AN ANALYSIS OF LIGHT-DENSITY RAIL LINES IN NORTH DAKOTA
APPENDIX A: INDIVIDUAL LINE-SEGMENT TRENDS AND ANALYSIS

by

**Denver Tolliver, John Bitzan,
Brian Lindamood, and Martha Struthers**

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Disclaimer

The data, methods, and findings presented herein do not necessarily reflect the views or policies of any of the above agencies, and are the sole responsibility of the Upper Great Plains Transportation Institute and the authors.

Table of Contents

List of Tables i

List of Figures i

List of Tables

TABLE 7: Branch-Line Traffic and Density Factors 6

List of Figures

Figure 57: North Dakota Line Segment ID Map 5
Figure 58: Trend in Grain Carloadings; BN001 9
Figure 59: Trend in Truck Modal Share; BN001 10
Figure 60: Burlington Northern Line Segment 001, Grenora to Stanley (Density in Thousands of Gross Ton Miles per mile) 11
Figure 61: Trend in Grain Carloadings; BN003 12
Figure 62: Trend in Truck Modal Share; BN003 13
Figure 63: Burlington Northern Line Segment 003, Crosby to Niobe (Density in Thousands of Gross Ton Miles per mile) 14
Figure 64: Trend in Grain Carloadings; BN007 15
Figure 65: Trend in Truck Modal Share; BN007 16
Figure 66: Burlington Northern Line Segment 007, Niobe to Berthold (Density in Thousands of Gross Ton Miles per mile) 17
Figure 67: Trend in Grain Carloadings; BN009 18
Figure 68: Trend in Truck Modal Share; BN009 19
Figure 69: Burlington Northern Line Segment 009, Sherwood to Granville (Density in Thousands of Gross Ton Miles per mile) 20
Figure 70: Trend in Grain Carloadings; BN011 21
Figure 71: Trend in Truck Modal Share; BN011 22
Figure 72: Burlington Northern Line Segment 011, Westhope to Rugby (Density in Thousands of Gross Ton Miles per mile) 23
Figure 73: Trend in Grain Carloadings; BN013 24
Figure 74: Burlington Northern Line Segment 013, Newburg to Towner (Density in Thousands of Gross Ton Miles per mile) 25
Figure 75: Burlington Northern Line Segment 015, Wolford to York (Density in Thousands of Gross Ton Miles per mile) 26
Figure 76: Trend in Grain Carloadings; BN021 27
Figure 77: Trend in Truck Modal Share; BN021 28
Figure 78: Burlington Northern Line Segment 021, Rolla to Churchs Ferry (Density in Thousands of Gross Ton Miles per mile) 29
Figure 79: Trend in Grain Carloadings; BN023 30
Figure 80: Trend in Truck Modal Share; BN023 31

Figure 81: Burlington Northern Line Segment 023, Hansboro to Devils Lake (Density in Thousands of Gross Ton Miles per mile) 32
Figure 82: Trend in Grain Carloadings; BN025 33
Figure 83: Trend in Truck Modal Share; BN025 34
Figure 84: Burlington Northern Line Segment 025, Sarles to Lakota (Density in Thousands of Gross Ton Miles per mile) 35
Figure 85: Trend in Grain Carloadings; BN027 36
Figure 86: Trend in Truck Modal Share; BN027 37
Figure 87: Burlington Northern Line Segment 027, Hannah to Larimore (Density in Thousands of Gross Ton Miles per mile) 38
Figure 88: Trend in Grain Carloadings; BN029 39
Figure 89: Trend in Truck Modal Share; BN029 40
Figure 90: Burlington Northern Line Segment 029, Walhalla to Grafton (Density in Thousands of Gross Ton Miles per mile) 41
Figure 91: Trend in Grain Carloadings; BN031 42
Figure 92: Trend in Truck Modal Share; BN031 43
Figure 93: Burlington Northern Line Segment 031, Neche to Grafton (Density in Thousands of Gross Ton Miles per mile) 44
Figure 94: Trend in Grain Carloadings; BN033 45
Figure 95: Trend in Truck Modal Share; BN033 46
Figure 96: Burlington Northern Line Segment 033, Joliette to Grafton (Density in Thousands of Gross Ton Miles per mile) 47
Figure 97: Trend in Grain Carloadings; BN035 48
Figure 98: Trend in Truck Modal Share; BN035 49
Figure 99: Burlington Northern Line Segment 035, Grafton to Grand Forks (Density in Thousands of Gross Ton Miles per mile) 50
Figure 100: Trend in Grain Carloadings; BN037 51
Figure 101: Trend in Truck Modal Share; BN037 52
Figure 102: Burlington Northern Line Segment 037, Honeyford to Grafton (Density in Thousands of Gross Ton Miles per mile) 53
Figure 103: Trend in Grain Carloadings; BN039 54
Figure 104: Trend in Truck Modal Share; BN039 55
Figure 105: Burlington Northern Line Segment 039, Binford to Hannaford (Density in Thousands of Gross Ton Miles per mile) 56
Figure 106: Trend in Grain Carloadings; BN043 57
Figure 107: Trend in Truck Modal Share; BN043 58
Figure 108: Burlington Northern Line Segment 043, Hunter to Vance (Density in Thousands of Gross Ton Miles per mile) 59
Figure 109: Trend in Grain Carloadings; BN045 60
Figure 110: Trend in Truck Modal Share; BN045 61
Figure 111: Burlington Northern Line Segment 045, Clifford to Erie (Density in Thousands of Gross Ton Miles per mile) 62
Figure 112: Trend in Grain Carloadings; BN059 63
Figure 113: Trend in Truck Modal Share; BN059 64
Figure 114: Burlington Northern Line Segment 059, Warwick to Nolan (Density in Thousands of Gross Ton Miles per mile) 65
Figure 115: Trend in Grain Carloadings; BN061 66

Figure 116: Trend in Truck Modal Share; BN061 67
Figure 117: Burlington Northern Line Segment 061, Sanborn to Hannaford (Density in Thousands of Gross Ton Miles per mile) 68
Figure 118: Trend in Grain Carloadings; BN071 69
Figure 119: Trend in Truck Modal Share; BN071 70
Figure 120: Burlington Northern Line Segment 071, Havana to Fairmount (Density in Thousands of Gross Ton Miles per mile) 71
Figure 121: Trend in Grain Carloadings; BN073 72
Figure 122: Trend in Truck Modal Share; BN073 73
Figure 123: Burlington Northern Line Segment 073, Mayville to Larimore (Density in Thousands of Gross Ton Miles per mile) 74
Figure 124: Trend in Grain Carloadings; BN095 75
Figure 125: Trend in Truck Modal Share; BN095 76
Figure 126: Burlington Northern Line Segment 095, McKenzie to Zeeland (Density in Thousands of Gross Ton Miles per mile) 77
Figure 127: Trend in Grain Carloadings; BN097 78
Figure 128: Trend in Truck Modal Share; BN097 79
Figure 129: Burlington Northern Line Segment 097, Watford City to Fairview (Density in Thousands of Gross Ton Miles per mile) 80
Figure 130: Trend in Grain Carloadings; BN101 81
Figure 131: Trend in Truck Modal Share; BN101 82
Figure 132: Burlington Northern Line Segment 101, Killdeer to Mandan (Density in Thousands of Gross Ton Miles per mile) 83
Figure 133: Burlington Northern Line Segment 115, Amenia to Vance (Density in Thousands of Gross Ton Miles per mile) 84
Figure 134: Trend in Grain Carloadings; SOO125 85
Figure 135: Trend in Truck Modal Share; SOO125 86
Figure 136: Soo Line Segment 125, Flaxton to East Westby (Density in Thousands of Gross Ton Miles per mile) 87
Figure 137: Trend in Grain Carloadings; SOO127 88
Figure 138: Trend in Truck Modal Share; SOO127 89
Figure 139: Soo Line Segment 127, New Town to Prairie Jct. (Density in Thousands of Gross Ton Miles per mile) 90
Figure 140: Trend in Grain Carloadings; SOO129 91
Figure 141: Trend in Truck Modal Share; SOO129 92
Figure 142: Soo Line Segment 129, Plaza to Prairie Jct (Density in Thousands of Gross Ton Miles per mile) 93
Figure 143: Trend in Grain Carloadings; SOO131 94
Figure 144: Trend in Truck Modal Share; SOO131 95
Figure 145: Soo Line Segment 131, Prairie Jct to Max (Density in Thousands of Gross Ton Miles per mile) 96
Figure 146: Trend in Grain Carloadings; SOO133 97
Figure 147: Trend in Truck Modal Share; SOO133 98
Figure 148: Soo Line Segment 133, Max to Drake (Density in Thousands of Gross Ton Miles per mile) 99
Figure 149: Trend in Grain Carloadings; SOO135 100
Figure 150: Trend in Truck Modal Share; SOO135 101

Figure 151: Soo Line Segment 135, Kenmare to Egeland (Density in Thousands of Gross Ton Miles per mile) 102
Figure 152: Trend in Grain Carloadings; SOO 103
Figure 153: Trend in Truck Modal Share; SOO139 104
Figure 154: Soo Line Segment 139, Egeland to Fordville (Density in Thousands of Gross Ton Miles per mile) 105
Figure 155: Trend in Grain Carloadings; SOO142 106
Figure 156: Trend in Truck Modal Share; SOO142 107
Figure 157: Soo Line Segment 142, Fordville to Devils Lake (Density in Thousands of Gross Ton Miles per mile) 108
Figure 158: Trend in Grain Carloadings; SOO144 109
Figure 159: Trend in Truck Modal Share; SOO144 110
Figure 160: Soo Line Segment 144, Fordville to Oslo, MN (Density in Thousands of Gross Ton Miles per mile) 111
Figure 161: Trend in Grain Carloadings; SOO145 112
Figure 162: Trend in Truck Modal Share; SOO145 113
Figure 163: Soo Line Segment 145, Oakes to Hankinson (Density in Thousands of Gross Ton Miles per mile) 114
Figure 164: Trend in Grain Carloadings; SOO146 115
Figure 165: Trend in Truck Modal Share; SOO146 116
Figure 166: Soo Line Segment 146, Devils Lake to Drake (Density in Thousands of Gross Ton Miles per mile) 117
Figure 167: Trend in Grain Carloadings; SOO147 118
Figure 168: Trend in Truck Modal Share; SOO147 119
Figure 169: Soo Line Segment 147, LaMars to Fairmount (Density in Thousands of Gross Ton Miles per mile) 120
Figure 170: Trend in Grain Carloadings; SOO149 121
Figure 171: Trend in Truck Modal Share; SOO149 122
Figure 172: Soo Line Segment 149, Max to Bismarck to Wishek (Density in Thousands of Gross Ton Miles per mile) 123
Figure 173: Trend in Grain Carloadings; SOO151 124
Figure 174: Trend in Truck Modal Share; SOO151 125
Figure 175: Soo Line Segment 151, Wishek to Oakes (Density in Thousands of Gross Ton Miles per mile) 126
Figure 176: Trend in Grain Carloadings; SOO153 127
Figure 177: Trend in Truck Modal Share; SOO153 128
Figure 178: Soo Line Segment 153, Wishek to Ashley (Density in Thousands of Gross Ton Miles per mile) 129

The purpose of this appendix is to highlight trends and data that reflect the authors' opinions regarding the potential viability of individual rail lines. In assessing the viability of individual lines, there are essentially two approaches which could be taken: (1) develop specific revenue and cost data for each line, or (2) evaluate traffic and other general line-segment trends.

Ideally, revenue and cost data should be developed for each line, including both on-branch and off-branch cost estimates. Such an analysis would be relatively precise in nature. However, it would consume a great deal of time and resources. Thus, it is beyond the scope of this project. Furthermore, the development of line-specific revenues and costs would entail the use and presentation of sensitive, proprietary data. Also, the values would only remain valid for the year and for the operating assumptions which prevailed during the analysis.

An alternative to the development of line-specific revenues and costs is the examination of traffic and other trends, and the use of general indices or thresholds. In this analysis, three major trends are analyzed and graphed over time:

1. Grain carloadings,
2. Grain truck modal share,
3. Traffic density, in gross ton-miles per mile (GTMM).

Trends in grain and oilseed carloadings and truck modal share have been developed from monthly elevator reports for the period 1985 through 1989. The overall traffic densities have been evaluated over a much longer period of time, 1975 through 1989. The traffic density variable (GTMM) reflects several different elements:

1. Originated and terminated grain traffic,
2. Originated and terminated non-grain traffic,

3. Bridge or overhead traffic (both grain and non-grain)

The overhead traffic is typically not a major factor on stub-end branch lines. However, overhead traffic can be quite important on feeder or connector lines, which may generate little originated and terminated (O/T) traffic themselves.

The GTMM have been developed from density charts provided by the BN and the Soo Line. The GTMM reflect the weight of the freight cars and locomotives in addition to the weight of the lading. However, there is a direct proportionate relationship between the net ton-miles per mile and the GTMM. So, trends in the former will be reflected in trends in the latter.

In addition to the trend variables, two current traffic density measures are used to assess the viability of each line: (1) grain cars per mile and (2) non-grain carloads. The grain cars per mile reflect both the level of traffic and the length of the line. Both are important factors. The length of the line determines in part the way train cost, including crew wages, locomotive ownership, fuel costs, etc. The volume of traffic also affects way train operating costs and maintenance expenses. But volume also generates revenues. In short, there is a relationship between grain traffic density (in cars per mile) and revenues and costs, particularly on grain-dependent branch lines. Grain-dependent branch lines are those on which:

1. The preponderance of the originated traffic consists of grains and oilseeds,
2. Terminated (inbound) traffic consists mostly of fertilizer and farm implements,
3. Inbound traffic comprises a small proportion of the traffic base.

Many North Dakota branch lines are grain-dependent. Previous research has shown that on such lines, the minimum viable traffic density (MVTD) typically lies

between 12 and 15 grain cars per mile.[29] Studies in other regions have placed the MVTD for all types of traffic at much higher levels -- e.g. 20 cars per mile (FRA) and 34 cars per mile (R.L. Banks). However, it should be noted that many North Dakota grain branch lines are currently being operated with 20 cars per mile or less. Furthermore, all of the recent abandonment applications filed by the BN in North Dakota have been on lines with less than ten cars per mile. Thus, a general rule regarding traffic density in North Dakota is: (1) the MVTD should probably be taken as 15 grain cars per mile, and (2) when a line has less than 10 grain cars per mile, it is in danger of being abandoned.

Table 7 shows the current grain and non-grain carloads per mile, as well as the total grain and non-grain carloads for each line. High non-grain traffic density can offset low grain density on a line. So, the MVTD should be interpreted differently when significant non-grain densities (e.g. 10 cars per mile) are present. In such cases, the more generalized 20-to-34 car per mile rule should probably be used.

As with any general rule, the MVTD criterion will not represent an exact break-even point for any particular branch line. Many factors will affect the MVTD: the proportion of unit train traffic in the traffic base, the condition of the line, and other factors. However, the lower range will rarely be less than 12 cars per mile for Class I carriers. The upper end of the MVTD range may be higher than 15 cars per mile where poor track condition and other factors drive-up operating costs. So, the MVTD should be interpreted in concert with traffic and density trends.

Interpretation of the trend variables is as follows. Downward trends in grain carloadings and overall traffic density are troublesome. Similarly, an increasing truck

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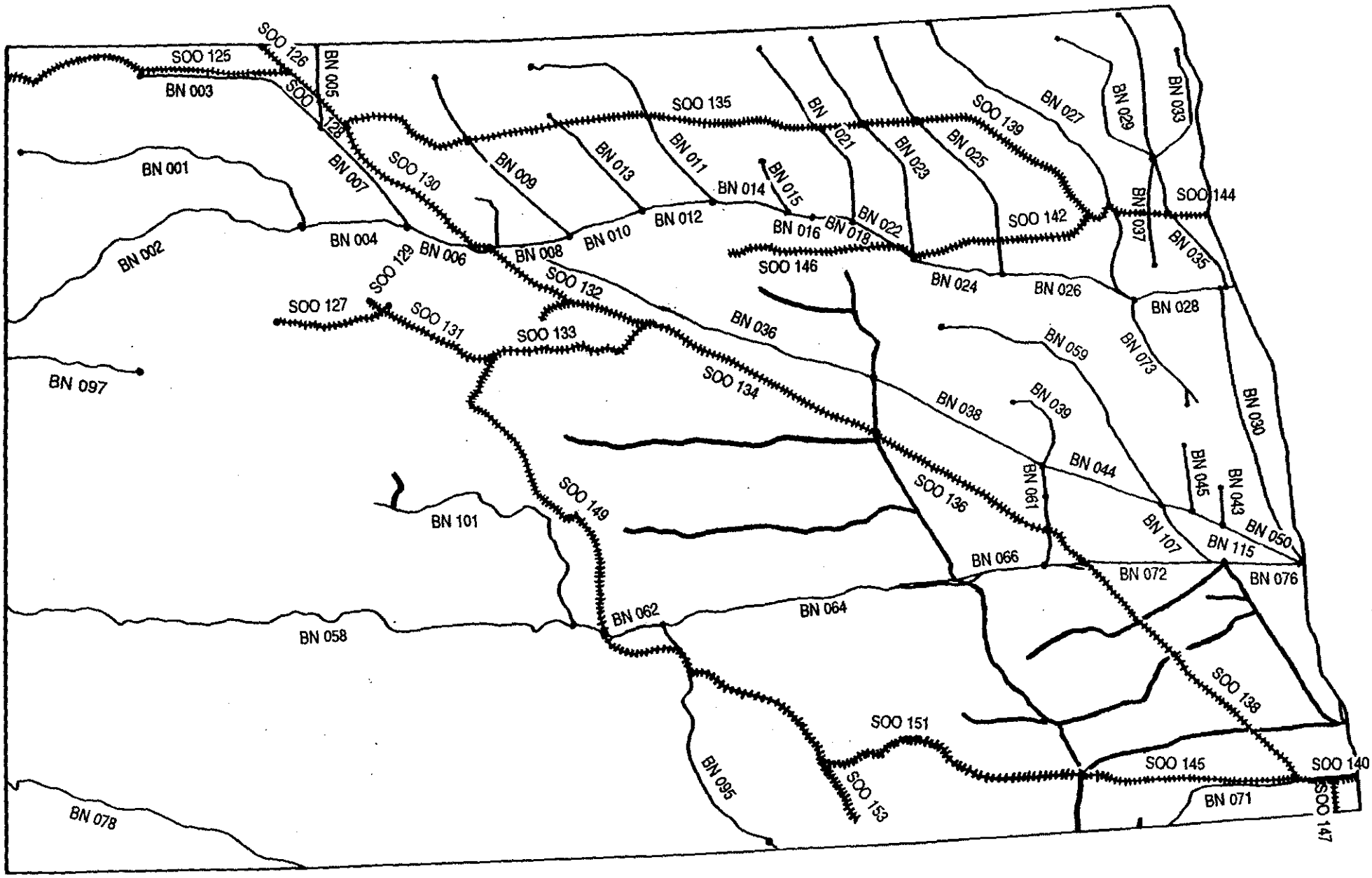
[29]see: Tolliver, D. The Effects of Local and Regional Railroads on Intermodal and Intramodal Competition: North Dakota Rail Services Planning Study, UGPTI Publication 77, November 1989.

modal share typically reflects the downgrading of a branch line and the erosion of its traffic base. Both trends are usually precursors to abandonment.[30]

[30]However, any interpretation of grain carloading trends must take into account the drought conditions which were present in 1987 and 1988.



Burlington Northern Railroad
Soo Line Railroad

North Dakota Public Service Commission

TABLE 7: Branch-Line Traffic and Density Factors					
BRANCHLINE	Length (miles)	Grain Carloads[31]	Non-Grain Carloads[32]	Grain Cars per Mile	Non-Grain Cars per Mile
BN001 Grenora* to Stanley	88.1	368	10	4.18	0.11
BN003 Crosby to Niobe	54.7	396	96	7.24	1.76
BN007 Niobe* to Berthold	34.2	85	0	2.49	0.00
BN009 Sherwood* to Granville	65.2	0	18	0.00	0.28
BN011 Westhope* to Rugby	67.2	1831	92	27.25	1.37
BN013 Newburg* to Towner	34.9	0	0	0.00	0.00
BN021 Rolla* to Churchs Ferry	47.5	1562	102	32.88	2.15
BN023 Hansboro* to Devils Lake	66.1	743	61	11.24	0.92
BN025 Sarles* to Lakota	73.8	2207	70	29.91	0.95
BN027 Hannah* to Larimore	97.3	3048	231	31.33	2.37
BN029 Walhalla* to Grafton	48.3	2945	1485	60.97	30.75
BN031 Neche* to Grafton	40.1	277	236	6.91	5.89
BN033 Joliette* to Grafton	33.9	2038	5091	60.12	150.18
BN035 Grafton* to Grand Forks	25.4	1257	116	49.49	4.57

[31]Represents most recent grain and oilseed shipment data available (1989).

[32]Represents most recent data available: 1988 from Burlington Northern, crop year 1988-1989 from Soo Line.

BN037 Honeyford* to Grafton	27.2	381	99	14.01	3.64
BN039 Binford* to Hannaford	24.6	191	19	7.76	0.77
BN059 Nolan to Warwick*	79.7	1484	140	18.62	1.76
BN061 Hannaford to Sanborn	18.6	431	14	23.17	0.75
BN071 Havana* to Fairmount	55.1	290	0	5.26	0.00
BN073 Mayville* to Larimore	32.4	2312	37	71.36	1.14
BN095 Zeeland* to McKenzie	75.2	70	1	0.93	0.01
BN097 Watford City* to East Fairview*	37	28	0	0.76	0.00
BN101 Zap* to Mandan	81	79	18310	0.98	0.11
SO125 East Westby* to Flaxton	81.4	720	68	8.845	0.835
SO127 New Town* to Prairie Jct.	31.3	530	44	16.93	1.41
SO129 Plaza* to Prairie Jct.	3.8	200	19	52.63	5.00
SO131 Prairie Jct. to Max	31.5	266	16	8.44	0.51
SO133 Max* to Drake	45	507	53	11.27	1.18
SO135 Kenmare to Egeland	137	2182	165	15.93	1.20
SO139 Egeland* to Fordville	72	1890	58	26.25	0.81
SO142 Devils Lake* to Fordville	52.4	1502	70	28.66	1.34
SO144 Fordville* to Oslo, MN	34.5	897	65	26.00	1.88
SO145 Oakes to Hankinson	58.3	1340	59	22.98	1.01

SO146 Drake to Devils Lake	79.5	268	22	3.37	0.28
SO147 La Mars* to Fairmount	10.6	459	854	43.30	80.57
SO149 Max to Wishek	170.8	1163	360	6.81	2.11
SO151 Wishek* to Oakes*	89.2	2119	36	23.76	0.40
SO153 Wishek to Ashley	19.4	248	0	12.78	0.00

* Indicates that the station is included on the line segment.

Burlington Northern Line Segment 001: Grenora to Stanley

The Grenora to Stanley Line has seen a decrease in grain traffic since 1986 (Figure 58).

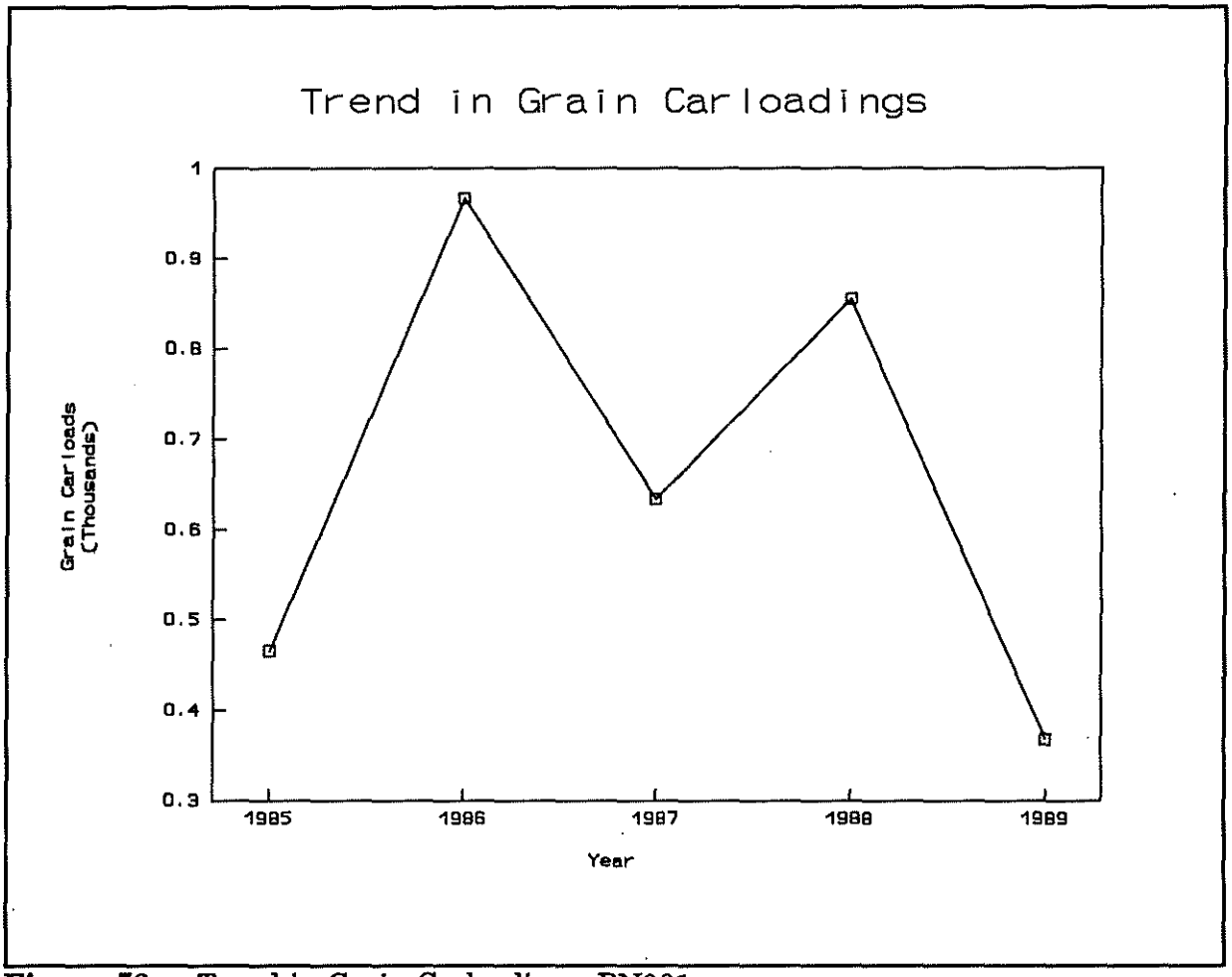


Figure 58: Trend in Grain Carloadings; BN001

The number of grain carloads originating on the line fell by nearly 600, reaching a low of 368 grain carloads in 1989.

Truck modal share on the line declined from 35 percent of total traffic in 1985 to 18 percent in 1988 (Figure 59). However, truck share rebounded to 27 percent in 1989, at the same time that rail carloadings were declining. The portion of the line from Zahl to

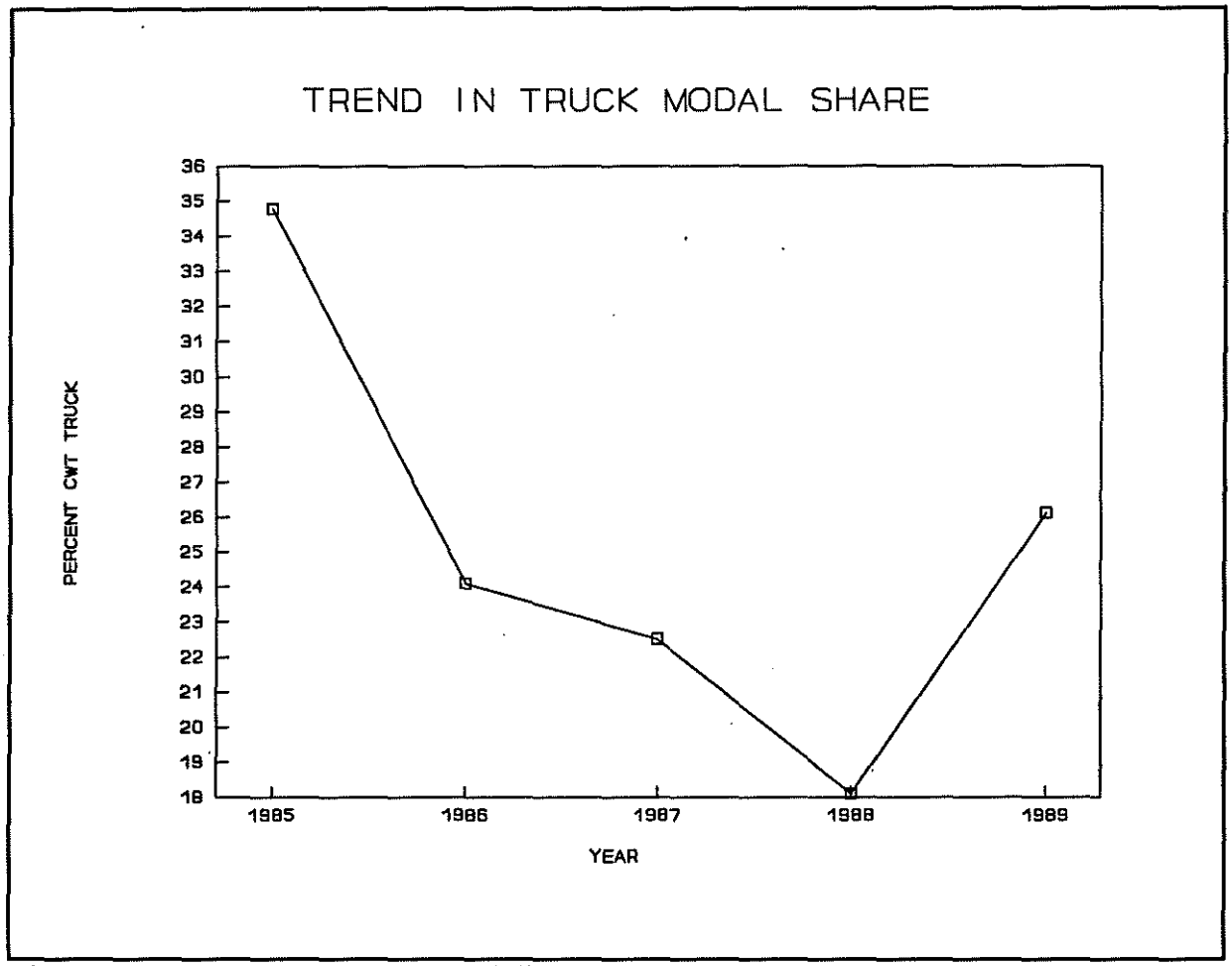


Figure 59: Trend in Truck Modal Share; BN001

Grenora has been placed in Category I[33] by the BN, for future evaluation.

Figure 60 shows the overall trend in rail traffic density from 1975 to 1989. In 1975, the Grenora-Stanley line had a traffic density of 198,000 gross ton-miles per mile

[33]The following definitions are from a Systems Diagram Map:

Category I Carrier anticipates that the line segment will be the subject of an abandonment or discontinuance application within three years.

Category II Carrier has the line segment under study and believes that it may be the subject of a future abandonment application because of anticipated operating losses or excessive rehabilitation costs as compared to potential revenues.

Category III An abandonment application is pending before the Interstate Commerce Commission.

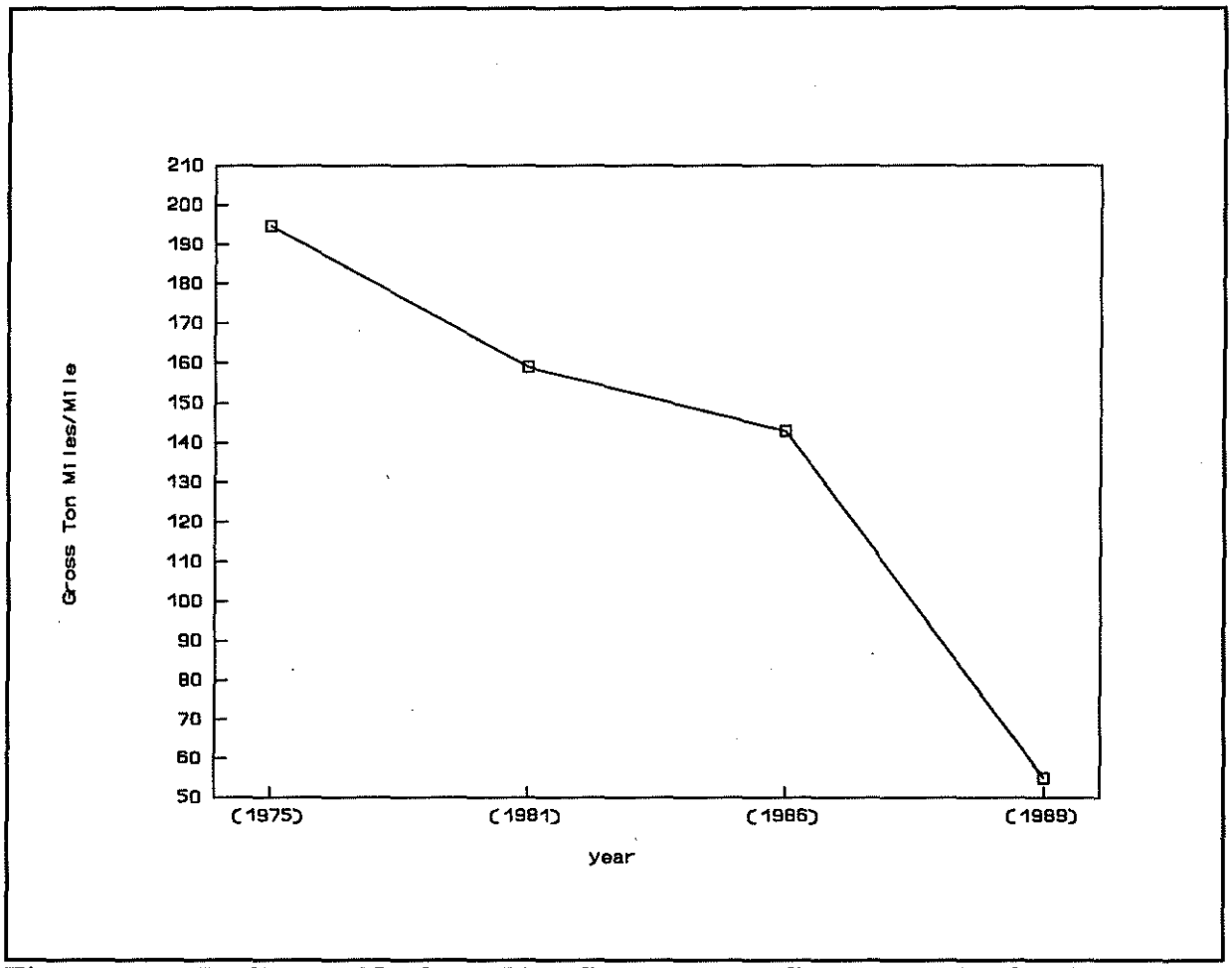


Figure 60: Burlington Northern Line Segment 001, Grenora to Stanley (Density in Thousands of Gross Ton Miles per mile)

(GTMM). Traffic density declined steadily over the period, reaching a low of 52,000 GTMM in 1989. The trend in GTMM from 1986 onward is consistent with the downward trend in grain carloadings shown in Figure 58. As Table 7 shows, the Grenora-Stanley line generated 4.18 grain cars per mile in 1989, with minimal non-grain traffic.

Crop failures in the area in recent years have resulted in lower grain production, reducing the amount of grain shipped. Subterminal competition has also had the effect of spreading the limited shipments of grain among the existing terminals.

Burlington Northern Line Segment 003: Crosby to Niobe

Figure 61 shows an increase in grain carloadings on the Crosby-Niobe line during

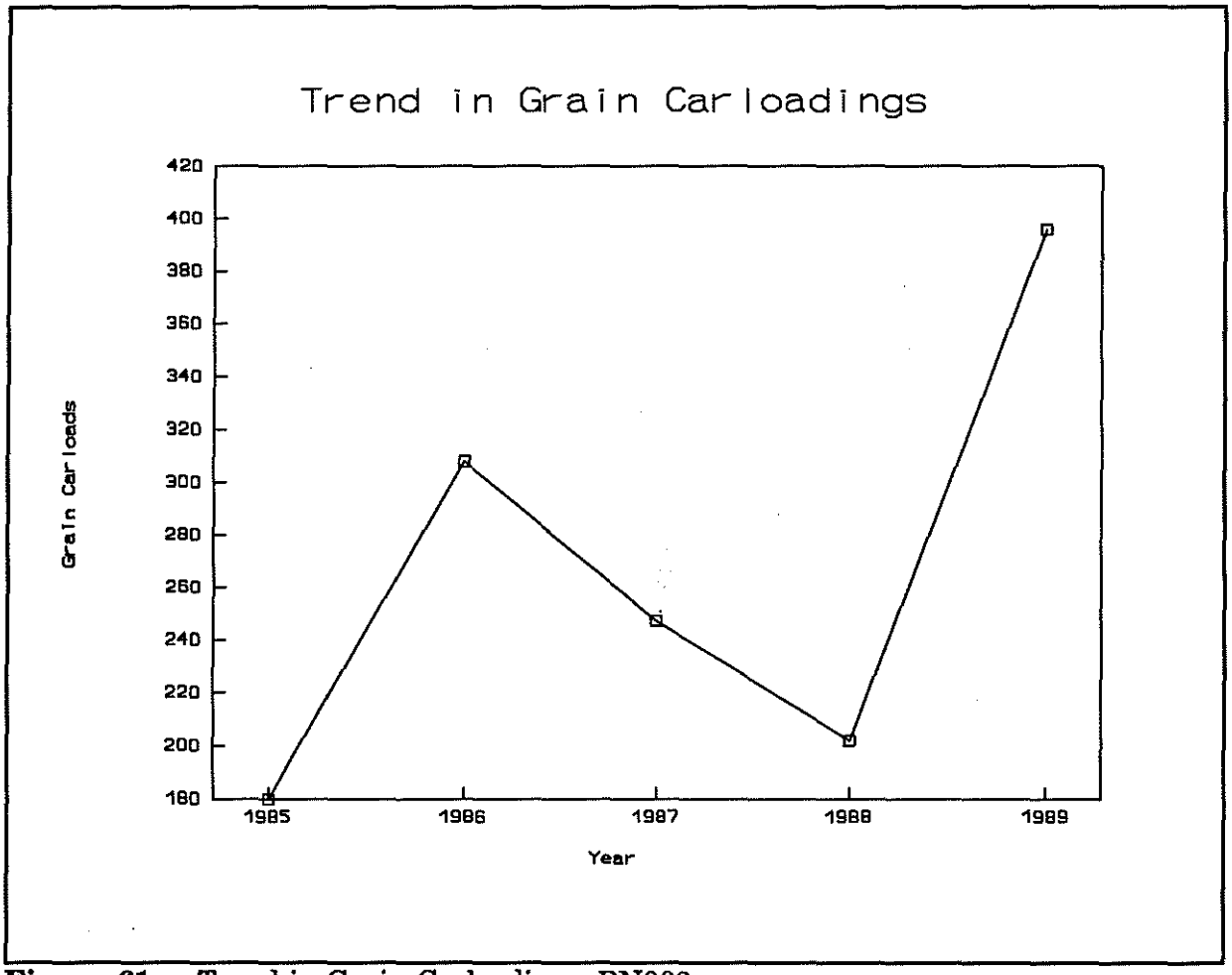


Figure 61: Trend in Grain Carloadings; BN003

the past five years, whereas Figure 62 shows a decrease in the truck modal share. This combination of rising grain traffic and falling truck modal share would seem to indicate a healthy future for the line. However, the total GTMM on the line, as depicted in Figure 63, declined by over 400,000 GTMM the past decade, despite the recent increase in grain carloadings. This trend can be attributed to two factors: direct Soo Line competition and erosion of non-grain carloadings. The Soo Line and the Burlington Northern share the part of the track running from Crosby to Rival, and directly compete for the loads in the area. Also, the new Soo Line terminal at Bowbells draws some traffic.

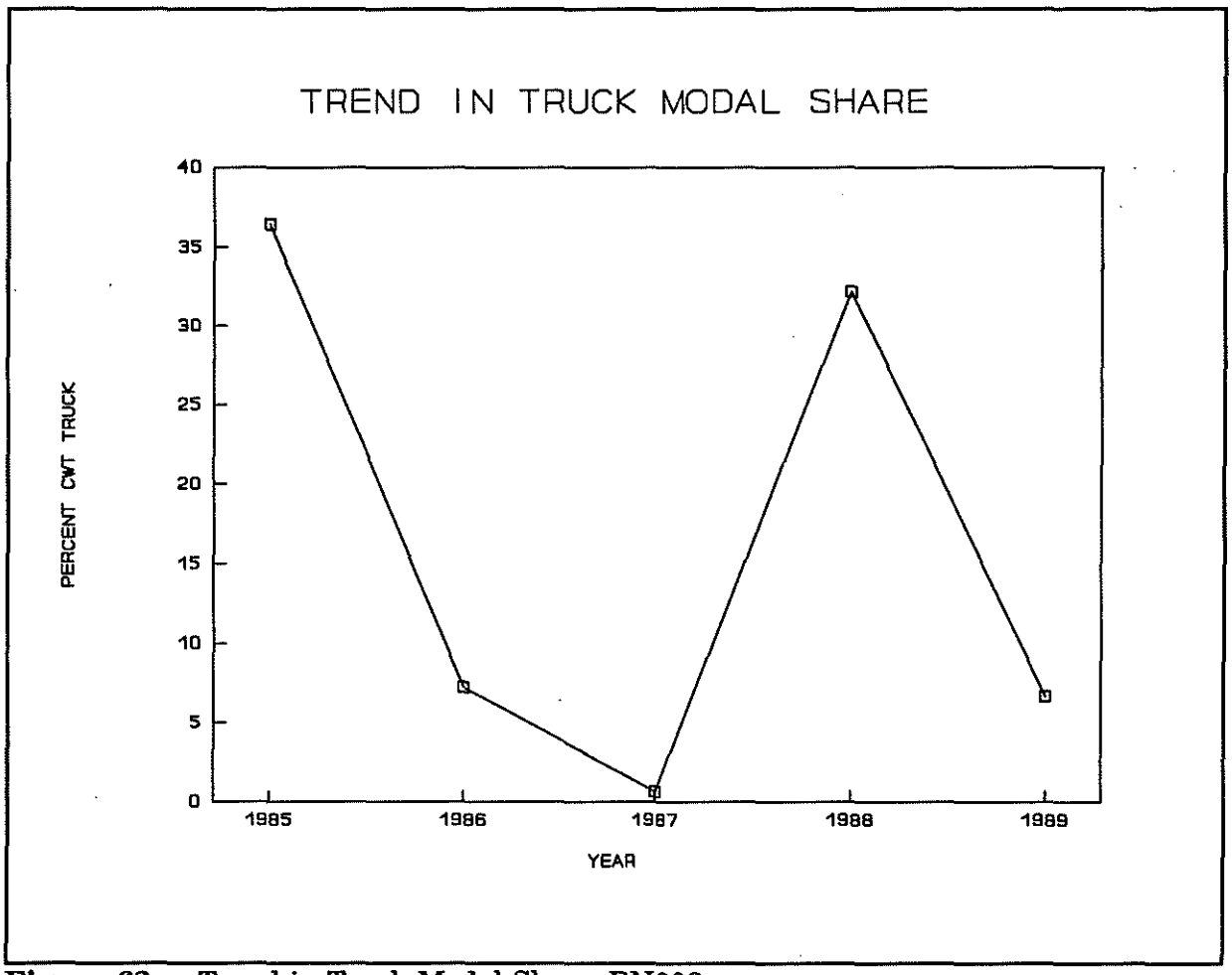


Figure 62: Trend in Truck Modal Share; BN003

As Table 7 on page 81 shows, the Crosby to Niobe line generated only seven grain cars per mile in 1989. Furthermore, the non-grain traffic density is also light (less than two cars per mile). With less than 150,000 GTMM, the line is probably marginal.

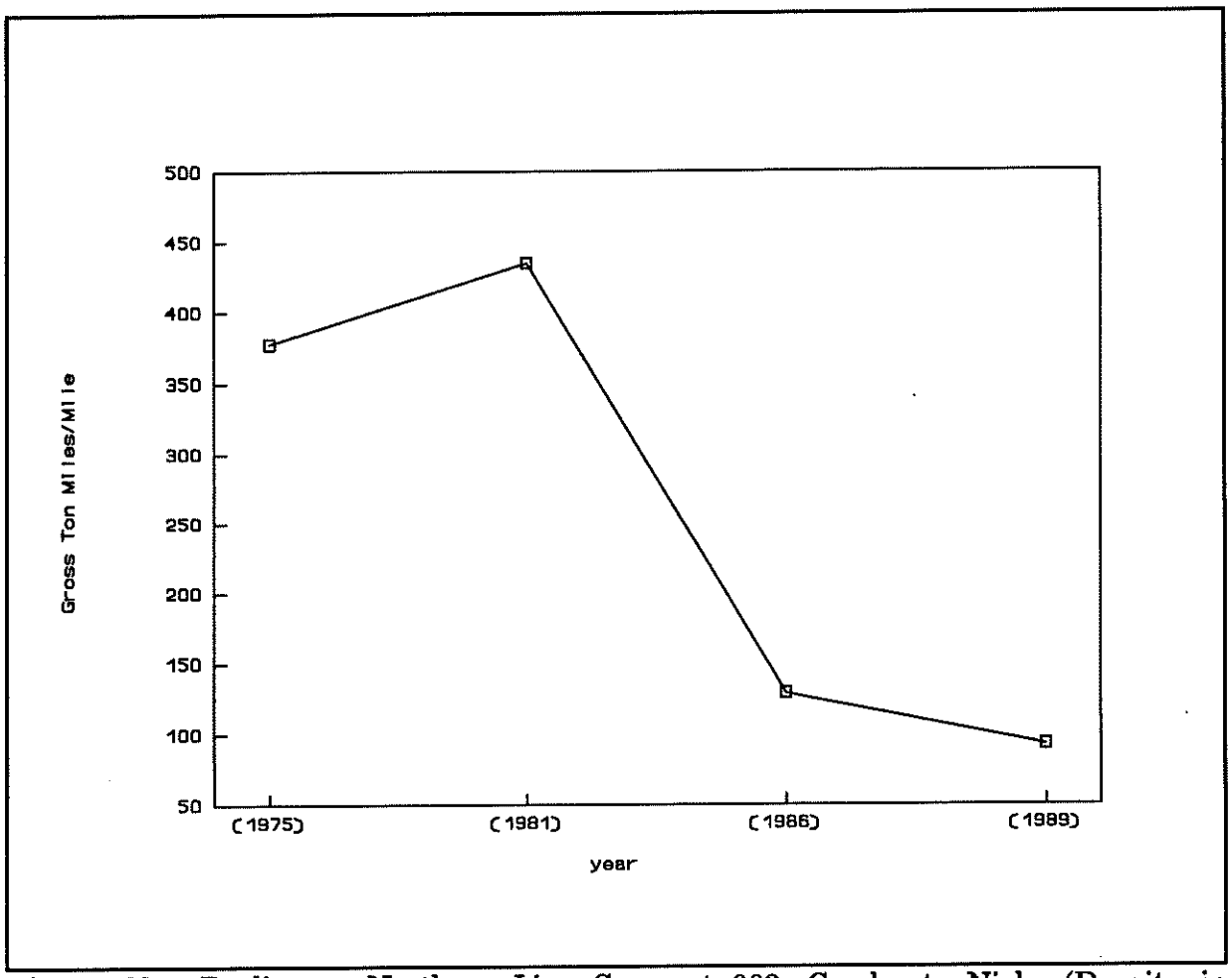


Figure 63: Burlington Northern Line Segment 003, Crosby to Niobe (Density in Thousands of Gross Ton Miles per mile)

Burlington Northern Line Segment 007: Niobe to Berthold

Beginning in 1985, the Niobe to Berthold line saw a decline of over 100 grain carloads (Figure 64) to 28 carloads in 1988. Traffic rebounded to nearly 80 carloads in

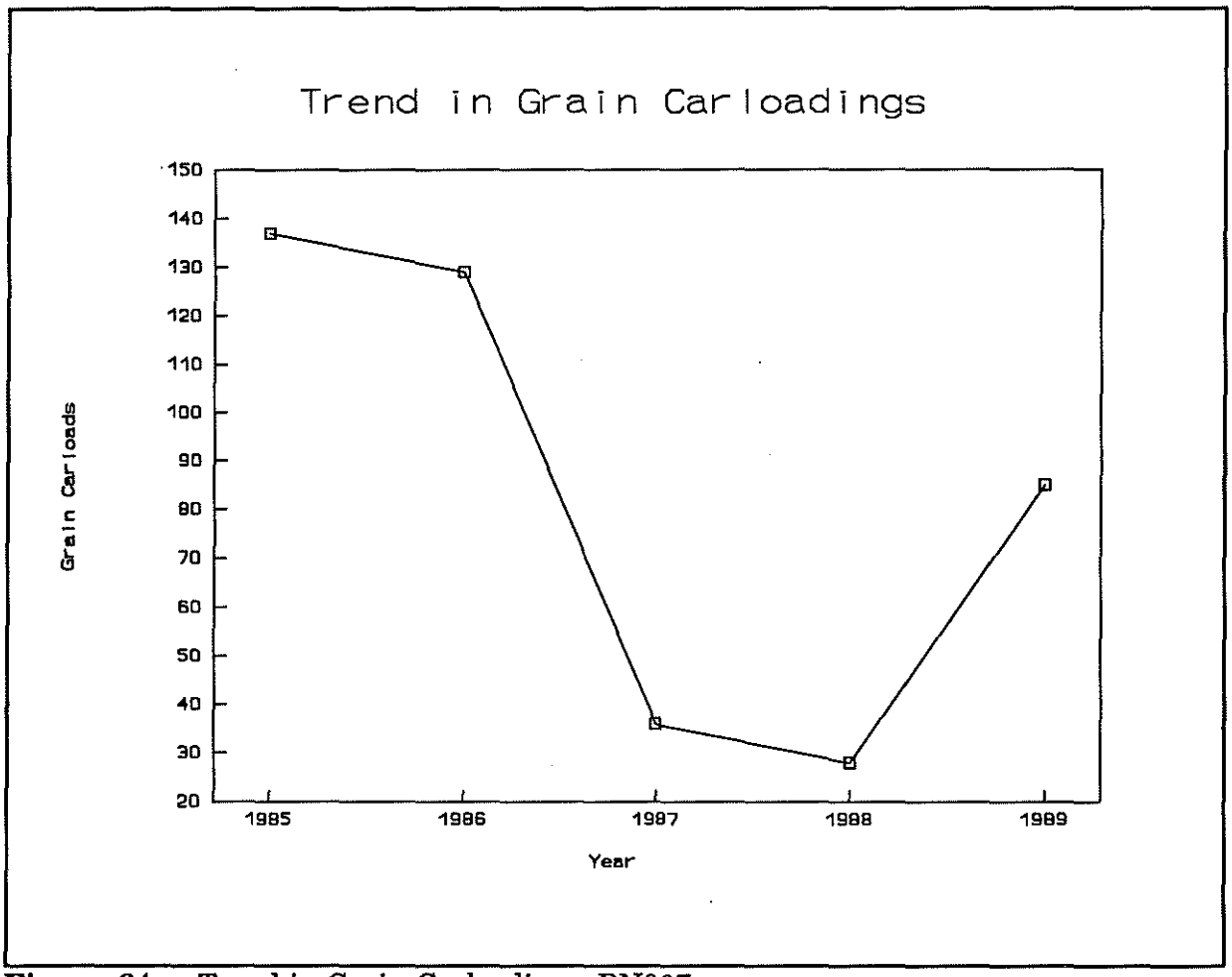


Figure 64: Trend in Grain Carloadings; BN007

1989, but the line did not regain all of the losses sustained in 1987 and 1988. Likewise, a decline is present in the percent shipped by truck (Figure 65). From a high of 61% in 1986 it dropped to just 12% in 1989. Figure 66 also shows declining traffic on the Niobe to Berthold line. Although traffic increased 2.4 million GTMM from 1975 to 1981, it fell more than 2.6 million GTMM to less than 1.6 million GTMM in the years that followed. The declining trends visible in grain carloadings, truck modal share, and traffic density

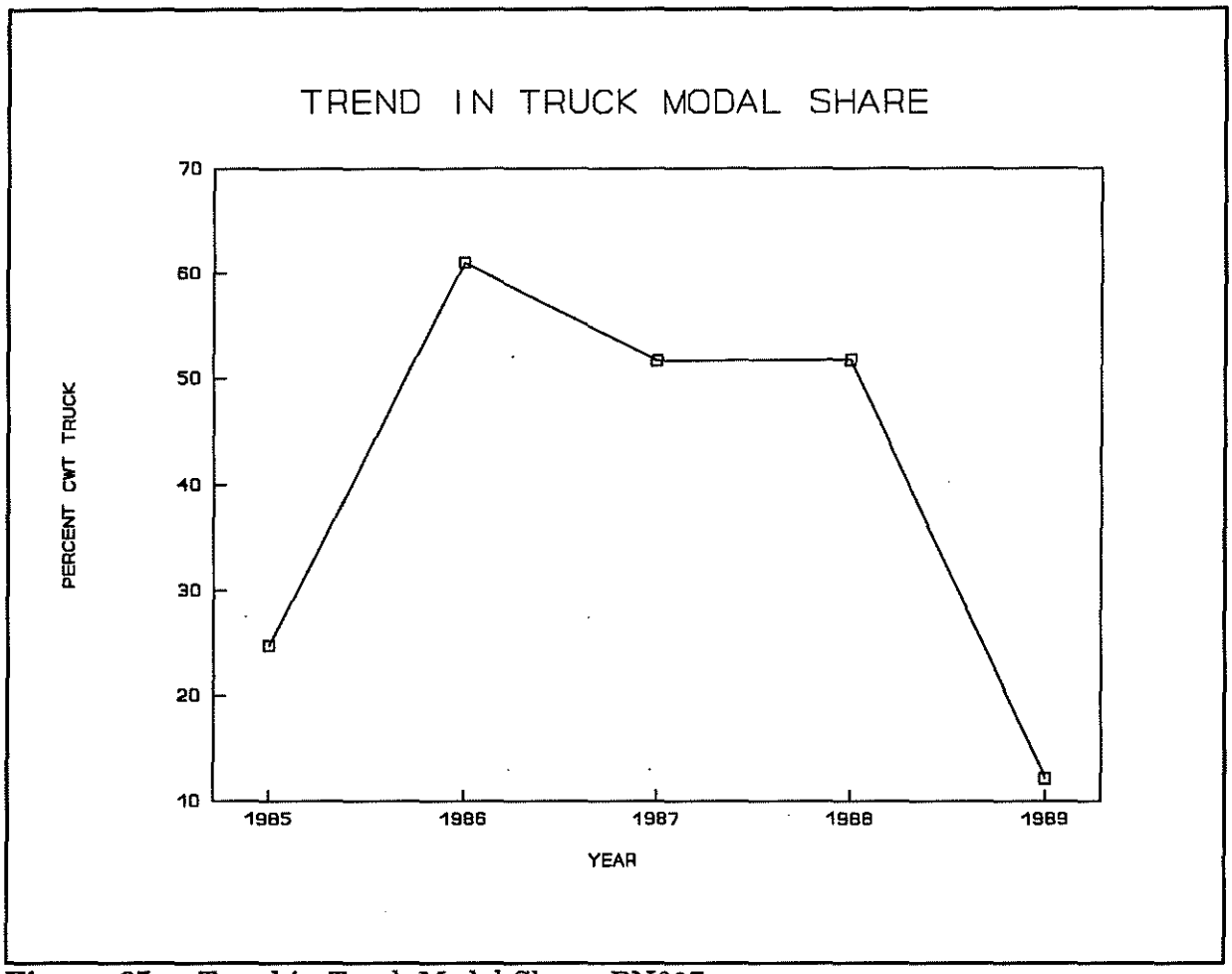


Figure 65: Trend in Truck Modal Share; BN007

are all primarily the result of the crop failures in 1987 and 1988 and trucking to Bowbells and Minot.

