced lightweight power shovel, as well as the more traditional single-stage and two-stage models. The (smaller) single-stage machines, with suggested retail prices of between \$270 and \$440, had been selling in excess of 100,000 units per year. The self-propelled two-stage machines, ranging in price from \$640 to \$1,500, had been selling at somewhat less than 20,000 units per year.

These figures were a far cry from the heady days of the late 1970s when several years of strong growth had culminated in two years, 1978-1979 and 1979-1980, of exceptionally high sales. During this time Toro sold approximately 800,000 single-stage and 125,000 two-stage machines. The severity

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of the three winters beginning in 1977/1978 created a demand that rewarded dealers for their aggressive inventories.

The following year, 1980/1981 sales plummeted (**Exhibit 1**). Dealers and distributors were left with unsold inventories that in some cases lasted them three years. Toro not only had to forego the lost income as orders fell to a trickle but they also offered to pay some of the huge holding costs faced by their dealers. The next two winters were equally mild, causing a sharp downturn in Toro's fortunes (**Exhibit 3**). Dealers had become disenchanted with snow removal equipment. The outlook was bleak.

The S'no Risk Idea

In November 1982, Susan Erdahl received a phone call from an organization called Goodweather that specialized in arranging insurance to cover weather-related business losses; they had made a reputation insuring rock concerts. They suggested that Toro might wish to insure their snowthrower customers against the possibility of no snow.

Dick Pollick was intrigued. A marketing survey commissioned a few years earlier, had emphasized that a major concern of prospective buyers was that their machines might not get enough use. Perhaps Goodweather's proposal would be a way to "guarantee" that a snowthrower purchase would be justified.

By January 1983 the program was set to go: under the plan, each Toro customer (with the exception of those buying power shovels) during the summer and fall of 1983 would receive a full refund of the suggested retail price and keep the snowthrower if the total winter snowfall was less than 20% of its historical average. Data from 172 government-run weather stations would be posted at each retail outlet so that a customer could read which weather station would apply and what the relevant historical average had been. If the actual snowfall was less than 50% of average, the customer would be refunded half the retail price. Intermediate percentages would produce a sliding scale of reimbursements (see **Exhibit 4**). Customer mailing in the registration form (**Exhibit 2**) would automatically be mailed a check in the event that snowfall in their area was sufficiently low.

Since Toro's potential liabilities ran into many millions of dollars, insurance was felt to be a necessity, and this is where Goodweather came in. They arranged a contract with American Home Assurance Company, who agreed to meet all claims resulting from the campaign in exchange for a premium equal to 2.1% of the retail value of snowthrowers covered.

The Program's Success

At first distributors resisted the new promotion, which was to replace the 10% discount program usually held in the fall. They were apprehensive about the possible administrative complexity and the potential for customer confusion. However, they soon saw the basic simplicity and appeal of the idea. Dealers greeted the promotion enthusiastically and, for the first time in three years, built up inventories to back the campaign.

The accompanying advertising campaign (**Exhibit 5**) generated a lot of interest, indeed excitement: dealers reported customers demanding nothing but a Toro, and buying larger models to take a greater advantage of the deal. Soaring retail sales were aided in some areas, such as in Toro's home base of Minneapolis, by record-setting fall snows. Dealers sold out of the large models

completely and sales of the single-stage machine were also strong. In an attempt to keep pace with demand, Toro made an unprecedented mid-season production run of 2,500 of one of the larger models. They were fortunate to be able to make even this number as they relied on outside suppliers for engines. Production lead times were on the order of months rather than weeks.

Dick Pollick was overjoyed. Not only were sales up and dealers' confidence and interest back, but the campaign had been cheap. Although some modest administrative costs had been incurred due to the set-up required for a new program, the S'no risk promotion had had a basic cost of 2.1% of sales instead of the 10% normally spend on the discount program!

The Present

Despite this success, Dick was not certain that the promotion should be continued. For one thing, the novelty might not carry over to a second year. Also, even though two weather stations had reported snow less than 50% of average (Richmond and Roanoke, both Virginia), customers might be less enthusiastic about the program when they learned that only a few customer had "collected" the previous year. Moreover, since the winter of 1983/1984 had been snowy, sales in the coming fall could be strong even without this kind of promotion. In any case, Pollick regarded the restimulation of the trade as a major benefit of the promotion and this would not likely be reinforced by a repetition.