As Table 7 shows, BN 007 survives on bridge traffic, generating less than three cars per mile. However, with an overall traffic density of nearly 1.5 million, the line should be stable for years to come.

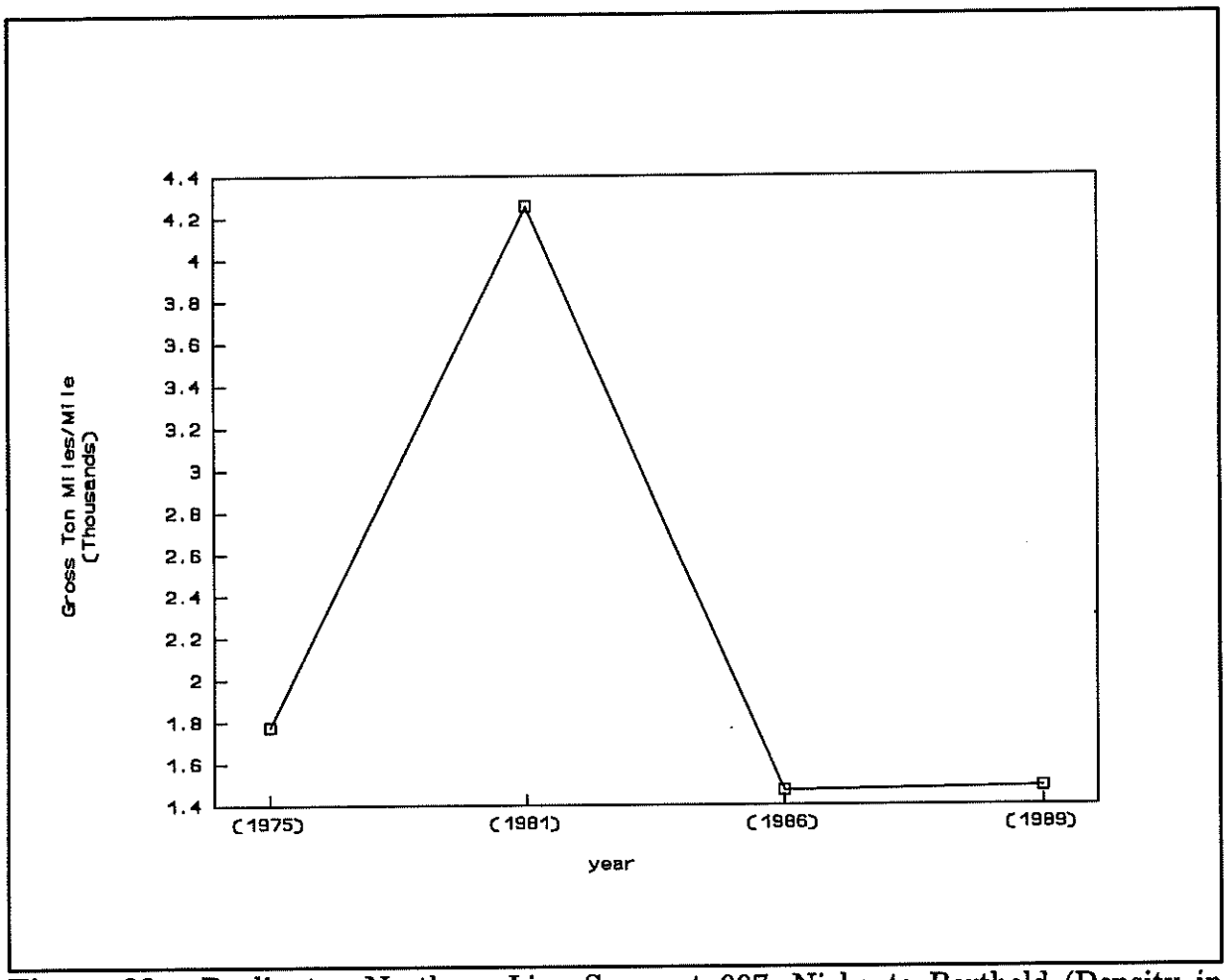


Figure 66: Burlington Northern Line Segment 007, Niobe to Berthold (Density in Thousands of Gross Ton Miles per mile)

Burlington Northern Line Segment 009: Sherwood to Granville

The outlook of the Sherwood to Granville line portrayed in the next few pages is bleak. Figure 67 shows the slide of grain carloads from 190 to none in the past five years.

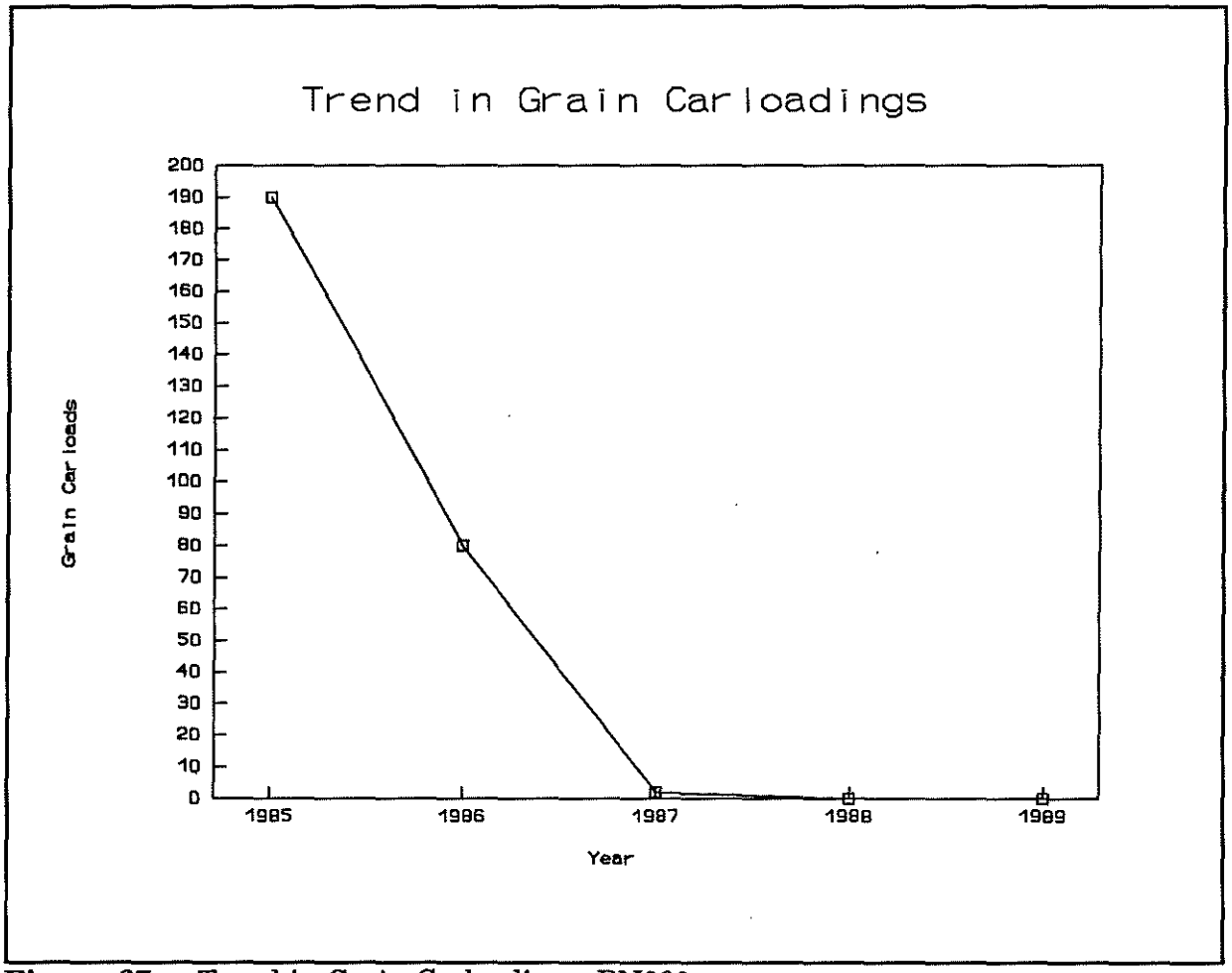


Figure 67: Trend in Grain Carloadings; BN009

Figure 68 shows the truck modal share conversely increasing to pick up the traffic lost by the line, until in 1988 it reached 100 percent. These shifts reflect the trucking of the line's former traffic to Minot and other Soo Line terminals. A weight restriction by the Burlington Northern has made many shippers prefer to ship by the Soo Line. Figure 69 shows the steady decline in overall traffic, giving evidence of the Sherwood to Granville line's historic decline. Furthermore, as Table 7 shows, the line generates little non-grain traffic.

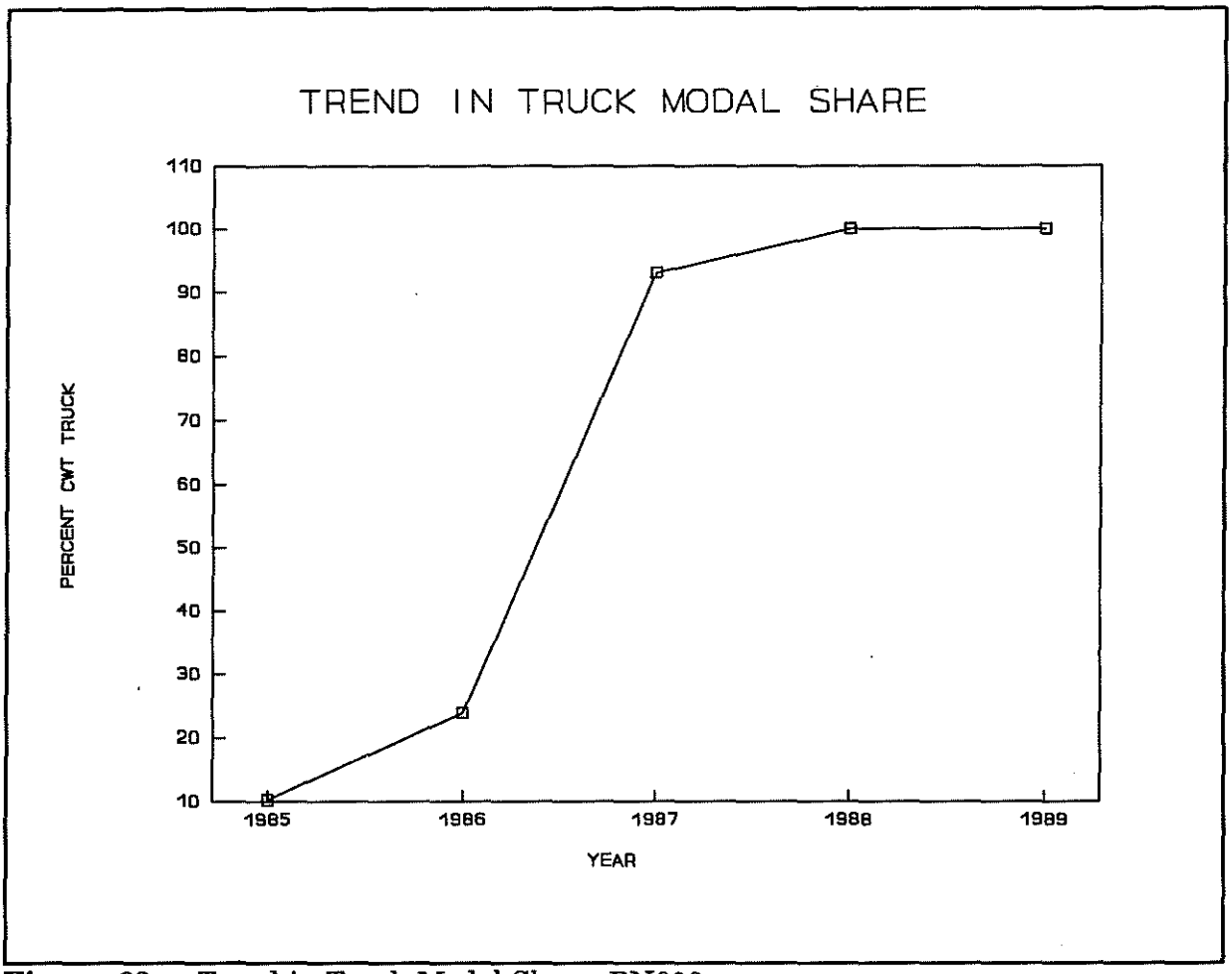


Figure 68: Trend in Truck Modal Share; BN009

The Loraine to Sherwood portion of the line has been abandoned for some years. Furthermore, the BN has not served Loraine in several years. The Loraine and Mohall elevators are trucking significant amount of grain to Bowbells. Furthermore, Lansford is now a satellite elevator to the subterminal at Russell, located on the Soo Line. Everything south of Lansford is being trucked to Minot. Currently, there is a 220,000 pound weight restriction on the line from Mohall to Loraine, eliminating the potential movement of inbound commodities to Loraine.

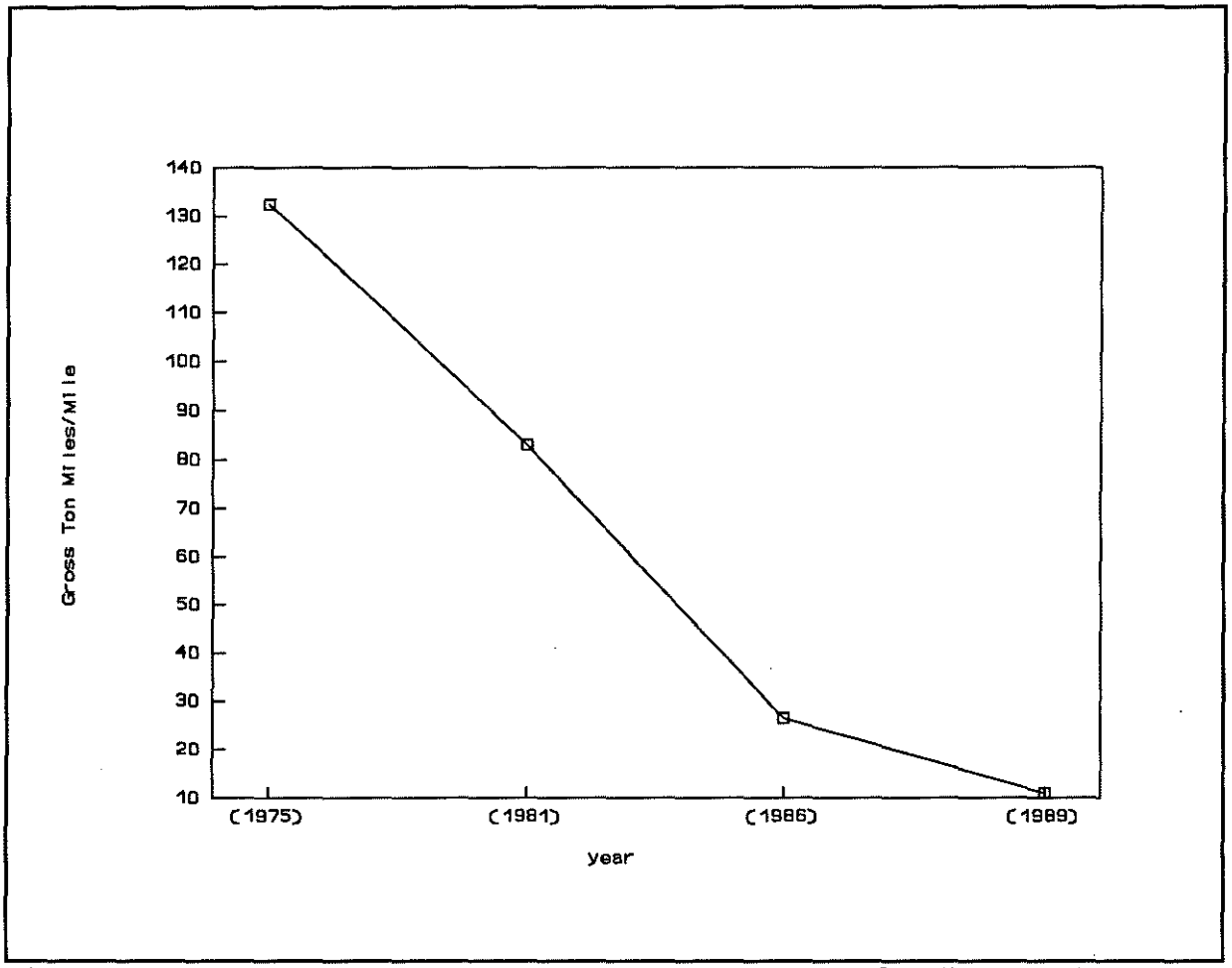


Figure 69: Burlington Northern Line Segment 009, Sherwood to Granville (Density in Thousands of Gross Ton Miles per mile)

Burlington Northern Line Segment 011: Westhope to Rugby

The Westhope to Rugby line peaked at 2,893 grain carloads in 1986, as seen in Figure 70, but otherwise traffic varied around the level of 1,700 carloads. The peak in

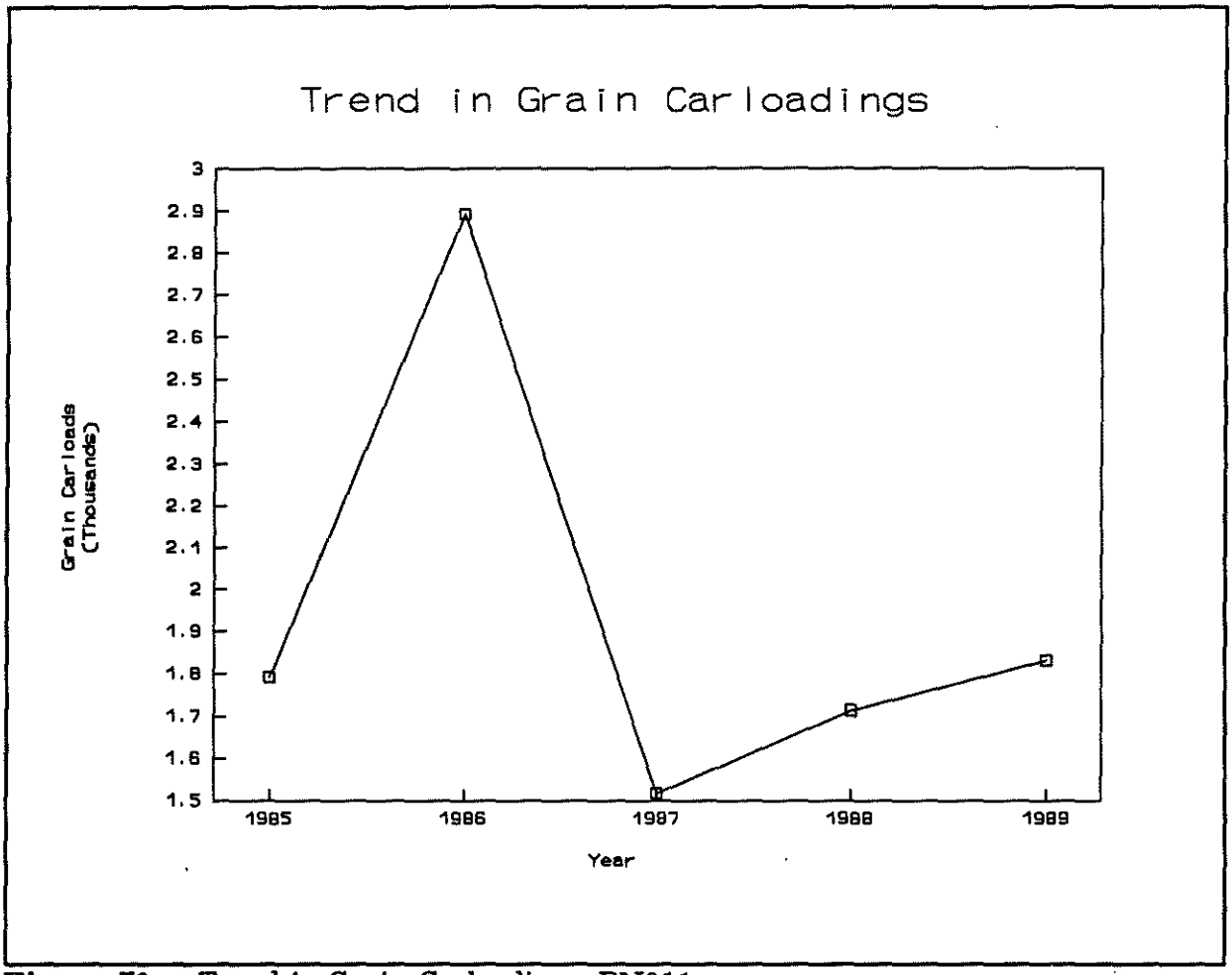


Figure 70: Trend in Grain Carloadings; BN011

grain carloads in 1986 was accompanied by a plunge in truck modal share the same year (Figure 71). Overall, however, truck shipping increased its share to 18.5% in 1989. Figure 72 also points to 1986 as a peak year for total shipments on the Westhope to Rugby line. Thus it would appear the line achieved its period high in 1986 at 350,000 GTMM, after which, diverted traffic was picked up by truck. As with other parts of North Dakota the region around the Westhope-Rugby line has experienced a drought and crop

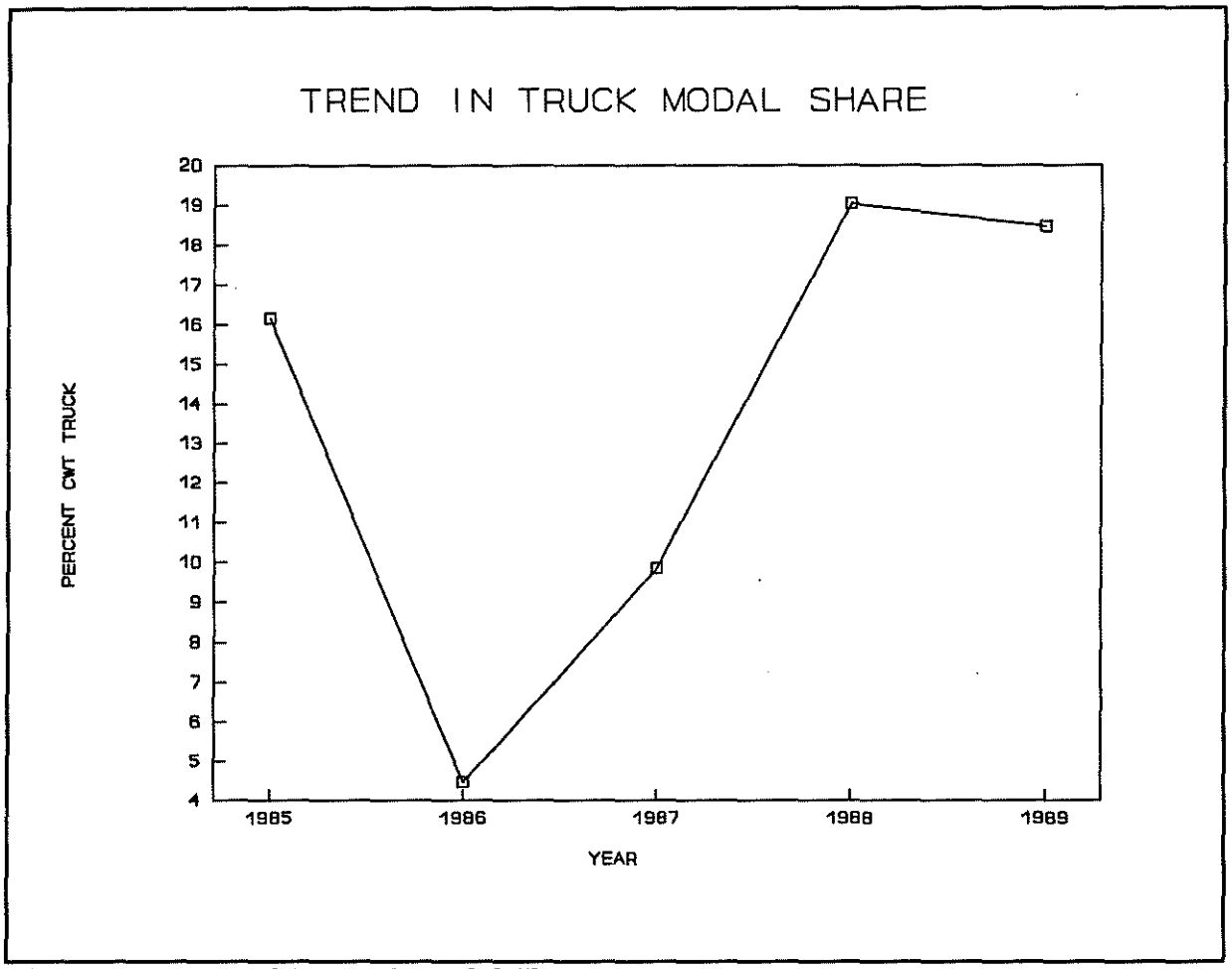


Figure 71: Trend in Truck Modal Share; BN011

failures in recent years. One of the elevators in Westhope has closed, and was bought by the other elevator in town, Minot Farmers' Union. Some traffic is shipped to Rugby by truck and some is shipped by rail. The Westhope to Antler subsegment of the line has been abandoned for years.

As Table 7 shows, the line generate 27 grain cars per mile in 1989. Thus, it should be viable in the near-term. However, with only two major shippers left on the line, any shift in market share or modal split could significantly impact the line.

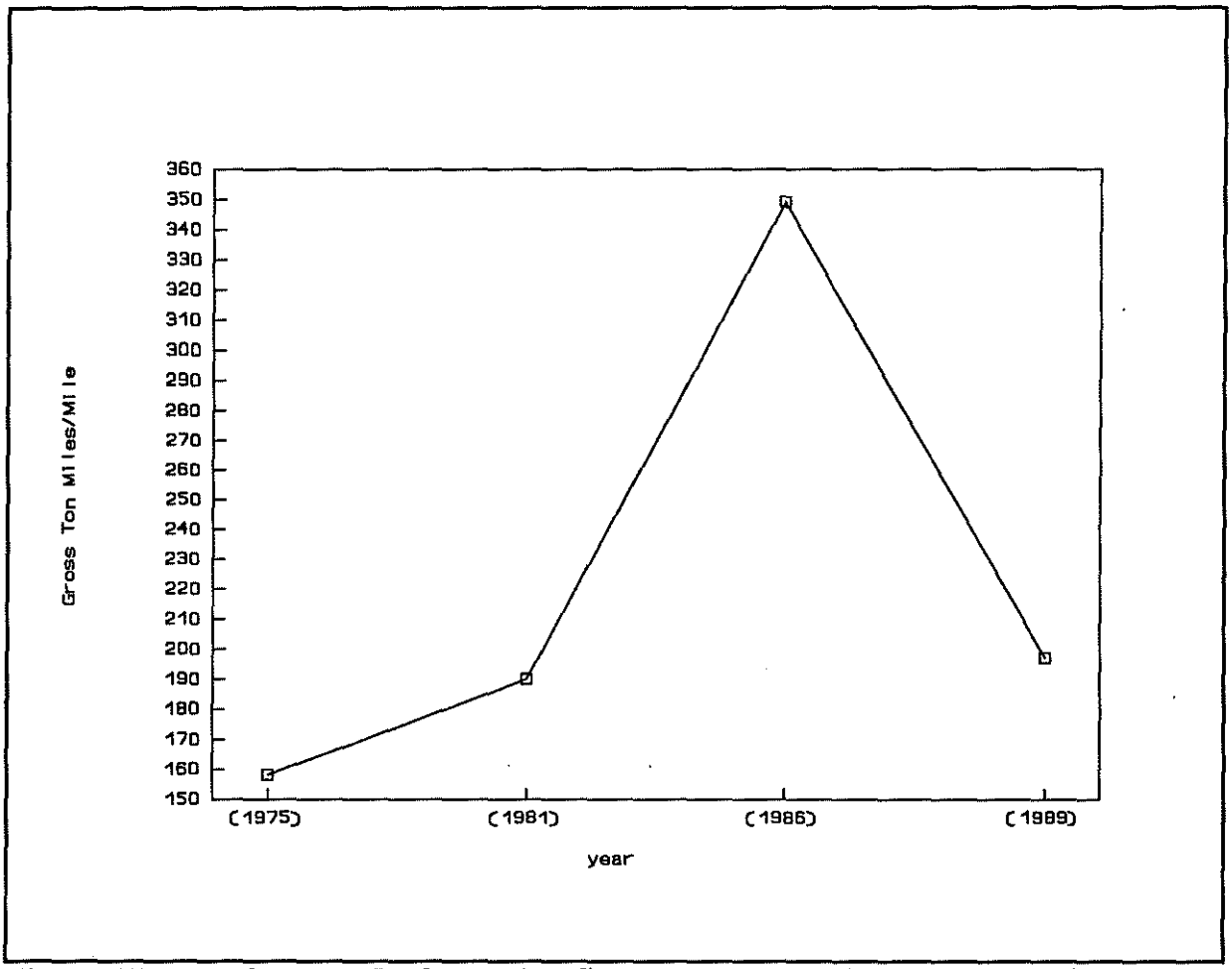


Figure 72: Burlington Northern Line Segment 011, Westhope to Rugby (Density in Thousands of Gross Ton Miles per mile)

Burlington Northern Line Segment 013: Newburg to Towner

The last carload of grain shipped on the Newburg to Towner line was in 1985, when it was the only carload of grain shipped (Figure 73). There was no traffic shipped

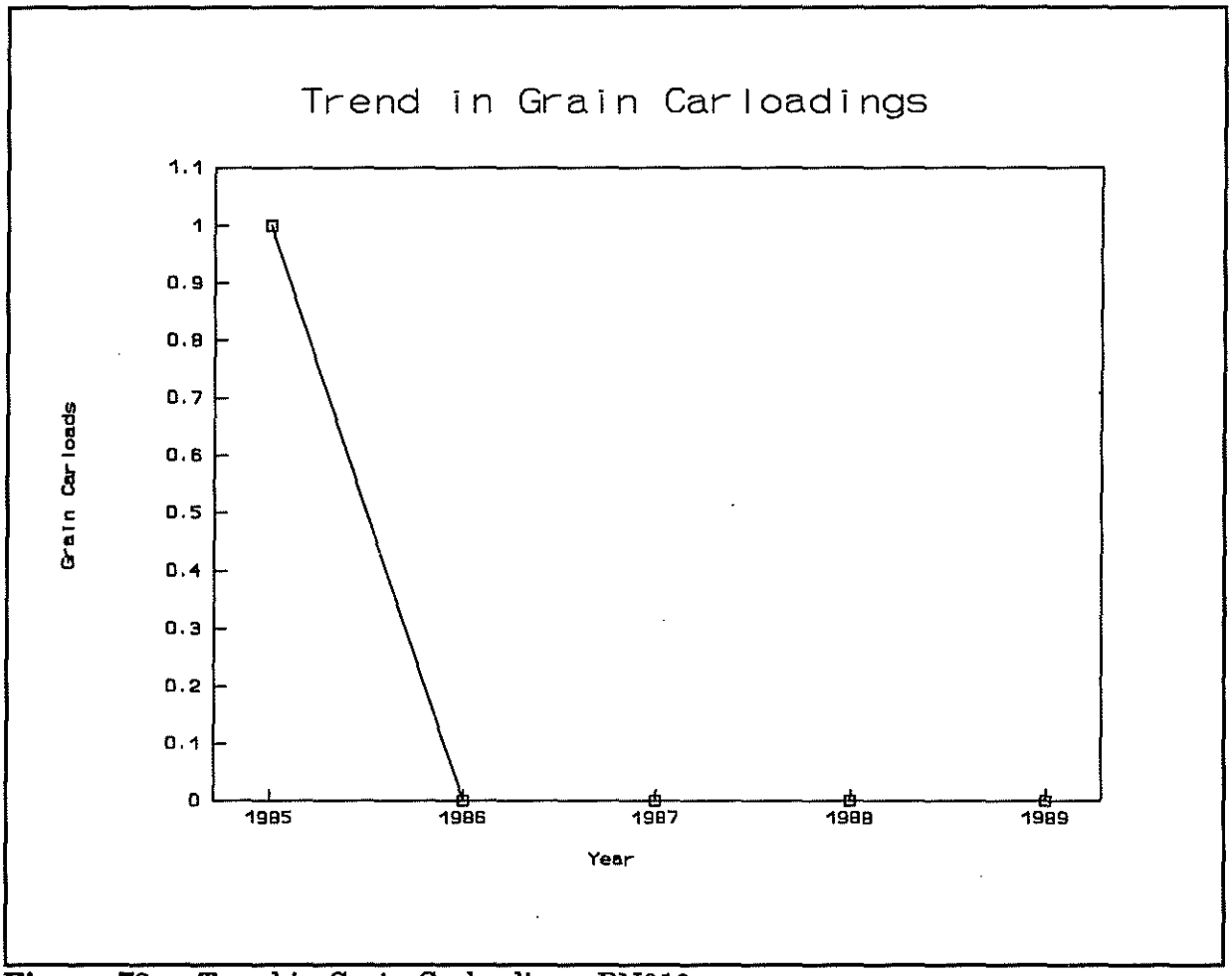


Figure 73: Trend in Grain Carloadings; BN013

by truck between 1985 and 1989. The weight restriction imposed by the Burlington Northern has resulted in the diversion of local traffic to the Soo Line. Figure 74 more clearly shows the decline in traffic starting from less than 70,000 GTMM in 1975 and dropping steadily for the next decade. Table 7 also reports no traffic on the line.

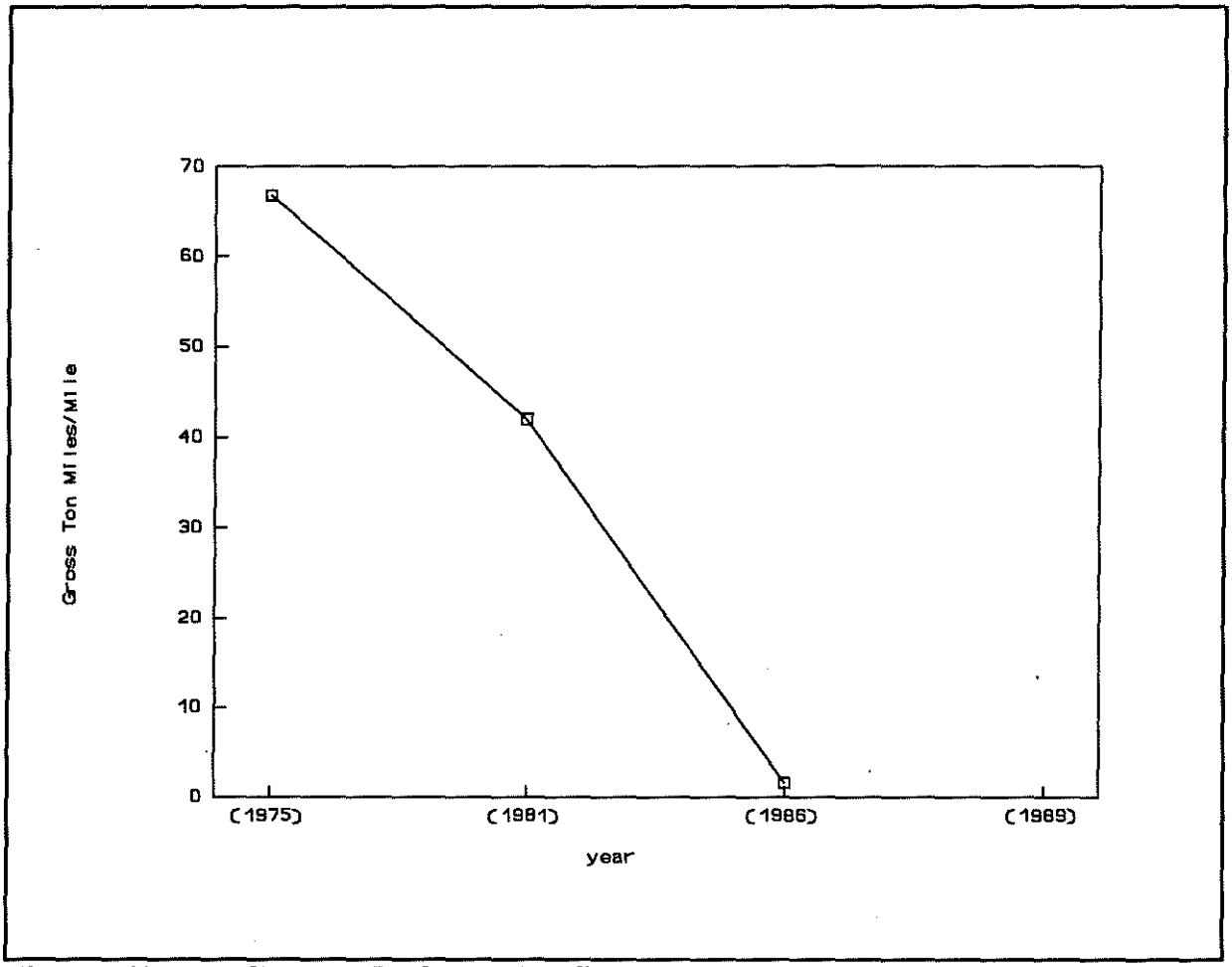


Figure 74: Burlington Northern Line Segment 013, Newburg to Towner (Density in Thousands of Gross Ton Miles per mile)

Burlington Northern Line Segment 015: Wolford to York

Because there are less than three shippers on this line it is necessary to keep the grain and non-grain shipping data confidential. Therefore, the analysis will focus on the overall trend in traffic density.

In 1975, the Wolford to York line generated 58,000 GTMM. However, the traffic density has declined significantly since then, falling to less than 20,000 GTMM in 1986. Presently, the line generates less than 10,000 gross ton-miles per mile (Figure 75). Because of its light traffic density, alternatives for this line should be evaluated.

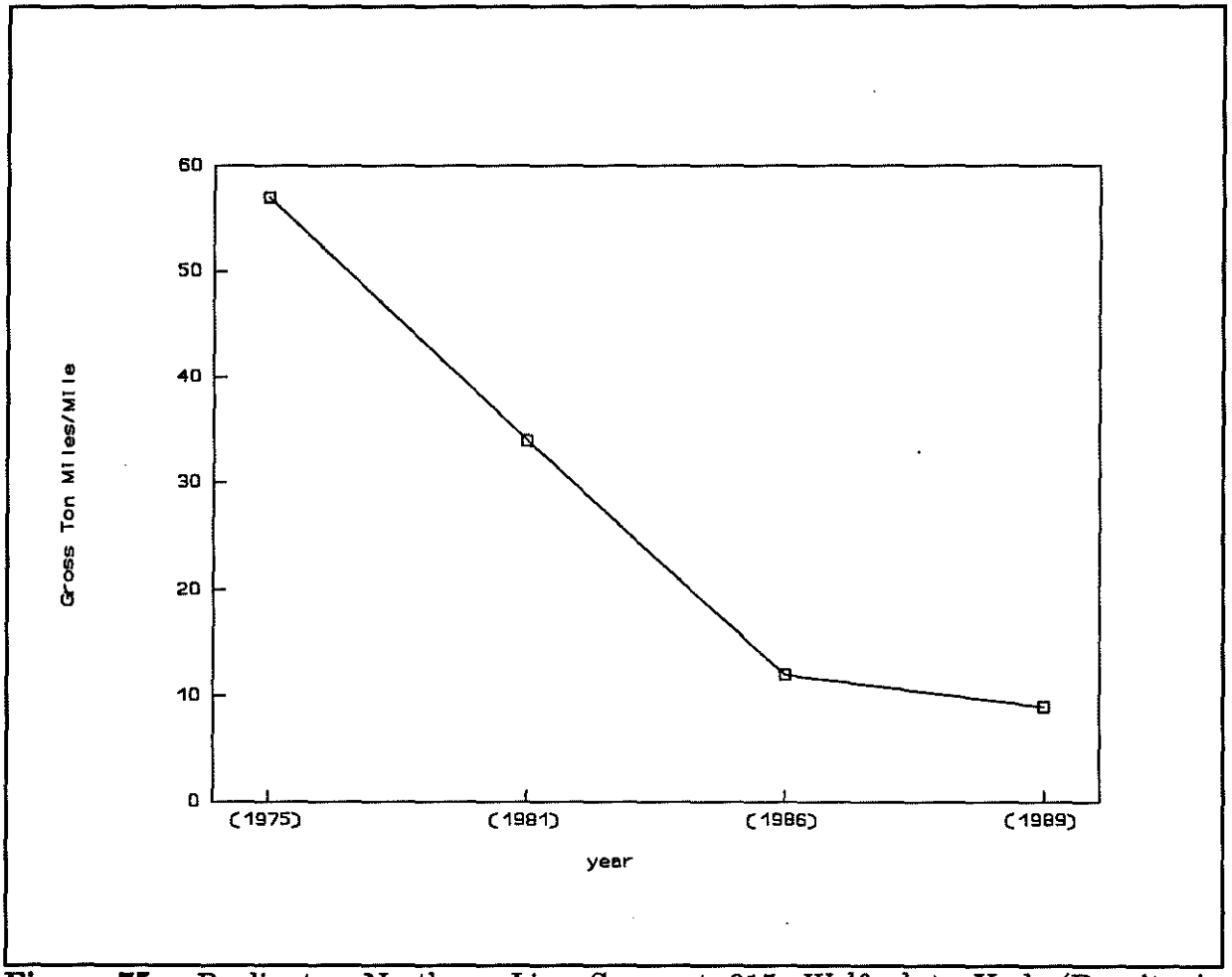


Figure 75: Burlington Northern Line Segment 015, Wolford to York (Density in Thousands of Gross Ton Miles per mile)

Burlington Northern Line Segment 021: Rolla to Churchs Ferry

Figure 76 shows the trend in grain carloadings for the Rolla to Churchs Ferry line.

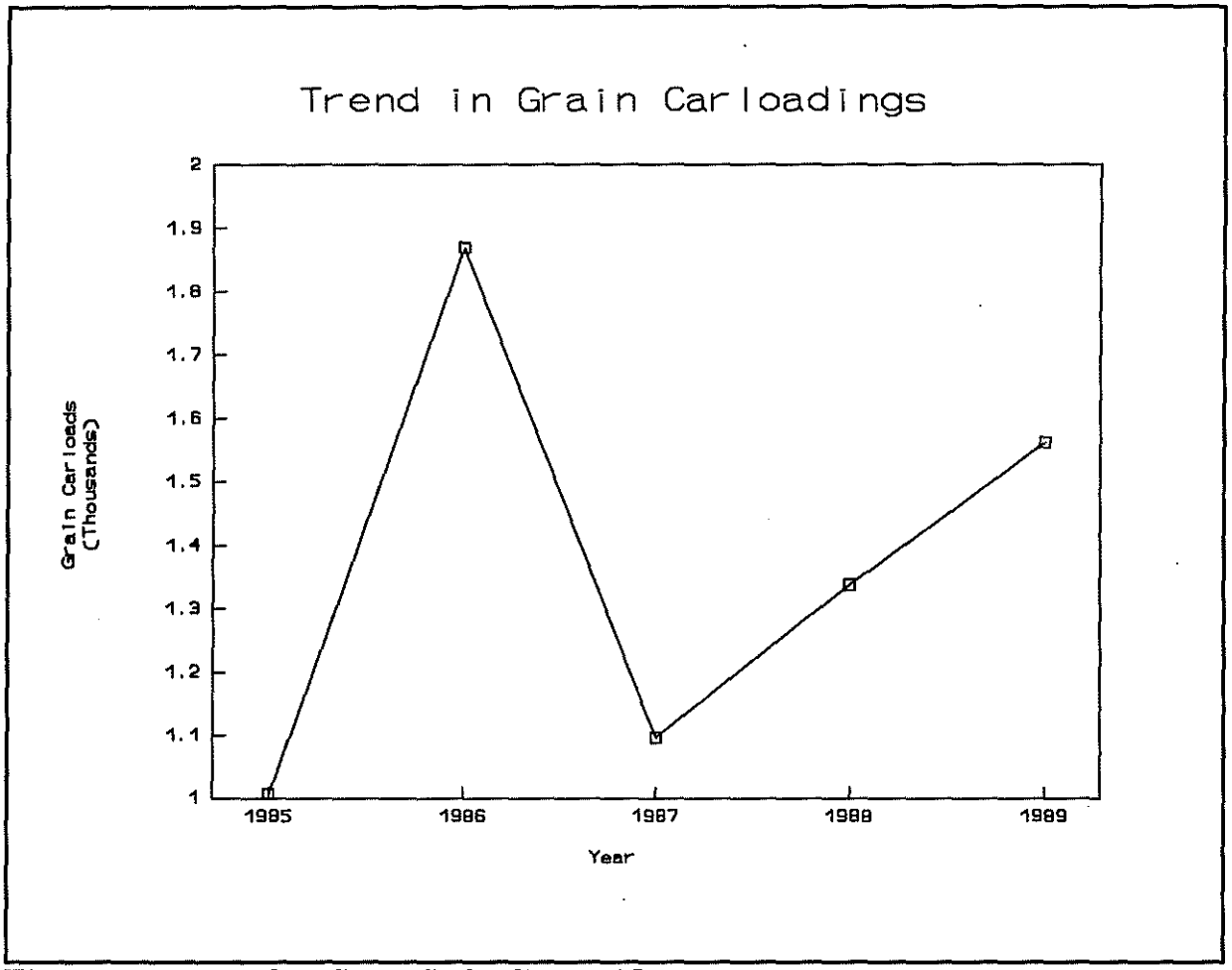


Figure 76: Trend in Grain Carloadings; BN021

Grain carloadings reached a peak in 1986, and after a sharp drop in 1987, have rebounded some. Truck modal share, shown in Figure 77, has increased over the five year period. The elevator at Perth, north of Bisbee, ships some grain by truck to Bisbee. The traffic on the Rolla-Churchs Ferry line peaked in 1981 at 600,000 GTMM, and fell to 185,000 GTMM by 1989 (Figure 78).