And now Susan had told him that American Home was asking premiums of around 8% of sales for the coming year. A check of other insurance companies, including Lloyd's of London, produced rate of between 6% and 10%. Susan's own analysis (**Exhibit 6**) had convinced her that American Home had erred in offering too low a rate for the previous year. Her calculations showed that had S'no Risk been in force for the years 1979/1980 through 1982/1983 the actual payouts would have been 4%, 8%, 1%, and 19% of sales respectively.

Exhibit 1 Snowthrower Sales

Snowthrower Sales—Units

Product	78/79	79/80	80/81	81/82	82/83	83/84
Power Shovels	--	107,213	107,896	56,981	89,114	68,141
Single-Stage	426,425	367,253	124,615	111,472	102,718	110,564
Two-Stage	53,700	73,483	17,335	19,683	18,374	31,702

Exhibit 2



Press Hard—Print Clearly

MODEL NO. _____ DESCRIPTION _____ SERIAL # _____

DATE OF PURCHASE _____ DEALER DESIGNATED WEATHER REPORTING STATION _____
(Must be between 5/1/83 and 12/10/83)

CUSTOMER NAME _____

ADDRESS _____
Street City State Zip

DEALER NAME _____

ADDRESS _____
Street City State Zip

CUSTOMER SIGNATURE _____ DEALER SIGNATURE _____

IMPORTANT—To participate, the last copy of this Registration Card must be mailed to the address pre-printed on the reverse of card. This registration must be postmarked no later than December 17, 1983 to qualify. Terms and conditions applicable to this program are those printed on the Toro S'NO RISK™ Program Brochure. Program void where prohibited by law.

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 The Toro Company—1983 Minneapolis, MN 55420
 Printed in U.S.A.

White—Customer copy Gold & Pink—Dealer Copy Registration Card—Mail to Toro S'NO RISK™ Program

Exhibit 3 Selected Financial Data 1974-1983 (dollars in thousands, except per share data)

Operating Data	1983	1982	1981	1980	1979	1978	1977	1976	1975	1974
Net sales	\$240,966	\$203,761	\$247,049	\$399,771	\$357,766	\$223,853	\$153,910	\$129,978	\$131,626	\$114,592
Earnings (loss)	\$106	\$(8,699)	\$(12,595)	\$5,679	17,717	\$11,733	\$5,669	\$3,703	\$1,809	\$4,572
Earnings (loss) from continuing operations	-	(4.3)%	(5.1)%	1.4%	5.0%	5.2%	3.7%	2.8%	1.4%	4.0%
Percent of sales	\$(27)	\$(1.86)	\$(2.57)	\$0.97	\$3.18	\$2.18	\$1.08	\$0.72	\$0.36 ^a	\$0.92
Per common share and common stock equivalent	\$572	\$(8,699)	\$(13,068)	\$5,272	\$17,126	\$11,085	\$5,589	\$4,403	\$2,480	\$5,345
Net earnings (loss)	\$(1.19)	\$(1.86)	\$(2.66)	\$0.90	\$3.07	\$2.06	\$1.07	\$0.86	\$0.50 ^a	\$1.07
Per common share and common stock equivalent										
Dividends	\$0	\$0	\$1,825	\$4,861	\$3,670	\$2,035	\$1,497	\$1,286	\$1,234	\$1,091
On common stock outstanding	-	-	\$0.33	\$0.88	\$0.68	\$0.39	\$0.29	\$0.26	\$0.25	\$0.22
Per common share										
Return on:										
Beginning common shareholders' equity	(2.6)%	(19.3)%	(21.1)%	7.2%	31.5%	24.5%	14.0%	12.1%	7.1%	17.3%
Average common shareholders' equity	(2.4)%	(21.4)%	(23.9)%	7.2%	27.6%	22.6%	13.4%	11.9%	7.0%	16.6%
Summary of Financial Position										
Current assets	\$92,662	\$89,606	\$99,678	\$123,180	\$139,207	\$107,189	\$73,234	\$65,718	\$74,516	\$61,063
Current liabilities	\$38,925	\$43,107	\$37,635	\$42,676	\$68,040	\$50,022	\$26,640	\$22,583	\$35,692	\$20,172
Net working capital	\$53,737	\$46,499	\$62,043	\$80,504	\$71,167	\$57,167	\$46,594	\$43,135	\$38,824	\$40,891
Non-current assets	\$58,547	\$60,553	\$57,353	\$60,410	\$38,406	\$25,817	\$21,674	\$19,183	\$20,061	\$11,462
Total assets	\$151,209	\$150,159	\$157,031	\$183,590	\$177,613	\$133,006	\$94,908	\$84,901	\$94,577	\$72,525
Non-current liabilities	\$2,167	\$1,311	\$1,488	\$816	\$591	-	-	-	-	-
Capitalization										
Long-term debt	\$41,858	\$47,414	\$49,288	\$55,315	\$39,250	\$28,650	\$23,100	\$22,344	\$22,500	\$17,210
Redeemable preferred stock	\$14,829	\$14,829	\$14,830	\$14,830	-	-	-	-	-	-
Common shareholders' equity	\$53,430	\$43,498	\$53,790	\$69,953	\$69,732	\$54,334	\$45,168	\$39,974	\$36,385	\$35,143
Total capitalization	\$110,117	\$105,741	\$117,908	\$140,098	\$108,982	\$82,984	\$68,268	\$62,318	\$58,885	\$52,353
Book value per common share	\$8.04	\$7.77	\$9.64	\$12.65	\$12.63	\$10.26	\$8.57	\$7.97	\$7.37	\$7.12
Stock Data										
Number of common shares outstanding	6,649	5,597	5,579	5,528	5,521	5,298	5,272	5,016	4,936	4,936
in thousands)	4,222	4,528	4,484	4,157	3,345	2,659	2,679	2,188	2,127	1,921
Number of shareholders	5,375	5,625	9,125	12,625	16,250	6,500	5,875	5,250	4,000	3,500
Low bid price	13.875	9.250	19.875	24.375	29.125	16.125	7.250	8.625	6.500	8.250
High bid price										