The decline in overall traffic density from 1981 indicates an erosion in the small non-grain traffic base. However, as Table 7 shows, the line still generates over 30 grain

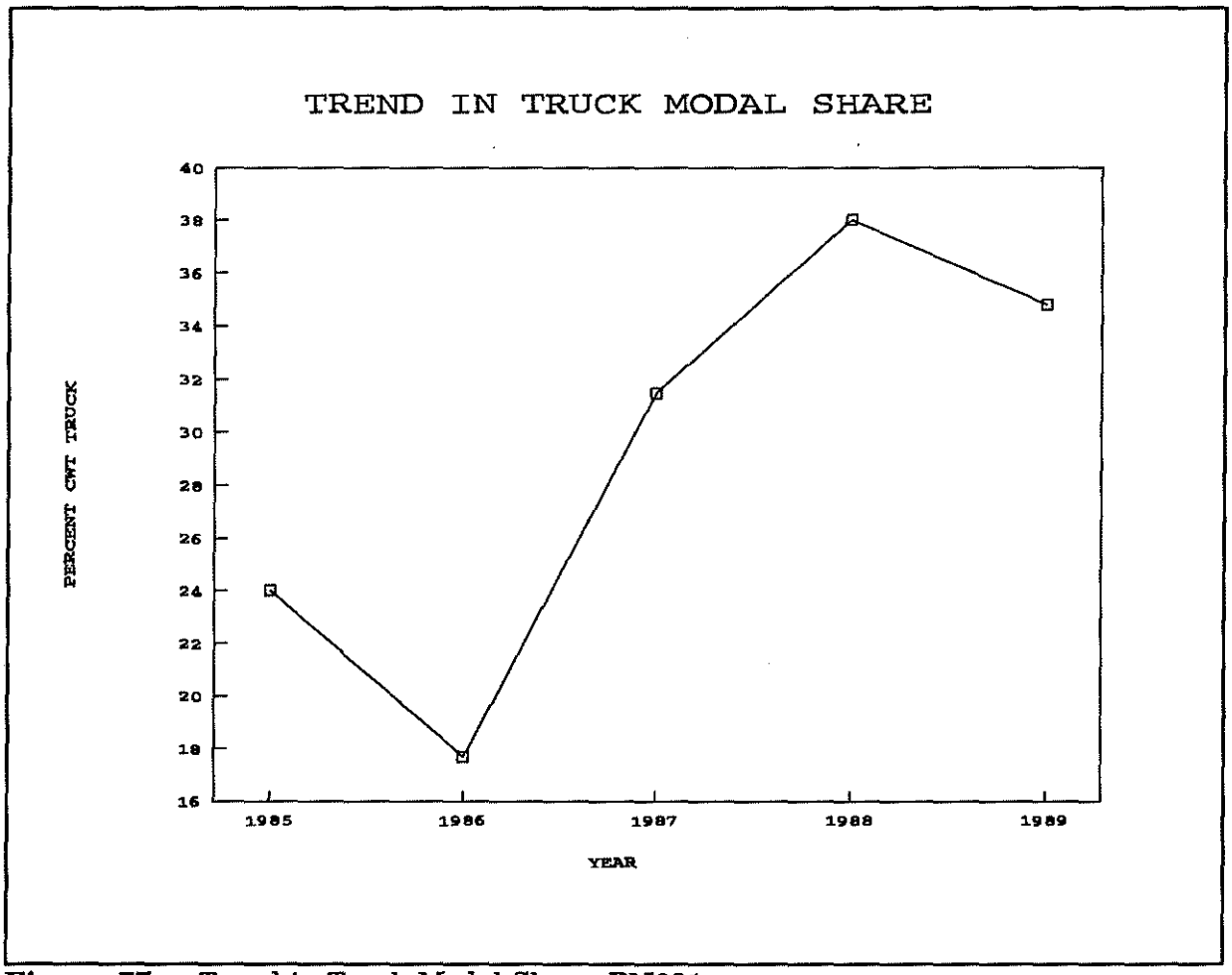


Figure 77: Trend in Truck Modal Share; BN021

cars per mile.

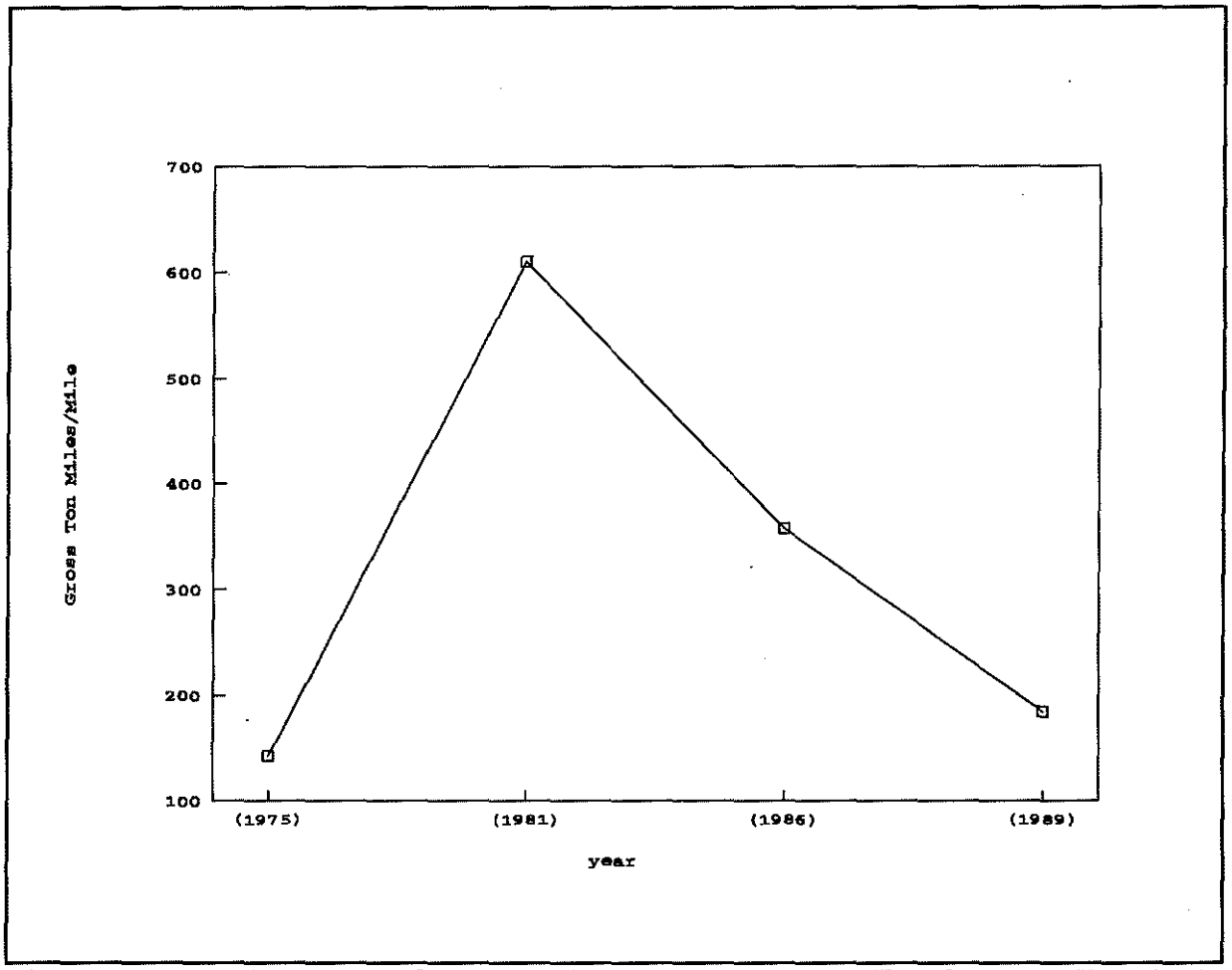


Figure 78: Burlington Northern Line Segment 021, Rolla to Churchs Ferry (Density in Thousands of Gross Ton Miles per mile)

Burlington Northern Line Segment 023: Hansboro to Devils Lake

From 1985 to 1988 the Hansboro to Devils Lake line lost 213 grain carloads (Figure 79). At the same time truck modal share rose about 7 percent (Figure 80). But in

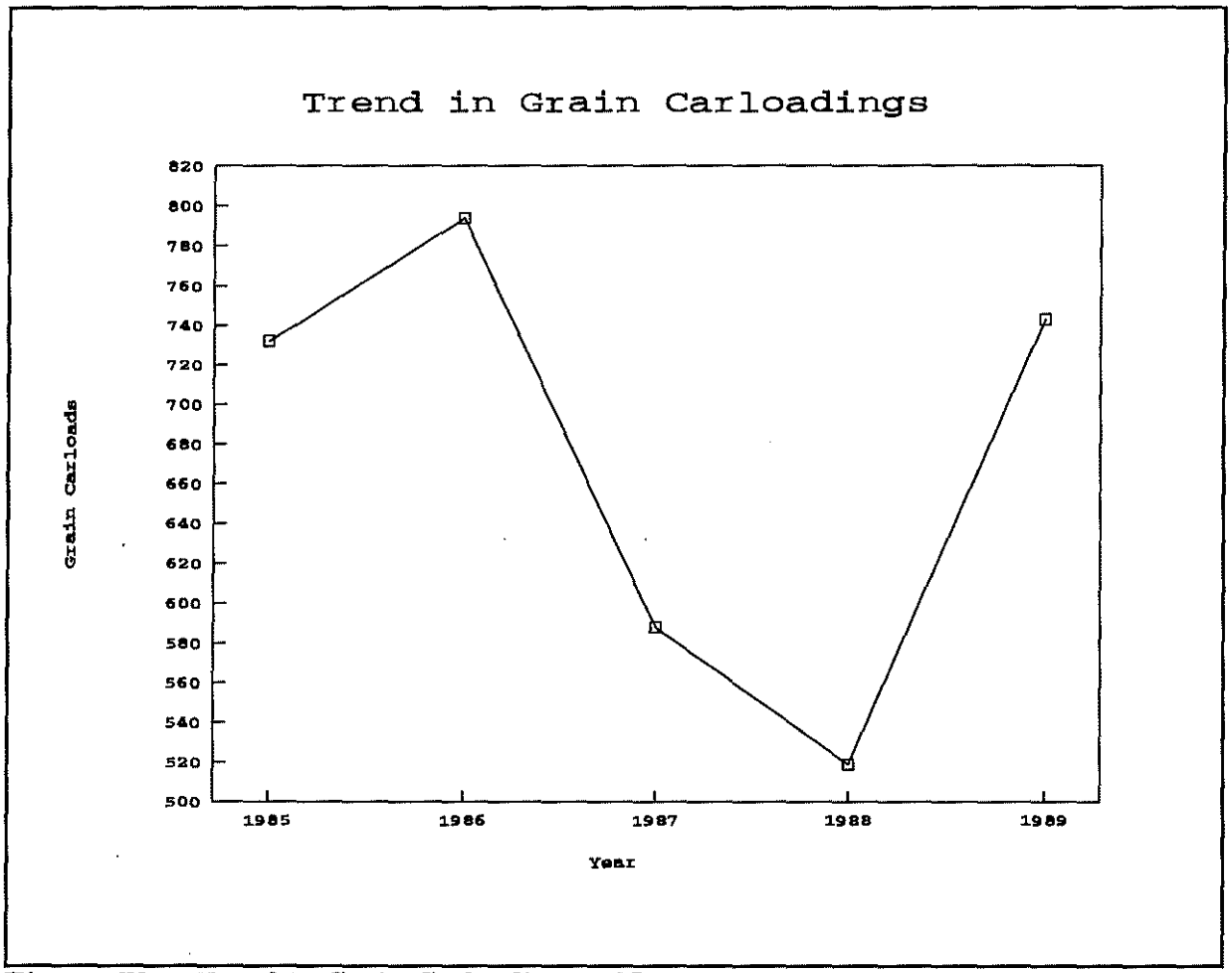


Figure 79: Trend in Grain Carloadings; BN023

1989 the number of grain carloads rebounded to its 1985 level, and truck modal share fell below its 1985 level to just 17 percent. This recent increase in grain traffic does not look as impressive when compared with the larger falls in traffic density during the preceding years, as shown in Figure 81. In addition, elevator closings that have occurred already in 1990 will detrimentally affect the traffic density for years to come. However, traffic density on this line may be difficult to predict due to the fact that one elevator on this line

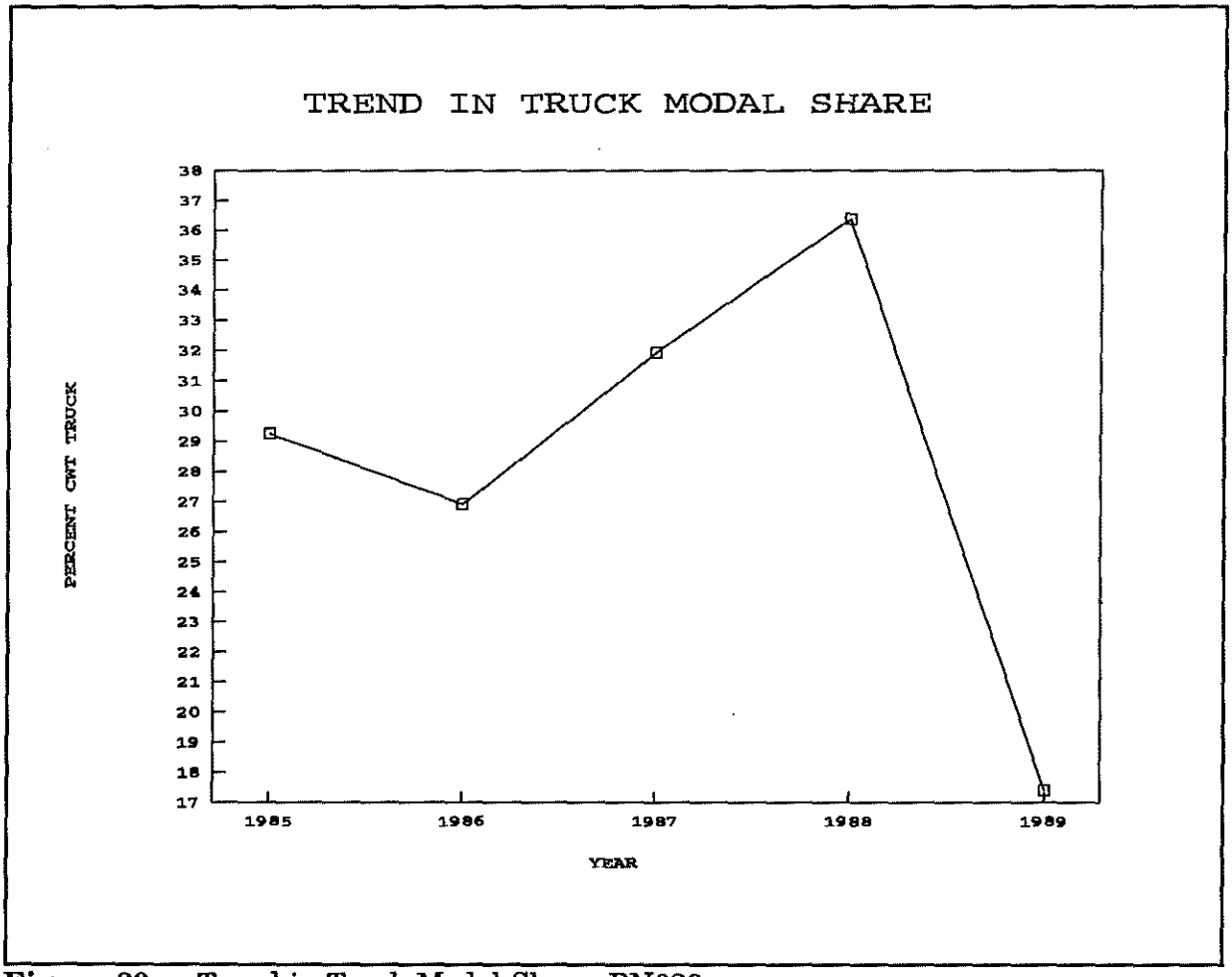


Figure 80: Trend in Truck Modal Share; BN023

(Rock Lake) is controlled by another which is not on this line (Bisbee).

As Table 7 shows, the line generated only eleven grain cars per mile in 1989. Furthermore, the non-grain traffic density is less than one car per mile. The Starkweather to Hansboro portion of the line is already on the abandonment map. The remainder of the line is marginally profitable at best. Thus, alternatives to abandonment need to be examined.

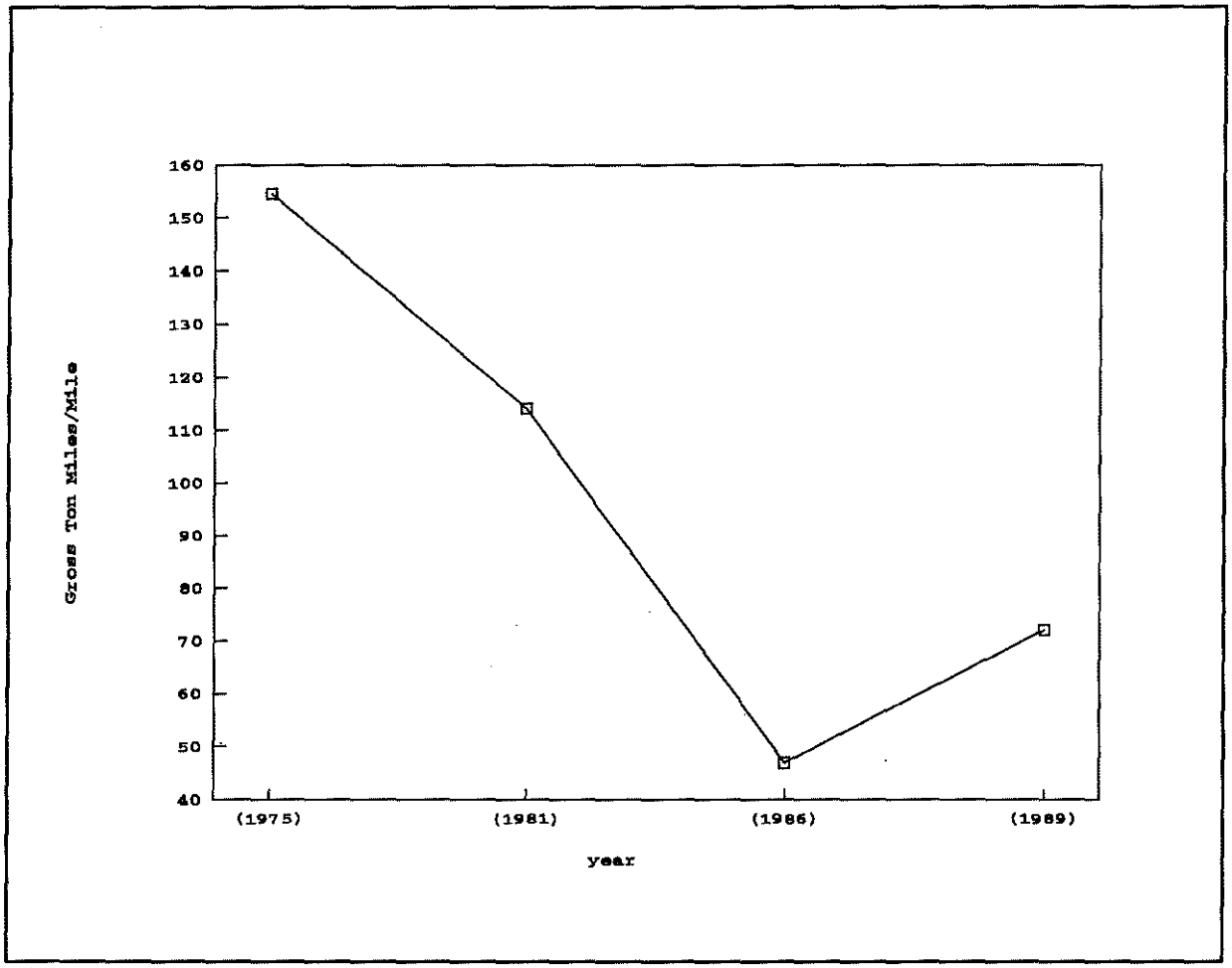


Figure 81: Burlington Northern Line Segment 023, Hansboro to Devils Lake (Density in Thousands of Gross Ton Miles per mile)

Burlington Northern Line Segment 025: Sarles to Lakota

The Sarles to Lakota line has generated over 2000 carloads of grain traffic since 1986 (Figure 82). Likewise, Figure 84 shows the line maintaining a healthy level of

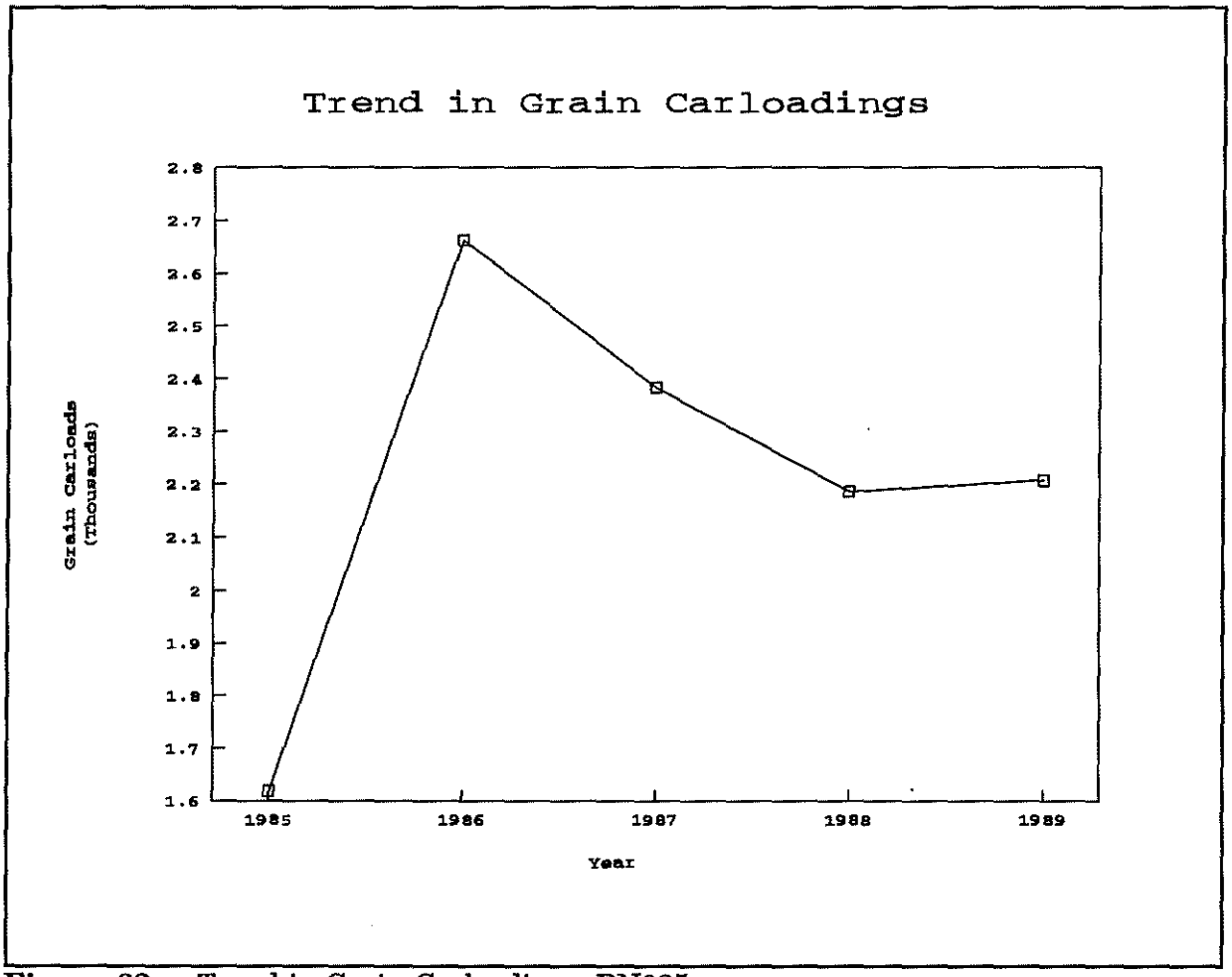


Figure 82: Trend in Grain Carloadings; BN025

total traffic near the 300,000 GTMM mark throughout the 1980's. With this level of traffic, the increase in truck modal share (Figure 83) does not pose a substantial threat to the future of this line. The increase in truck shipments is due to competition from the Soo Line at Hampden and Munich. But overall, this is a strong line and will probably continue to be so. As Table 7 shows, it generated 30 grain cars per mile in 1989.

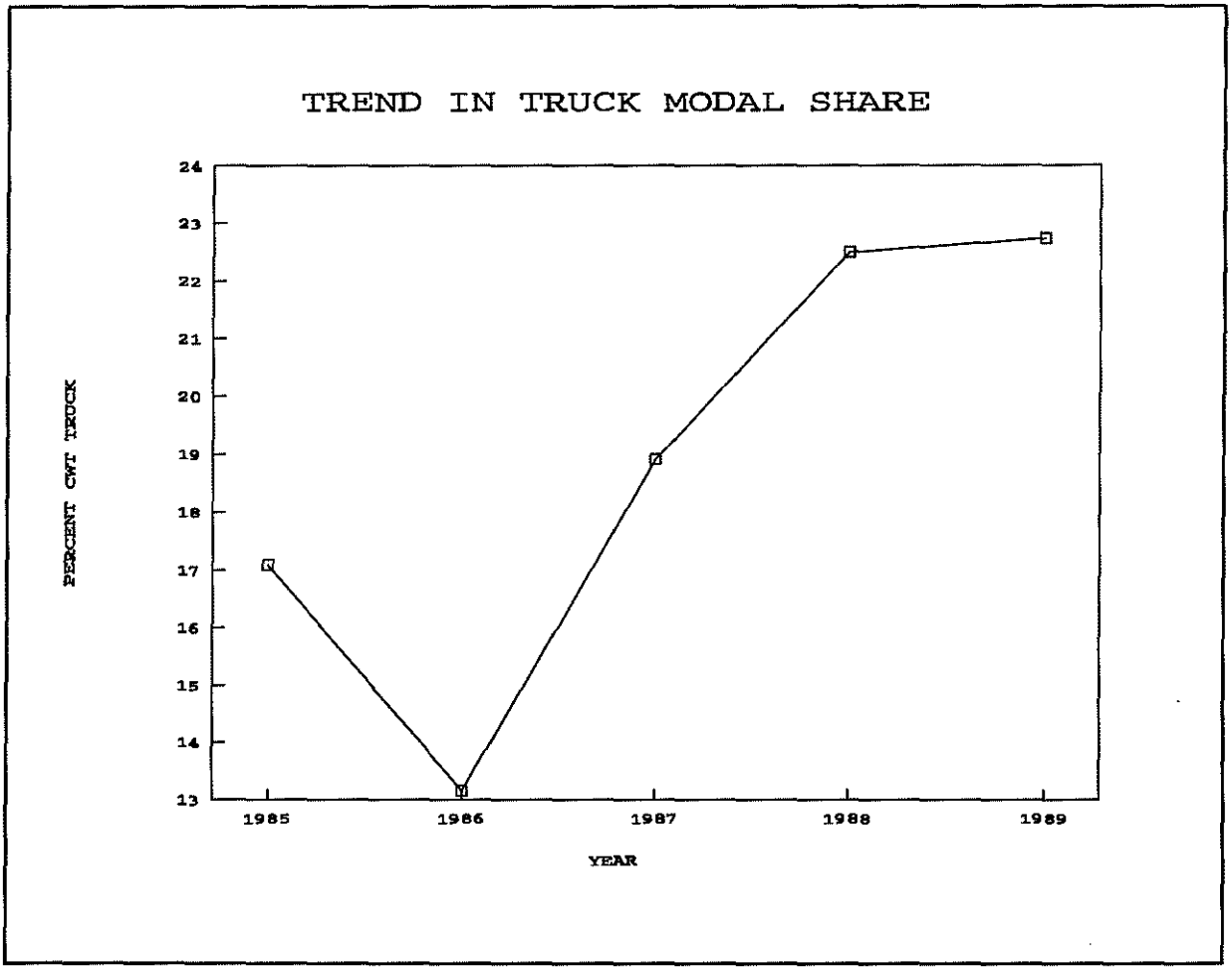


Figure 83: Trend in Truck Modal Share; BN025

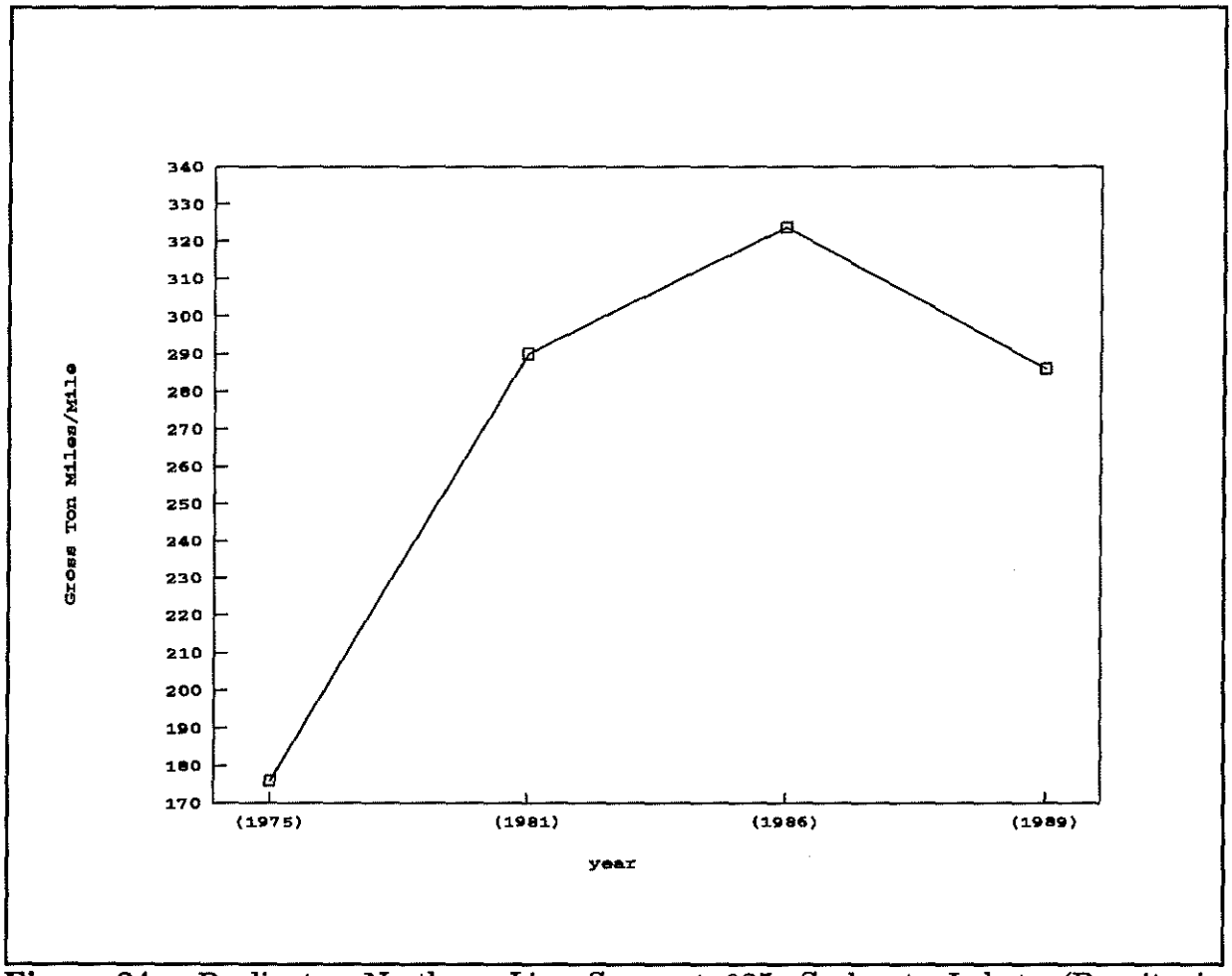


Figure 84: Burlington Northern Line Segment 025, Sarles to Lakota (Density in Thousands of Gross Ton Miles per mile)

Burlington Northern Line Segment 027: Hannah to Larimore

Line segment 27 runs from Hannah, on the Canadian border, to Larimore, west of Grand Forks. Along this long branchline many new terminals have opened, increasing the activity on the line. The number of grain carloads has nearly doubled from 1,745 in 1985 to 3,048 in 1989 (Figure 85). Meanwhile, Figure 86 shows the truck modal share

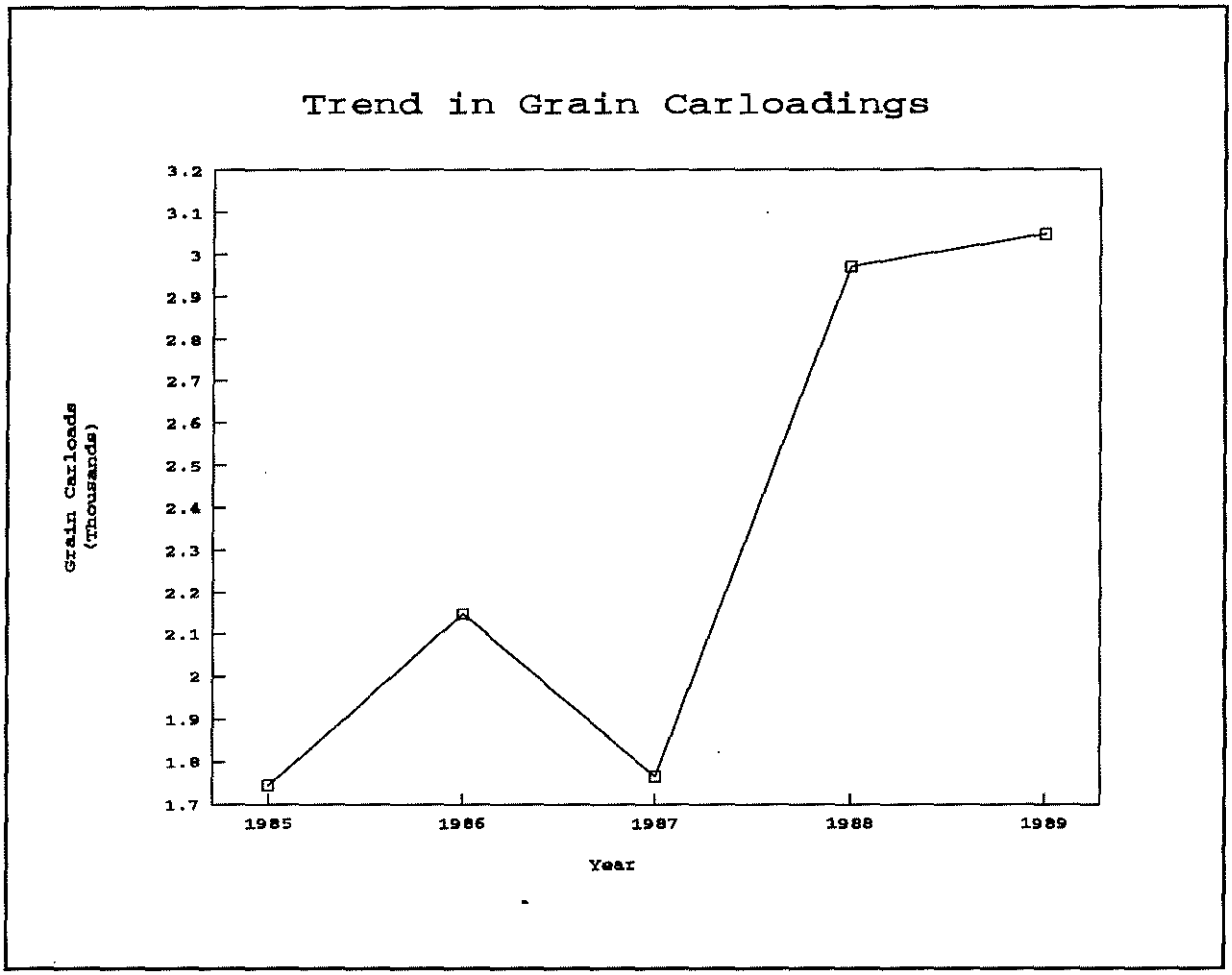


Figure 85: Trend in Grain Carloadings; BN027

dropping from 39 percent in 1985 to just under 30 percent in 1988 and 1989. The increase in rail traffic appears also in the graph of traffic density (Figure 87). Between the years 1981 and 1986 the density jumped by over 50,000 GTMM, remaining at the 400,000 GTMM level from 1986 to 1989.

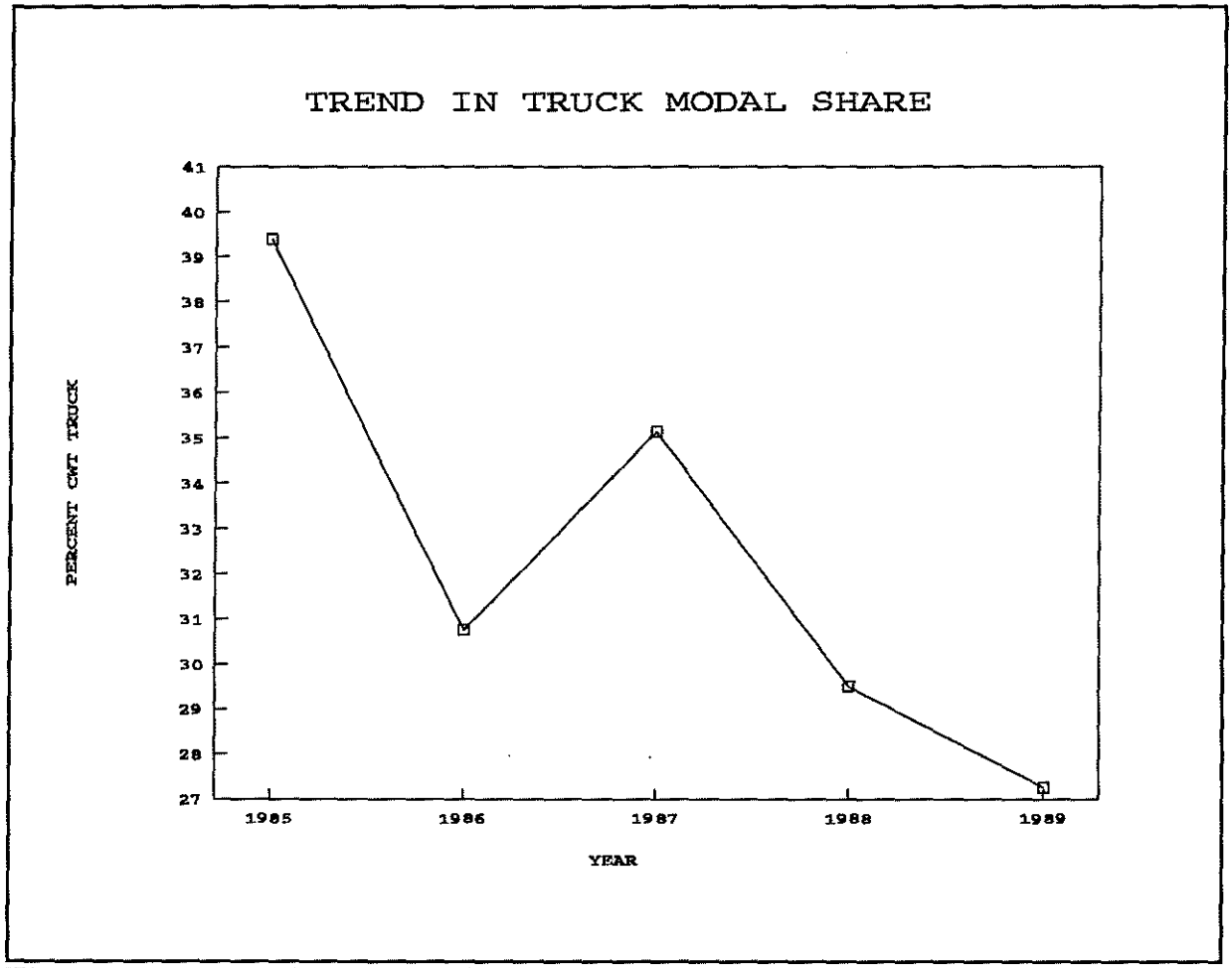


Figure 86: Trend in Truck Modal Share; BN027

The McCanna to Conway subsegment of the line is currently embargoed[34], and the BN has not operated over it in several years. The BN presently moves traffic from the Hannah to Conway portion of the line over the Soo Line to Ardoch. The middle subsegment of the line from Conway to Langdon generates the preponderance of the traffic. Even if the lower and upper subsegments fail, the Conway to Langdon subsegment will probably remain viable for the foreseeable future.

[34]An embargo means that a carrier cannot operate safely over the line.

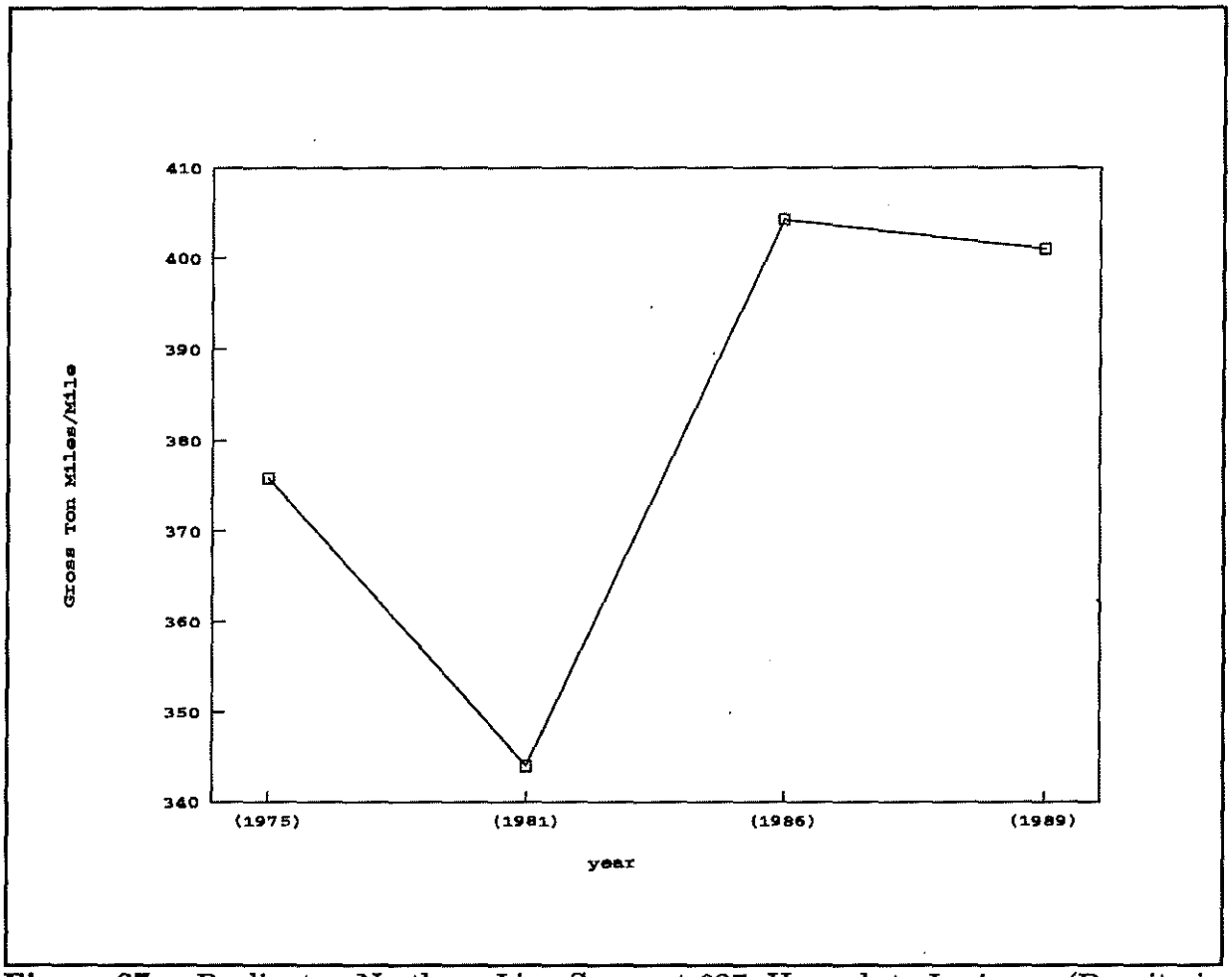


Figure 87: Burlington Northern Line Segment 027, Hannah to Larimore (Density in Thousands of Gross Ton Miles per mile)

Burlington Northern Line Segment 029: Walhalla to Grafton

With the exception of 1987, grain carloadings increased by approximately 100 carloads a year on BN line segment 029, Walhalla to Grafton (Figure 88). The drop of 759

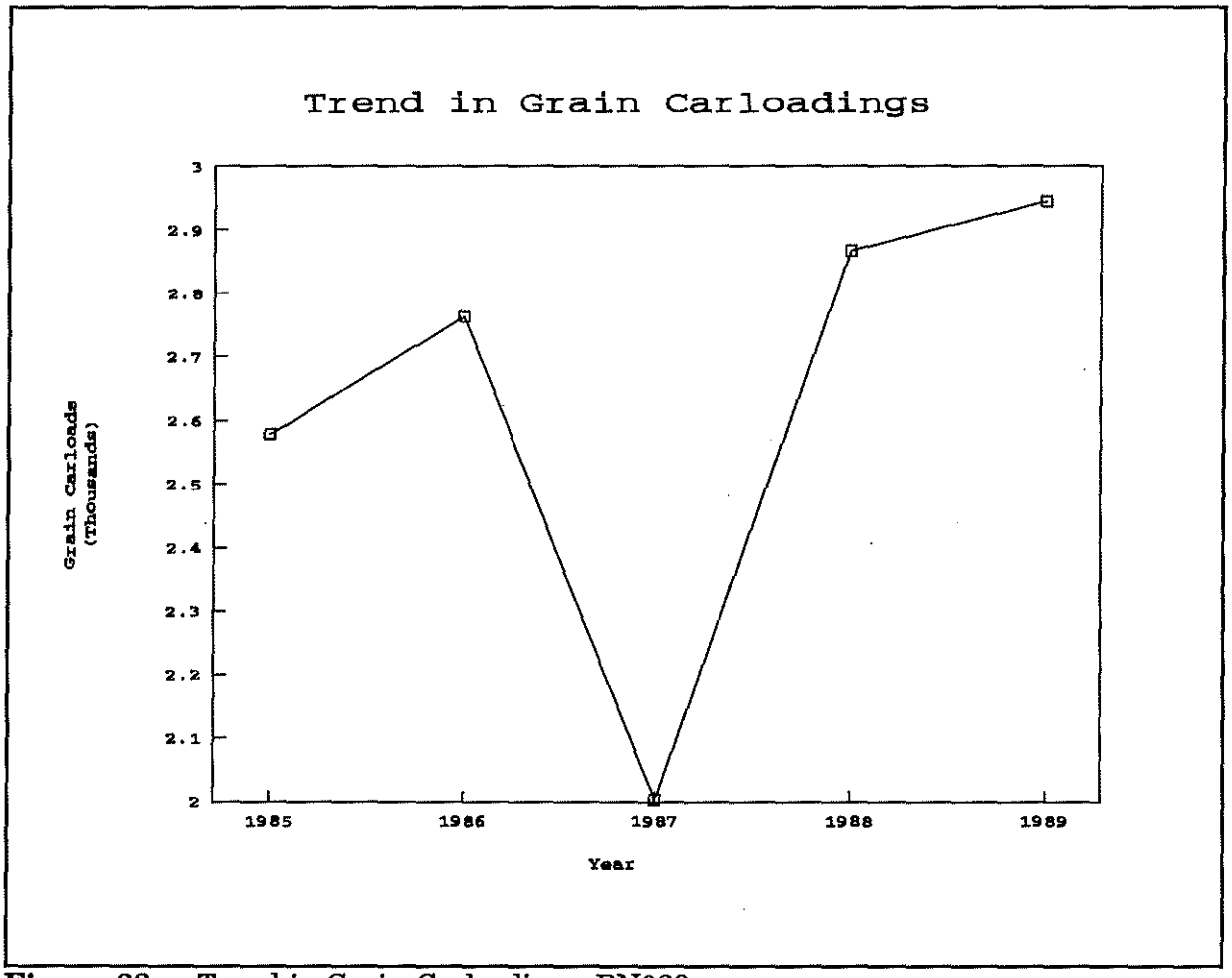


Figure 88: Trend in Grain Carloadings; BN029

carloads in 1987 resulted primarily from a regional crop failure. Truck modal share (Figure 89) steadily declined from 1985 to 1988, but rebounded to 23 percent in 1989, three percentage points higher than its 1985 share. Total traffic density on the line rose to a period high of 600,000 GTMM in 1986 (Figure 90), but otherwise has stayed above 360,000 GTMM. However, traffic density declined sharply from 1986 to 1989. As Table 7 depicts, the non-grain cars per mile and the grain cars per mile are 31 and 61 respectively. Both figures appear sufficient to assure the future viability of the line.