^aEarnings per share were lowered by \$.35 in 1975 as a result of the change to last-in, first-out (LIFO) cost method of accounting for substantially all inventories.


All 1975-1978 figures have been restated for the sale of Irrigation & Power Equipment, Inc. and all 1980 figures have been restated for the sale of Barefoot Grass Lawn Service, Inc.

All "per common share" figures have been adjusted to give effect to the 100% stock dividend in December 1978.

The 197-1981 data has been restated for the implementation of FASB No. 43 accounting for compensated absences.

Earnings per share are computed based on net earnings less preferred stock dividends.

Exhibit 4 Conditions and Terms of Toro's S'no Risk Program

<p>IF IT DOESN'T SNOW WE'LL RETURN YOUR DOUGH! AND YOU KEEP THE SNOWTHROWER.</p> 	<p>If it snows less than</p>	<p>You keep the Toro and you receive:</p>
	<p>20% * AVERAGE SNOWFALL</p>	<p>100% REFUND of suggested retail price</p>
	<p>30% * AVERAGE SNOWFALL</p>	<p>70% REFUND of suggested retail price</p>
	<p>40% * AVERAGE SNOWFALL</p>	<p>60% REFUND of suggested retail price</p>
	<p>50% * AVERAGE SNOWFALL</p>	<p>50% REFUND of suggested retail price</p>

CONDITION AND TERMS OF TORO'S S'NO RISK PROGRAM

- Eligible Toro Snowthrower models include only: model S-140, S-200R, S-200E, S-620E, 3521, 421, 521, 524, 724, 824, 826 and 1132.
- Consumer purchases of eligible Toro Snowthrowers must be made between May 1, 1983, and December 10, 1983.
- Eligibility for full or partial reimbursement will be based upon snowfall measurement from 12:10 A.M. July 1, 1983, through 11:59 P.M. May 31, 1984.
- Snowfall statistics and definitions will be based on figures and wording of the United States Department of Commerce/National Oceanic and Atmospheric Administration (NOAA-US Dept of Commerce).
- Determination of full or partial reimbursement will be based upon the NOAA snowfall statistics of a specific, predetermined weather reporting station. The location of the NOAA weather reporting station applicable to your Toro Snowthrower purchase and the terms of reimbursement are displayed in print at the Toro dealer you purchased your Toro Snowthrower from.
- Eligibility for Toro's S'No Risk Program is limited to the original purchaser only and is not transferable. Only new equipment purchased is eligible for the program.

- Toro's product warranty program is a separate program. See operator's manual for product warranty details.
- The territory of this S'No Risk Program includes the 48 contiguous United States and Alaska. Canada is not included.
- Determination of your eligibility will not be made until May 31, 1984, the end of the defined snow period. If eligible for full or partial reimbursement, please allow 8 to 10 weeks for the delivery of your check.
- Your eligibility under Toro's S'No Risk Program shall be void if you, as a Toro Snowthrower purchaser, have concealed or misrepresented any material fact or circumstance concerning your purchase of the Toro Snowthrower. The refund is void where prohibited.
- Inquiries concerning the S'No Risk Program may be directed to your Toro Dealer, or write:
The Toro Company, ATTN: S'No Risk Program, 8111 Lyndale Avenue South, Minneapolis, MN 55420

*Average annual snowfall for each reporting station will be the "Record Mean" snowfall compiled by the National Oceanic and Atmospheric Administration (NOAA) on file at and/or published by the U.S. Department of Commerce, National Climatic Center, Federal Building, Asheville, North Carolina 28801, as of January 1, 1982, or latest available data.

Purchaser receives Toro's S'No Risk Program at no additional cost. All forms available at participating dealers. Consumer reimbursement is based on Toro's published suggested retail prices exclusive of sales or use tax. Refund void where prohibited.

**NEW TORO MONEY BACK
S'NO RISK™ PROGRAM**

**IF IT DOESN'T SNOW WE'LL RETURN YOUR DOUGH.
AND YOU KEEP THE SNOWTHROWER!**

Buy a Toro Snowthrower before December 10, 1983, and if it snows less than 20% of average this season, you get all your money back and you keep the Toro. If it snows less than 50% of average you get 50% of your money back. And you still keep the Toro.

If it snows more than that you'll really be glad you bought a Toro snowthrower.

Offer includes S-140, S-200R, S-200E, S-620E, and all two stage models.

Come in for full details.

"IT'S S'NO RISK FOR ME!"




TORO

Haven't you done without a Toro long enough?®

(DEALER IMPRINT)

TM 84-3
Prepared by THE TORO CO.
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SAU #19
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Buy a Toro Snowthrower before December 10, 1983, and if it snows less than 20% of average this season, you get all your money back and you keep the Toro. If it snows less than 50% of average you get 50% of your money back. And you still keep the Toro.

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TORO

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(DEALER IMPRINT)