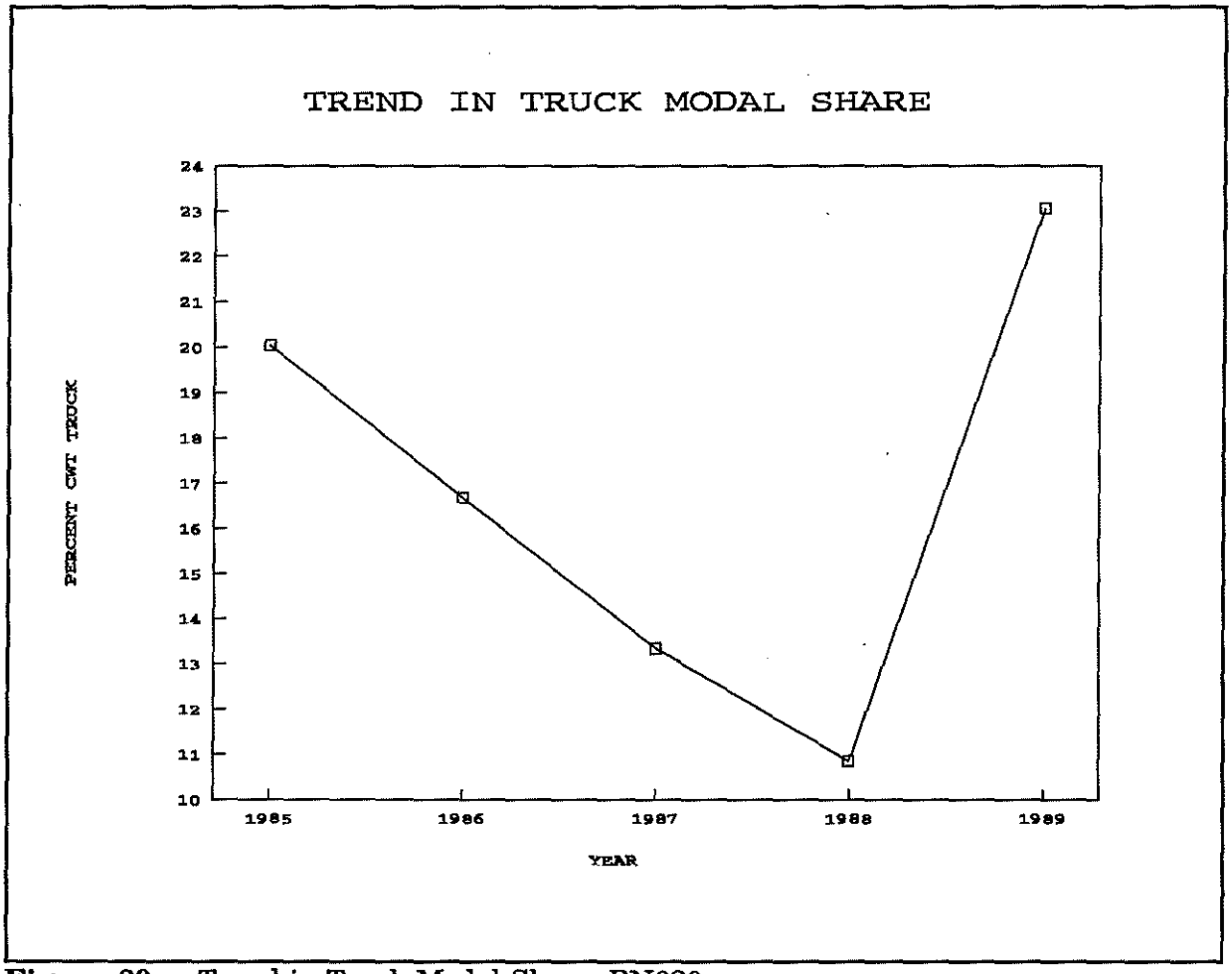


Figure 89: Trend in Truck Modal Share; BN029

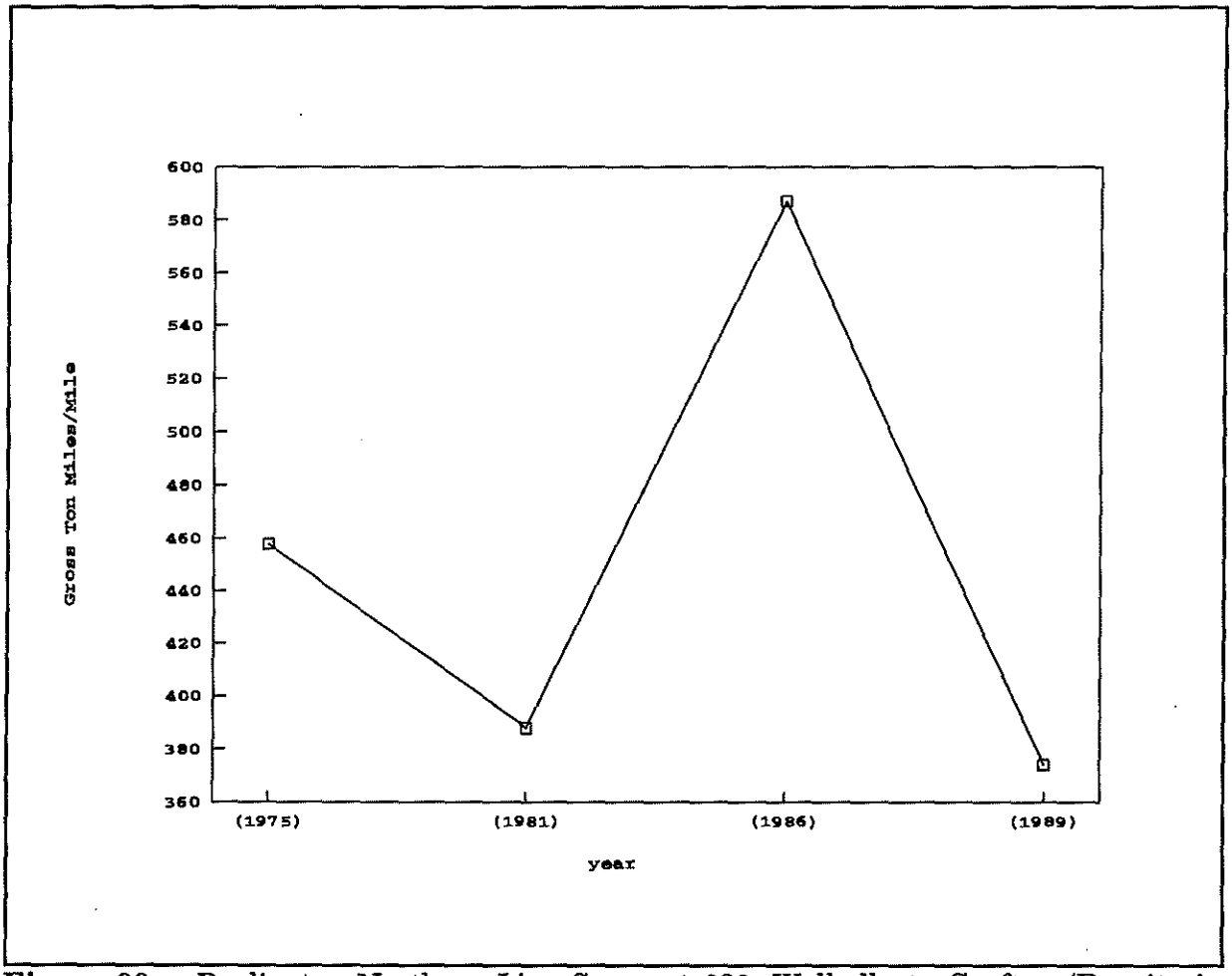


Figure 90: Burlington Northern Line Segment 029, Walhalla to Grafton (Density in Thousands of Gross Ton Miles per mile)

Burlington Northern Line Segment 031: Neche to Grafton

Across the border from Neche lies the Canadian city of Gretna, on the Canadian Pacific Railroad. Not since 1975 has there been any interchange over the border between these cities. With this loss of traffic, the total traffic density (Figure 93) has fallen since 1975 from 150,000 GTMM to under 40,000 GTMM in 1989. The trend in grain carloadings (Figure 91) follows the trend in major crop production. The primary crop

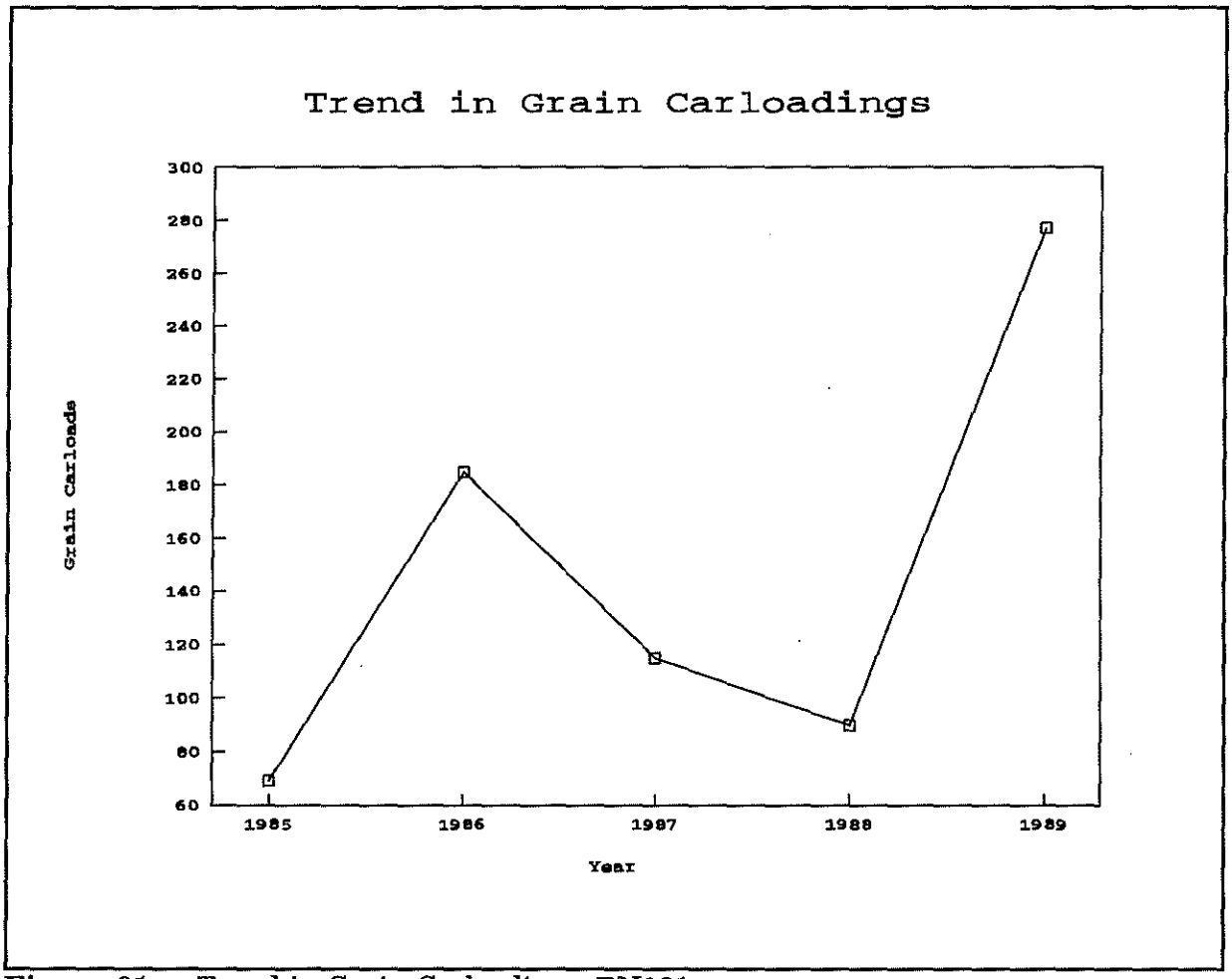


Figure 91: Trend in Grain Carloadings; BN031

shipped on this line is wheat. The drought in 1987 and 1988 reduced wheat production by two thirds during these two years. However, 1989 wheat production figures (not shown in Figure 54) are nearly up to pre-drought levels. Another reason grain

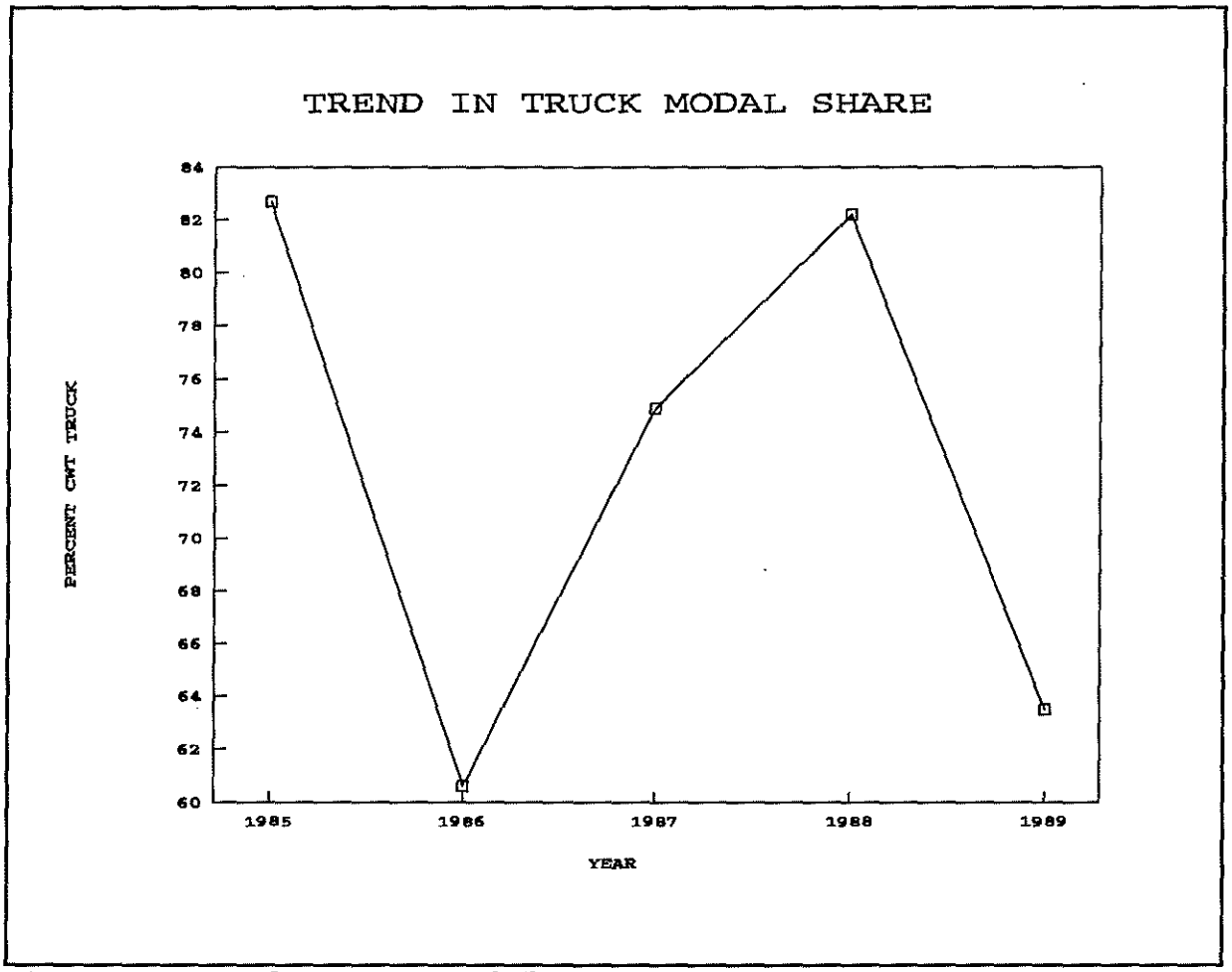


Figure 92: Trend in Truck Modal Share; BN031

carloadings were down in 1987 and 1988 is that trucks hauled a much higher percentage of the grain in this area during these years (Figure 92). But, as Figure 93 shows, BN and trucks are competing for a declining overall traffic base. Grain cars per mile and non-grain cars per mile from Table 7 are both about six.

The Neche to Glasston subsegment of the line is embargoed and is currently on the abandonment map. The viability of this subsegment is clearly in doubt. The southern portion of the line from St. Thomas to Grafton has a better chance of survival. However, its future is also unclear.

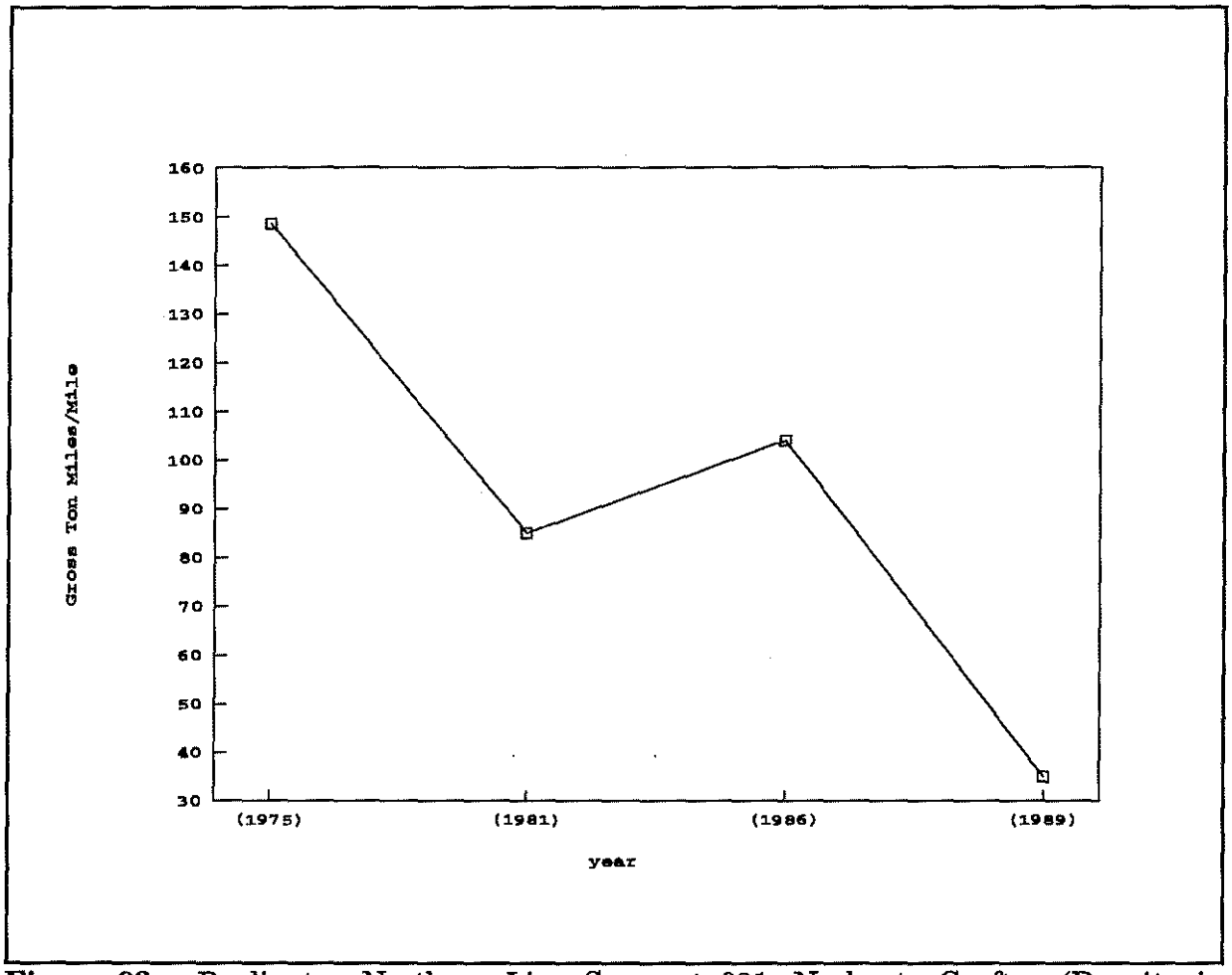


Figure 93: Burlington Northern Line Segment 031, Neche to Grafton (Density in Thousands of Gross Ton Miles per mile)

Burlington Northern Line Segment 033: Joliette to Grafton

As Figure 94 shows, grain carloadings on the Joliette to Grafton line have increased in recent years. In 1989, the line generated 2,038 carloads of grain. As

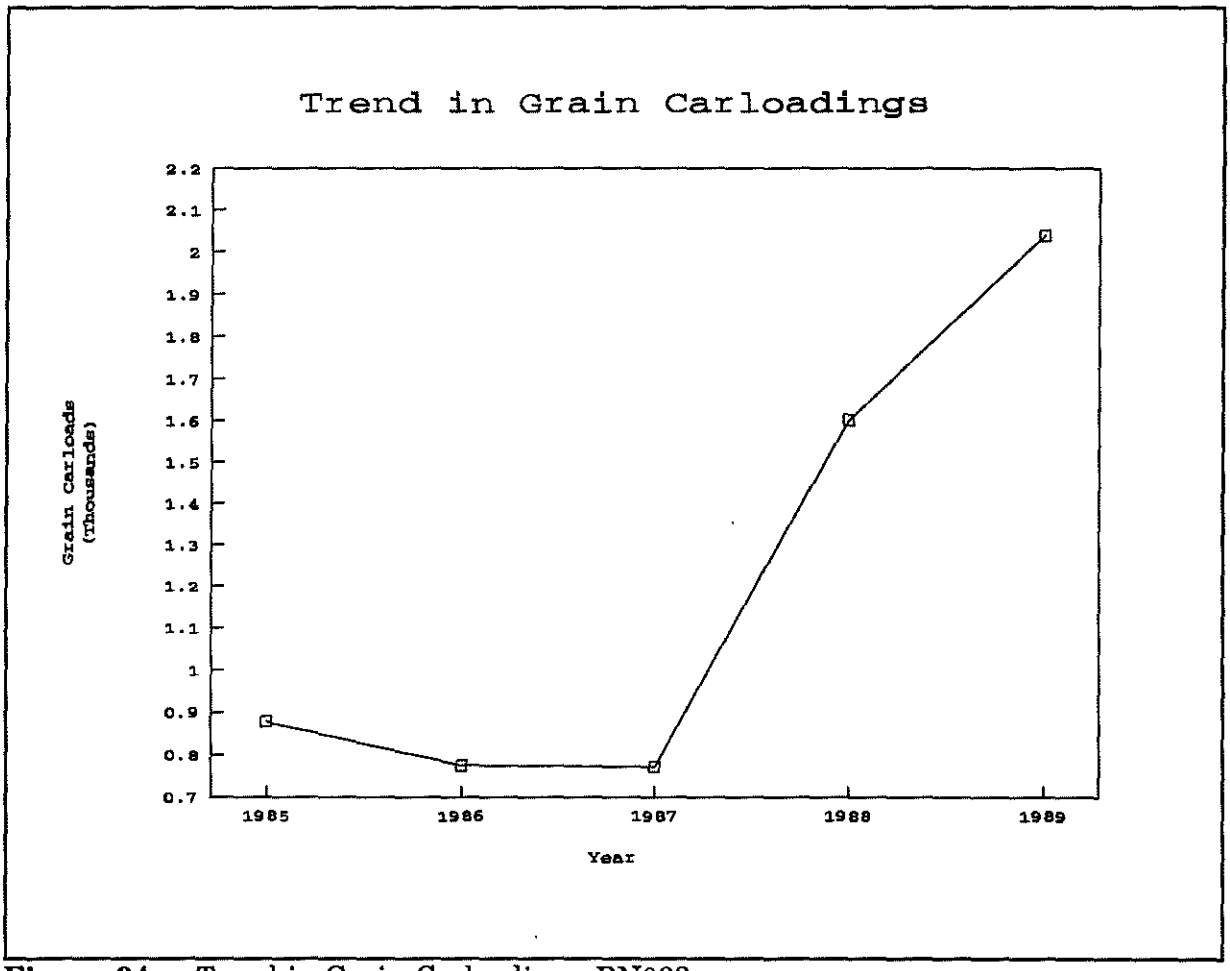


Figure 94: Trend in Grain Carloadings; BN033

Figure 95 shows, truck modal share has been decreasing, comprising only 6½ percent in 1989. Finally, Figure 96 shows total traffic density on the line increasing steadily for the past 15 years. The graphs suggest that the overall traffic base is increasing and the BN is capturing the preponderance of the grain traffic from the line. As Table 7 shows, there are over 60 grain cars per mile, plus approximately 150 non-grain carloads. This is a healthy line, on which there is little danger of future abandonment.

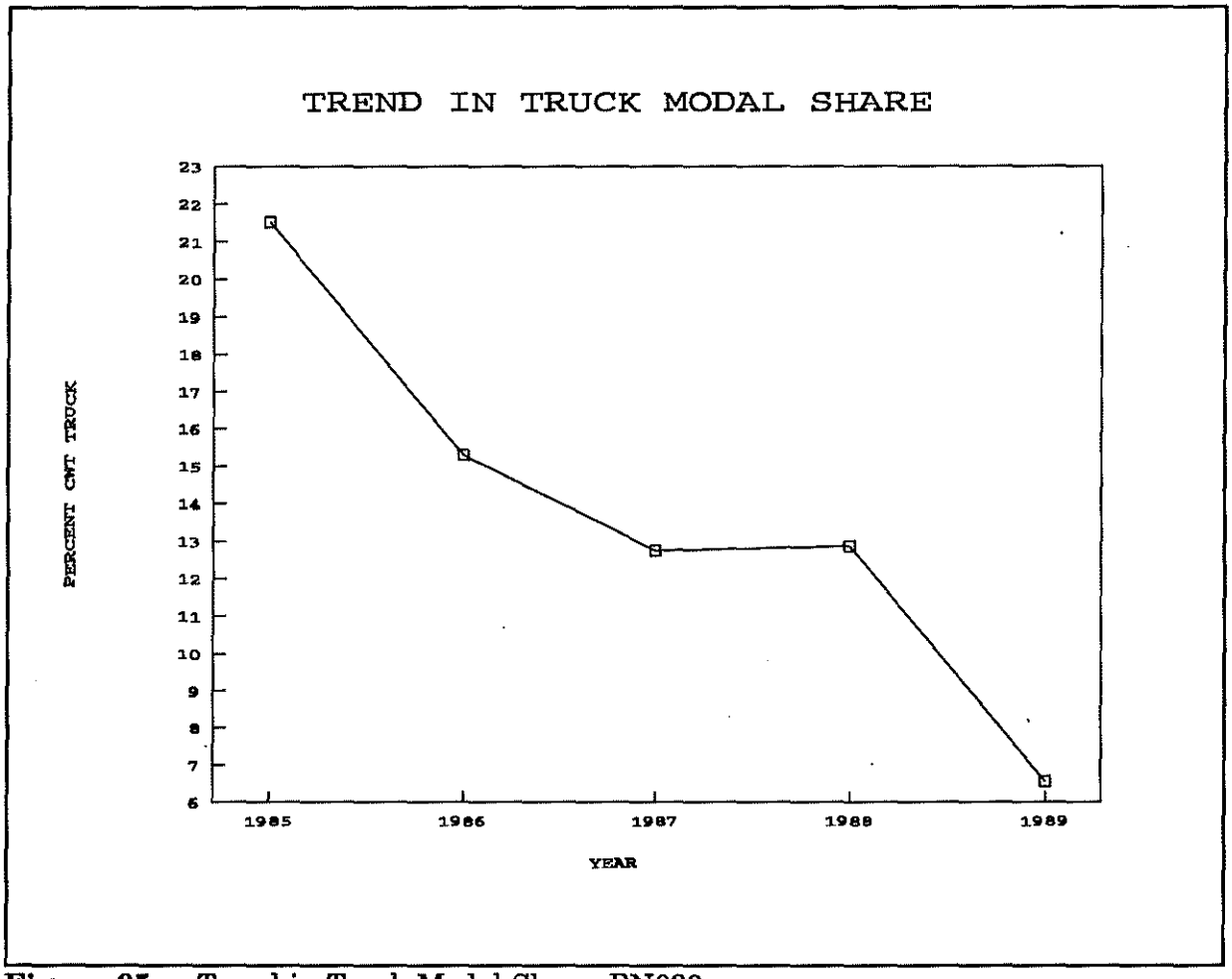


Figure 95: Trend in Truck Modal Share; BN033

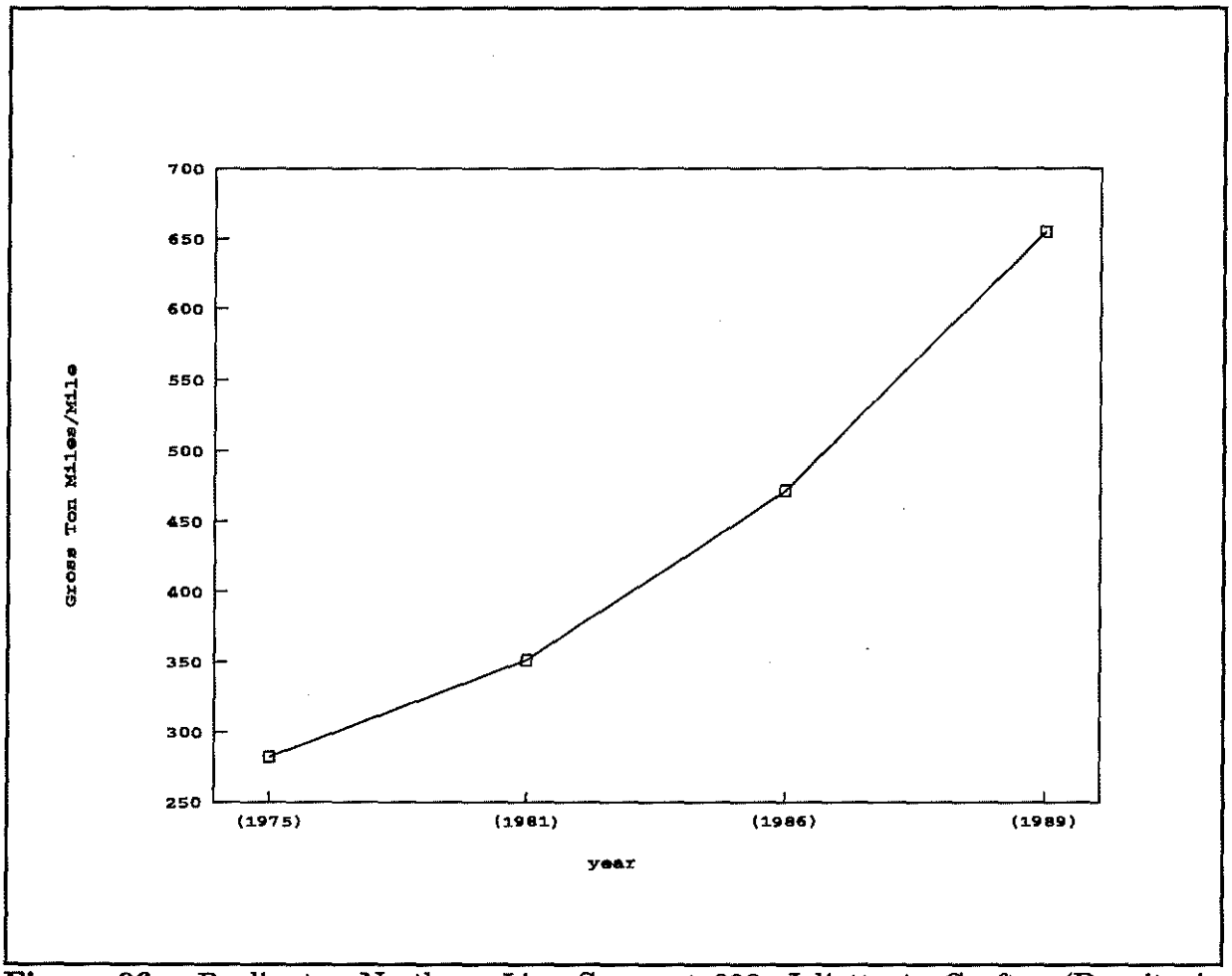


Figure 96: Burlington Northern Line Segment 033, Joliette to Grafton (Density in Thousands of Gross Ton Miles per mile)

Burlington Northern Line Segment 035: Grafton to Grand Forks

As Figure 97 shows, grain carloadings on the Grafton to Grand Forks line closely

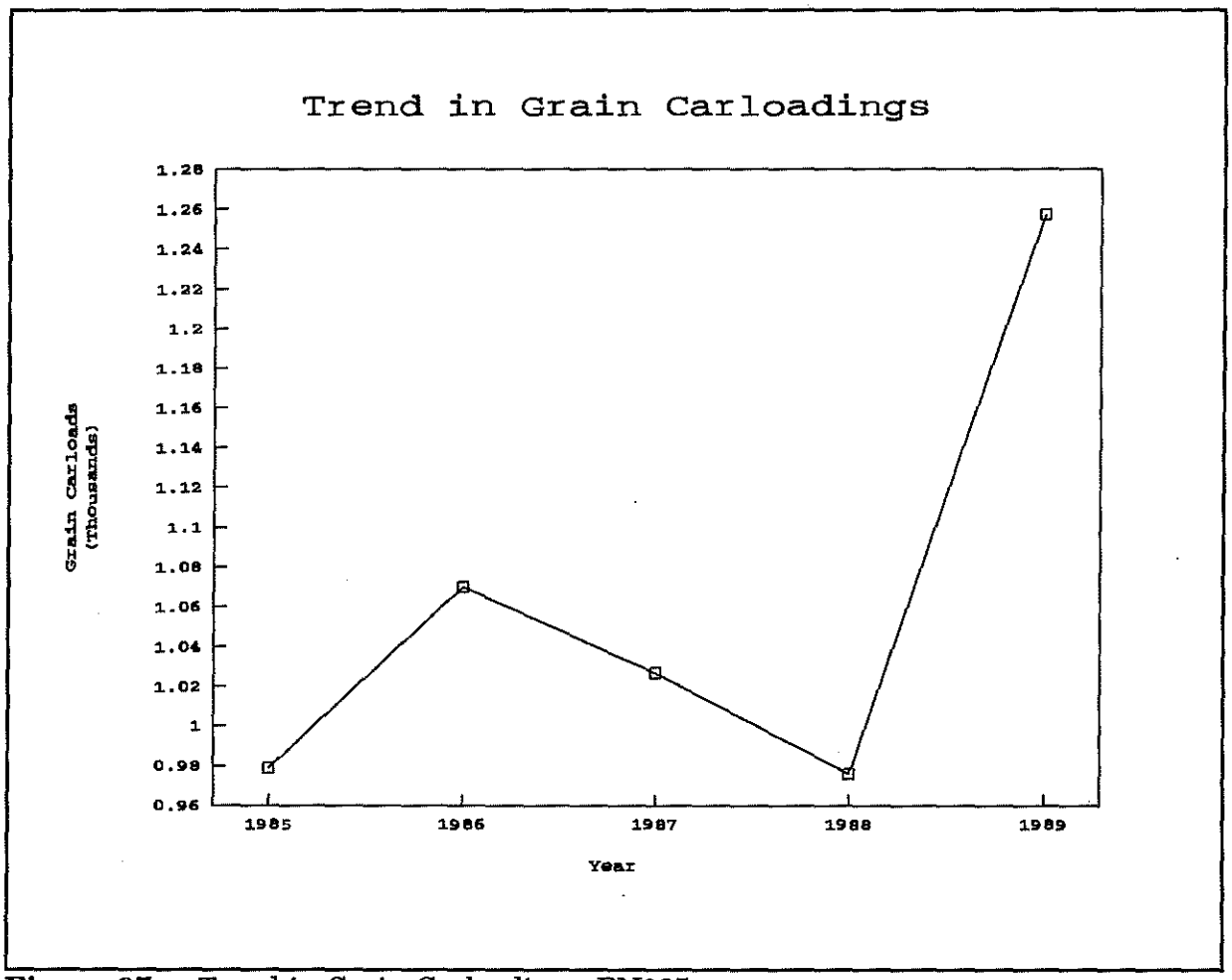


Figure 97: Trend in Grain Carloadings; BN035

follow crop production trends. Truck modal share, on the other hand, has decreased every year since 1985 (Figure 98). Total traffic density on the line, Figure 99, has remained at a rather constant level between 2 and 2.5 million GTMM for the last 15 years (note: data for 1986 were not available). The line has consistently high traffic because it is fed by four other lines: segments 29, 31, 33, and 37. Furthermore, as Table 7 shows, it generates nearly 50 grain cars per mile.

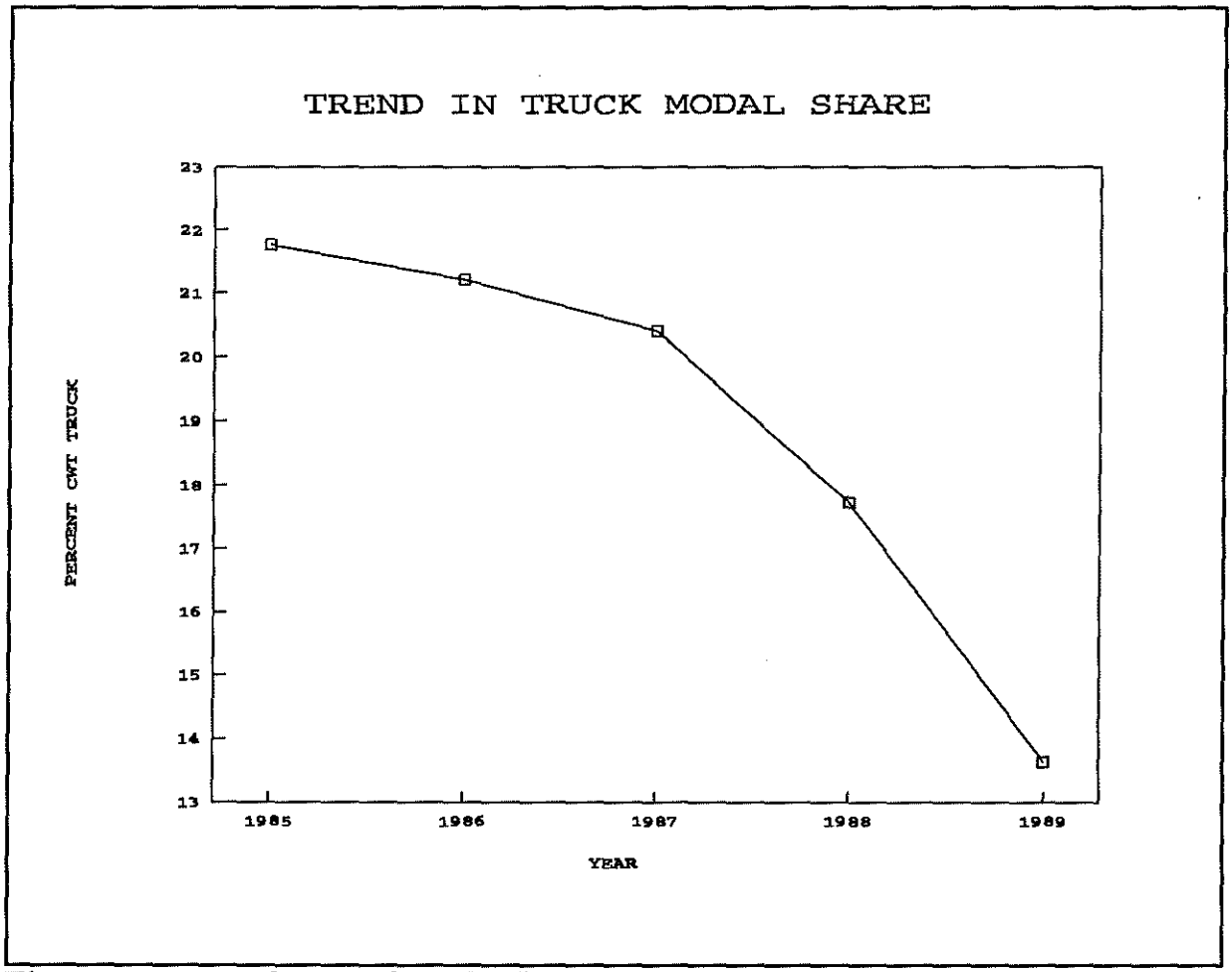


Figure 98: Trend in Truck Modal Share; BN035

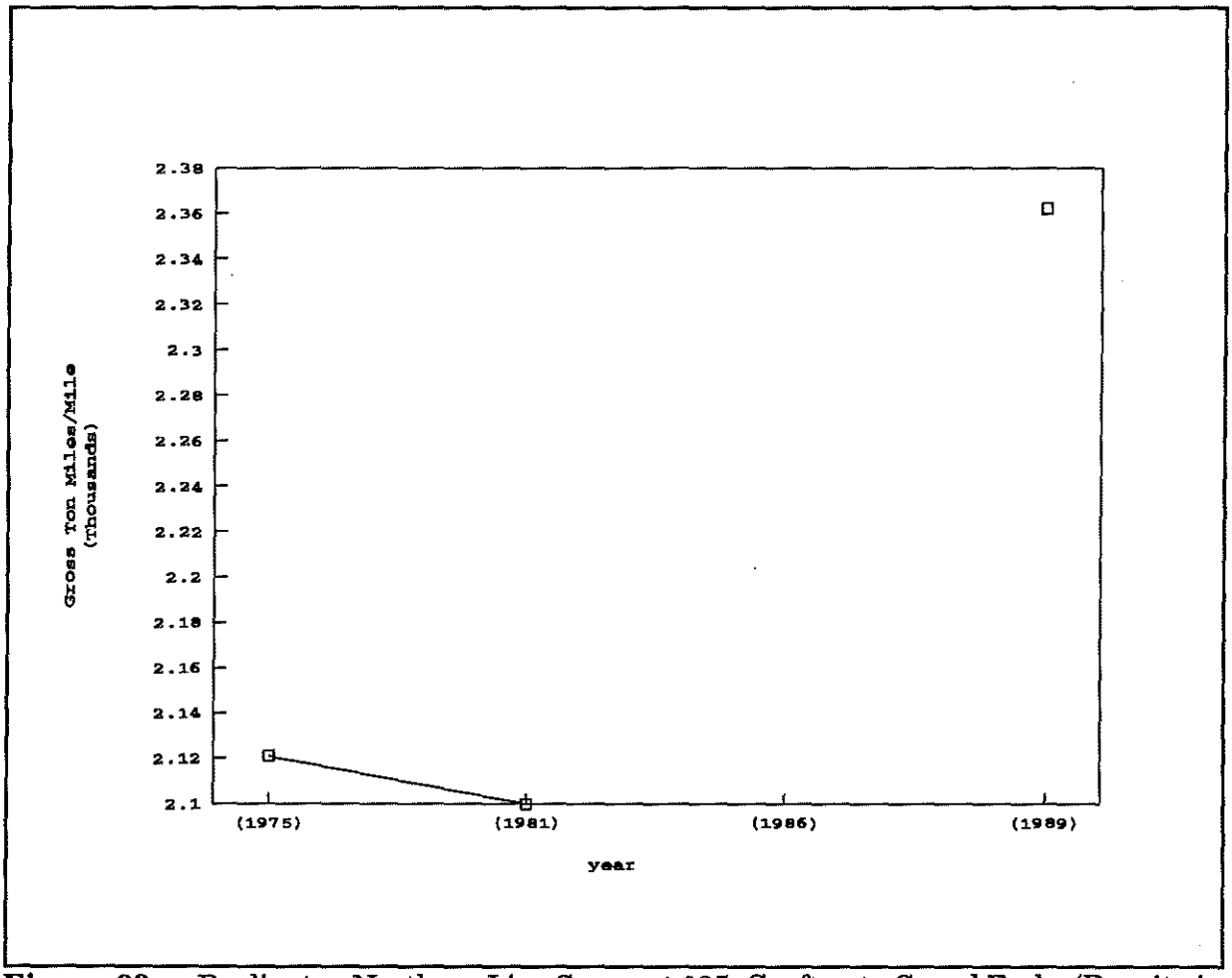


Figure 99: Burlington Northern Line Segment 035, Grafton to Grand Forks (Density in Thousands of Gross Ton Miles per mile)

Burlington Northern Line Segment 037: Honeyford to Grafton

Grain carloads have decreased overall in the past 5 years on the Honeyford to Grafton line (Figure 100), while truck modal share (Figure 101) has increased. This line,

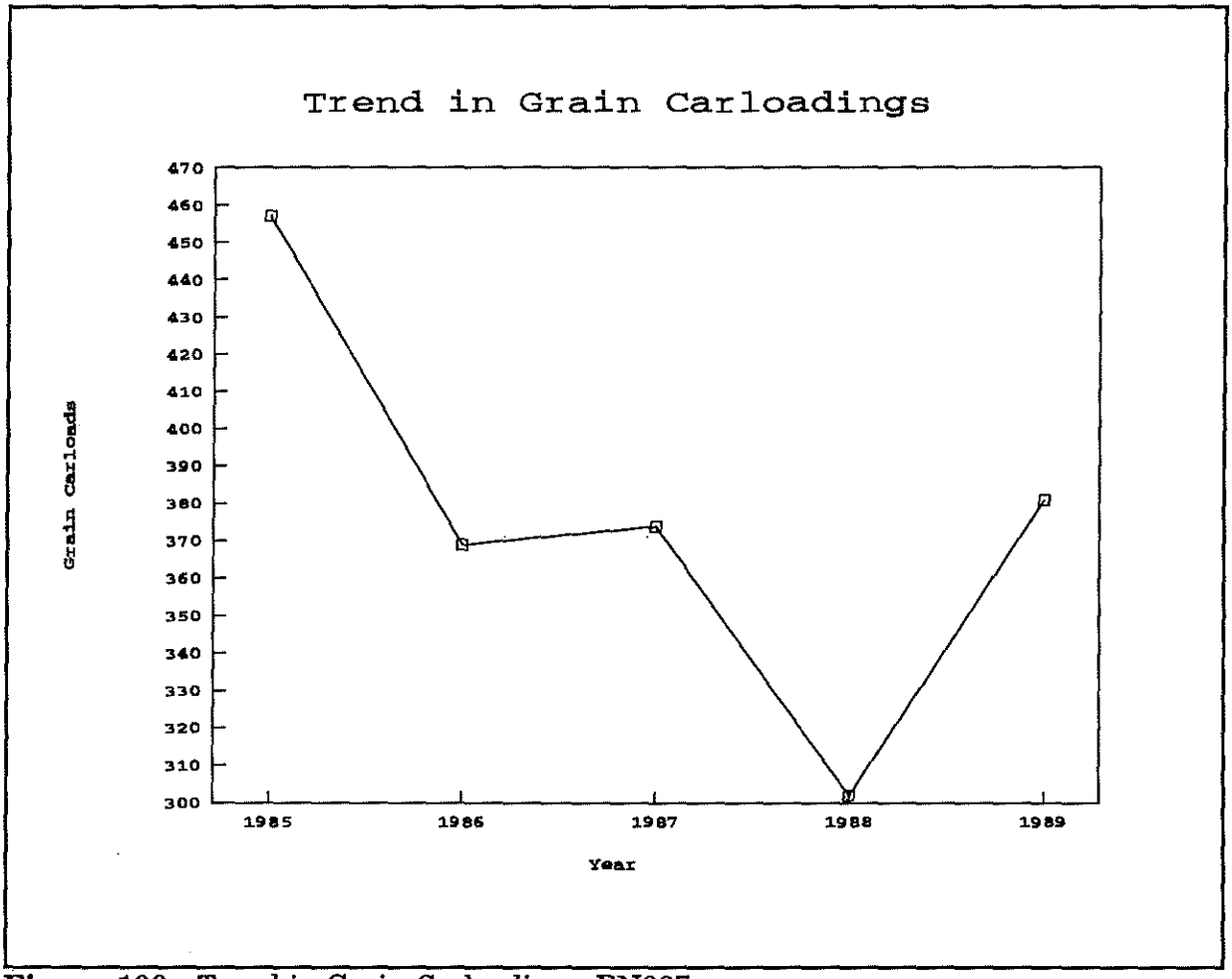


Figure 100: Trend in Grain Carloadings; BN037

which in 1981 ran from Grafton to Grand Forks, passing through Honeyford, no longer goes to Grand Forks, but stops at Honeyford. Though traffic density was low in 1981 (Figure 102), it jumped to 80,000 GTMM in 1986, and declined slightly in 1989. As Table 7 denotes, the line generates 14 grain cars per mile, which, in the absence of significant non-grain traffic, usually indicates marginal profitability.

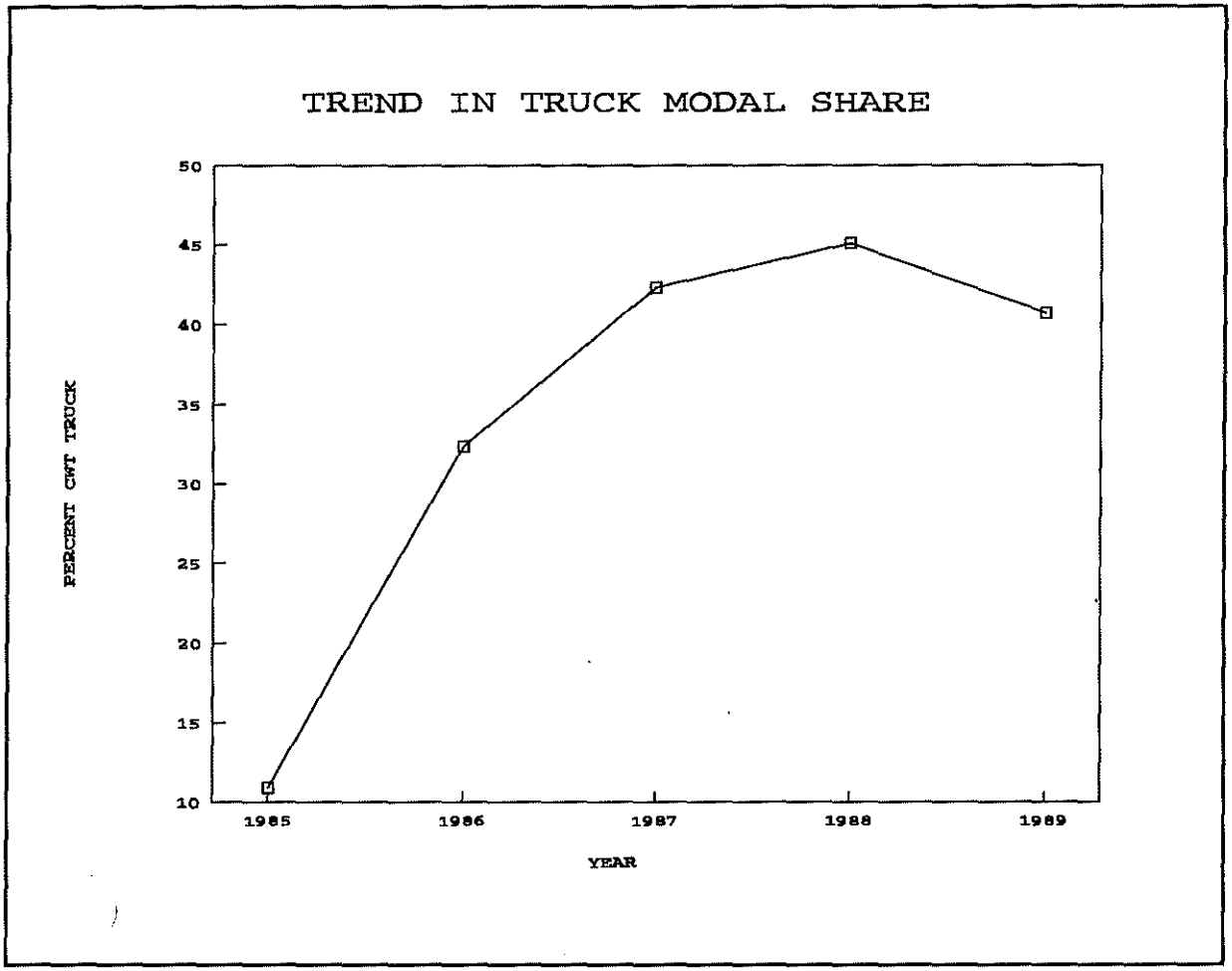


Figure 101: Trend in Truck Modal Share; BN037

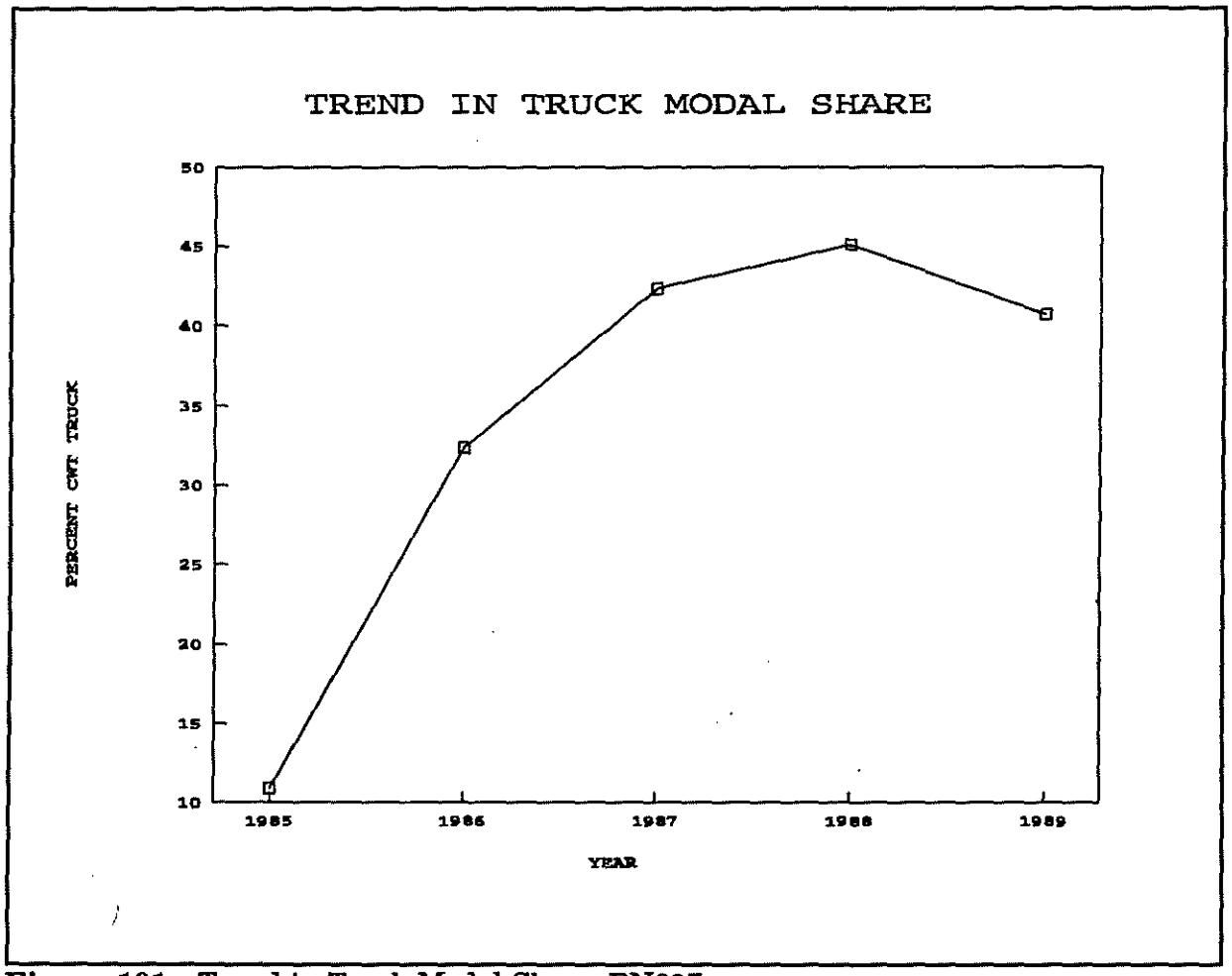


Figure 101: Trend in Truck Modal Share; BN037

Burlington Northern Line Segment 039: Binford to Hannaford

The Binford to Hannaford line has seen an increase in grain carloads in the past five years (Figure 103). At the same time truck modal share has been decreasing

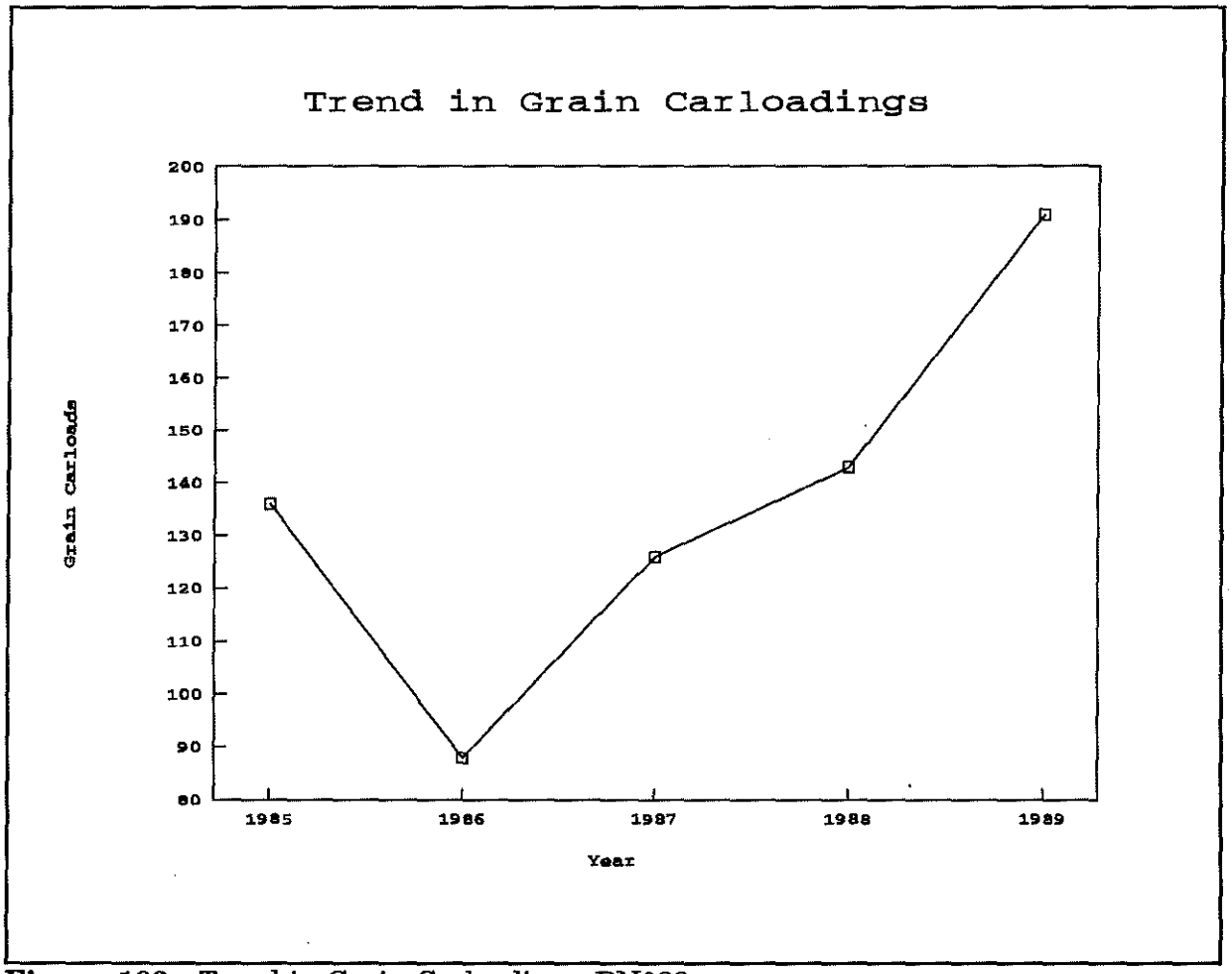


Figure 103: Trend in Grain Carloadings; BN039

(Figure 104). Information on total traffic density for 1989 was not available, but with the increasing trend from 1981 to 1986 in Figure 105 and the increasing trend in grain carloadings during the missing years, an increasing trend in total traffic can be assumed. However, as Table 7 shows, the line generated less than 10 grain cars per mile, with very little non-grain traffic. Thus, the future of the line may be bleak.