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Exhibit 6

Reporting Station	Code	Average Snowfall	Actual Snowfall			Actual Sales (at retail value) before 12/10			S'no Risk Refund			
			79/80	80/81	81/82	79	80	81	82	79/80	80/81	81/82
Blue Canyon, CA	004	241.6	232.5	146.4	N/A	86,028	40,257	14,071	51,386			
Colorado Springs, CO	006	40.6	72.6	18.2	34.4	281,457	110,471	31,900	31,757	55,236		
Denver, CO	007	59.1	85.5	45.1	26.7	2,428,829	1,302,086	342,171	242,671	171,085		
Grand Junction, CO	009	26.1	21.9	5.9	15.4	11,157	7,214	3,857	2,100	5,050		
Pueblo, CO	013	30.5	42.6	16.8	N/A	21,028	23,400	3,371	3,471			
Bridgeport, CT	016	26.1	9.6	11.5	19.7	571,643	168,700	90,214	288,243	84,350		
Hartford, CT	017	50.4	16.4	17.7	56.4	608,886	257,400	117,957	376,900	154,440		
National Airport, DC	018	17.2	20.1	4.5	22.5	145,171	25,900	16,014	42,543	18,130		
Pocatello, ID	021	40.7	35.5	29.7	66.4	149,228	52,143	31,429	117,914			
Chicago-O'Hare, IL	022	40.4	41.6	35.0	59.3	39,074,000	3,989,314	1,673,829	3,838,900			
Moline, IL	025	30.8	37.0	18.9	45.3	2,382,029	386,529	175,128	132,857			
Peoria, IL	026	25.6	27.5	23.8	46.9	1,307,529	179,214	62,814	86,757			
Rockford, IL	028	35.0	33.9	21.1	41.0	1,967,143	166,414	59,857	169,829			
Springfield, IL	029	24.7	30.5	17.5	50.4	836,843	190,271	95,186	404,129	202,064		
Evansville, IN	030	13.9	16.3	3.4	15.0	75,971	8,986	3,886	4,300	6,290		
Fort Wayne, IN	031	33.2	28.7	35.7	81.2	610,571	225,200	83,900	582,086	291,043		
Indianapolis, IN	033	22.9	24.8	17.3	58.2	1,360,586	312,171	78,000	783,229	469,937		
South Bend, IN	036	72.3	66.4	85.0	135.2	2,654,286	423,557	210,986	499,700	249,850		
Des Moines, IA	038	33.8	23.3	20.4	62.9	2,243,914	399,671	288,057	285,557			
Dubuque, IA	039	43.5	36.0	21.7	N/A	488,714	70,443	31,400	66,843	33,432		
Sioux City, IA	043	30.9	21.7	17.1	56.8	228,600	52,371	51,800	62,329			
Waterloo, IA	045	31.4	28.2	21.9	39.9	561,243	146,514	90,228	120,243			
Concord, KS	046	21.6	28.3	6.4	20.6	165,343	65,157	14,329	9,386	39,094		
Dodge City, KS	047	18.9	35.6	11.8	19.2	38,443	19,557	2,729	6,100			
Goodland, KS	048	35.9	102.0	41.8	24.4	2,200	8	2,228	529			
Topeka, KS	049	21.1	18.3	8.9	13.4	62,814	24,057	15,643	9,743	12,029		
Wichita, KS	050	15.2	12.7	3.1	13.9	106,600	79,014	16,886	23,057			
Lexington, KY	054	16.4	20.5	3.7	12.6	10,014	2,371	-	1,057	1,660	528	
Louisville, KY	055	17.7	18.3	2.9	11.0	9,728	3,614	2,100	3,371	3,614	2,360	
Caribou, ME	058	113.1	70.6	122.9	158.8	261,371	68,729	29,571	106,843			
Portland, ME	060	72.9	27.5	38.8	85.3	1,043,600	270,500	130,500	512,657	626,160		
Baltimore, MD	062	21.7	14.6	4.6	25.5	41,814	12,200	3,814	18,157	8,540		
Boston, MA	063	42.0	12.7	22.3	61.8	775,800	258,186	346,457	900,043	465,480		
Worcester, MA	064	70.4	26.6	43.0	73.9	163,686	89,414	67,000	170,686	98,212		
Alpena, MI	065	84.6	78.2	82.1	89.3	178,900	46,371	9,343	32,057			
Detroit, MI	066	40.7	26.9	38.4	74.0	5,353,000	1,256,386	1,016,114	4,111,600			

Reporting Station	Code	Average Snowfall	Actual Snowfall			82/83	Actual Sales (at retail value) before 12/10			82	S'no Risk Refund		
			79/80	80/81	81/82		79	80	81		79/80	80/81	81/82
Flint, MI	067	45.3	39.7	36.4	62.2	33.6	1,128,657	321,429	171,686	224,557			
Grand Rapids, MI	068	74.1	48.5	51.5	74.5	35.9	2,951,729	490,286	257,271	477,529			238,764
Houghton Lake, MI	069	81.8	59.3	74.4	98.7	51.5	914,086	191,629	132,286	297,357			
Lansing, MI	070	48.8	34.7	38.7	62.1	33.5	2,821,128	507,529	276,171	999,529			
Marquette, MI	071	114.0	146.1	176.1	243.8	199.3	230,871	34,214	14,057	14,843			360,574
Muskegon, MI	072	98.4	75.4	107.6	173.9	35.5	2,888,143	471,800	348,071	600,957			
Sault Ste. Marie, MI	073	113.8	108.1	141.7	168.6	87.0	74,957	19,371	6,000	26,486			
Duluth, MN	076	76.7	55.1	36.5	95.7	96.5	351,057	106,471	66,386	190,886		53,236	
International Falls, MN	077	61.0	64.2	45.8	89.9	46.0	51,943	14,614	5,071	22,586			
Minneapolis/St. Paul, MN	078	47.4	53.3	21.1	95.0	74.4	4,379,943	1,160,014	926,057	982,871		580,007	
Rochester, MN	080	45.6	55.2	25.6	62.7	62.6	401,957	144,143	115,129	114,514			
St. Cloud, MN	081	43.8	44.2	16.5	55.4	53.3	682,971	208,114	120,442	231,329		124,868	
Columbia, MO	083	23.4	31.1	17.6	31.9	4.0	20,686	7,371	857	3,571			3,571
Kansas City, MO	084	20.1	23.5	10.2	29.4	23.4	1,258,214	437,471	163,500	174,014			883
Springfield, MO	085	16.6	24.7	18.2	24.6	5.6	14,071	11,900	2,200	1,471			
St. Louis, MO	086	20.0	25.6	18.1	36.6	7.4	1,211,214	269,143	61,771	777,229			466,337
Billings, MT	087	57.3	59.2	65.9	63.1	49.2	125,200	24,171	14,457	9,100			
Glasgow, MT	089	27.6	17.1	17.1	42.0	30.4	14,629	4,957	1,142	4,086			
Great Falls, MT	090	58.3	34.3	39.2	100.3	45.6	81,600	13,971	15,086	22,443			
Havre, MT	091	46.0	19.8	26.2	N/A	38.1	9,643	1,529	429	1,571		4,822	
Helena, MT	092	48.3	40.3	16.9	56.7	39.0	178,686	109,300	23,157	103,900		76,510	
Kalispell, MT	093	66.7	65.1	50.2	66.2	44.7	98,100	39,043	12,328	16,743			
Miles City, MT	094	31.1	11.6	6.9	21.5	29.6	21,343	1,042	2,729	12,100		12,806	
Missoula, MT	095	49.4	54.7	14.4	69.3	24.2	65,343	30,271	6,743	19,443		21,190	9,722
Grand Island, NE	096	30.0	36.8	19.2	36.7	40.2	106,071	50,200	20,886	46,429			
Lincoln, NE	097	28.0	23.3	13.0	32.3	38.0	177,714	74,071	37,757	85,786		37,036	
Norfolk, NE	098	29.8	22.2	10.1	47.1	51.6	113,843	31,929	13,457	38,200		19,157	
North Platte, NE	099	30.6	66.3	3.9	25.1	25.7	65,443	36,043	19,300	15,914		36,043	
Omaha, NE	100	31.0	20.5	9.1	24.3	31.5	1,006,714	506,957	144,814	164,514		354,870	
Scottsbluff, NE	101	38.8	78.5	21.5	15.7	45.2	55,143	24,614	6,757	2,014			3,378
Valentine, NE	102	31.2	53.3	16.4	47.9	18.9	16,643	11,685	957	2,000			
Reno, NV	103	25.7	22.0	6.1	26.0	23.8	49,517	26,114	12,571	27,671		18,280	
Concord, NH	104	64.8	27.0	54.7	90.0	38.7	491,314	189,985	110,486	436,843		245,657	
Newark, NJ	106	28.1	14.3	19.5	30.8	31.0	62,328	7,971	5,086	8,143			
Albany, NY	107	65.1	27.4	44.9	97.1	75.0	1,016,000	405,129	188,243	436,271		508,000	
Binghamton, NY	108	84.5	56.8	59.3	81.6	81.0	413,443	170,643	54,571	53,186			
Buffalo, NY	109	92.5	68.4	60.9	112.4	52.4	4,803,414	1,208,386	533,229	558,443			
Laguardia, NY	112	26.0	10.3	16.1	25.6	30.2	3,002,686	620,871	573,629	885,729		1,801,612	