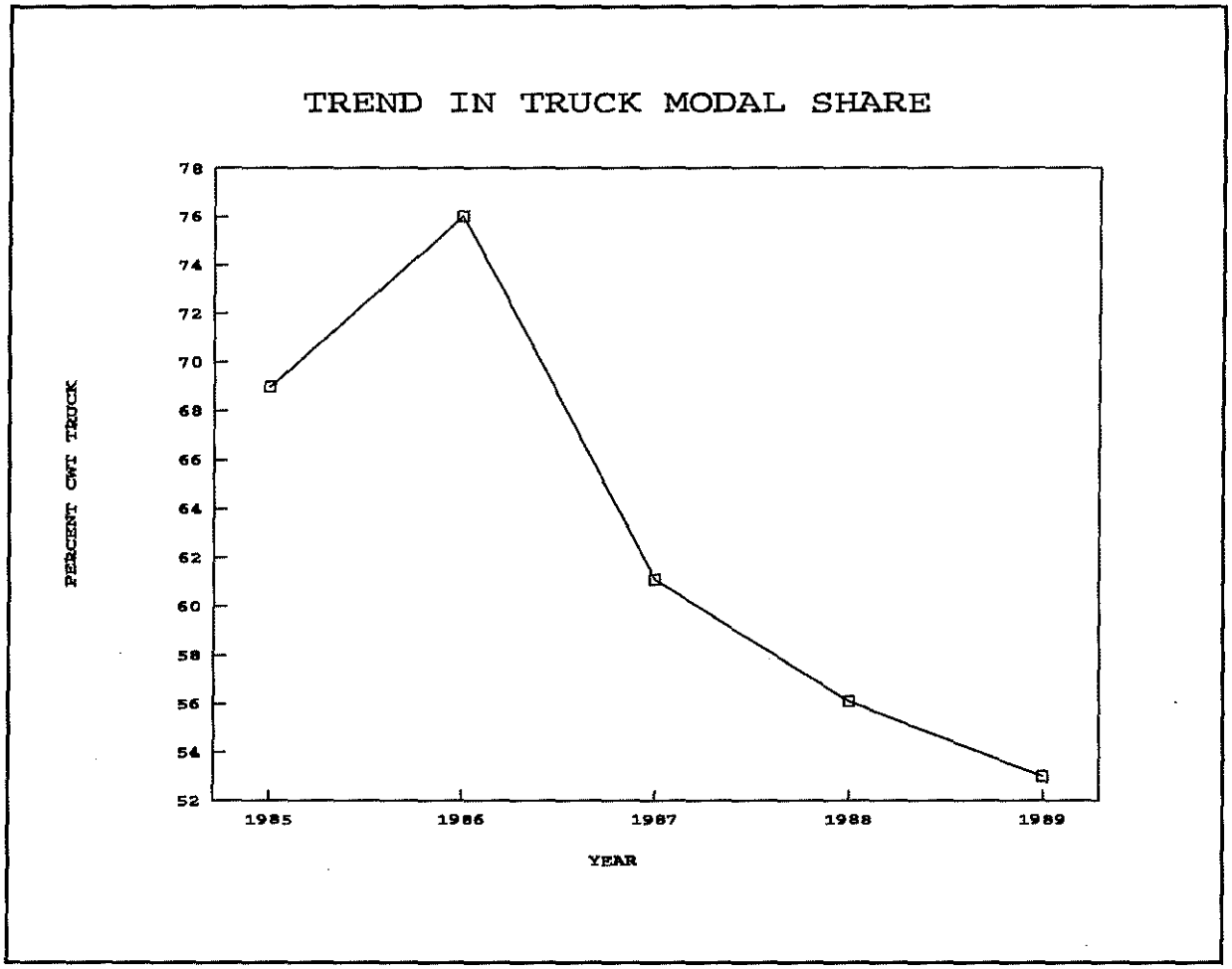


Figure 104: Trend in Truck Modal Share; BN039

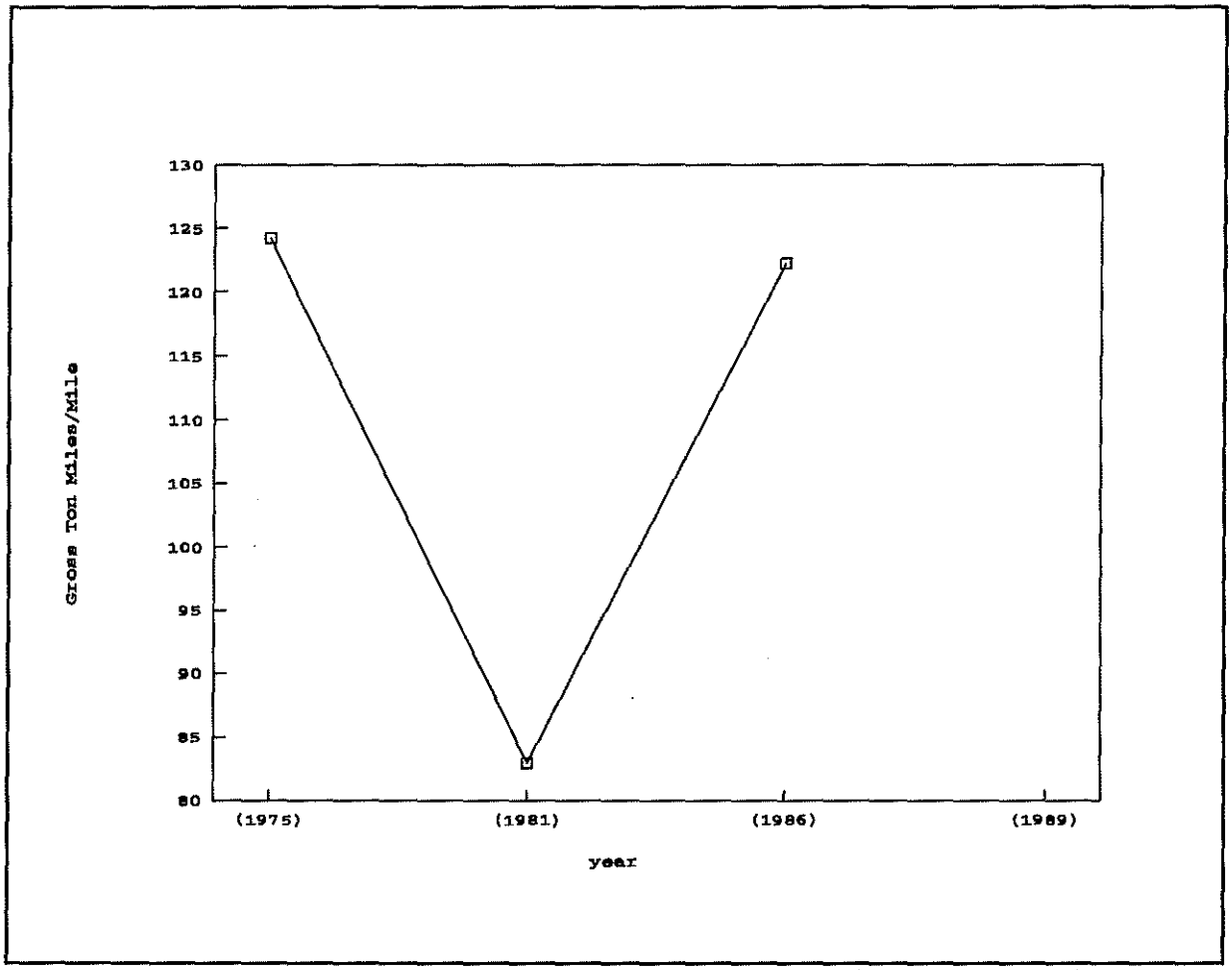


Figure 105: Burlington Northern Line Segment 039, Binford to Hannaford (Density in Thousands of Gross Ton Miles per mile)

Burlington Northern Line Segment 043: Hunter to Vance

Grain carloads on the Hunter to Vance line (Figure 106) have increased during the

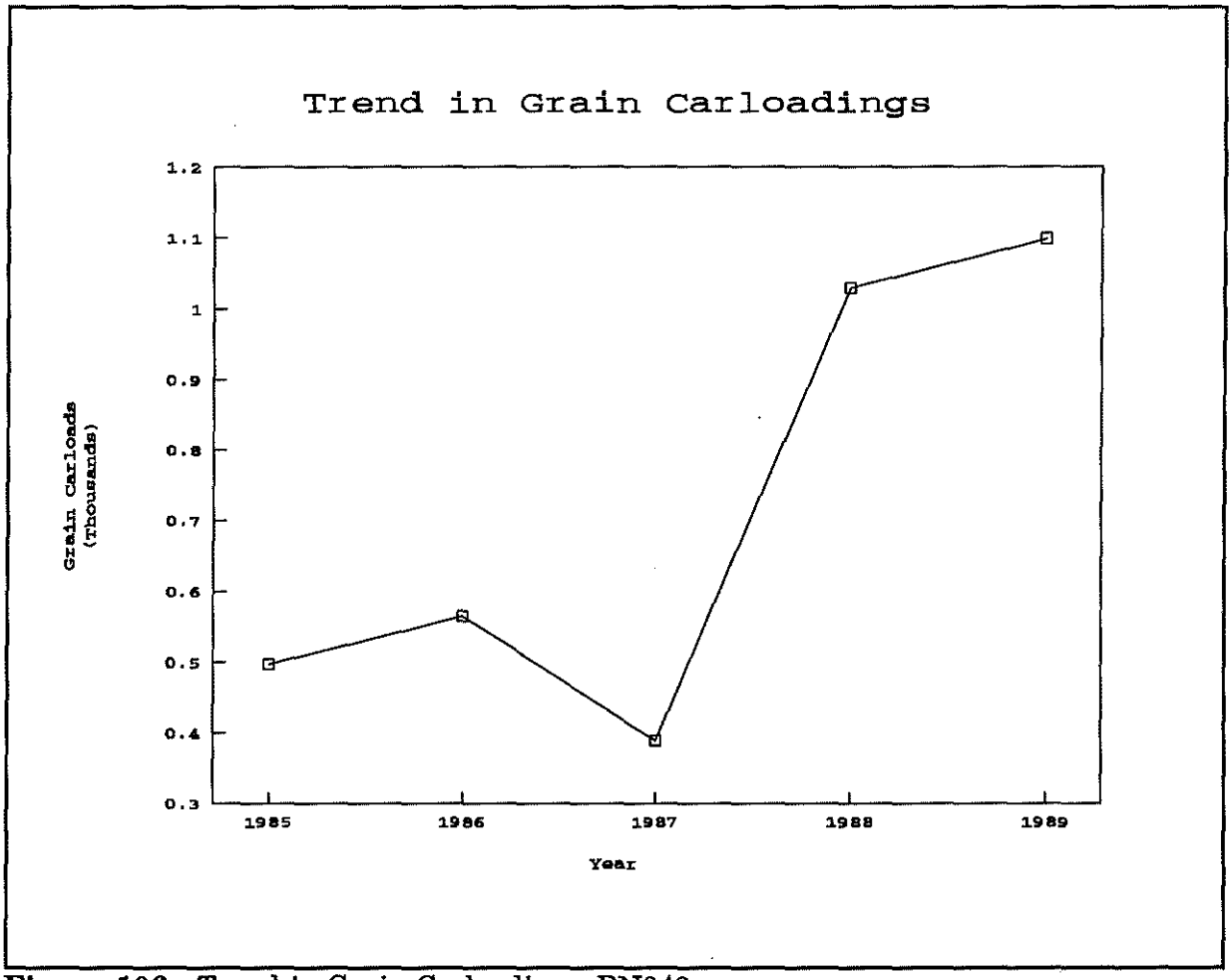


Figure 106: Trend in Grain Carloadings; BN043

past five years, while the percent truck (Figure 107) has declined for the same years. Although the traffic density on the line (Figure 108) was lower in 1981 than it was in 1975 by 100,000 GTMM, it has since been on the rise.

As Table 7 shows, the line generated nearly 100 grain cars per mile in 1989, plus 9 non-grain cars per mile. Thus, the line is quite profitable and is in little danger of being abandoned.

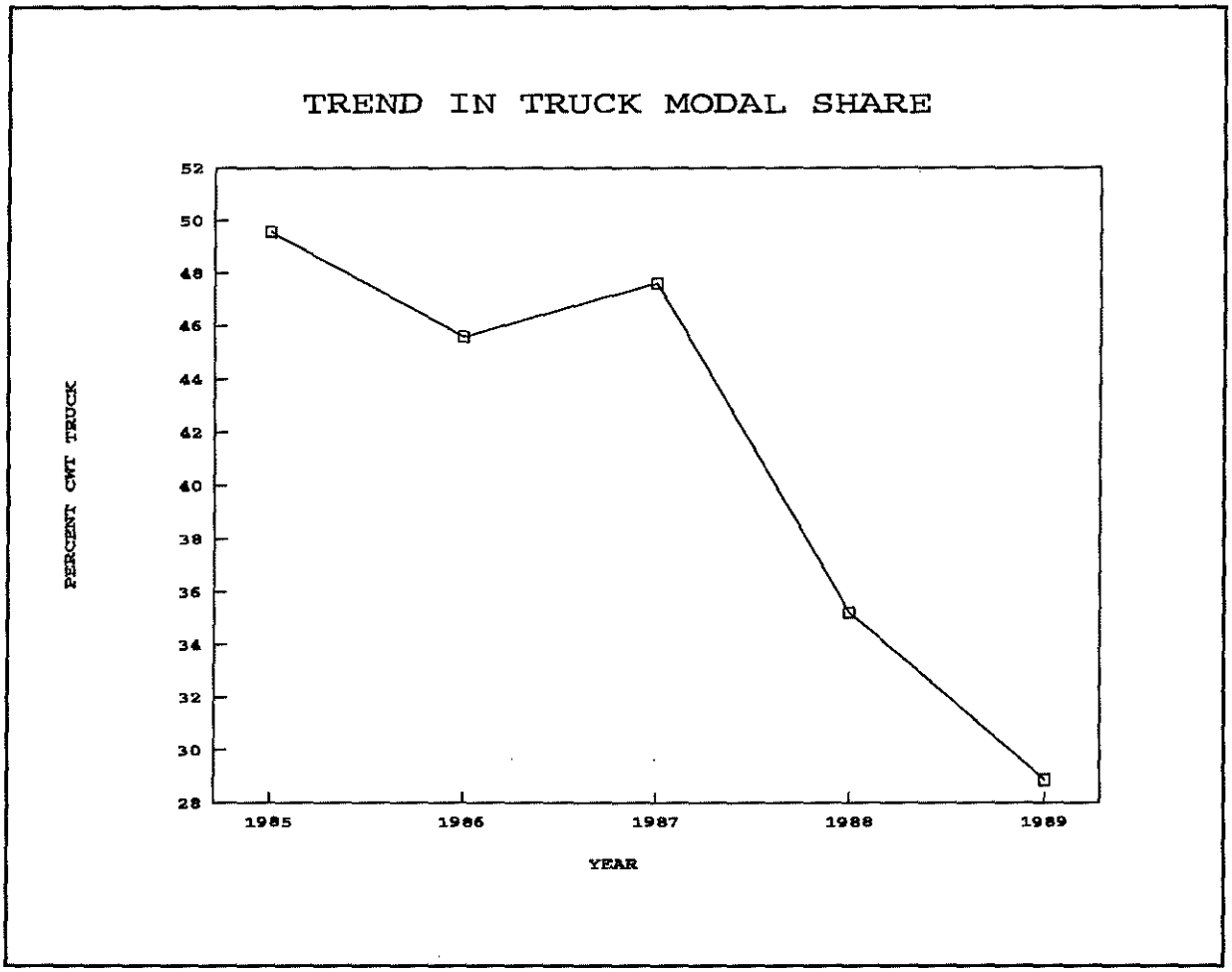


Figure 107: Trend in Truck Modal Share; BN043

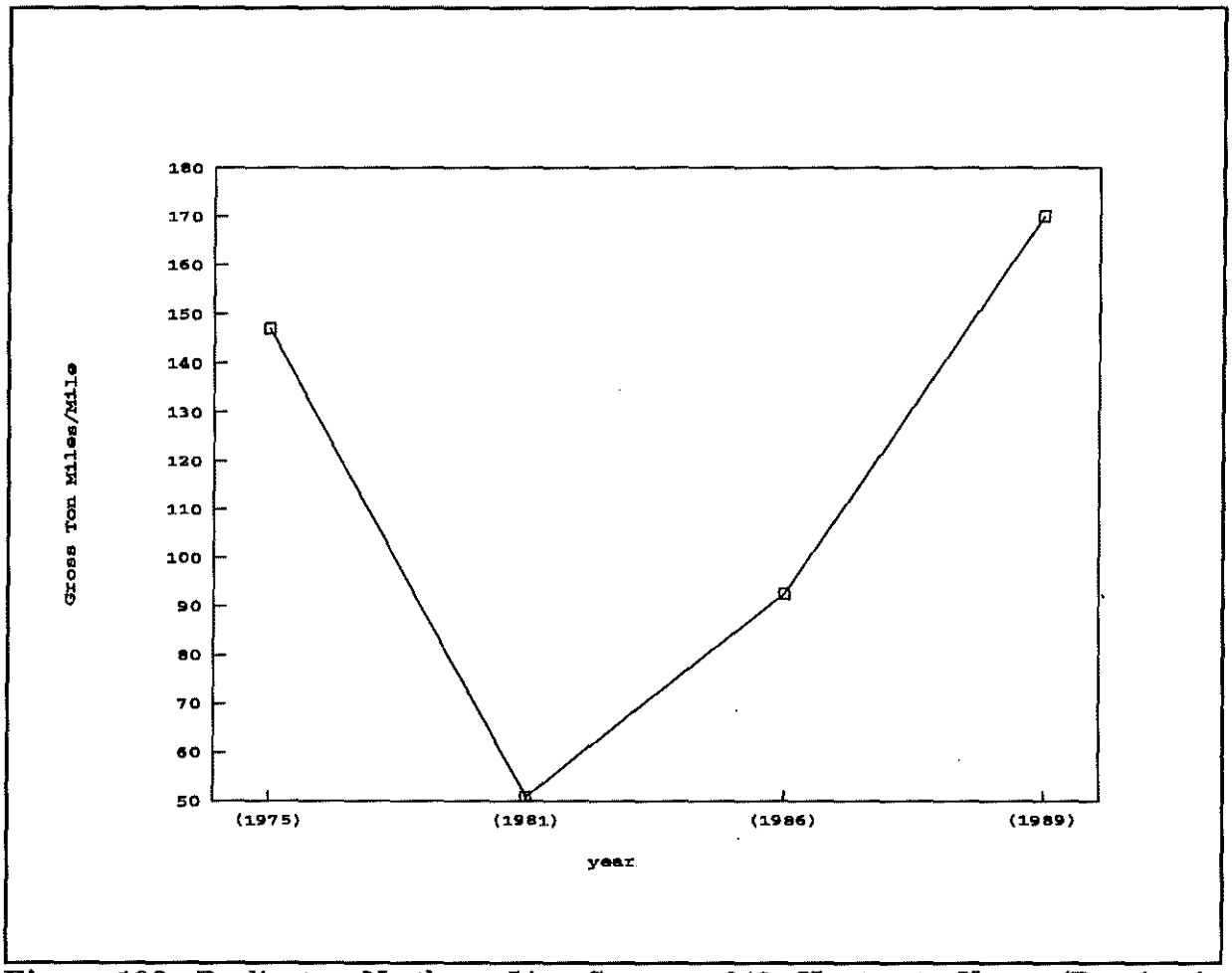


Figure 108: Burlington Northern Line Segment 043, Hunter to Vance (Density in Thousands of Gross Ton Miles per mile)

Burlington Northern Line Segment 045: Clifford to Erie

The trend in grain carloadings for the Clifford to Erie line (Figure 109) has risen

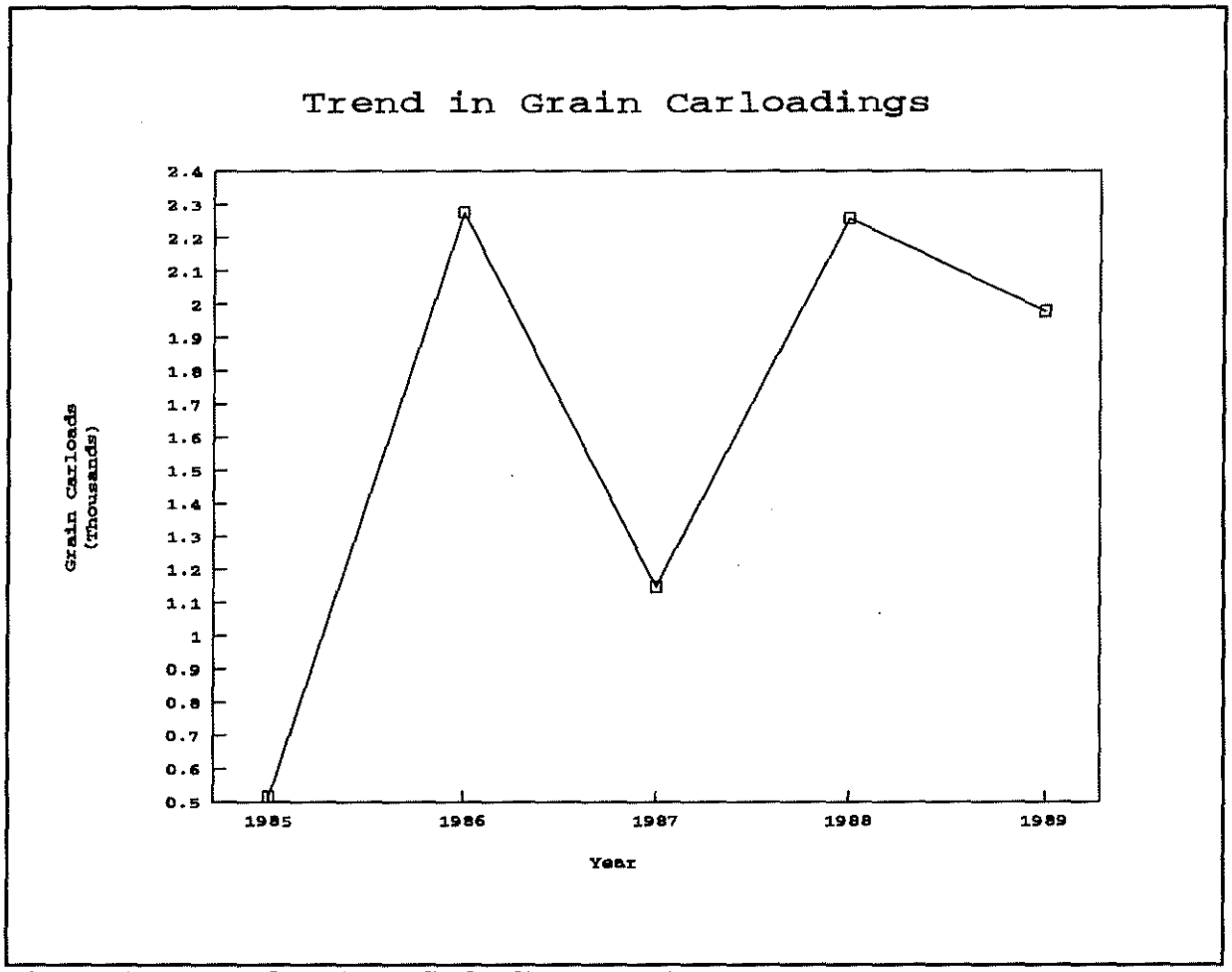


Figure 109: Trend in Grain Carloadings; BN045

and fallen considerably since 1985, with the line generating nearly 2000 carloads in 1989. Truck modal share dropped 43 percentage points in 1986, but has changed little since then, remaining below 25 percent (Figure 110). Total traffic density from 1975 to 1986 rose, reaching a high of 360,000 GTMM in 1986 (Figure 111).

As Table 7 shows, the line generates 95 grain cars per mile. Thus, it is in little or no danger of being abandoned.

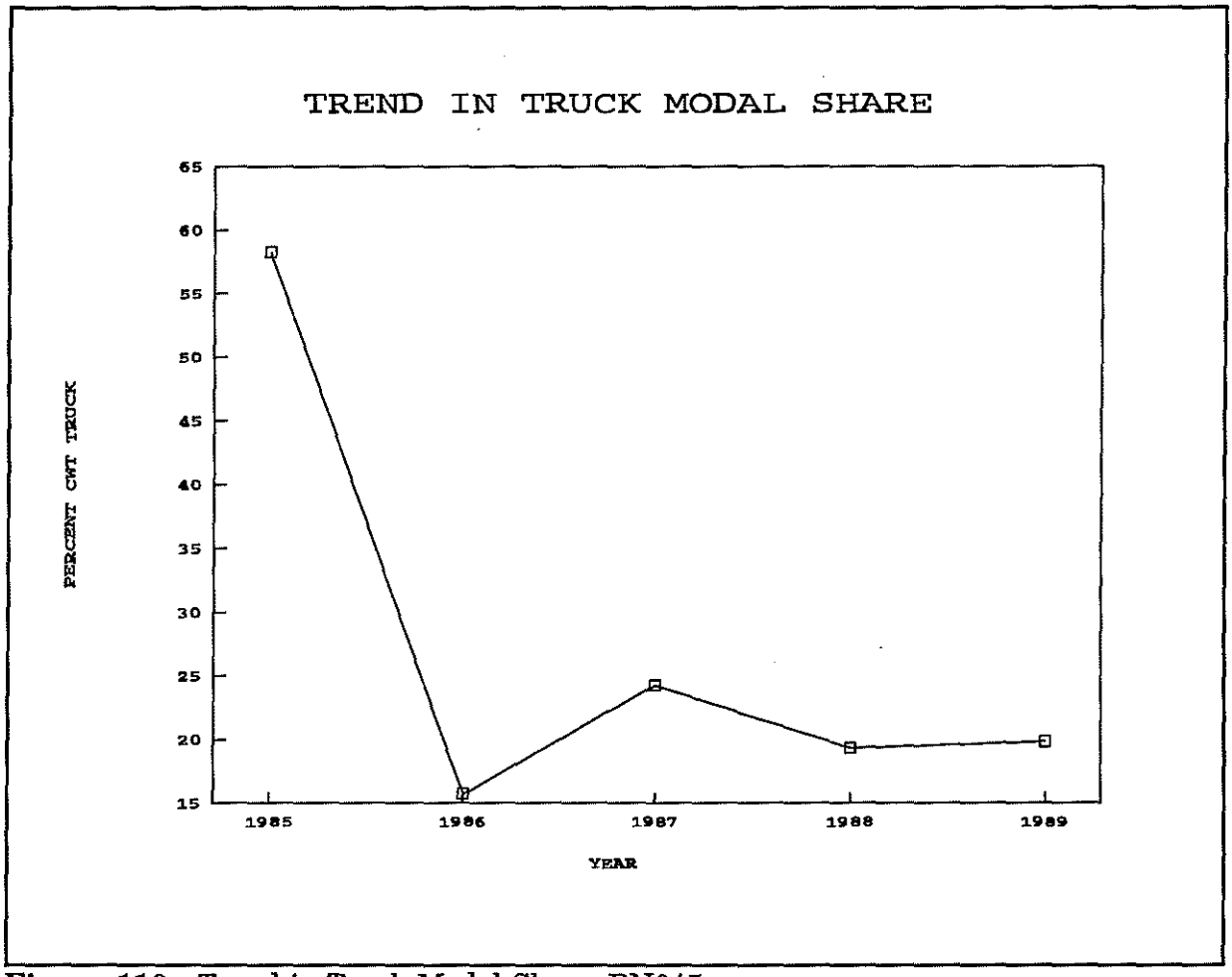


Figure 110: Trend in Truck Modal Share; BN045

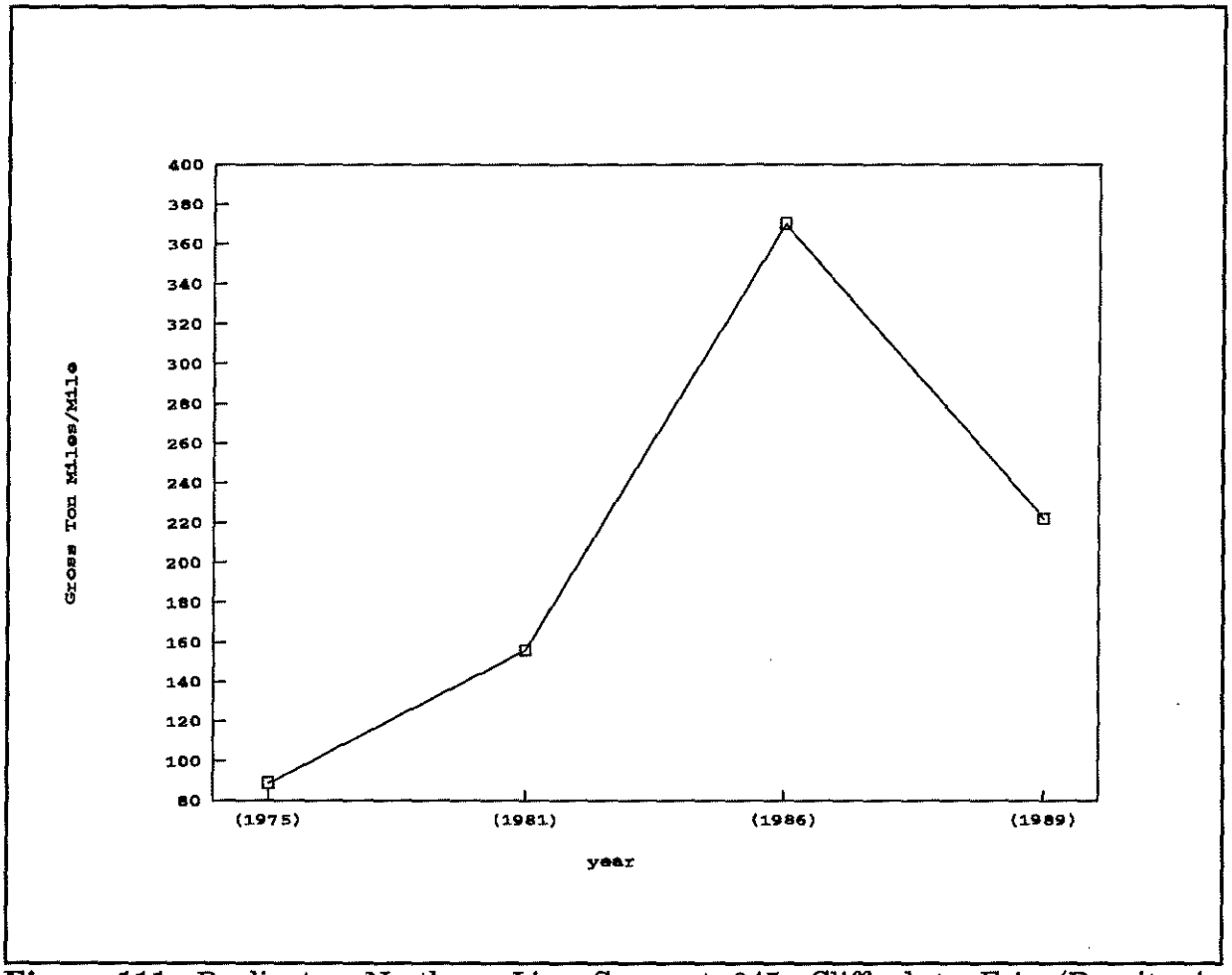


Figure 111: Burlington Northern Line Segment 045, Clifford to Erie (Density in Thousands of Gross Ton Miles per mile)

Burlington Northern Line Segment 059: Warwick to Nolan

Line segment 59 shows increasing grain traffic (Figure 112), decreasing truck

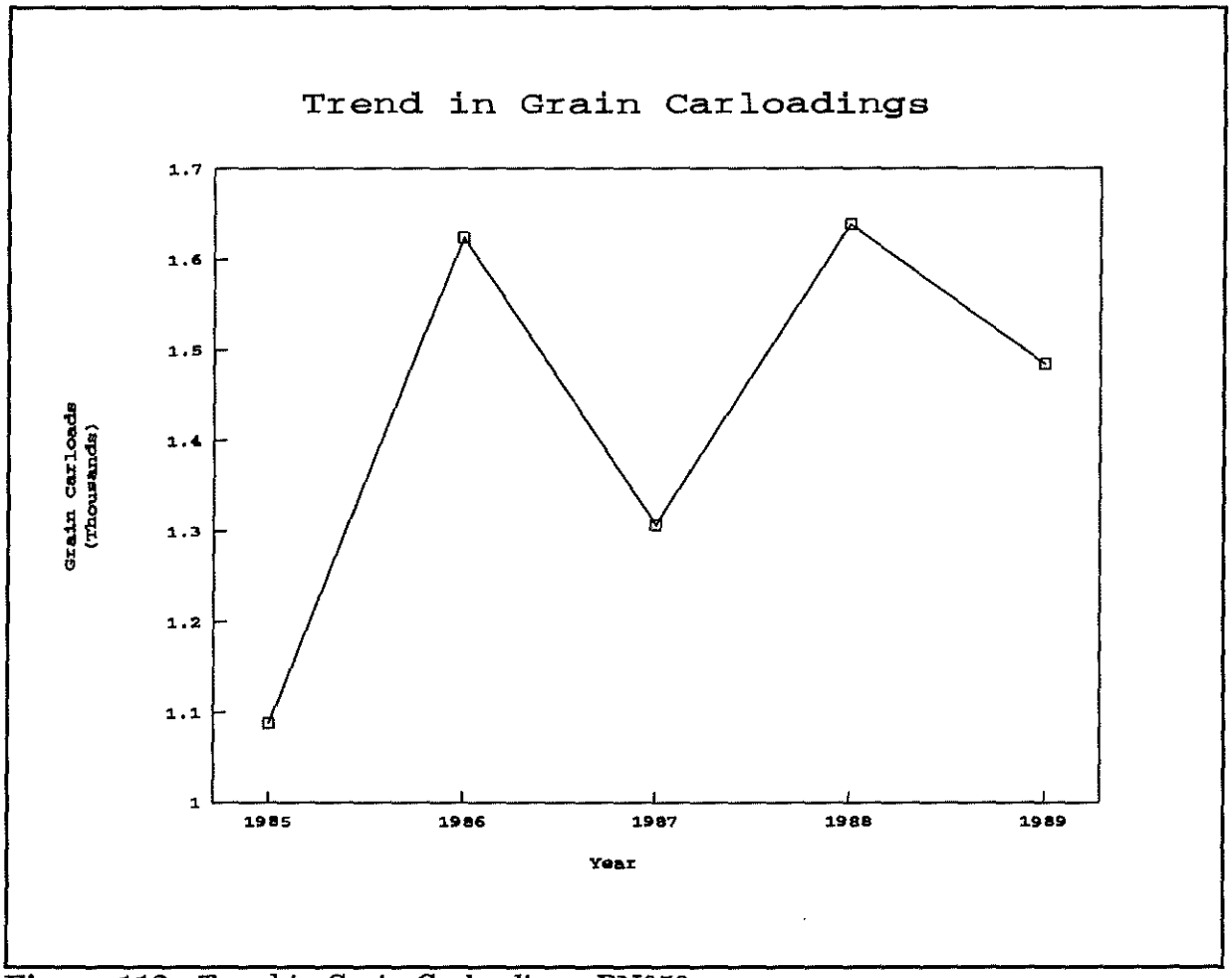


Figure 112: Trend in Grain Carloadings; BN059

modal share (Figure 113), and increasing total density (Figure 114) overall. In 1987 drought brought grain carloadings down, and in 1989 truck shipments to Devils Lake brought both grain carloadings and total traffic density down, while increasing truck modal share. As Table 7 depicts, the line generates over 18 grain cars per mile.

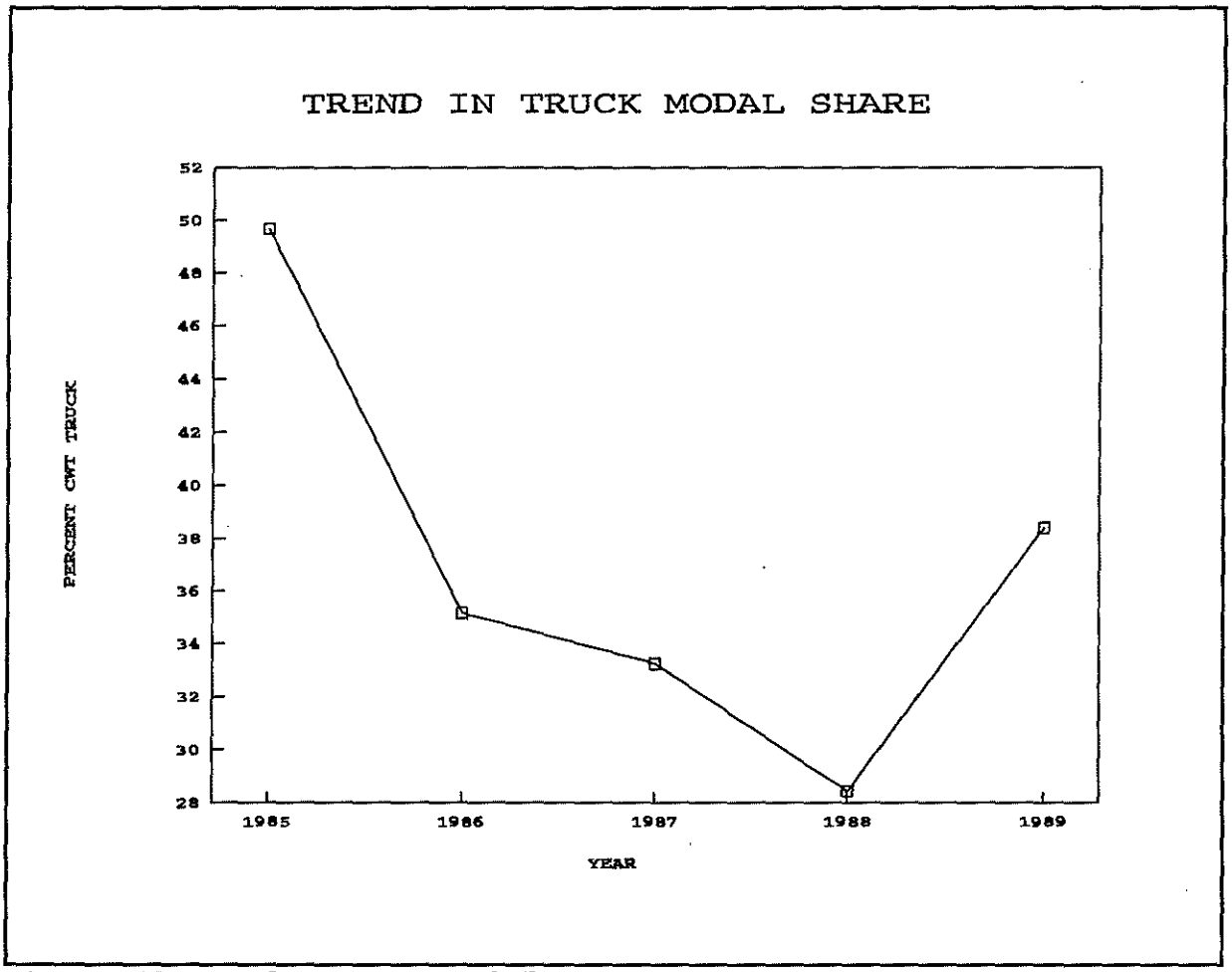


Figure 113: Trend in Truck Modal Share; BN059

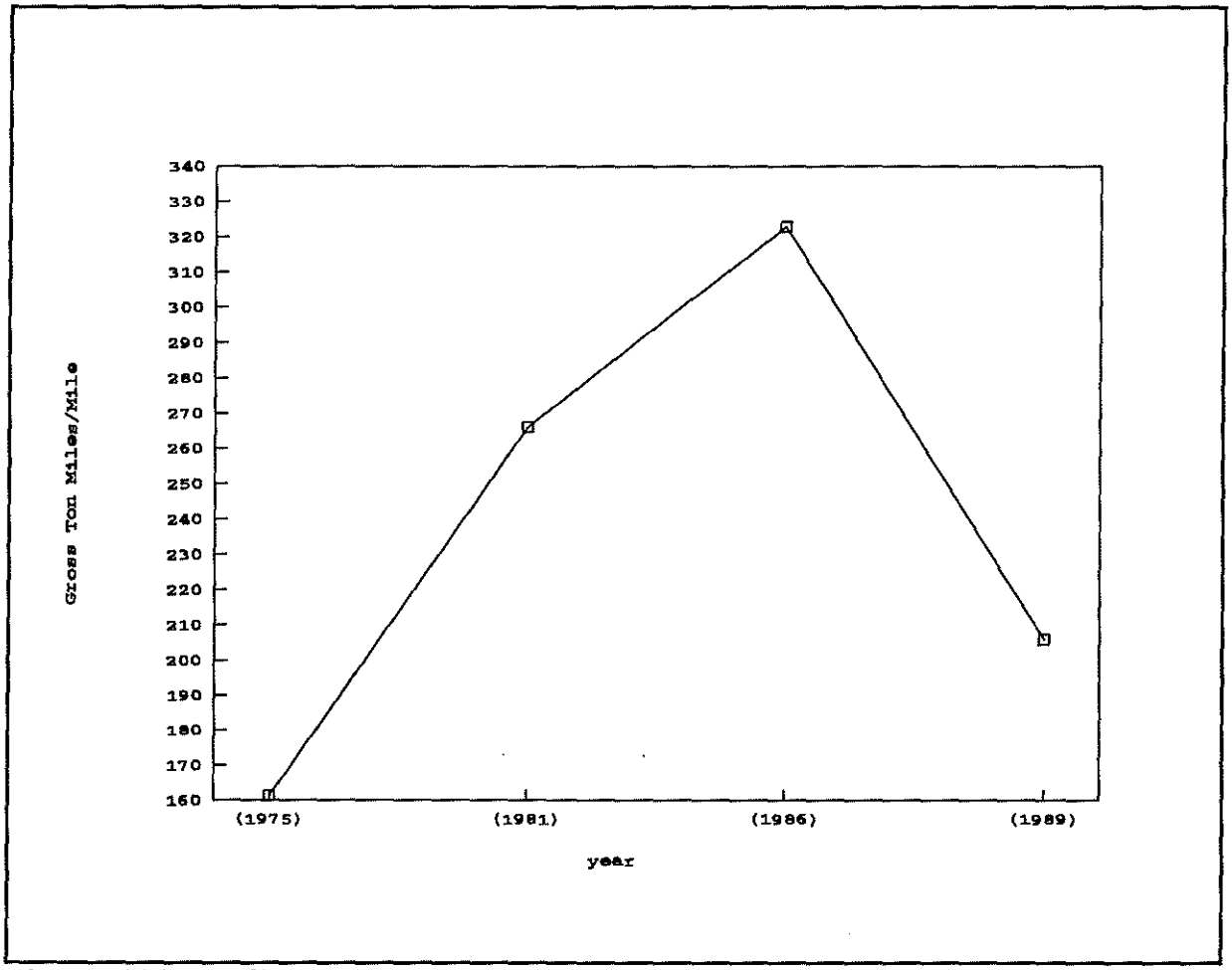


Figure 114: Burlington Northern Line Segment 059, Warwick to Nolan (Density in Thousands of Gross Ton Miles per mile)

Burlington Northern Line Segment 061: Sanborn to Hannaford

In 1986, a peak crop year, both grain carloadings (Figure 115) and truck modal

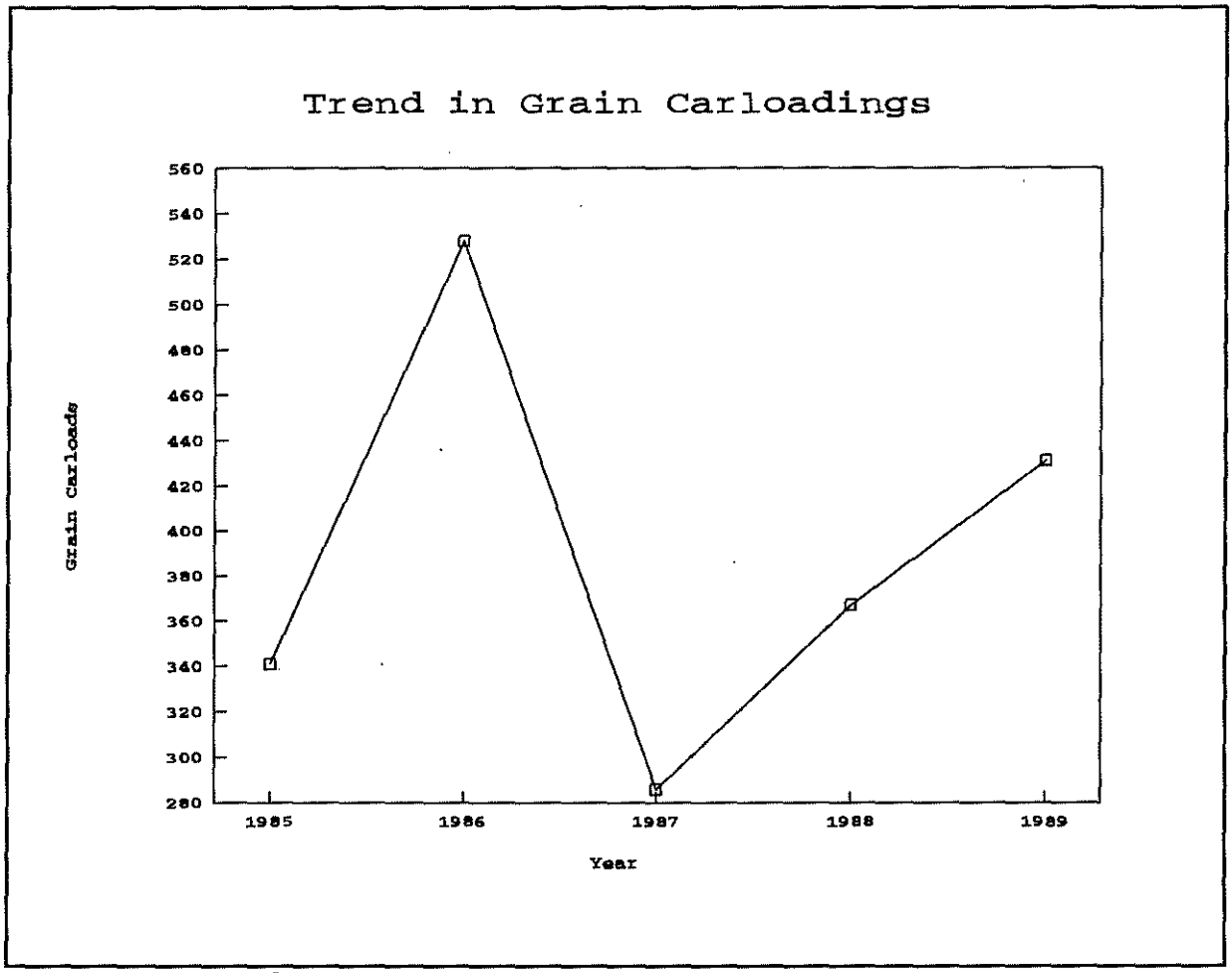


Figure 115: Trend in Grain Carloadings; BN061

share (Figure 116) increased. Because of drought conditions, grain carloadings dropped in 1987. However, they have improved since then. Furthermore, truck modal share has declined. Traffic density figures for 1986 and 1989 were not available. Traffic fell more than 40,000 GTMM from 1975 to 1981 (Figure 117). However, the line generated 23 grain cars per mile in 1989. Although the non-grain traffic is insignificant, the grain traffic density may be substantial enough to ensure the future viability of the line.

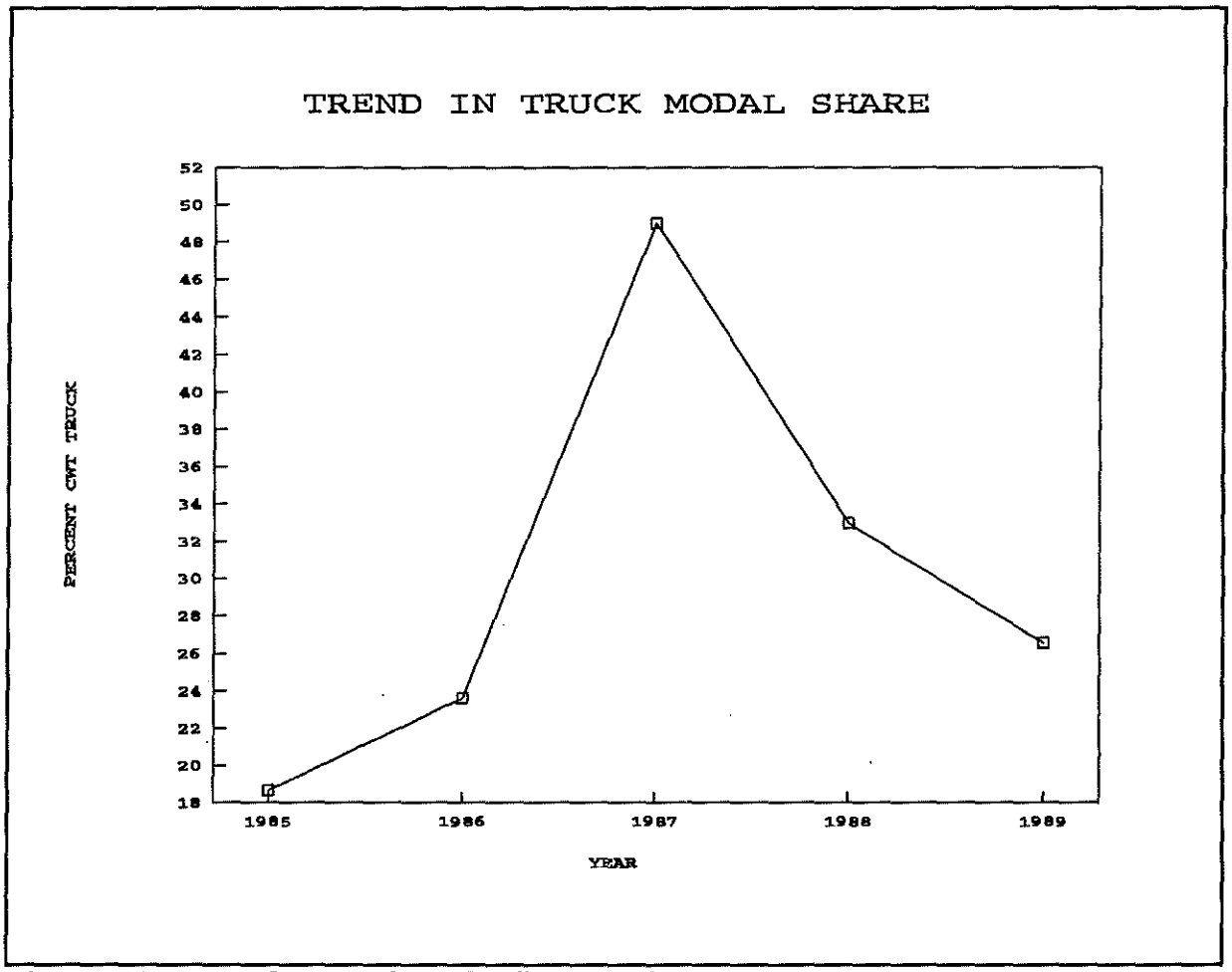


Figure 116: Trend in Truck Modal Share; BN061

It should be noted that a portion of this line between Dazey and Rogers was abandoned in 1988. The traffic on the Dazey to Hannaford section is fairly significant. However, the viability of the Sanborn to Rogers segment is more questionable.

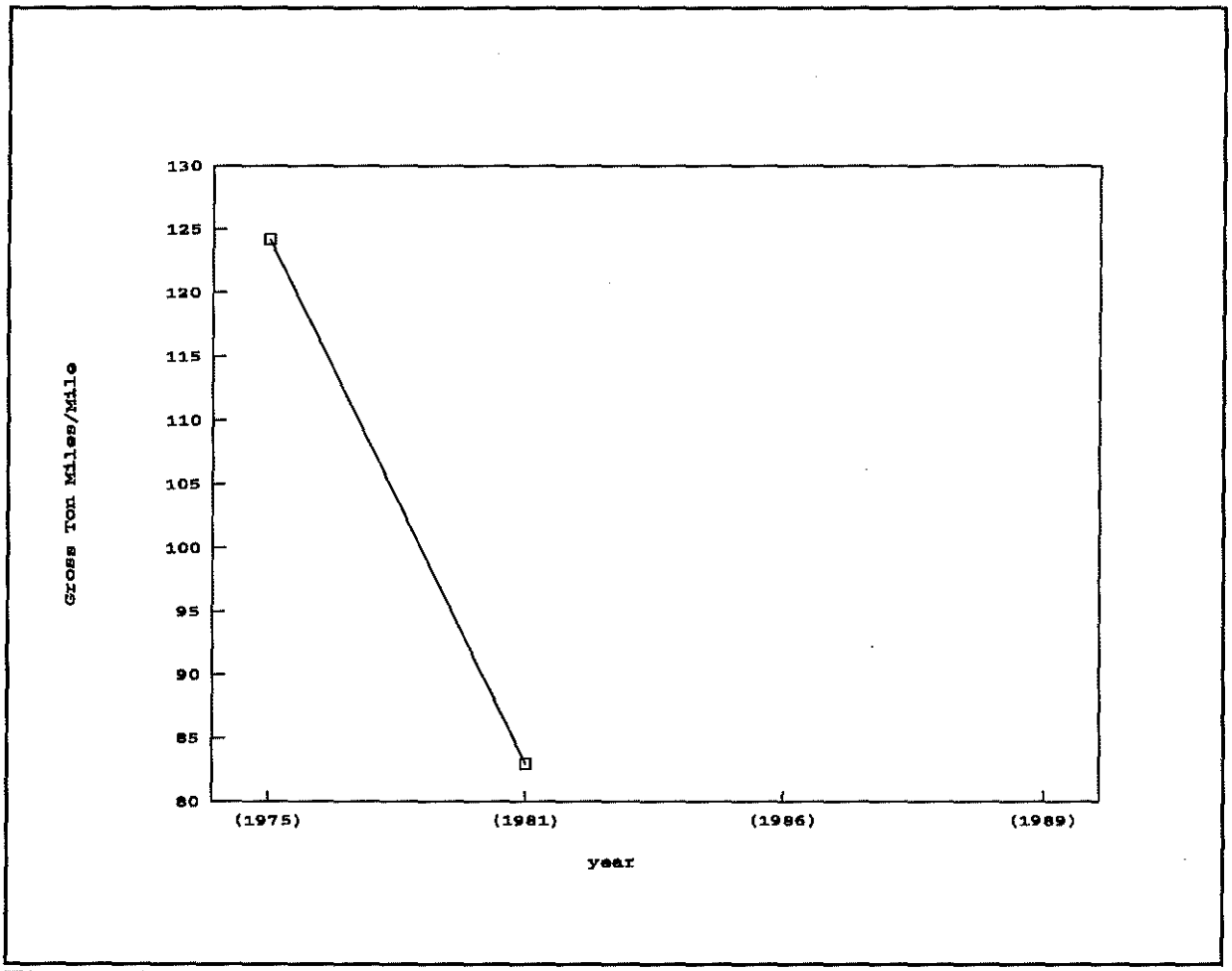


Figure 117: Burlington Northern Line Segment 061, Sanborn to Hannaford (Density in Thousands of Gross Ton Miles per mile)

Burlington Northern Line Segment 071: Havanna to Fairmount

After a brief increase in grain carloads, the Havanna to Fairmount line experienced a decline (Figure 118). Figure 119 shows the trend in truck modal share

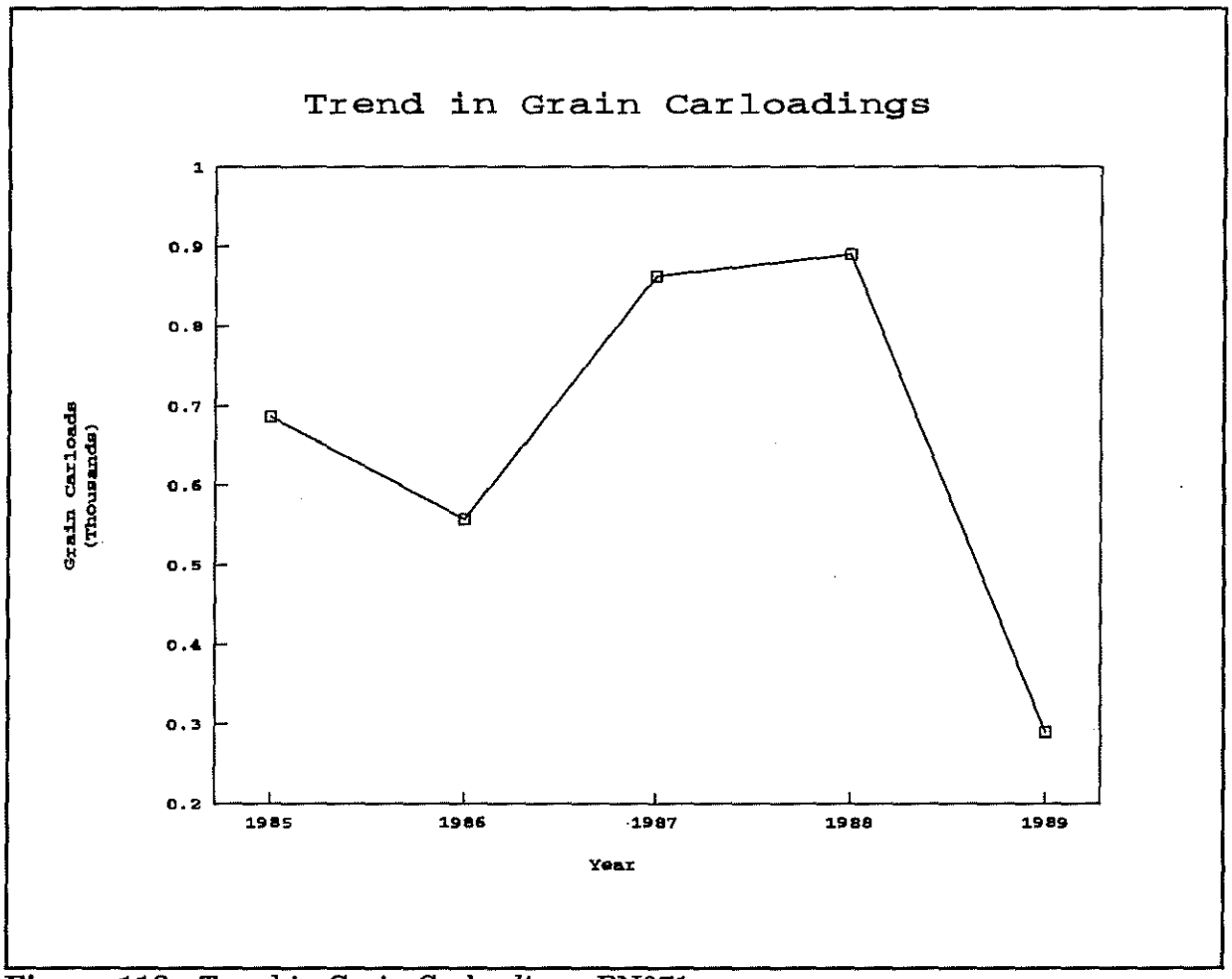


Figure 118: Trend in Grain Carloadings; BN071

decreasing, then increasing in the same manner. Total traffic density in Figure 120 rose slightly in 1981, and fell about 50,000 GTMM in 1986. Data were not available for 1989.

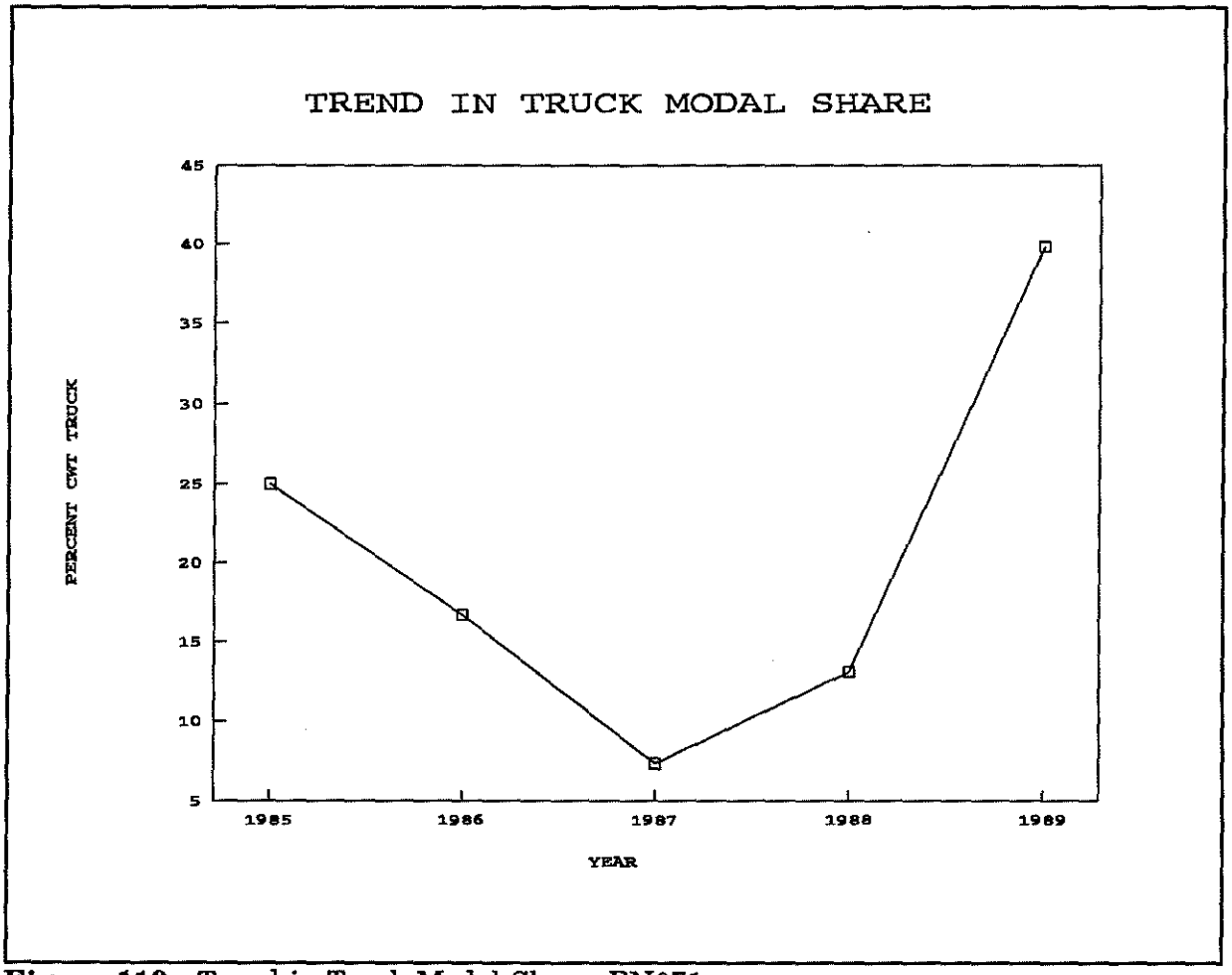


Figure 119: Trend in Truck Modal Share; BN071

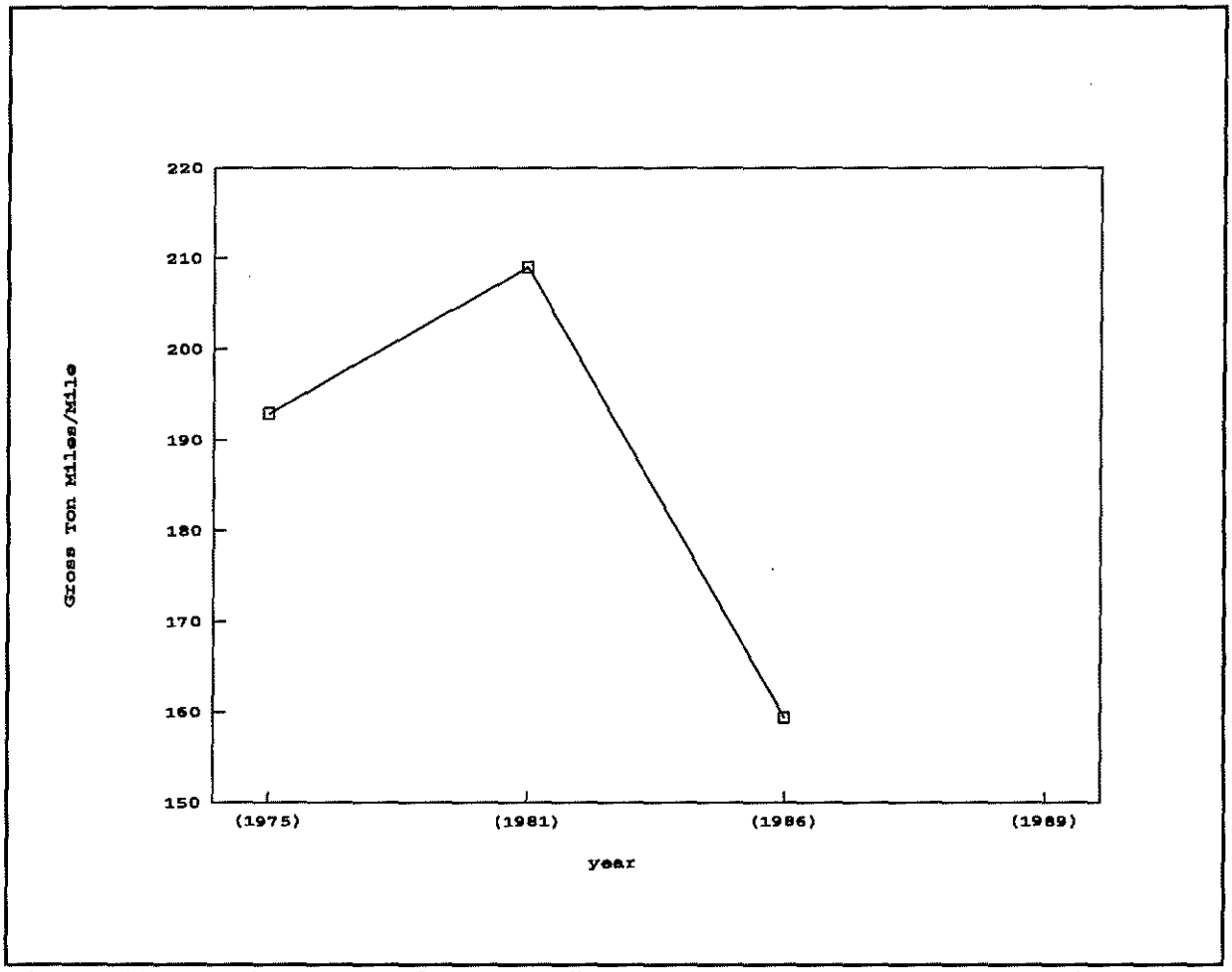


Figure 120: Burlington Northern Line Segment 071, Havana to Fairmount (Density in Thousands of Gross Ton Miles per mile)

Burlington Northern Line Segment 073: Mayville to Larimore

The Mayville to Larimore line has experienced an overall increase in grain traffic (Figure 121), despite a drop of 609 carloads in 1989. With the drop in carloads in 1989,

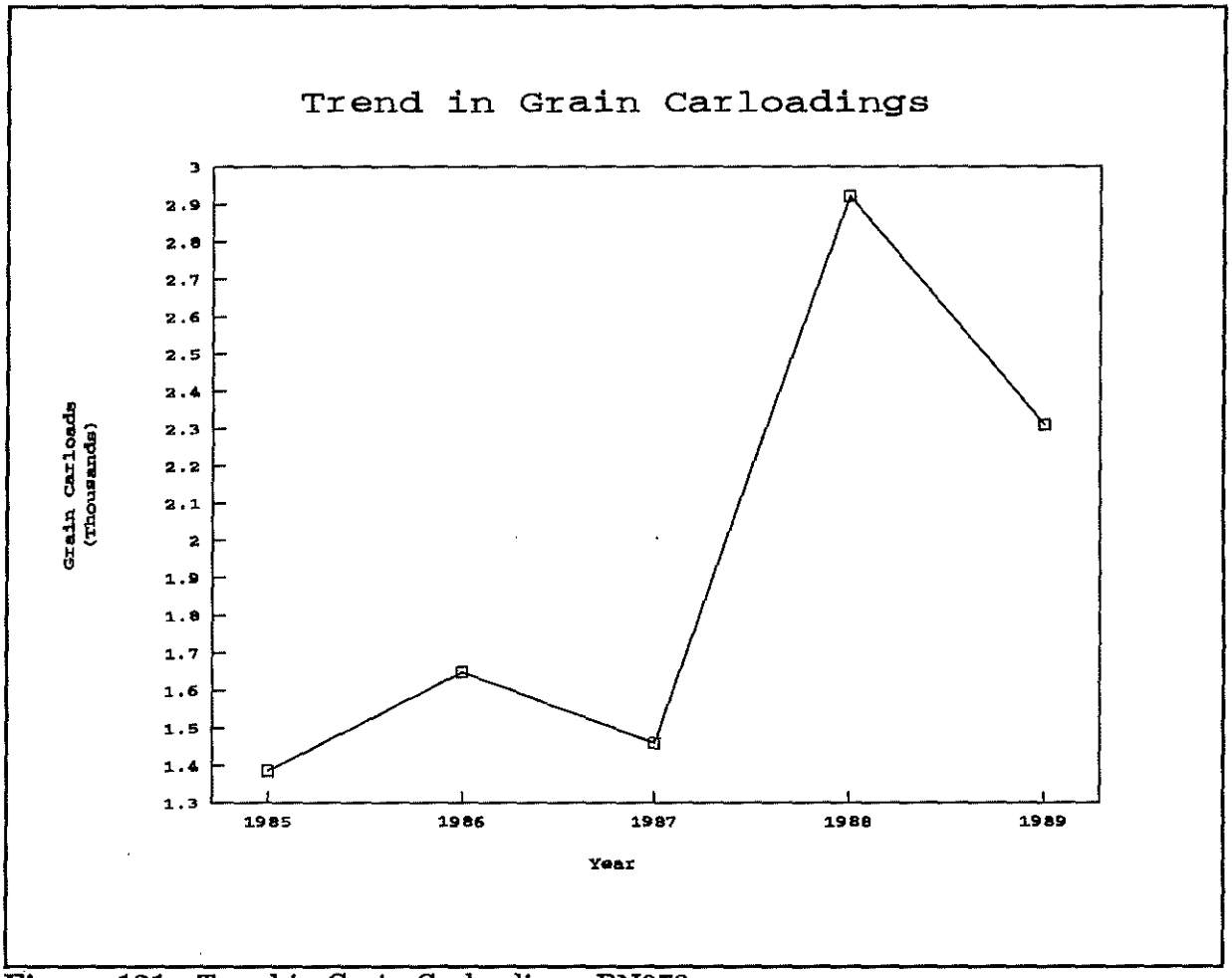


Figure 121: Trend in Grain Carloadings; BN073

the truck modal share increased 7 percent, but, on the whole, decreased from its 1985 level (Figure 122). Between 1975 and 1981 the line which ran from Larimore to Vance was split into two lines: segment 73, Mayville to Larimore; and segment 43, Hunter to Vance. The effect of this split can be seen on the total density graph for the Larimore to Mayville line (Figure 123). The density more than doubled to 330,000 GTMM by 1981, a level from which it has fallen only slightly.

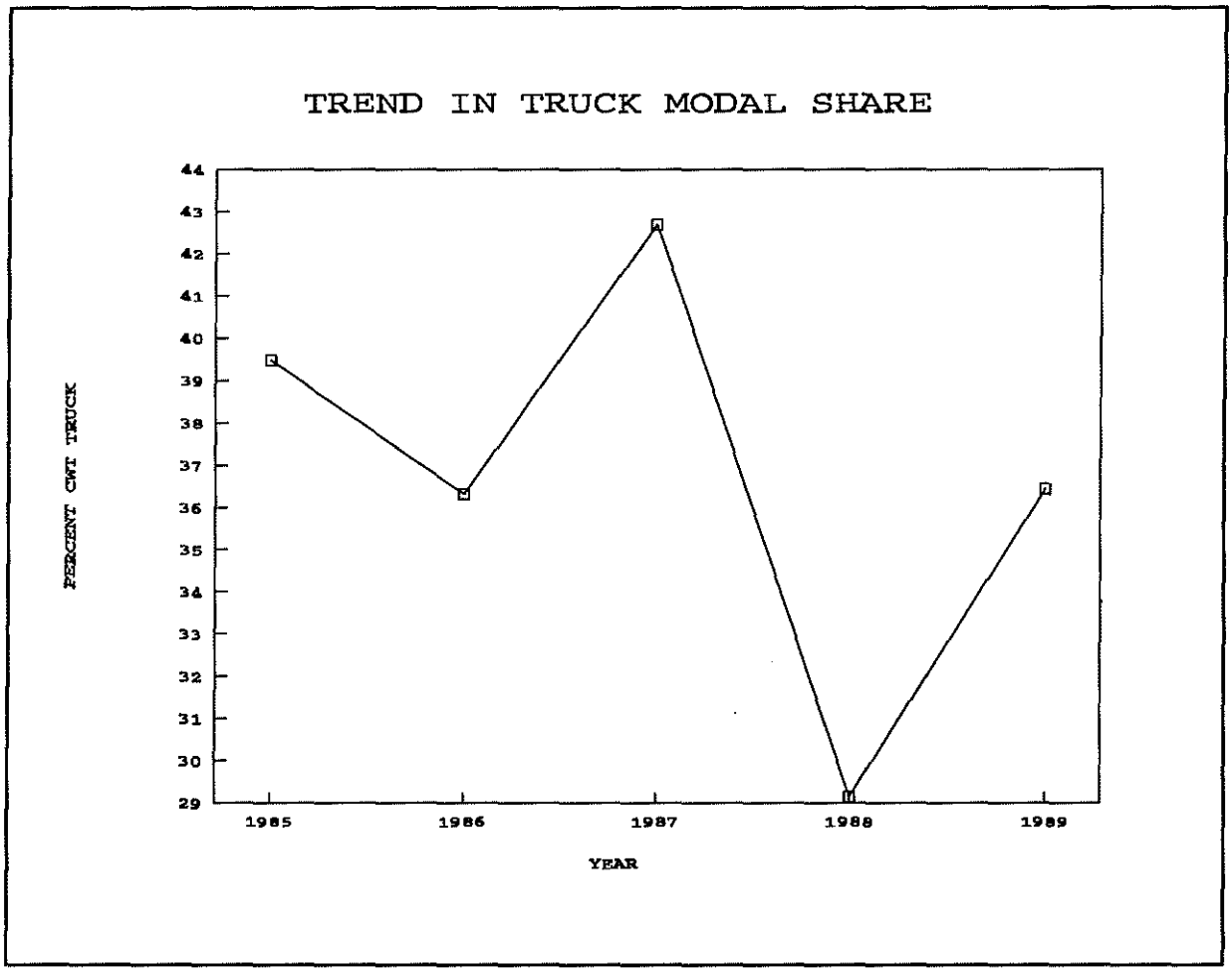


Figure 122: Trend in Truck Modal Share; BN073

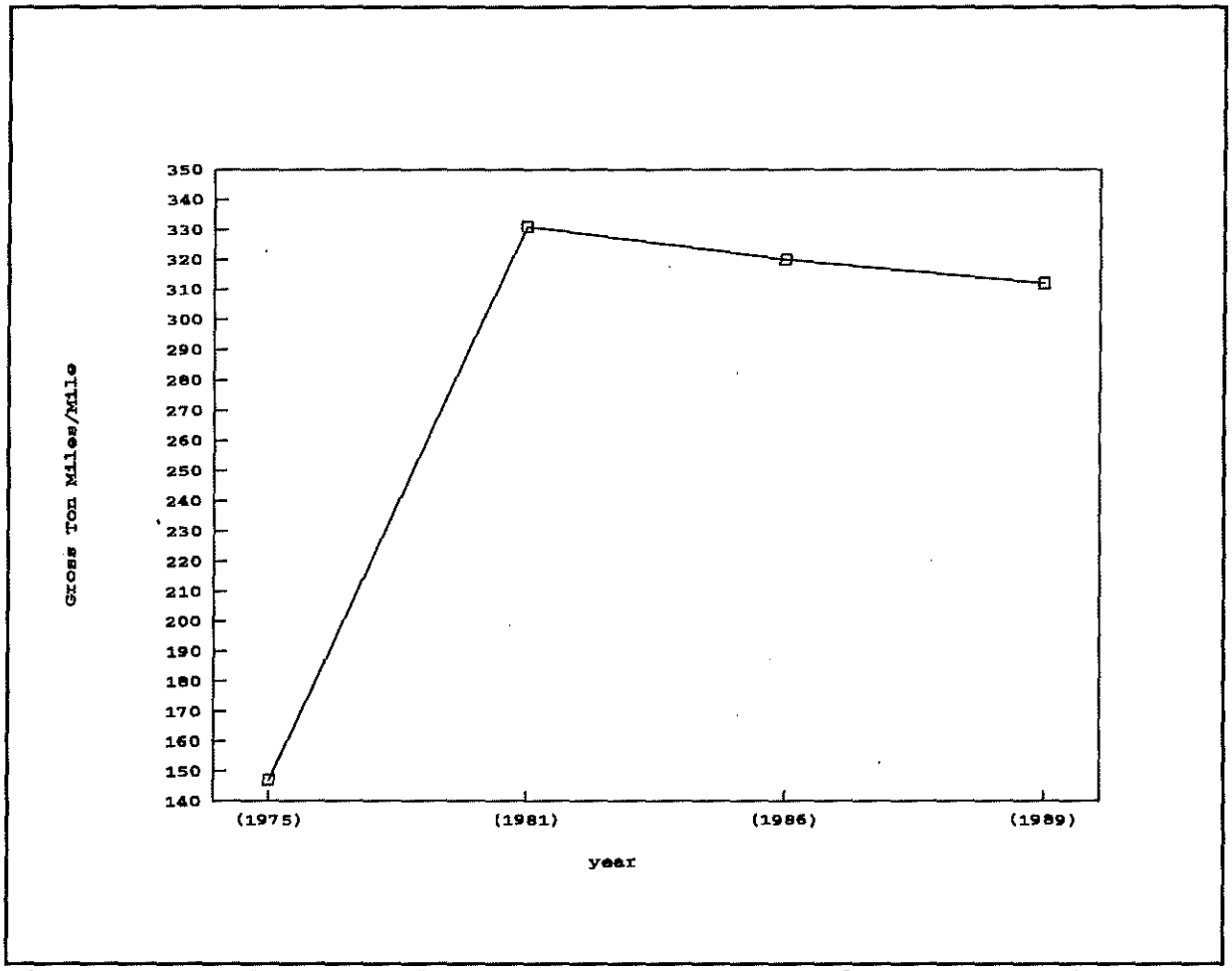


Figure 123: Burlington Northern Line Segment 073, Mayville to Larimore (Density in Thousands of Gross Ton Miles per mile)

Burlington Northern Line Segment 095: McKenzie to Zeeland

Figure 124 shows a steady decline in grain carloadings on the McKenzie to Zeeland

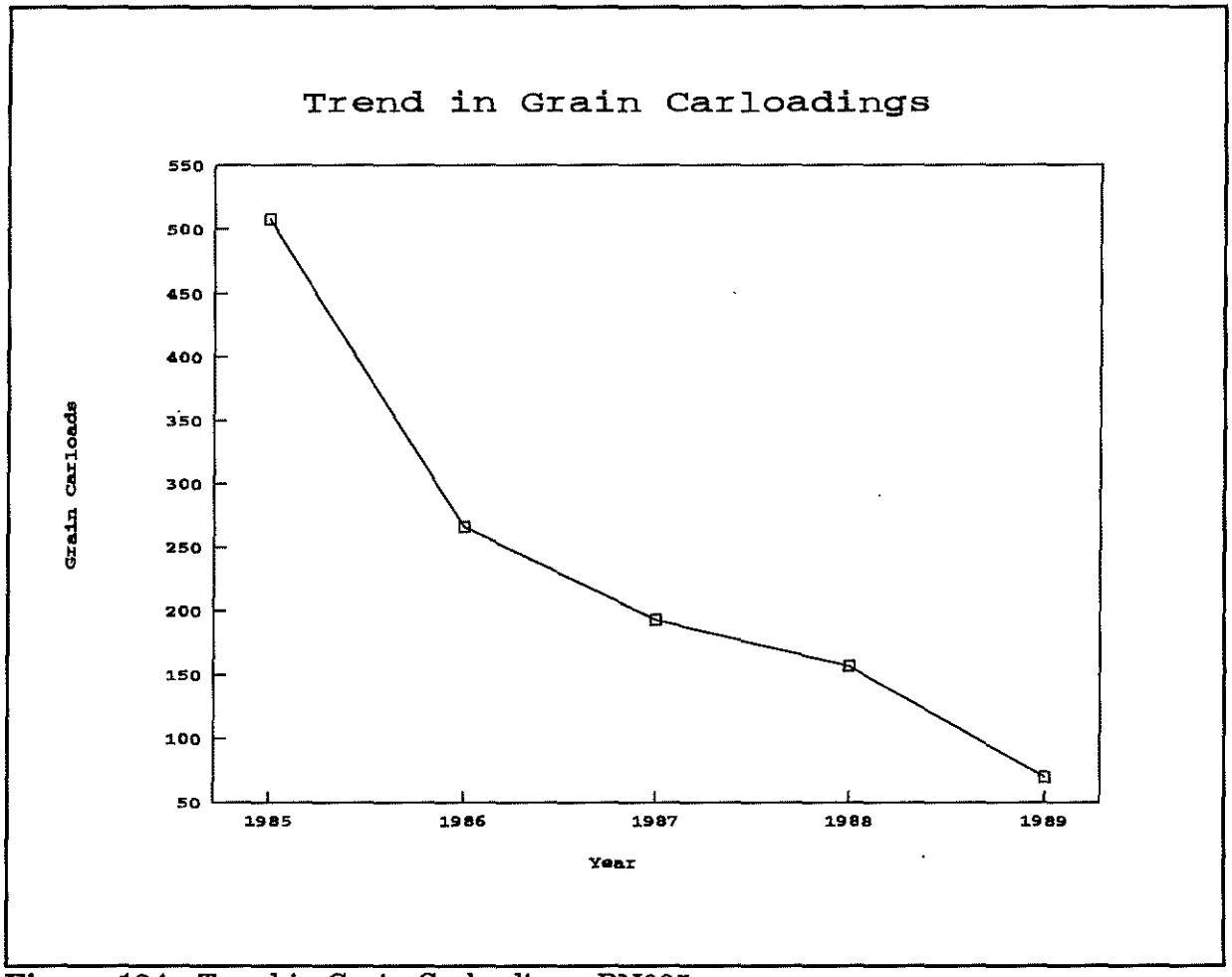


Figure 124: Trend in Grain Carloadings; BN095

line. On the other hand, truck modal share climbed during 1985 - 1987 (Figure 125), but fell in 1988 and 1989. Figure 126 shows that total traffic density on the line has been falling since 1975. Among the reasons for this are the drought and the closing of the elevator at Zeeland. Trucks now take the shipments to Ashley or Bismarck, and Linton and Temvik are satellite stations shipping primarily to Soo subterminals.

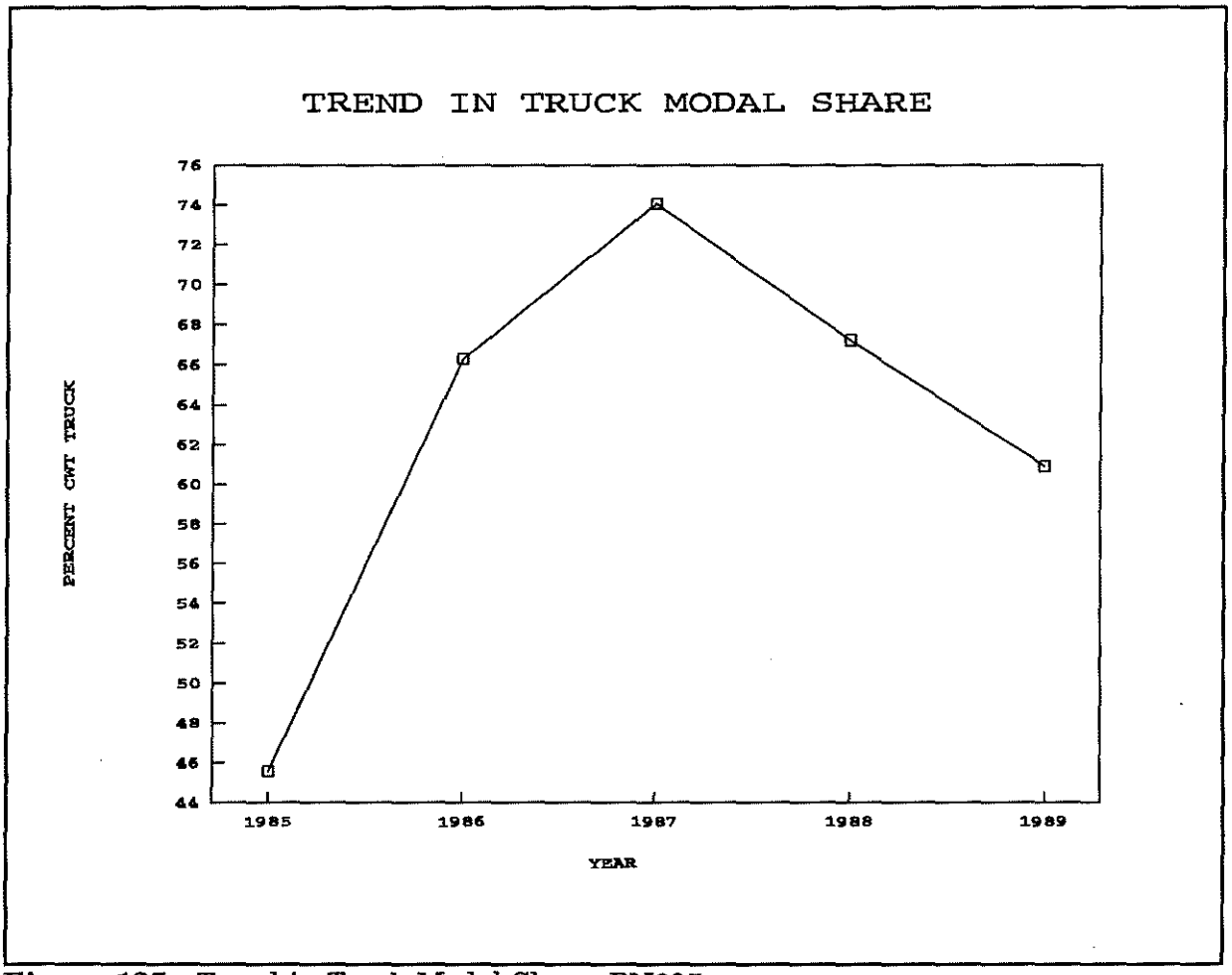


Figure 125: Trend in Truck Modal Share; BN095

As Table 7 shows, the line generated only one grain car per mile in 1989. With no non-grain traffic, the future of the line from Moffit to Zeeland is unclear. The line has very light rail, for the most part, further detracting from its future potential.

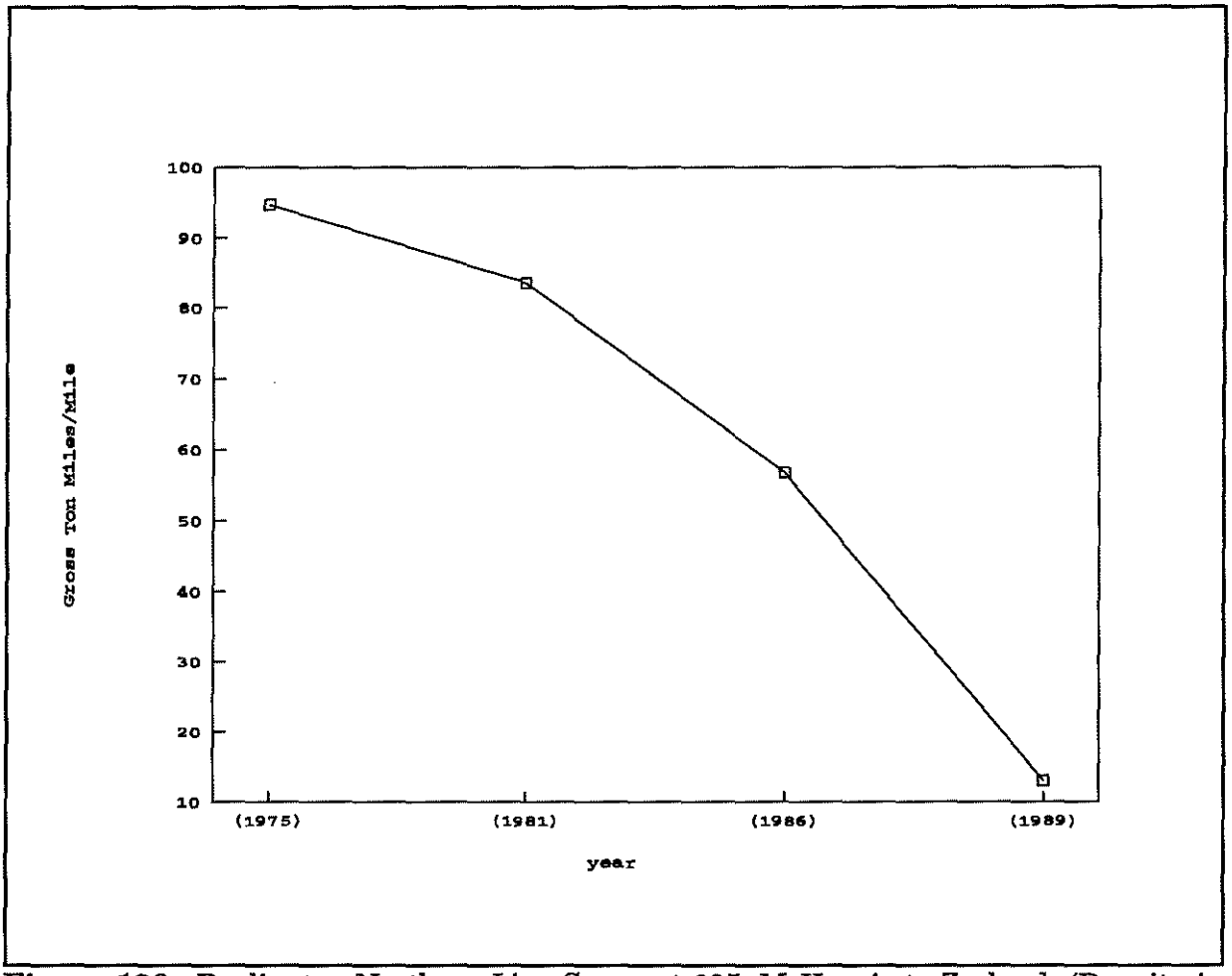


Figure 126: Burlington Northern Line Segment 095, McKenzie to Zeeland (Density in Thousands of Gross Ton Miles per mile)

Burlington Northern Line Segment 097: Watford City to Fairview

Supposedly, line segment 97 has not had any traffic since 1986, contrary to the numbers shown in Figure 127. Truck modal share has increased to nearly 100 percent

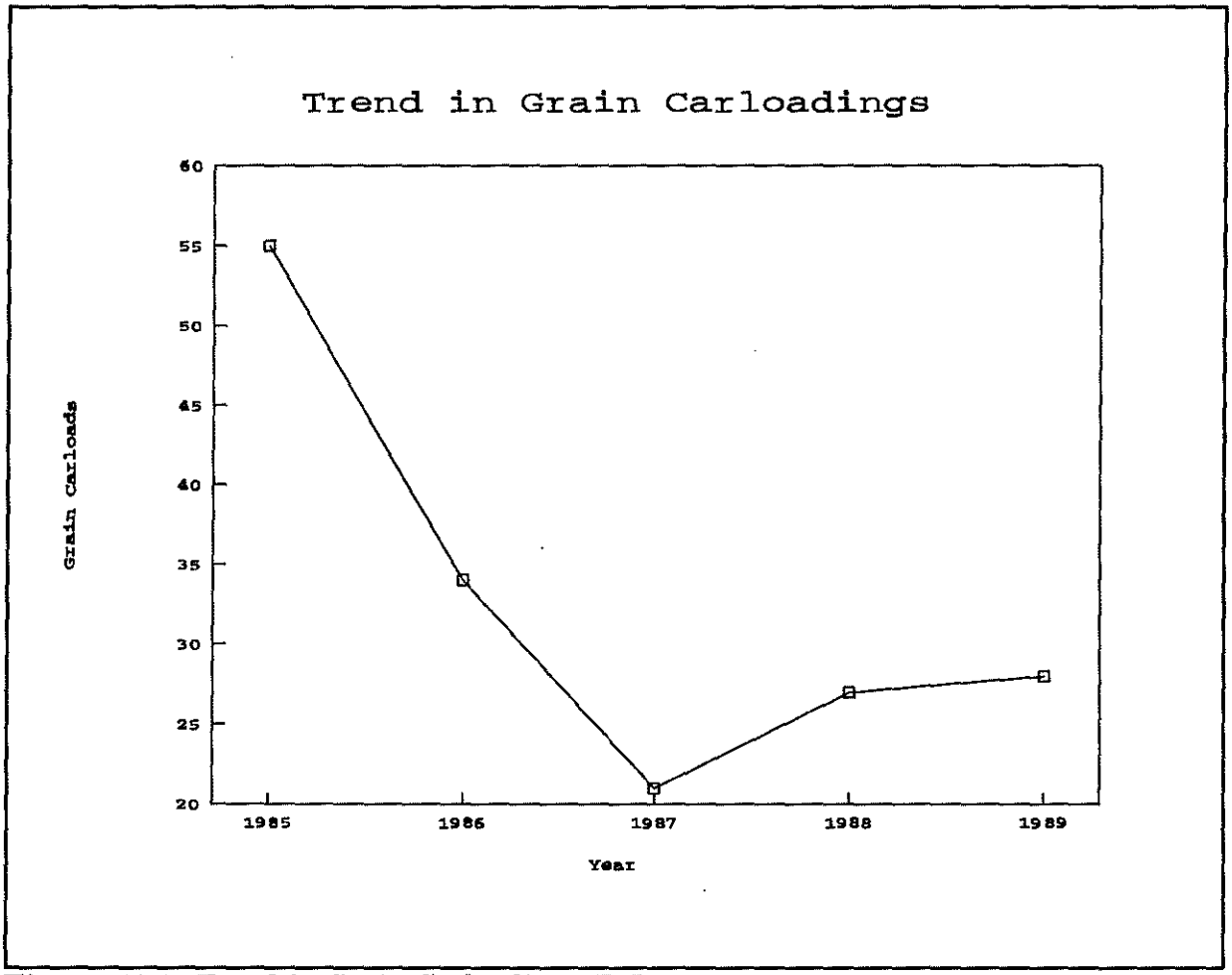


Figure 127: Trend in Grain Carloadings; BN097

(Figure 128). Figure 129 shows no traffic on the line from 1986 on.

An abandonment application was recently filed by the BN. However, the ICC initially refused to hear the case.