Reporting Station	Code	Average Snowfall	Actual Snowfall			82/83	Actual Sales (at retail value) before 12/10			82	Sino Risk Refund		
			79/80	80/81	81/82		79	80	81		79/80	80/81	81/82
Rochester, NY	115	89.7	72.2	94.4	128.4	59.7	1,296,071	232,343	171,500	121,143			
Syracuse, NY	116	110.7	93.4	79.0	137.1	66.0	1,044,314	247,971	118,757	103,686			
Bismarck, ND	119	39.7	26.6	11.7	80.3	32.2	145,900	23,000	17,400	51,329	16,100		
Fargo, ND	121	35.8	39.9	13.1	69.5	23.2	599,786	89,114	59,286	82,371	53,468		
Williston, ND	124	38.1	25.4	19.1	70.4	42.3	101,314	14,829	12,242	31,071			
Akron/Canton, OH	125	48.5	34.2	52.3	61.7	38.8	1,242,429	221,329	193,457	257,300			
Cincinnati, OH	127	24.5	30.1	14.0	24.2	66.0	597,486	312,086	54,100	220,900			154,630
Cleveland, OH	128	53.3	38.7	60.5	100.5	38.0	2,434,443	669,871	521,814	1,032,214			
Columbus, OH	129	28.4	16.6	30.1	35.1	11.5	1,372,500	255,700	120,842	176,886			88,443
Dayton, OH	130	29.0	24.9	19.6	42.9	5.5	2,120,229	588,600	191,371	305,414			305,414
Mansfield, OH	132	42.5	27.6	43.4	66.9	16.6	244,286	75,486	35,786	58,314			34,988
Toledo, OH	134	38.7	17.5	37.7	68.2	12.2	861,571	302,571	213,743	1,376,143	430,786		825,686
Youngstown, OH	135	56.3	32.8	49.1	62.1	39.4	856,971	243,286	213,486	121,157			
Allentown, PA	136	32.2	21.9	25.5	43.9	45.8	451,586	83,357	43,829	134,557			
Avoca-Wilkes Barre, PA	137	49.9	25.5	40.5	59.6	59.1	228,286	159,600	67,671	137,114			
Erie, PA	138	82.4	55.2	89.4	71.3	41.2	793,786	114,329	129,529	49,257			
Harrisburg, PA	139	35.4	14.6	24.9	36.0	35.4	767,800	127,929	68,857	216,943	383,900		
Philadelphia, PA	141	21.7	20.9	15.4	25.4	37.9	818,343	180,886	93,300	129,843			
Pittsburgh, PA	142	45.0	24.1	48.0	45.1	30.1	6,172,600	949,771	434,143	484,043			
Williamsport, PA	143	43.6	20.5	41.6	54.5	17.6	97,471	46,843	18,957	96,957	48,736		48,479
Providence, RI	144	37.2	12.2	21.5	47.4	32.4	115,171	35,529	54,271	223,029	69,103	3,120	
Aberdeen, SD	145	36.1	28.8	8.3	N/A	18.9	21,486	4,457	1,271	7,843	9,010		
Huron, SD	146	38.5	22.2	10.4	59.7	27.3	14,857	12,871	10,743	4,814			
Rapid City, SD	147	38.0	29.2	16.9	34.8	24.9	11,900	6,543	4,742	5,586			
Sioux Falls, SD	148	38.8	29.2	10.8	42.4	70.5	99,371	38,329	21,328	28,957			
Salt Lake City, UT	151	58.1	61.6	30.2	57.8	55.8	513,829	389,157	529	434,557			
Burlington, VT	154	77.6	39.6	64.7	81.5	80.5	147,571	44,271	154,086	100,071			
Norfolk, VA	156	8.2	41.9	0.3	6.1	3.4	-	0	32,900	529			265
Richmond, VA	157	14.6	38.6	1.0	21.2	29.4	528	3,257	528	4,929	3,257		
Roanoke, VA	158	24.6	31.8	11.8	30.9	35.0	8,157	3,757	2,000	2,671	1,879		
Spokane, WA	159	51.6	38.3	14.2	47.4	36.6	732,214	363,029	84,000	164,171	254,120		
Walla Walla, WA	160	20.1	27.8	5.4	13.5	3.9	16,443	6,771	-	529	4,739		529
Yakima, WA	161	24.8	47.6	12.0	28.2	21.9	11,714	17,786	1,614	10,000	8,893		
Green Bay, WI	163	44.8	38.1	30.2	54.0	39.7	769,171	199,543	63,529	118,886			
La Crosse, WI	164	42.2	32.0	21.8	36.1	37.1	777,100	220,071	83,786	185,114			
Madison, WI	165	40.4	31.0	26.5	50.0	41.4	2,506,143	406,871	242,414	262,643			
Milwaukee, WI	166	47.0	47.0	41.9	67.2	38.1	9,253,143	1,703,529	786,300	1,035,286			
Casper, WY	168	77.9	101.2	56.9	68.7	151.6	108,086	47,671	11,000	13,829			

Reporting Station	Code	Average Snowfall	Actual Snowfall			Actual Sales (at retail value) before 12/10			S'no Risk Refund				
			79/80	80/81	81/82	82/83	79	80	81	82	79/80	80/81	81/82
Cheyenne, WY	169	52.7	121.5	27.6	26.9	101.0	98,443	68,043	15,000	16,057			
Lander, WY	170	104.0	124.4	67.6	41.8	165.7	78,214	33,914	12,914	14,086			
Sheridan, WY	172	70.0	75.8	46.7	58.9	66.2	37,100	13,643	7,200	14,700			6,457

	Total Sales	Total Rebate
1979/1980	135,246,551	5,403,592
1980/1981	27,313,192	2,150,357
1981/1982	214,521,866	180,920
1982/1983	30,024,217	5,846,299