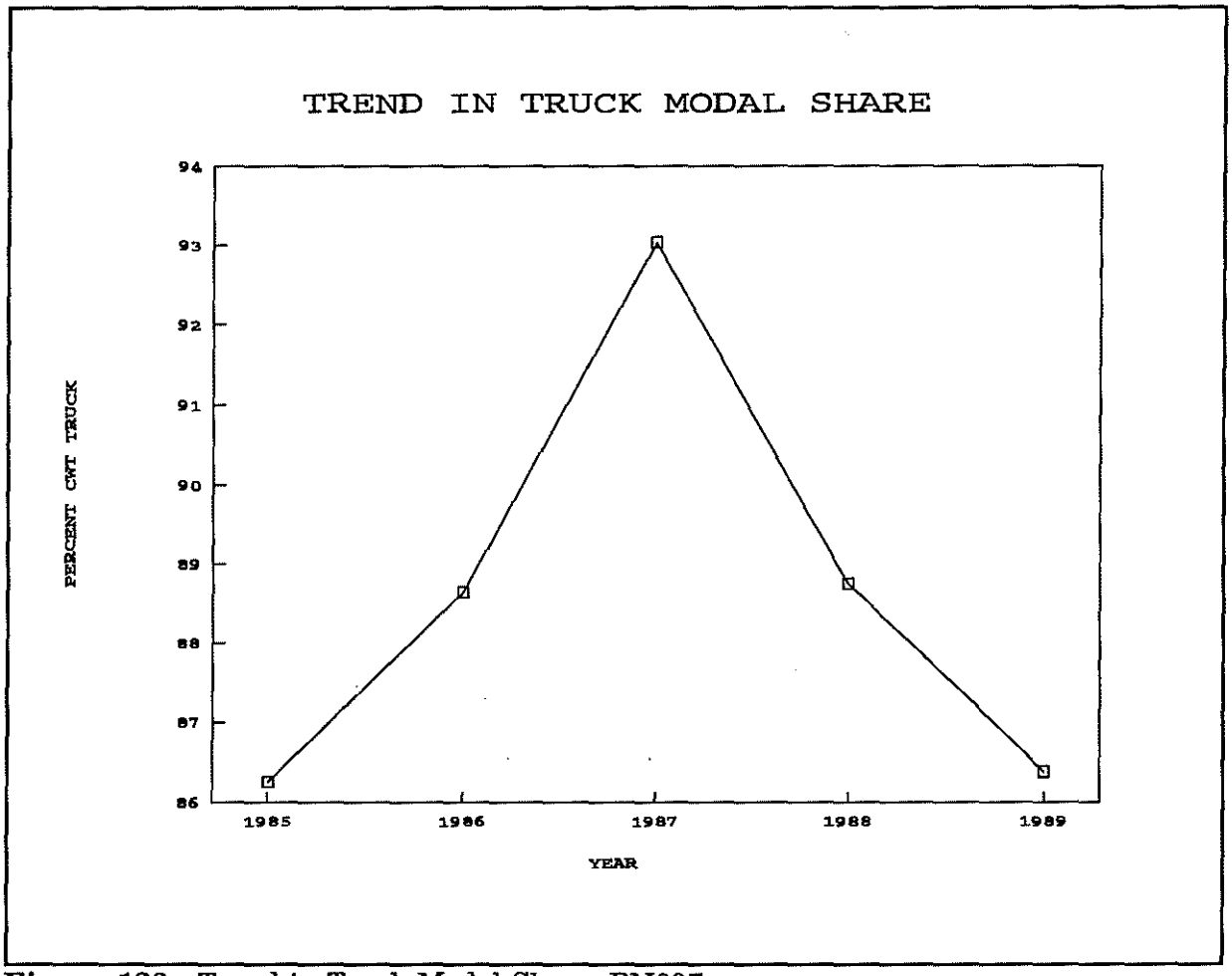


Figure 128: Trend in Truck Modal Share; BN097

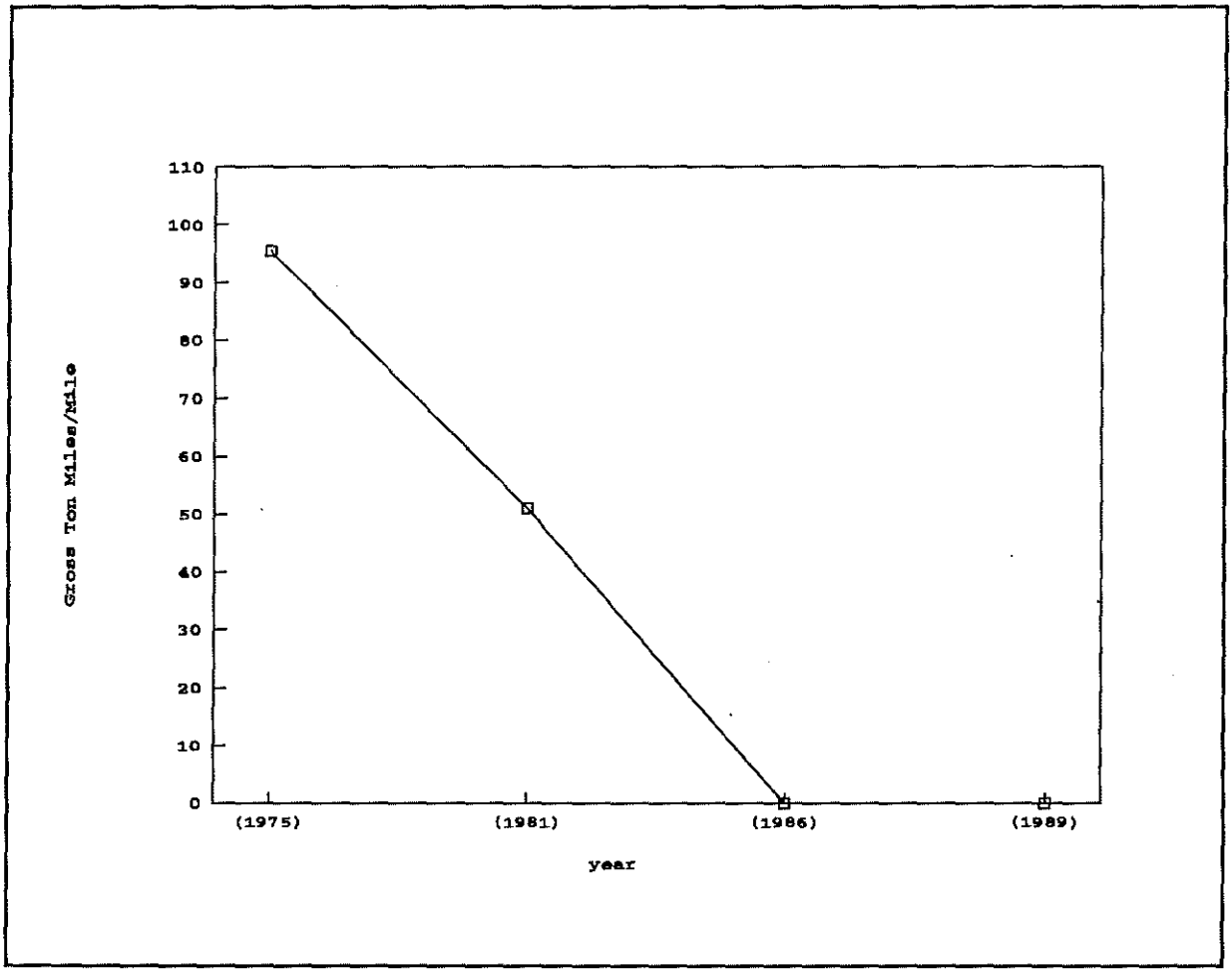


Figure 129: Burlington Northern Line Segment 097, Watford City to Fairview (Density in Thousands of Gross Ton Miles per mile)

Burlington Northern Line Segment 101: Zap to Mandan

The trends from 1986 to 1989 on the Zap to Mandan line have been falling grain carloads (Figure 130) and rising truck modal share (Figure 131). Figure 132 confirms

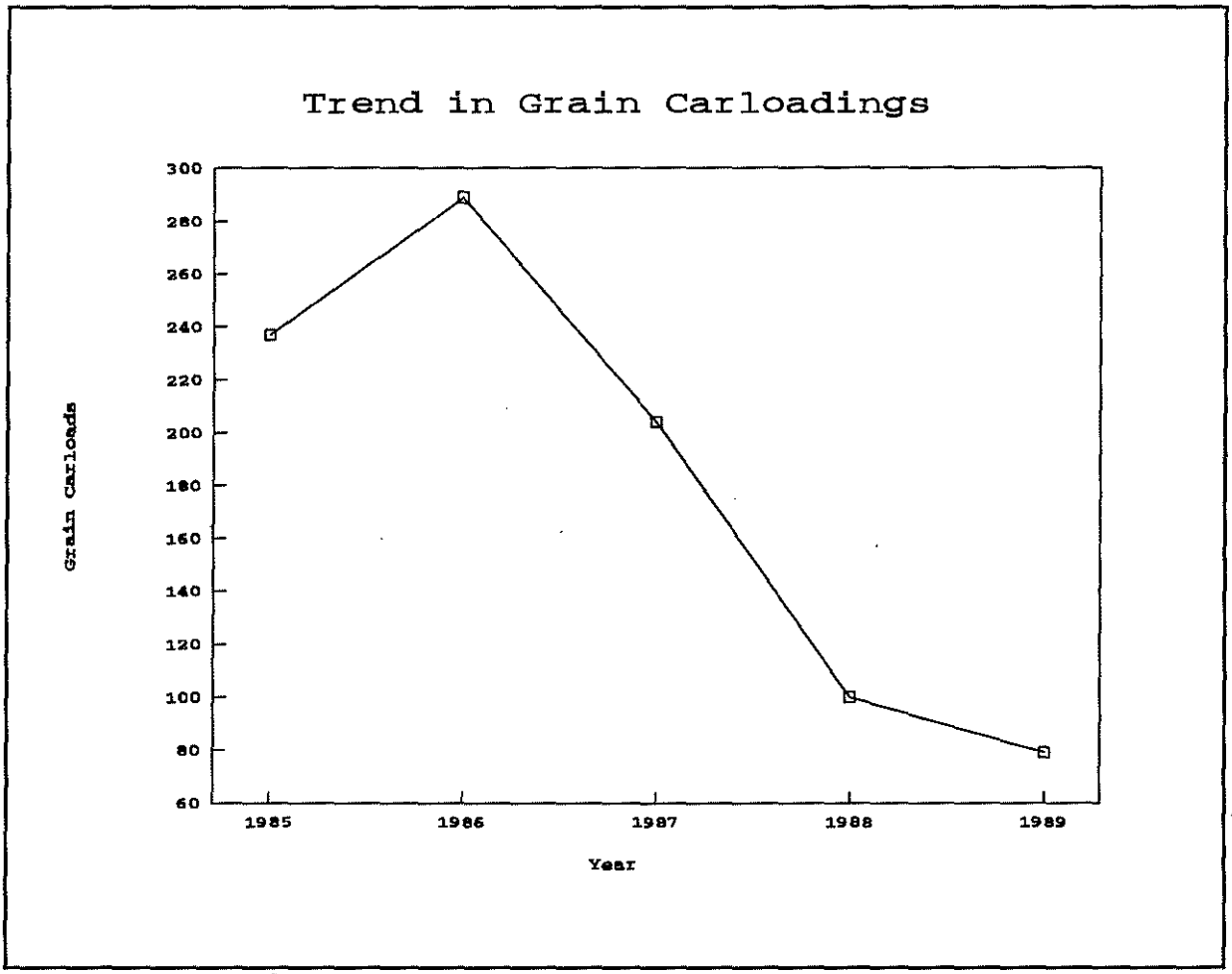


Figure 130: Trend in Grain Carloadings; BN101

that overall traffic has diminished for the past ten years. As a result, the line which once ran from Kildeer to Mandan, was reduced in 1985 with the Kildeer to Zap portion being abandoned. Grain traffic is now trucked to nearby Soo Line terminals or the mainline. The remainder of the traffic on the line is coal. Although coal traffic has declined since 1981, the line still generates over 18,000 non-grain carloads (Table 7). So, even if the grain traffic disappears, the Zap to Mandan line should remain viable. However, it

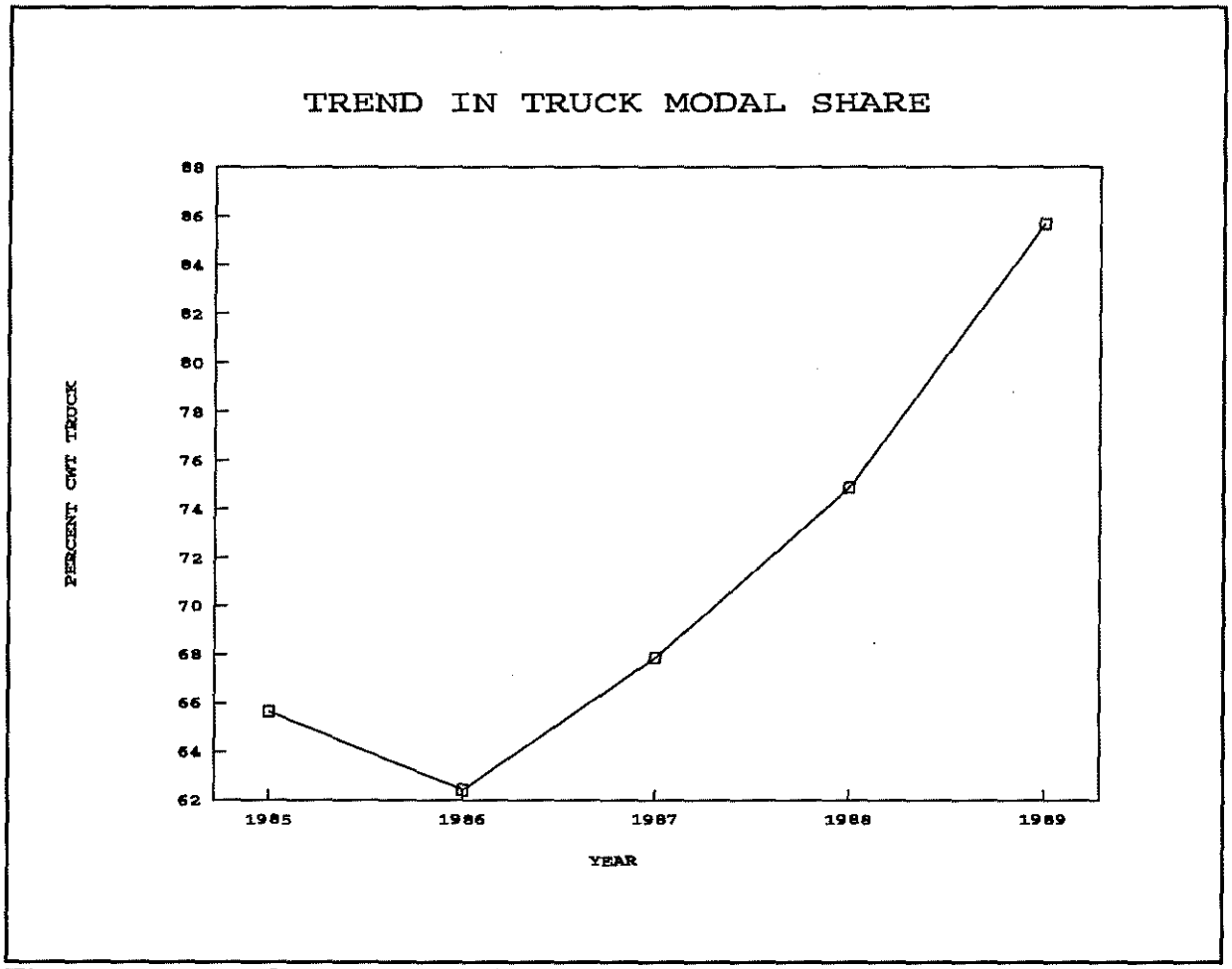


Figure 131: Trend in Truck Modal Share; BN101

should be noted that a good portion of the coal traffic operates over the Zap and Stanton segment of the line.

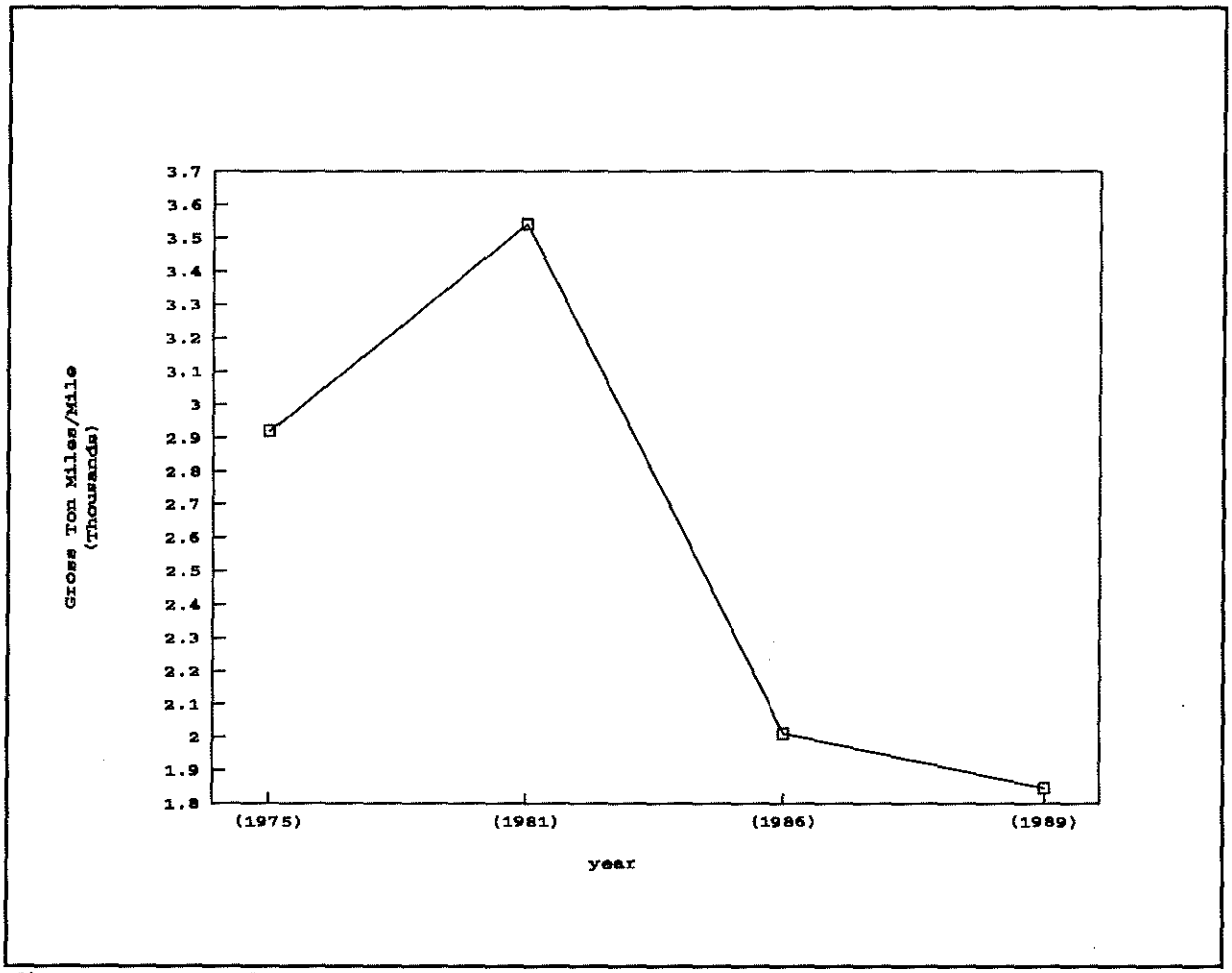


Figure 132: Burlington Northern Line Segment 101, Killdeer to Mandan (Density in Thousands of Gross Ton Miles per mile)

Burlington Northern Line Segment 115: Amenia to Vance

The line from Amenia to Vance is only 2.2 miles in length. Because there are fewer than three shippers on this line, the grain and non-grain carloading data cannot be presented. Therefore, the analysis will focus on overall traffic density.

In 1975, the Amenia to Vance line generated 260,000 GTMM. The traffic density dropped to 20,000 GTMM in 1981 (Figure 133), but has since risen. The upward trend in traffic density since 1981 is a positive sign. The 1989 traffic density is high enough that the near-term future of the line segment appears secure.

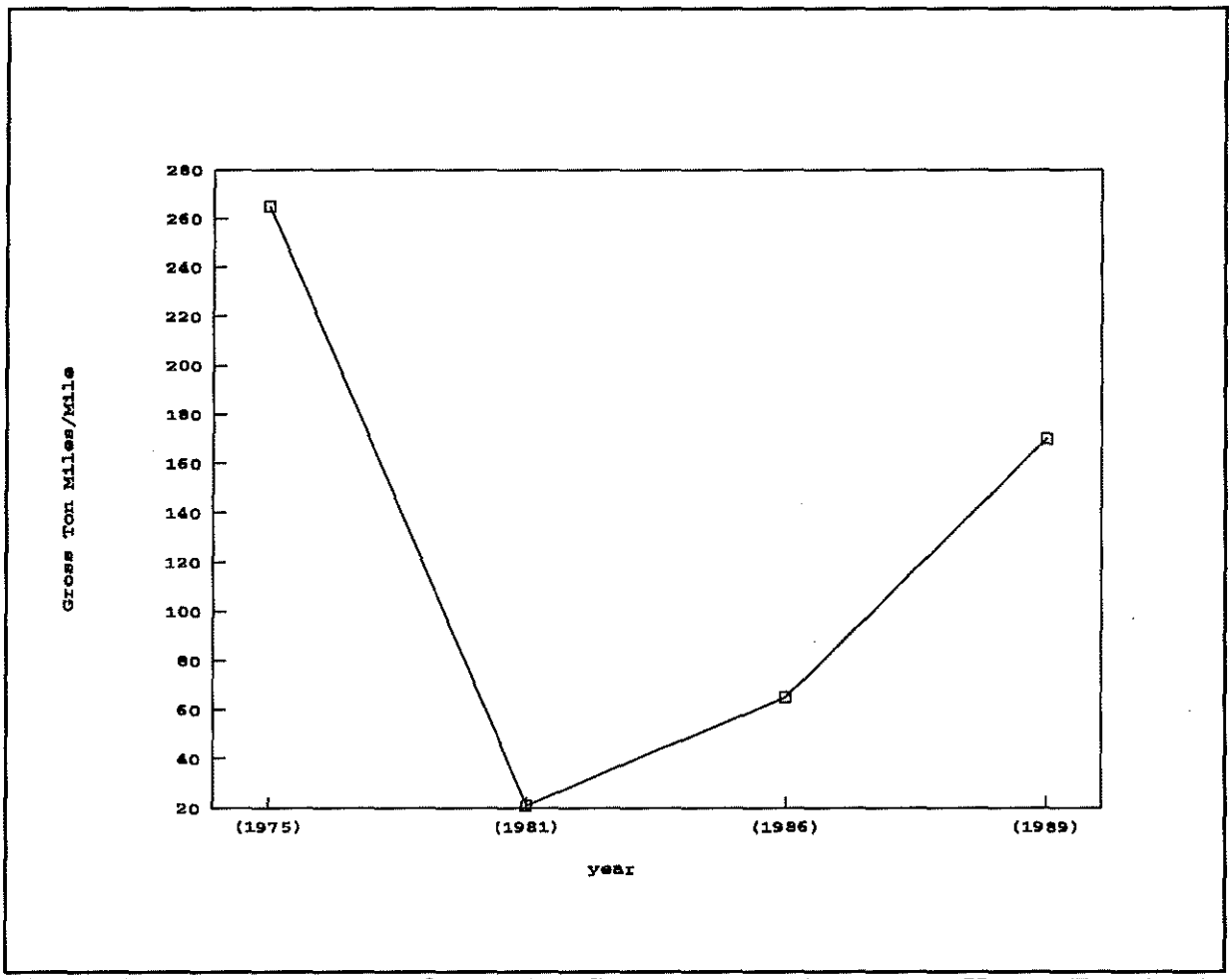


Figure 133: Burlington Northern Line Segment 115, Amenia to Vance (Density in Thousands of Gross Ton Miles per mile)

Soo Line Segment 125: East Westby to Flaxton

Soo Line segment 125 is a shared track with Burlington Northern. The corresponding Burlington Northern line segment is BN 003. A good share of the traffic on the line is generated from Burlington Northern stations.

Grain traffic (Figure 134) increased from 1985 to 1987, but decreased for the

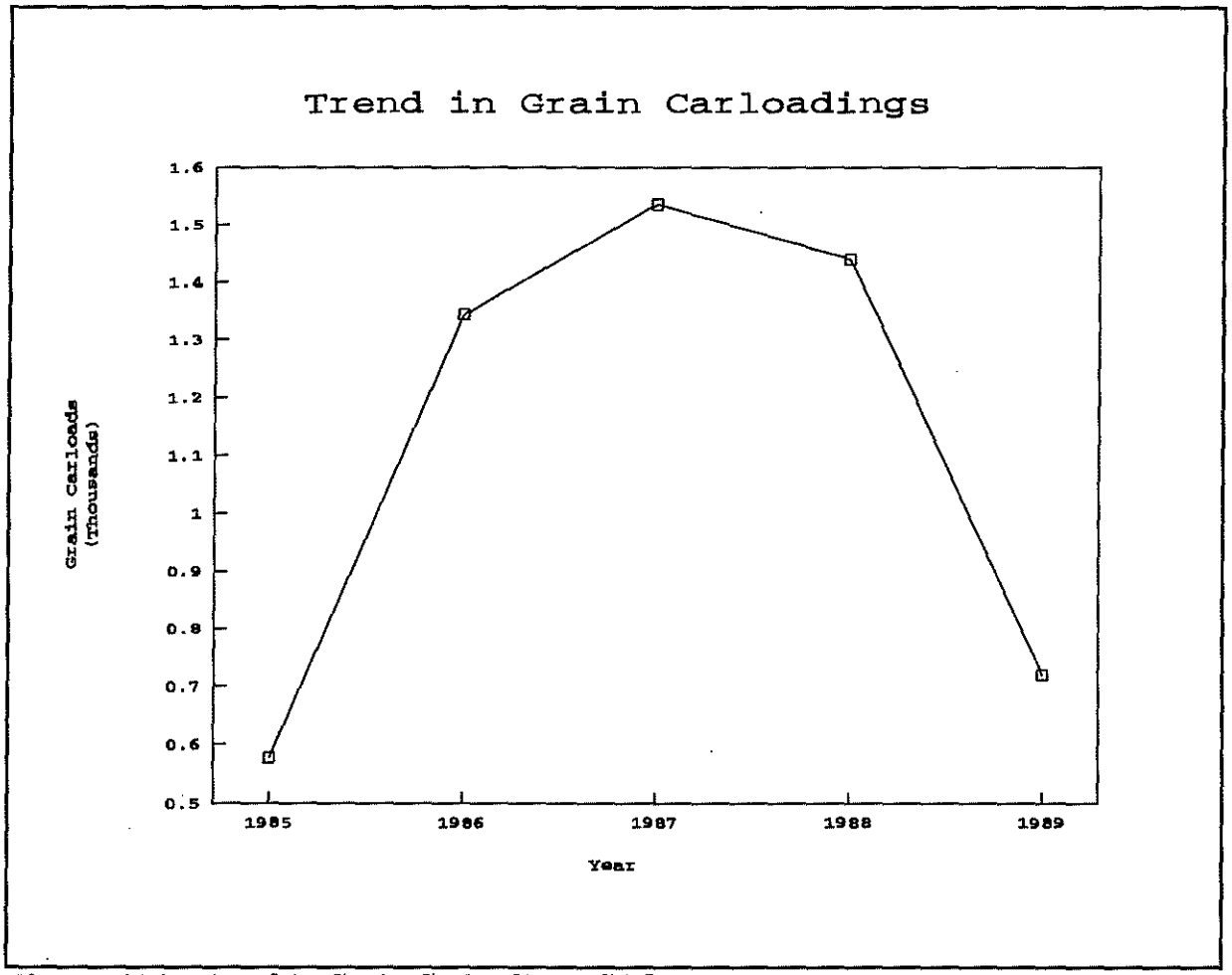


Figure 134: Trend in Grain Carloadings; SOO125

remaining two years in the period. Truck modal share (Figure 135) has been below 10 percent since 1986. Traffic density on the line (Figure 136) has more than doubled since 1985, and shows an overall increase since 1975.

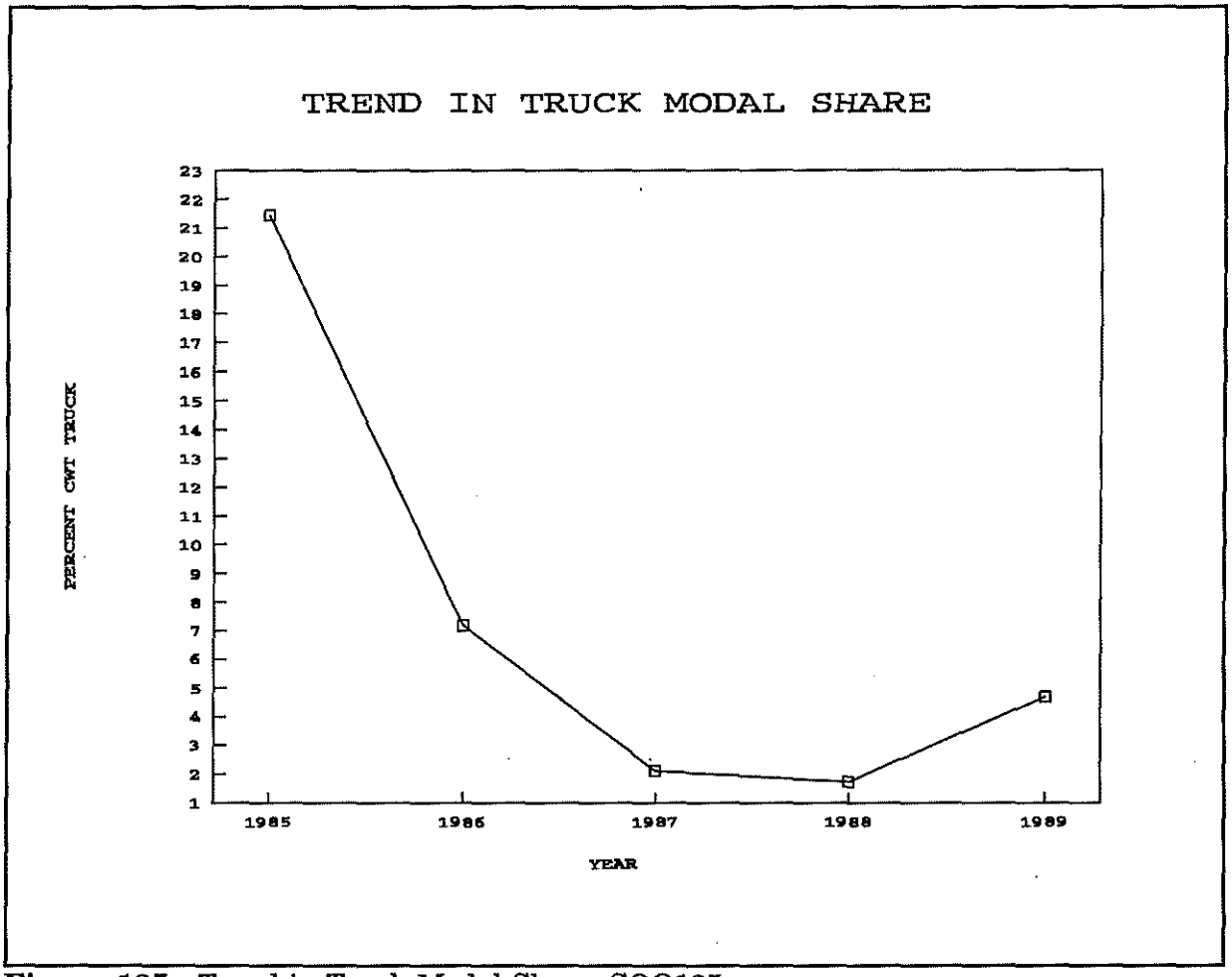


Figure 135: Trend in Truck Modal Share; SOO125

This line has recently been sold to a short-line operator. As Table 7 shows, the East Westby to Flaxton line generated less than 10 grain cars per mile in 1989. Thus, as a grain line, the East Westby to Flaxton line is marginal. Furthermore, in 1989 the line generated only 68 non-grain carloads, which is less than 1 car per mile.

Because this line involves a substantial proportion of common track, the GTMM data must be interpreted with caution. It is not known whether BN tonnage is included in Soo Line data, or vice versa. In fact, the trend in gross density from 1985 to 1988 stands in contrast to the trend in grain carloadings. So, for this particular line, the grain and non-grain carloadings are perhaps better indicators of line viability.

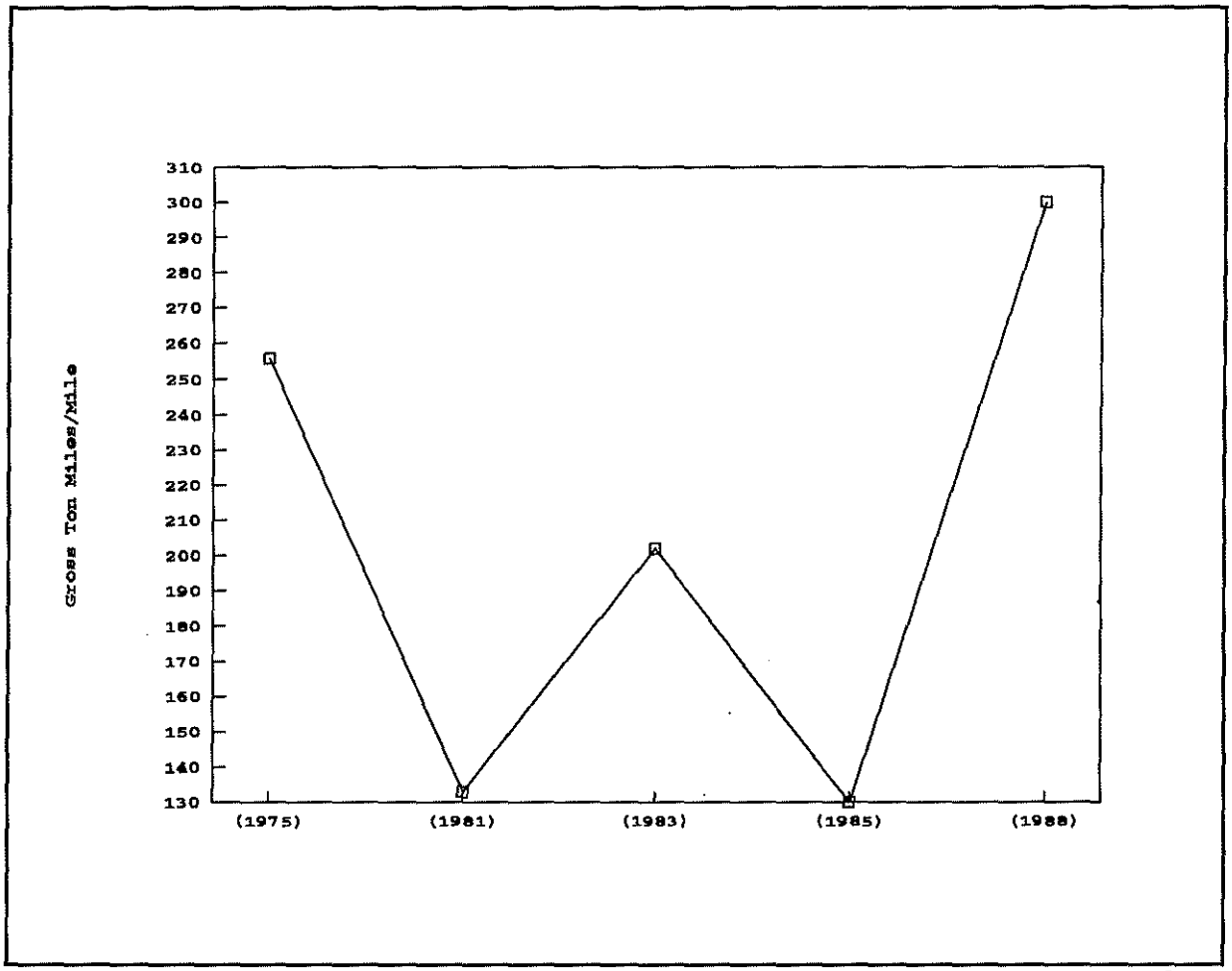


Figure 136: Soo Line Segment 125, Flaxton to East Westby (Density in Thousands of Gross Ton Miles per mile)

Soo Line Segment 127: New Town to Prairie Jct.

The line segment from New Town to Prairie Junction has experienced a decline in grain traffic since 1986 (Figure 137). At the same time truck modal share has increased

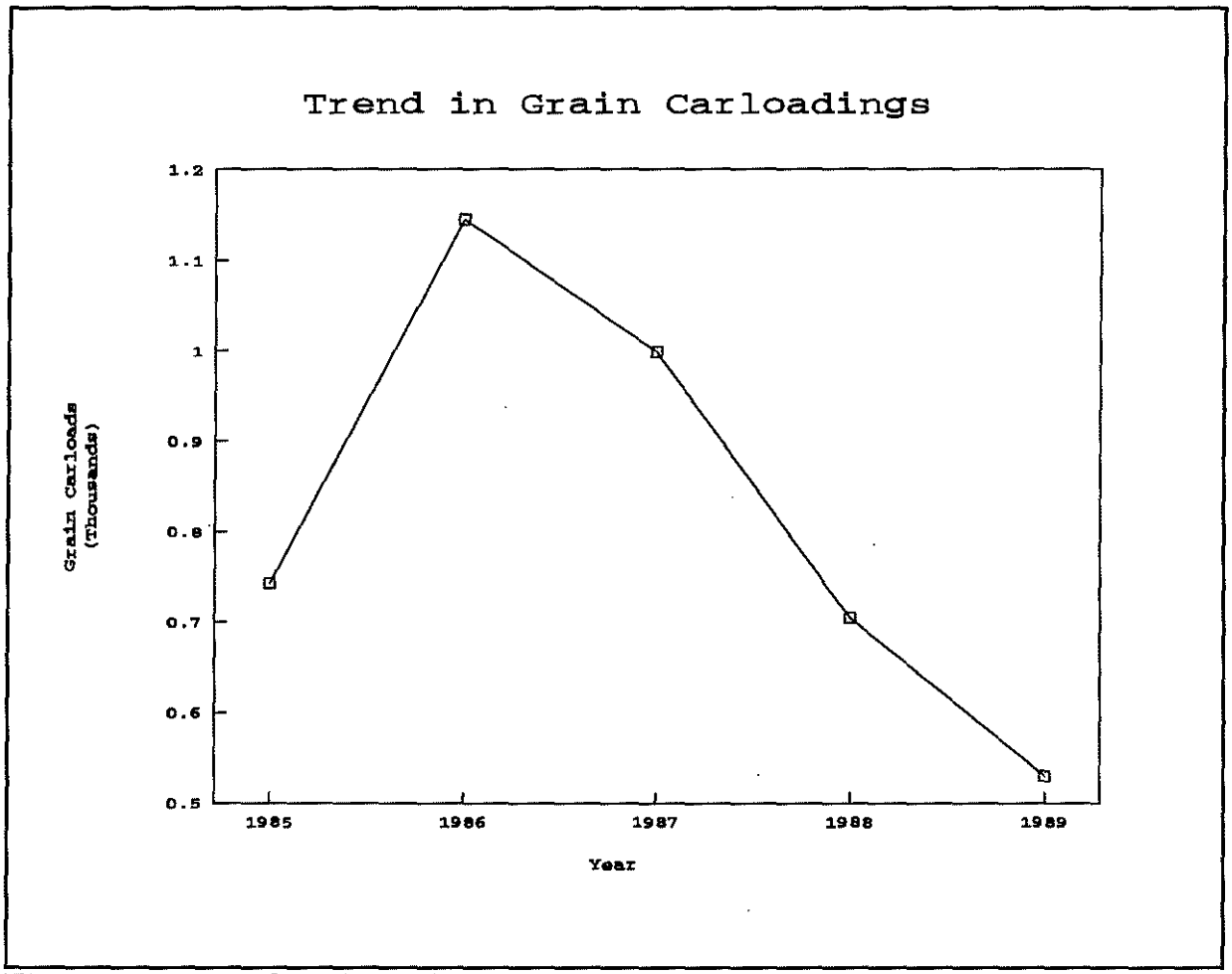


Figure 137: Trend in Grain Carloadings; SOO127

(Figure 138). Figure 139 also shows a declining overall traffic density on the line. Since 1983, density has dropped below 100,000 GTMM.

As Table 7 shows, the New Town to Prairie Jct. line generated 17 grain cars per mile in 1989, suggesting that the line is marginally profitable to the Soo Line. However, there is little non-grain traffic originated or terminated on the line. Thus, even a small decline in grain traffic could impact the future viability of the line.

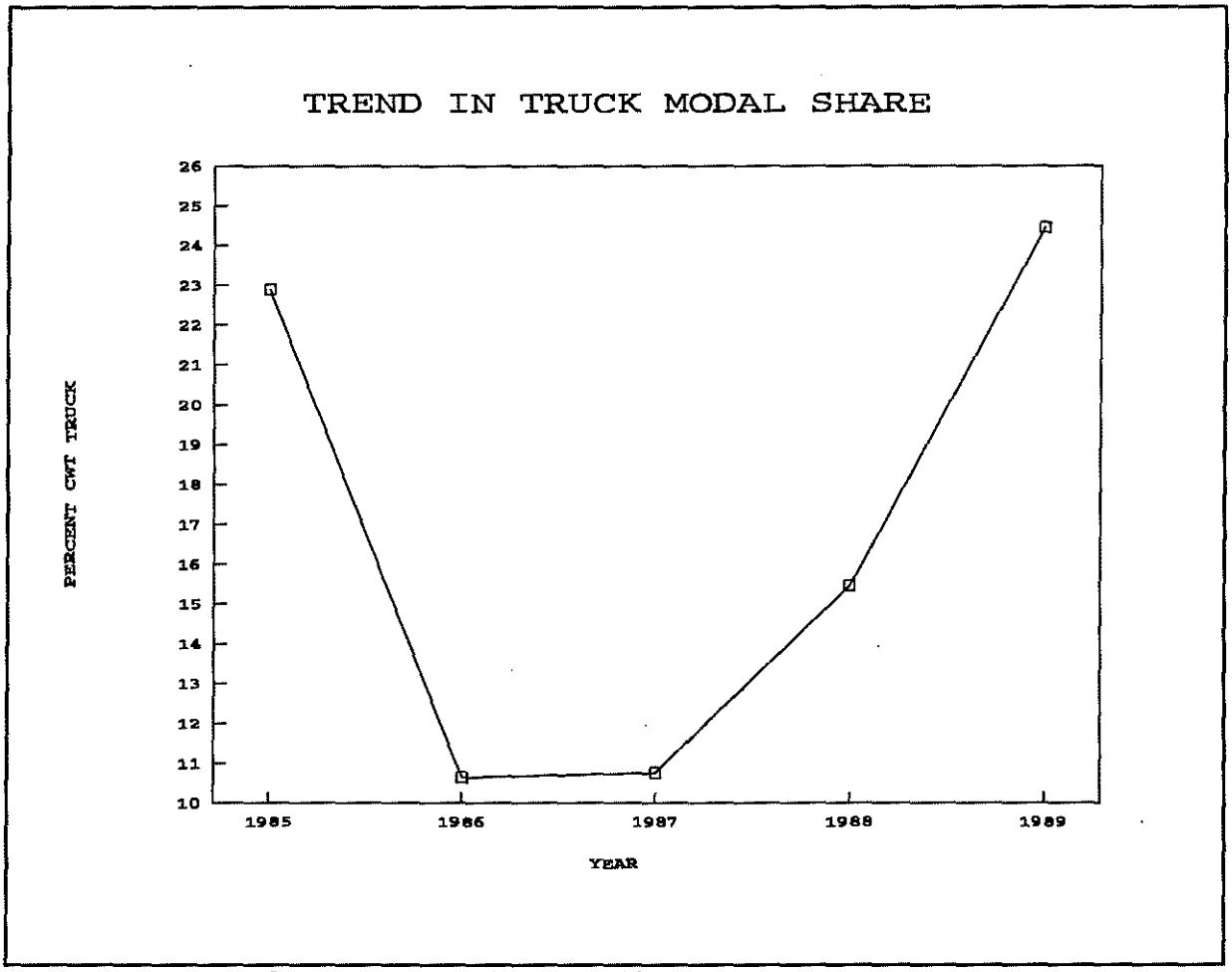


Figure 138: Trend in Truck Modal Share; SOO127

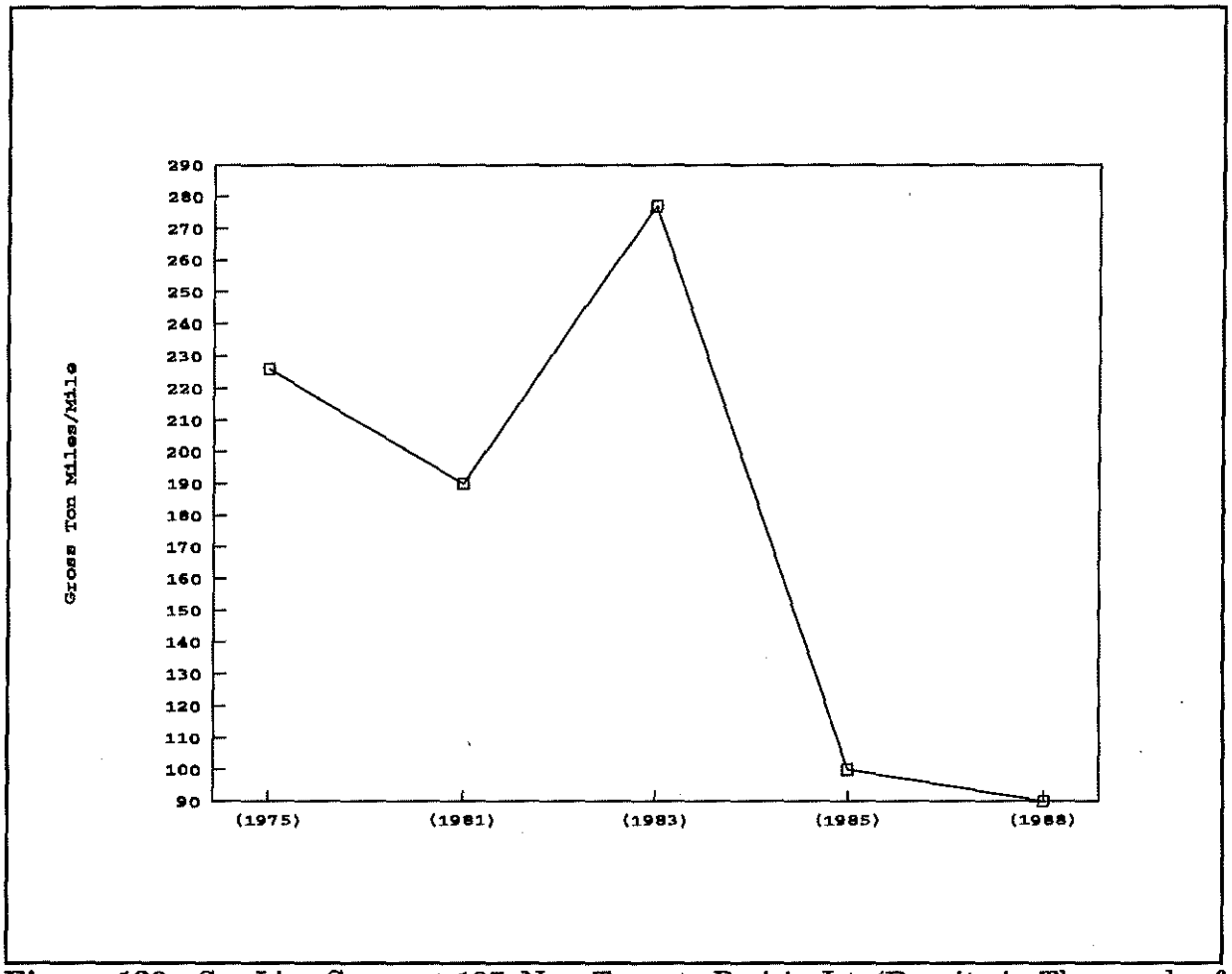


Figure 139: Soo Line Segment 127, New Town to Prairie Jct. (Density in Thousands of Gross Ton Miles per mile)

Soo Line Segment 129: Plaza to Prairie Jct

Grain carloadings on the Plaza to Prairie Junction line have decreased since 1986 (Figure 140). Truck modal share has been on the increase since 1987 (Figure 141). The

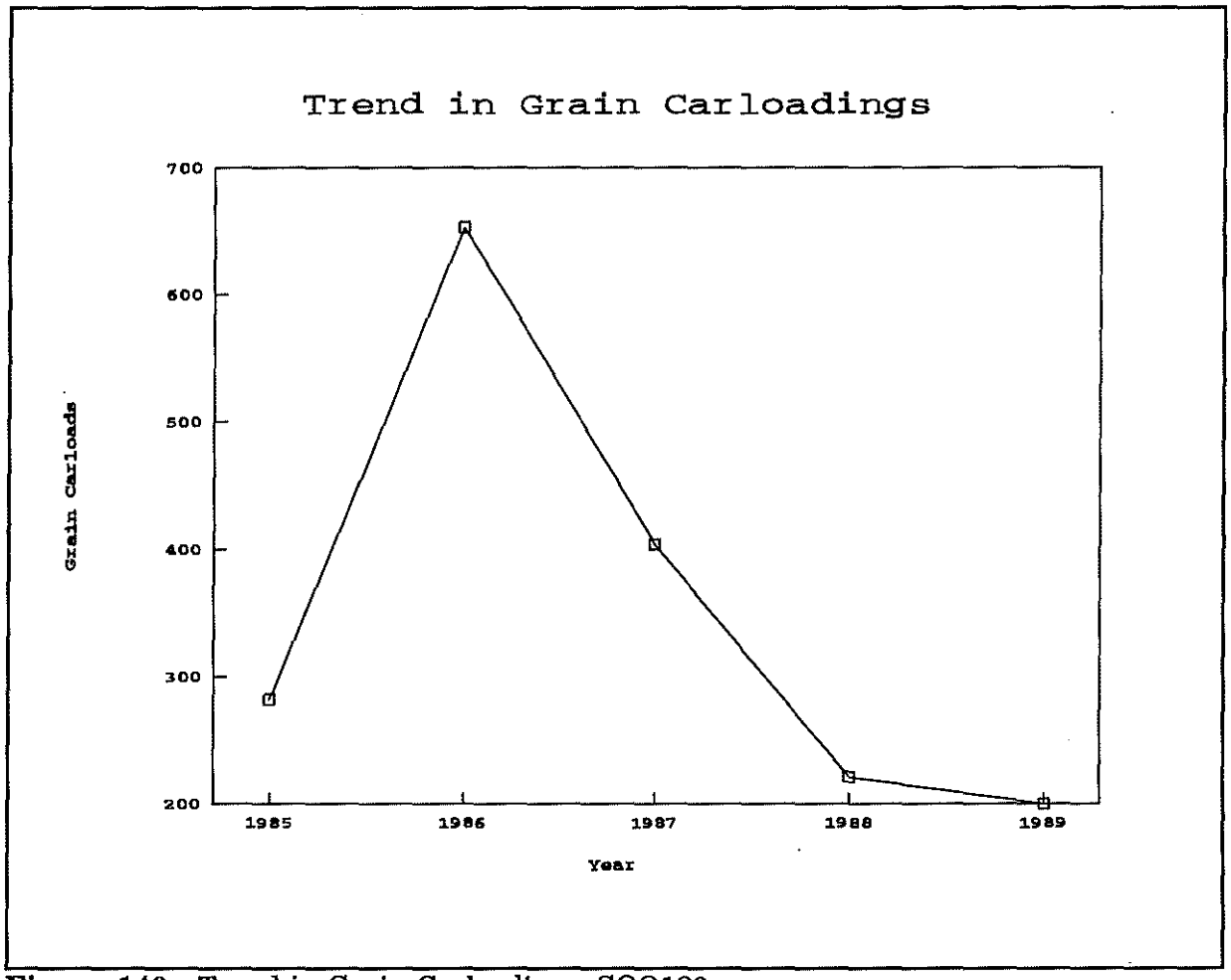


Figure 140: Trend in Grain Carloadings; SOO129

lost grain traffic may be going to Stanley, ND, on the BN. The line has otherwise maintained a steady traffic density of 40,000 GTMM since 1985 (Figure 142).

As Table 7 depicts, the Plaza to Prairie Jct. line generated 53 grain cars per mile in 1989, plus a modicum of non-grain traffic. Thus, the line appears to have a strong traffic base for the future.

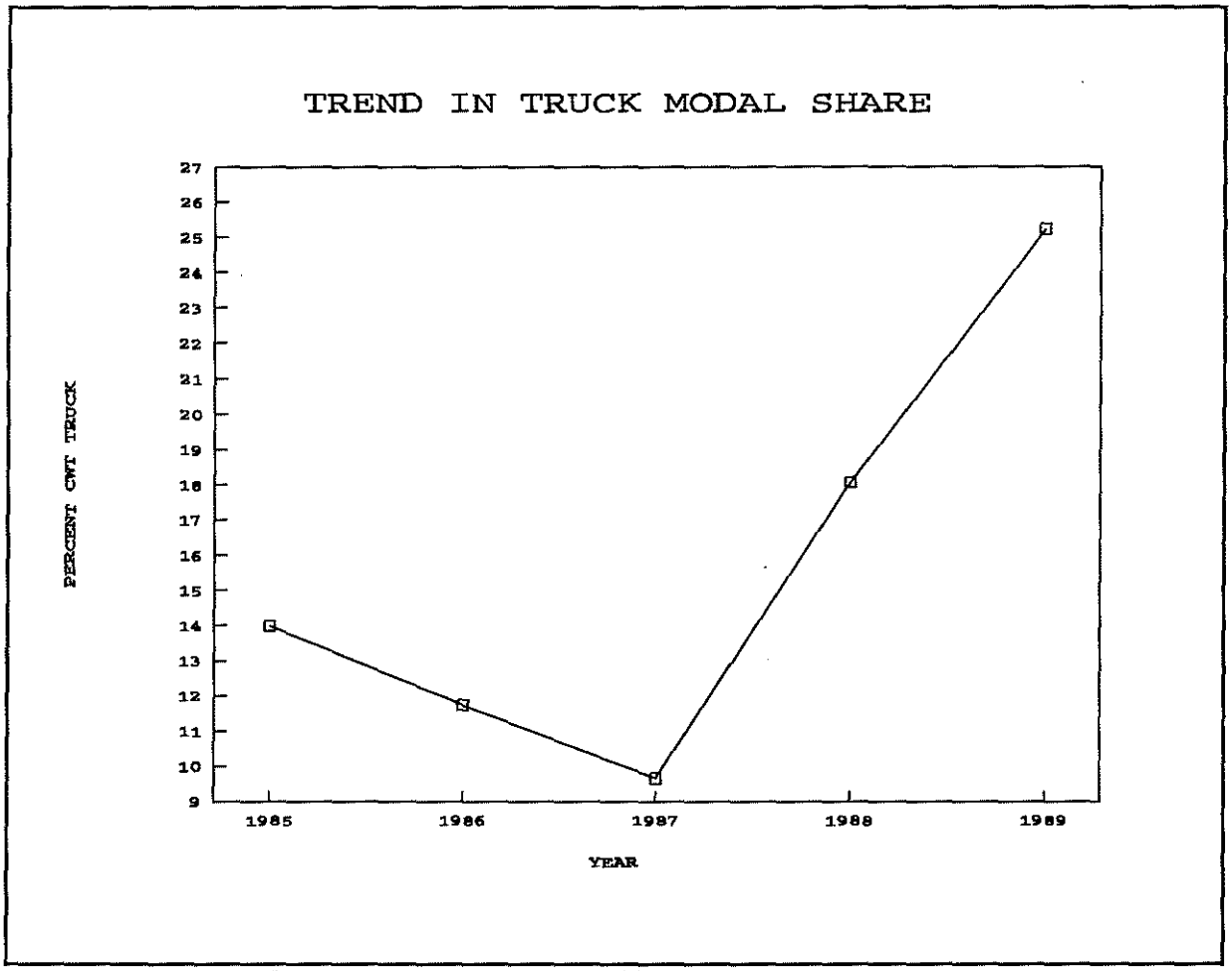


Figure 141: Trend in Truck Modal Share; SOO129

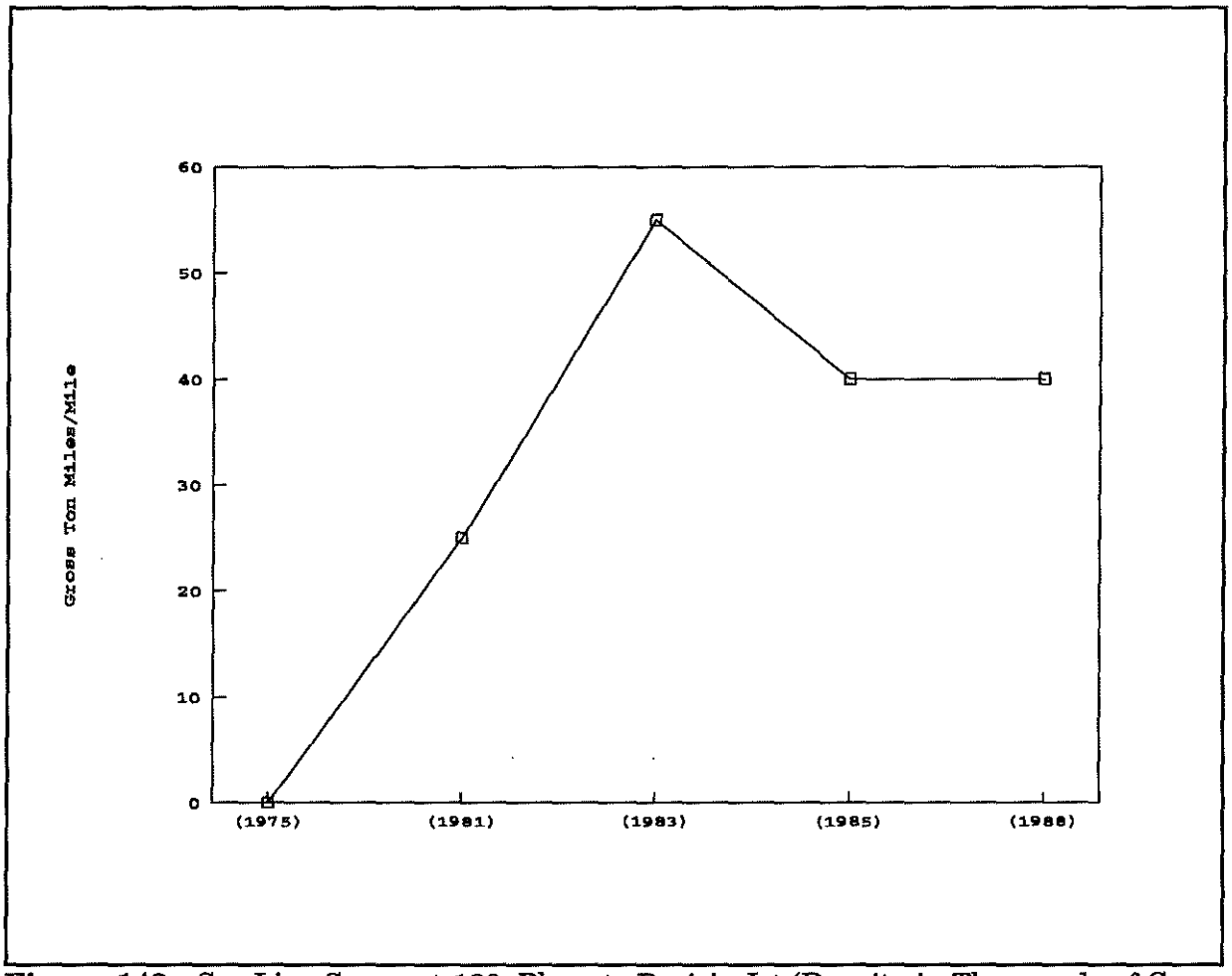


Figure 142: Soo Line Segment 129, Plaza to Prairie Jct (Density in Thousands of Gross Ton Miles per mile)

Soo Line Segment 131: Prairie Jct to Max

The Prairie Junction to Max line connects lines 127 and 129 to lines 133 and 149. Grain carloads rose from 1985 to 1987, but fell in 1988 (Figure 143). Truck modal share

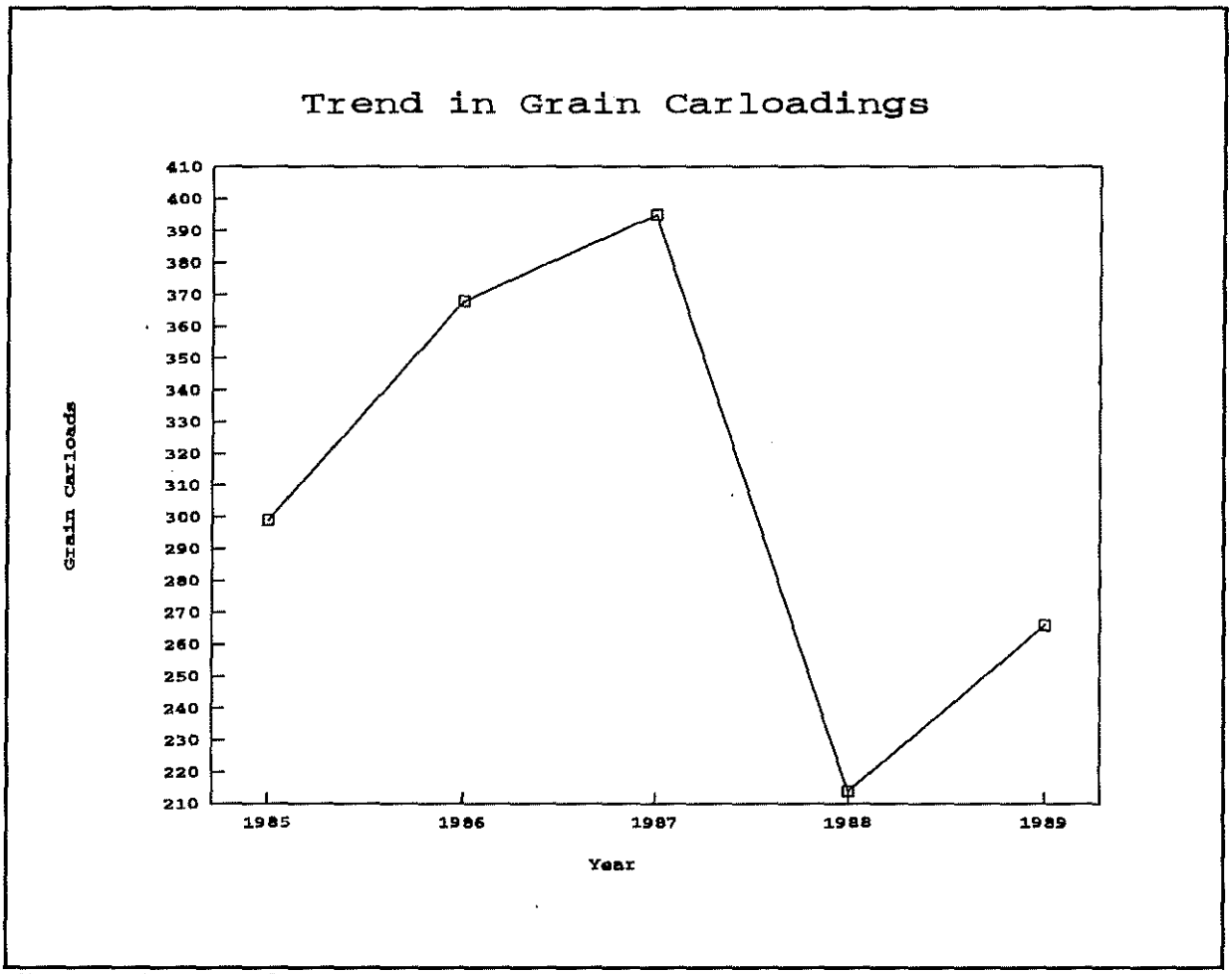


Figure 143: Trend in Grain Carloadings; SOO131

fell substantially in 1987 (Figure 144), but has rebounded to around 12 percent. Drought was primarily responsible for the grain traffic decline. The total density shown in Figure 145 reflects traffic from the lines connected by line 131, and has fluctuated over time. Although traffic density fell in 1985 it returned to 1981 levels in 1988.

As Table 7 shows, the Prairie Jct. to Max line generated 19 grain cars per mile in 1989. With an overall traffic density of 220,000 GTMM, the line appears to be marginally

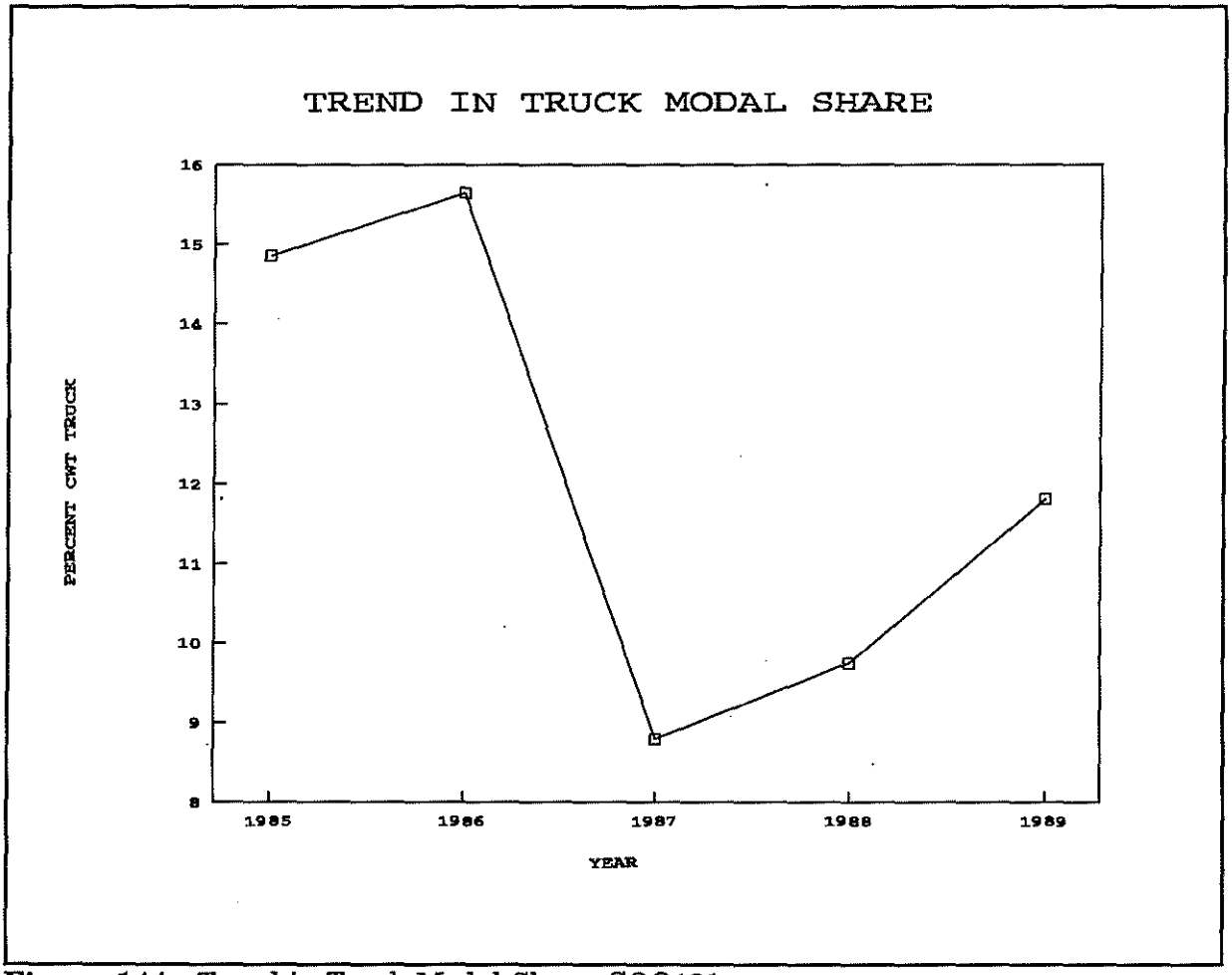


Figure 144: Trend in Truck Modal Share; SOO131

viable. However, even a small slippage in grain traffic, coupled with diversion in bridge traffic, could seriously impact the future viability of the line.

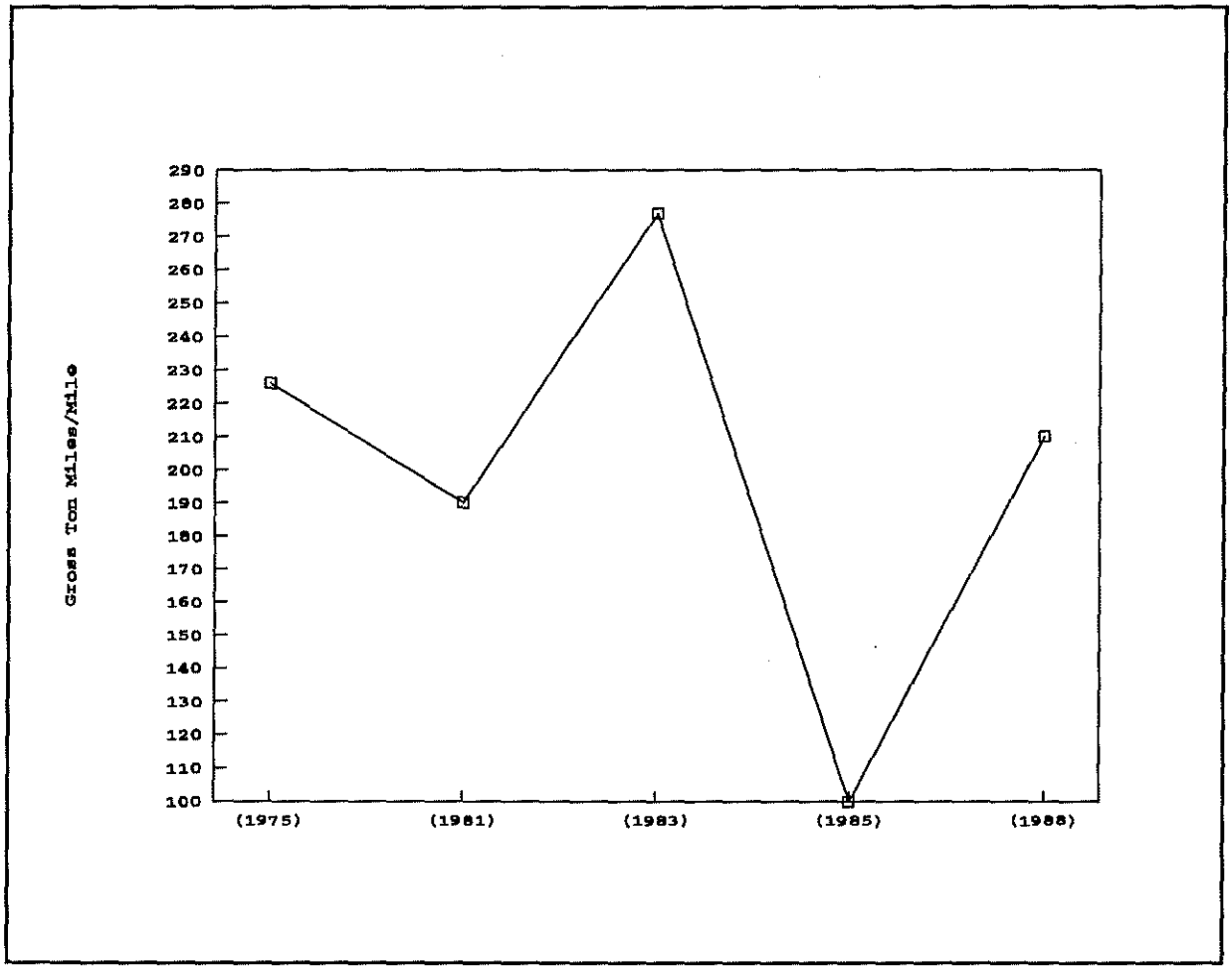


Figure 145: Soo Line Segment 131, Prairie Jct to Max (Density in Thousands of Gross Ton Miles per mile)

Soo Line Segment 133: Max to Drake

Grain traffic peaked at 1,216 carloads in 1986 on the Max to Drake line, then fell during the drought years of 1987 and 1988 (Figure 146). However, it was during these

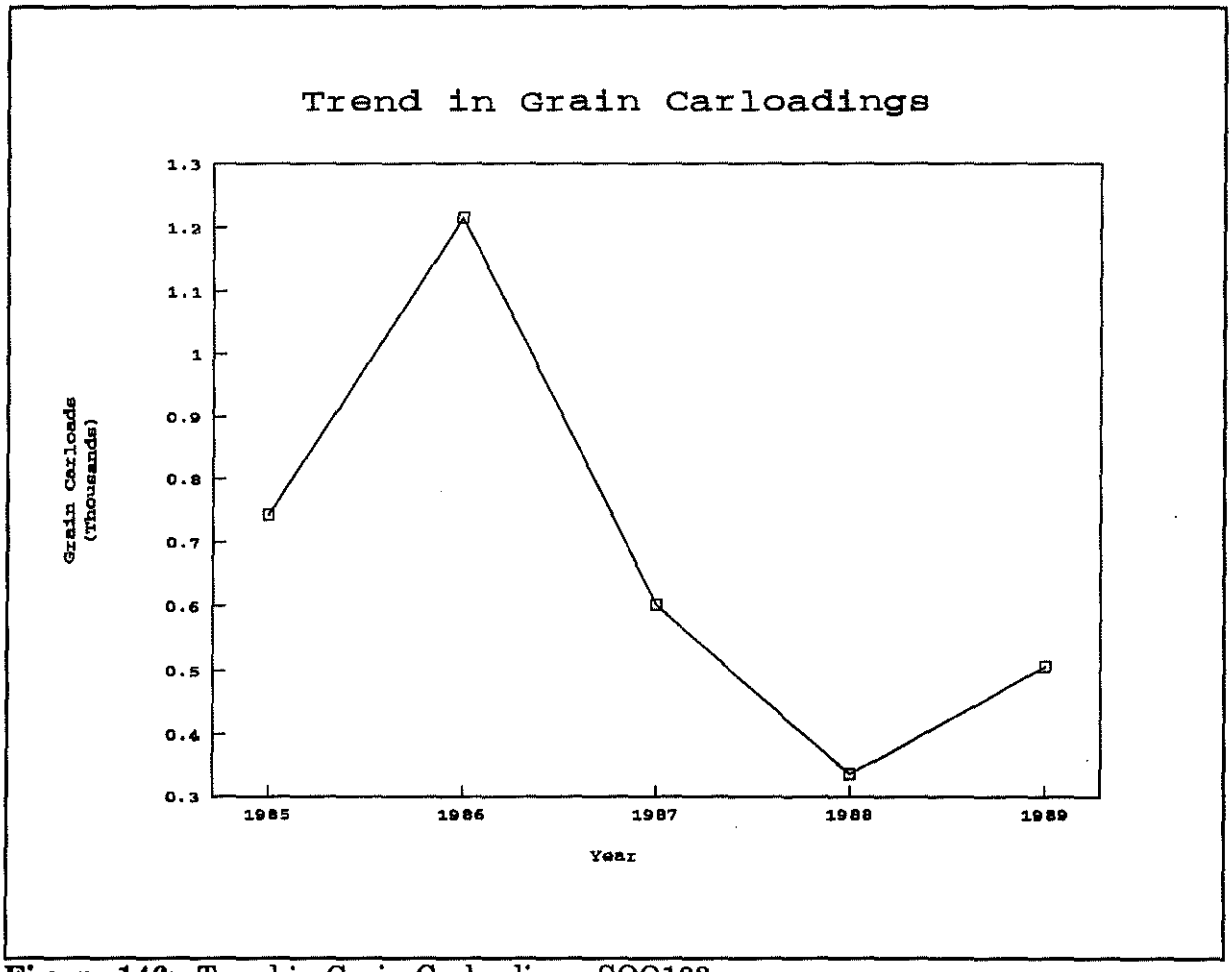


Figure 146: Trend in Grain Carloadings; SOO133

years that truck modal share increased, to 36 percent in 1988 (Figure 147). Figure 148 shows lower overall density on the line during the years 1985 and 1988, falling from a peak of over 1 million GTMM in 1983.

As Table 7 shows, the line generated only 11 grain cars per mile in 1989. However, with an overall traffic density of 640,000 GTMM, the line will probably remain a viable feeder/connector segment in the near future. Much of the traffic to and from Bismarck traverses this link.

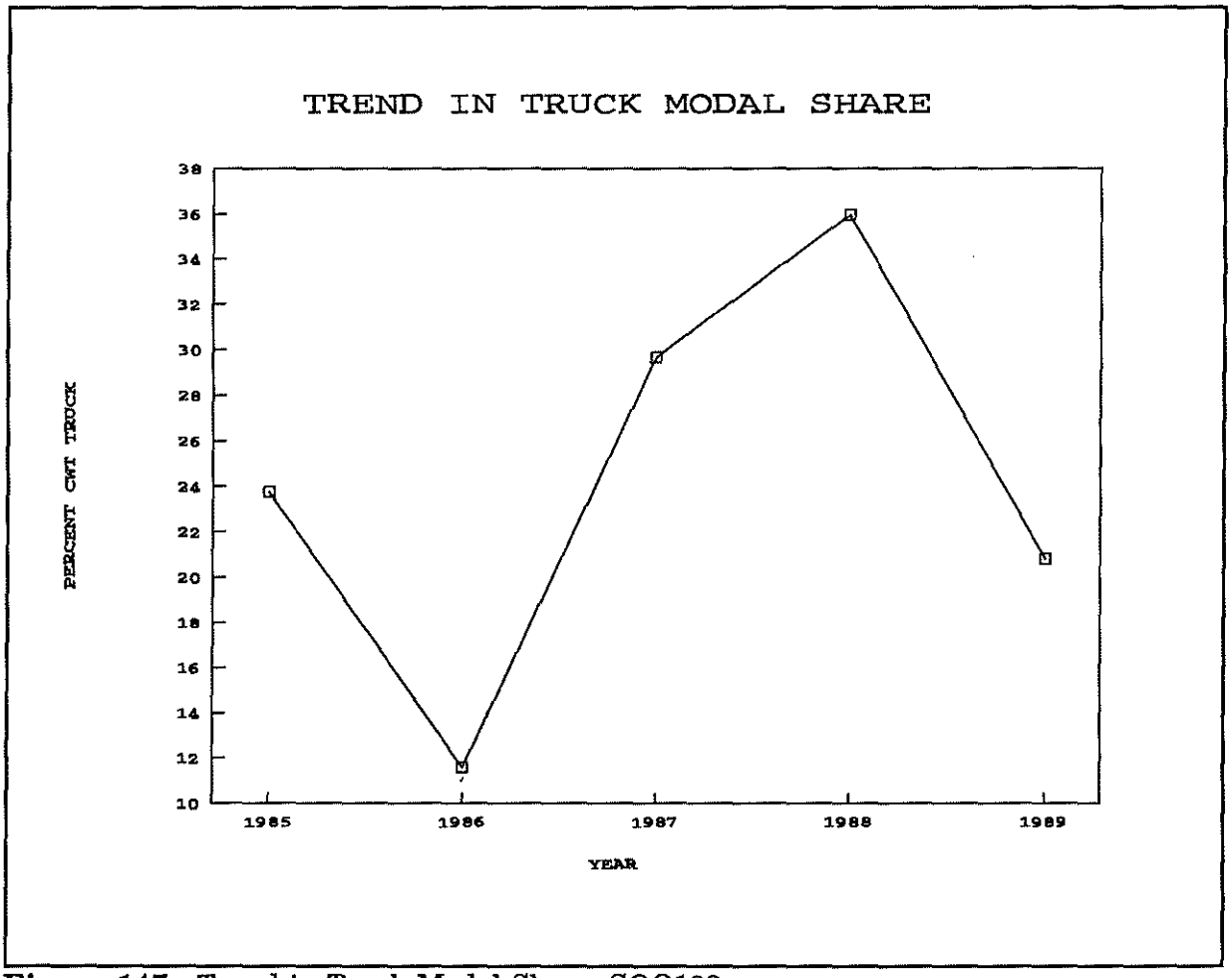


Figure 147: Trend in Truck Modal Share; SOO133

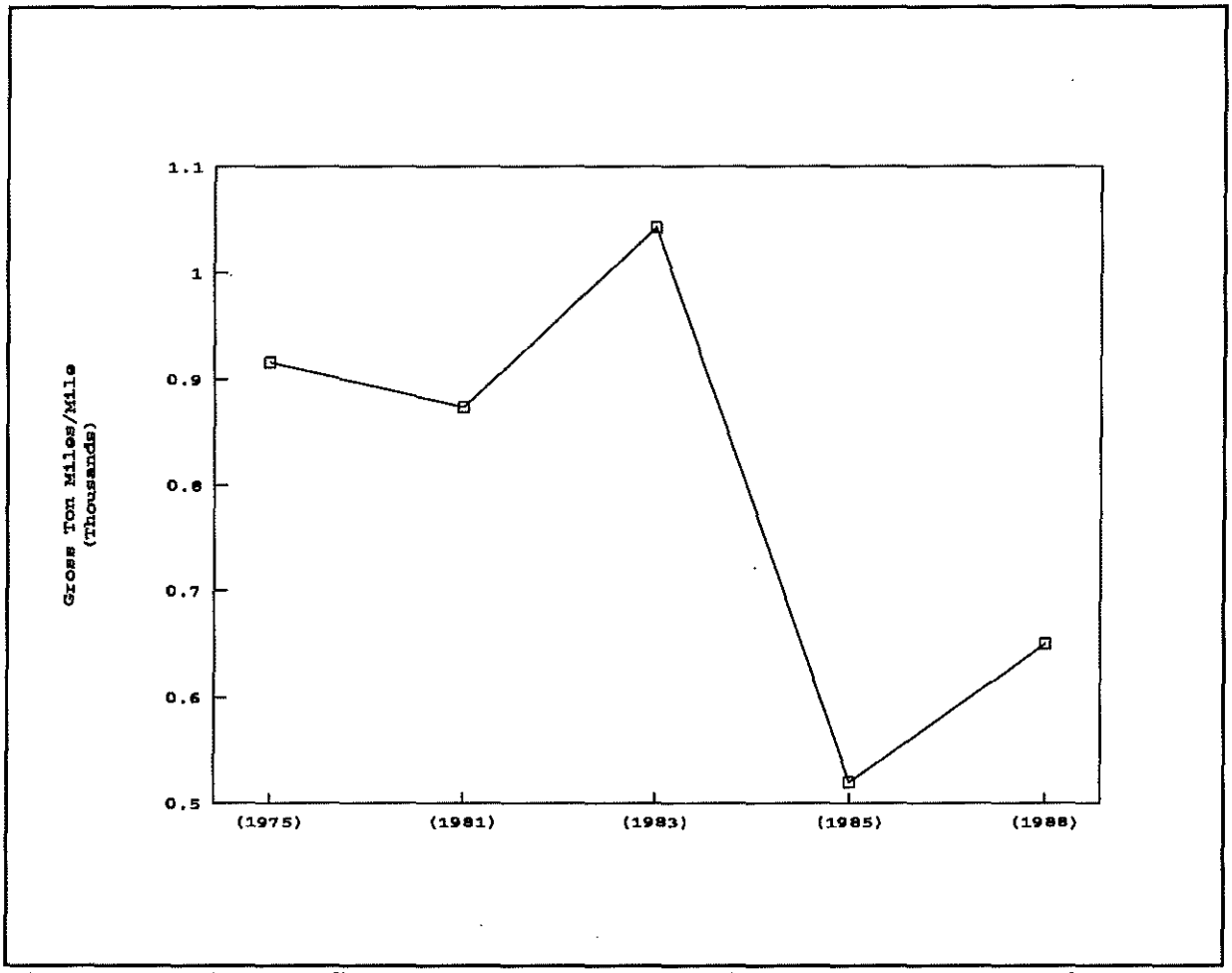


Figure 148: Soo Line Segment 133, Max to Drake (Density in Thousands of Gross Ton Miles per mile)

Soo Line Segment 135: Kenmare to Egeland

The grain carloadings trend for the Kenmare to Egeland line (Figure 149)

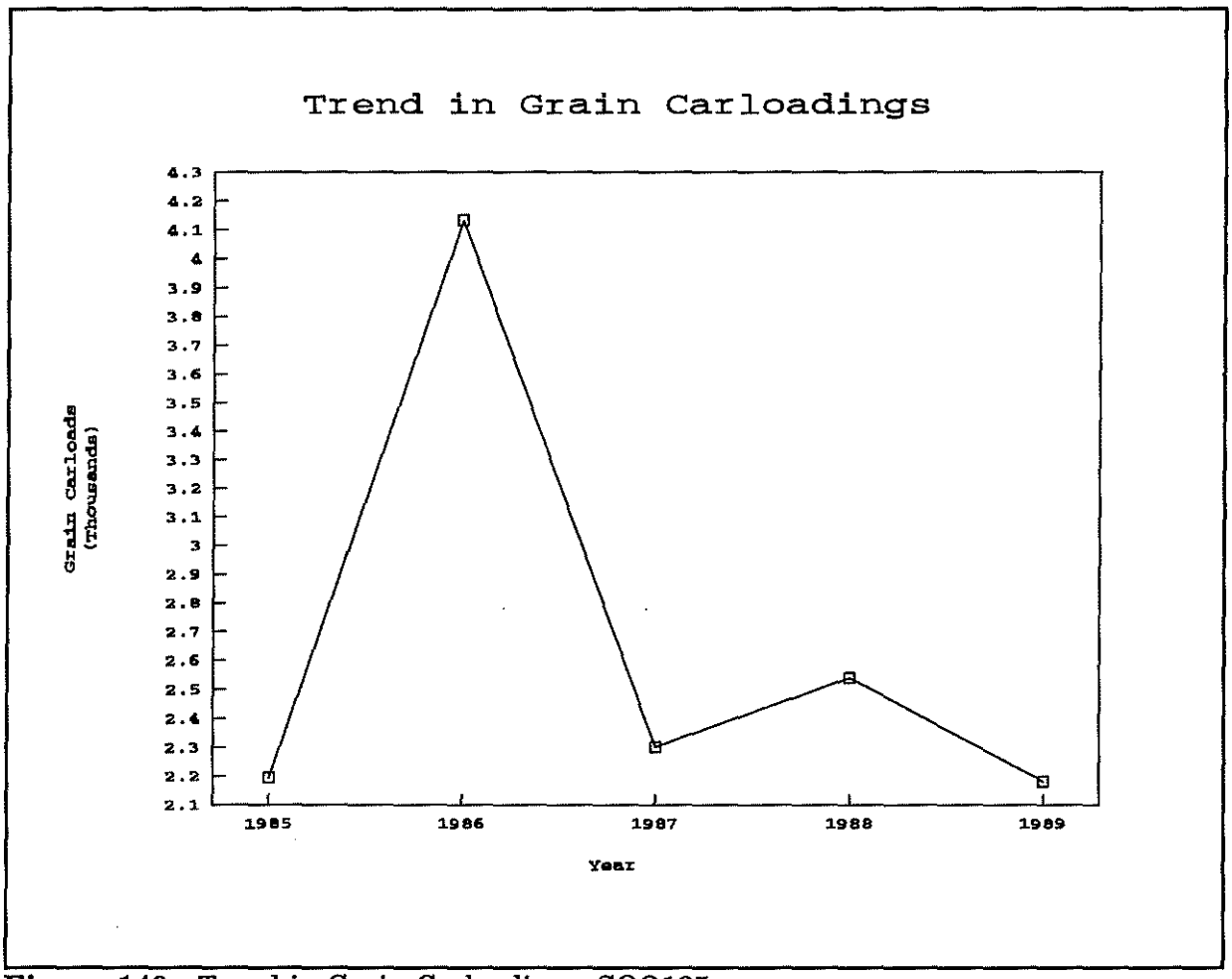


Figure 149: Trend in Grain Carloadings; SOO135

resembles the trend for other lines in the region, showing the effects of drought in 1987 and 1988. Figure 150 shows increasing truck modal share in 1987 and 1988. Overall density on the line has fallen since 1983 (Figure 151). The tendency, especially near Gardena, has been to ship more by truck to elevators at Bowbells and Minot.

As Table 7 depicts, the Kenmare to Egeland line generated 16 grain cars per mile in 1989. Coupled with an overall traffic density of 170,000 GTMM, the line meets two of the minimum viability criteria set forth previously. However, the lack of non-grain traffic

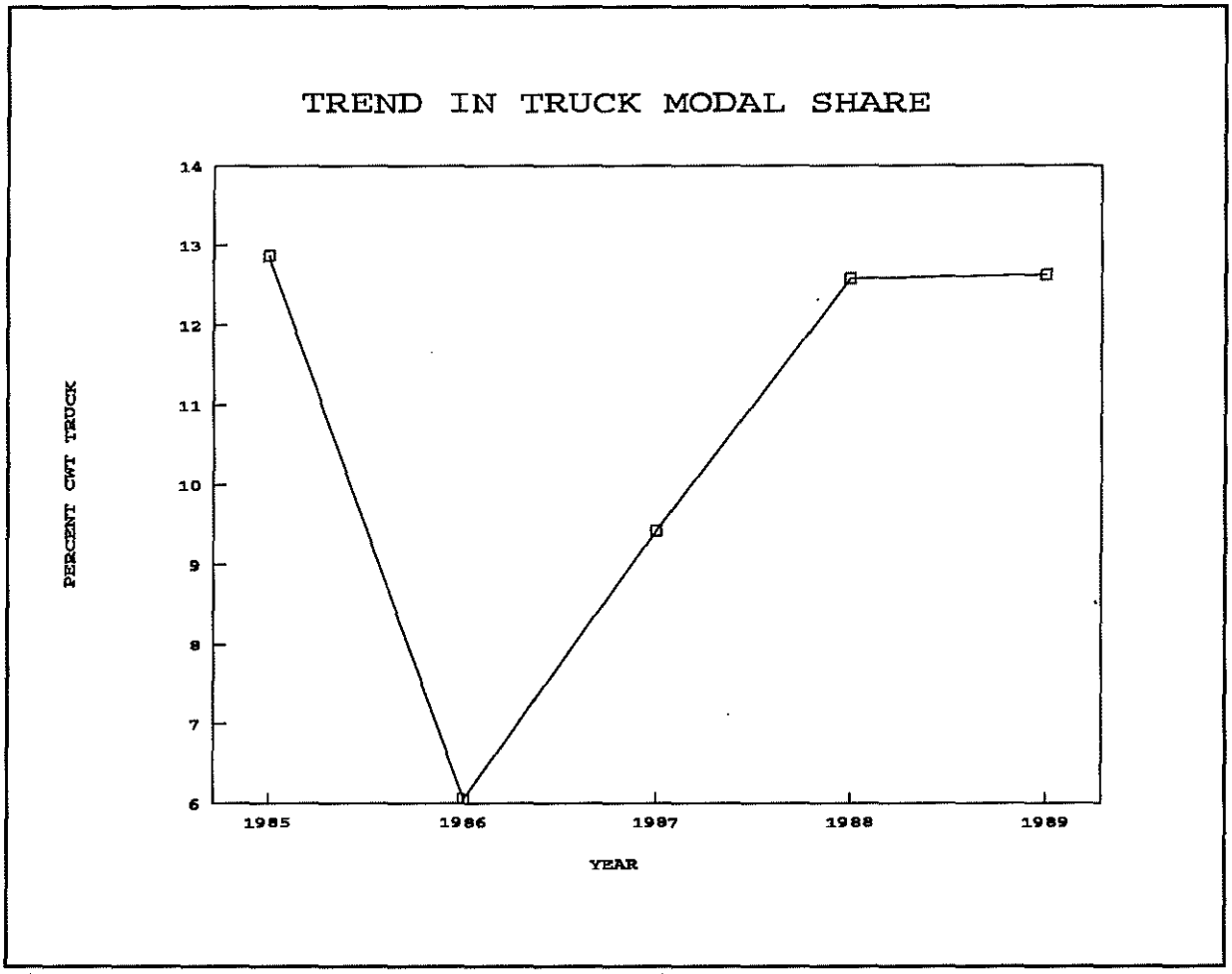


Figure 150: Trend in Truck Modal Share; SOO135

and the declining density trend since 1983 are disturbing factors. The future viability of the line may be significantly impacted by small changes in grain traffic density. In short, the line's status is stable but tenuous.

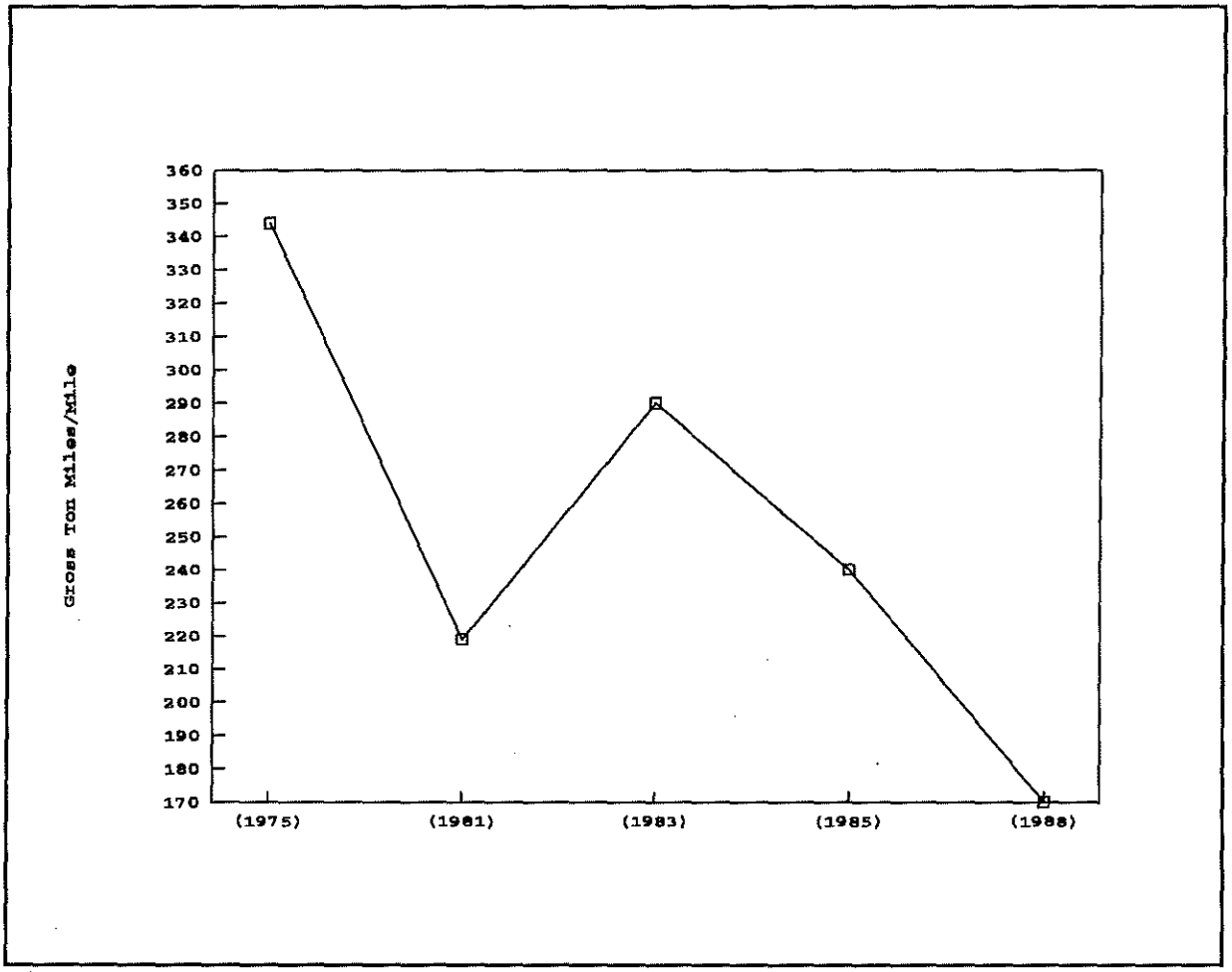


Figure 151: Soo Line Segment 135, Kenmare to Egeland (Density in Thousands of Gross Ton Miles per mile)

Soo Line Segment 139: Egeland to Fordville

Line Segment 139 generated increasing grain traffic until 1989 (Figure 152). At

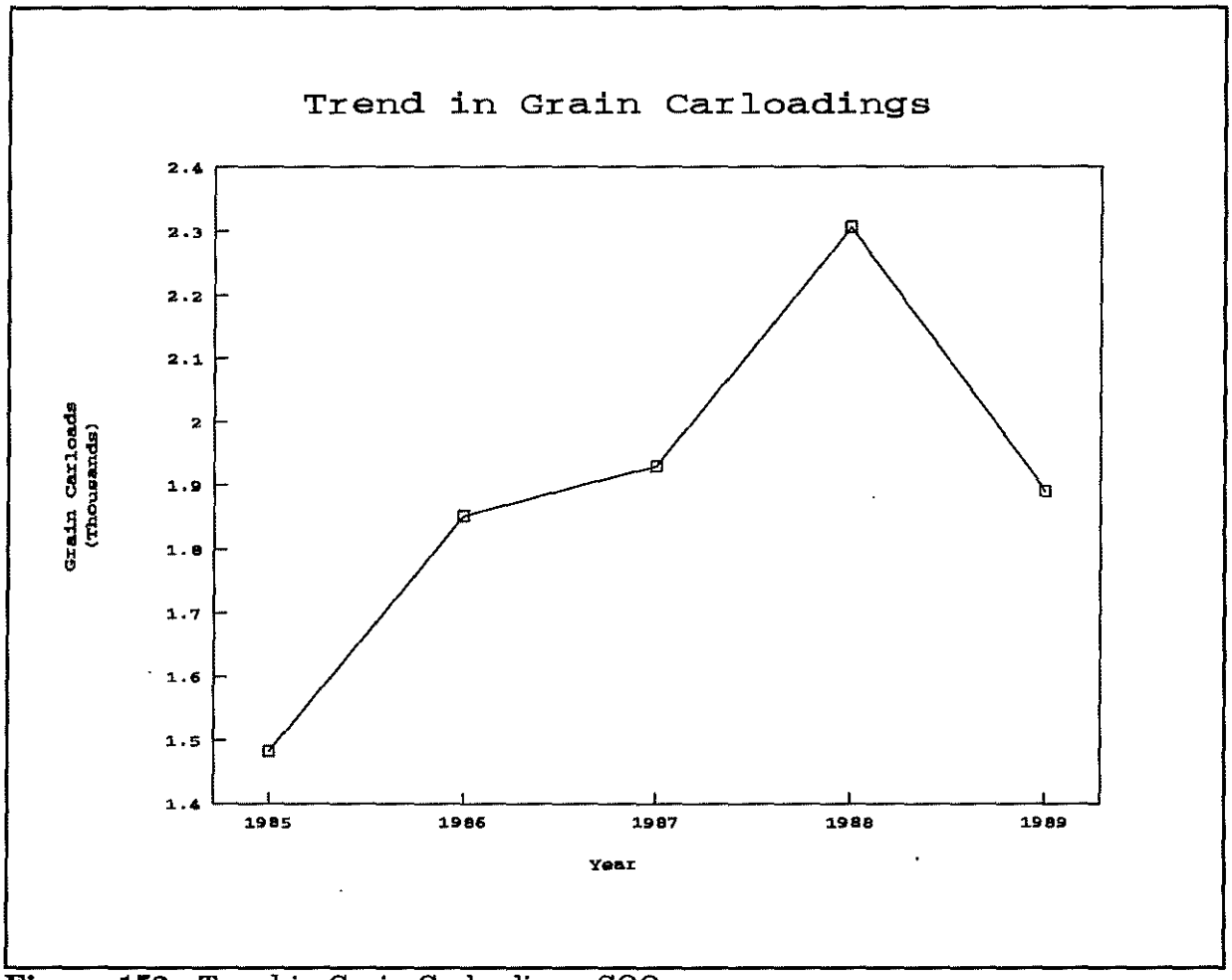


Figure 152: Trend in Grain Carloadings; SOO

the same time, truck modal share declined to less than 10 percent (Figure 153). In 1989, truck share increased and grain carloads fell as grain terminal expansion at Langdon on the BN drew shipments away from the line. Total traffic density rose during the 1980's but not up to its 1975 levels (Figure 154). However, with an aggregate traffic density of 310,000 GTMM and a grain traffic density of 26 cars per mile (Table 7), the line appears to have a solid future.

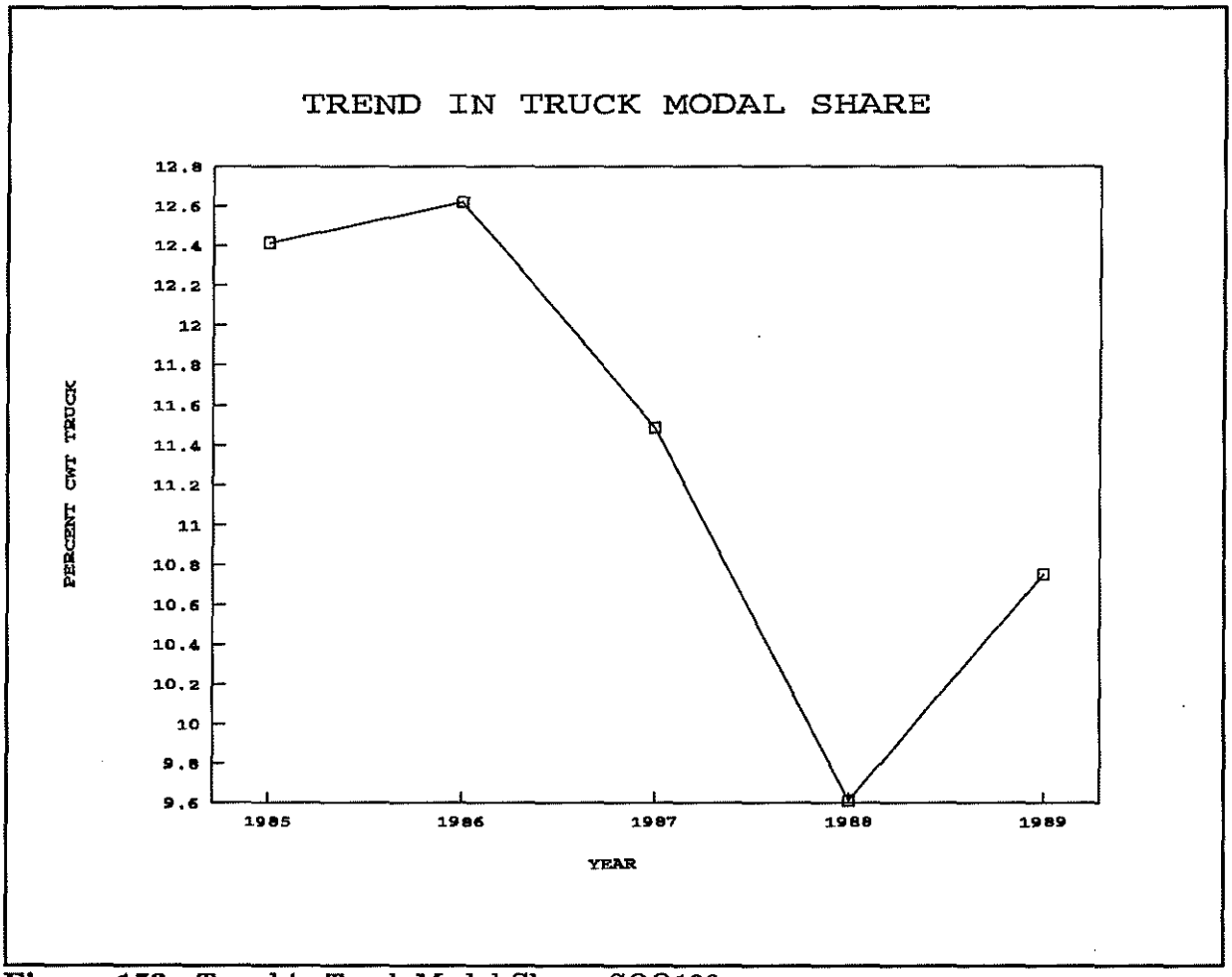


Figure 153: Trend in Truck Modal Share; SOO139

Elevators at Rollete, Milo, Agate, and Egeland are part of the Bisbee cooperative. As the subterminal at Bisbee picks up steam, rail shipments from some of the satellite elevators may decline or even dry up. Furthermore, the Loma to Fordville subsegment of the line is in competition with the new Langdon facility. So, the near-term viability of this subsegment is less clear than for the remainder of the line.

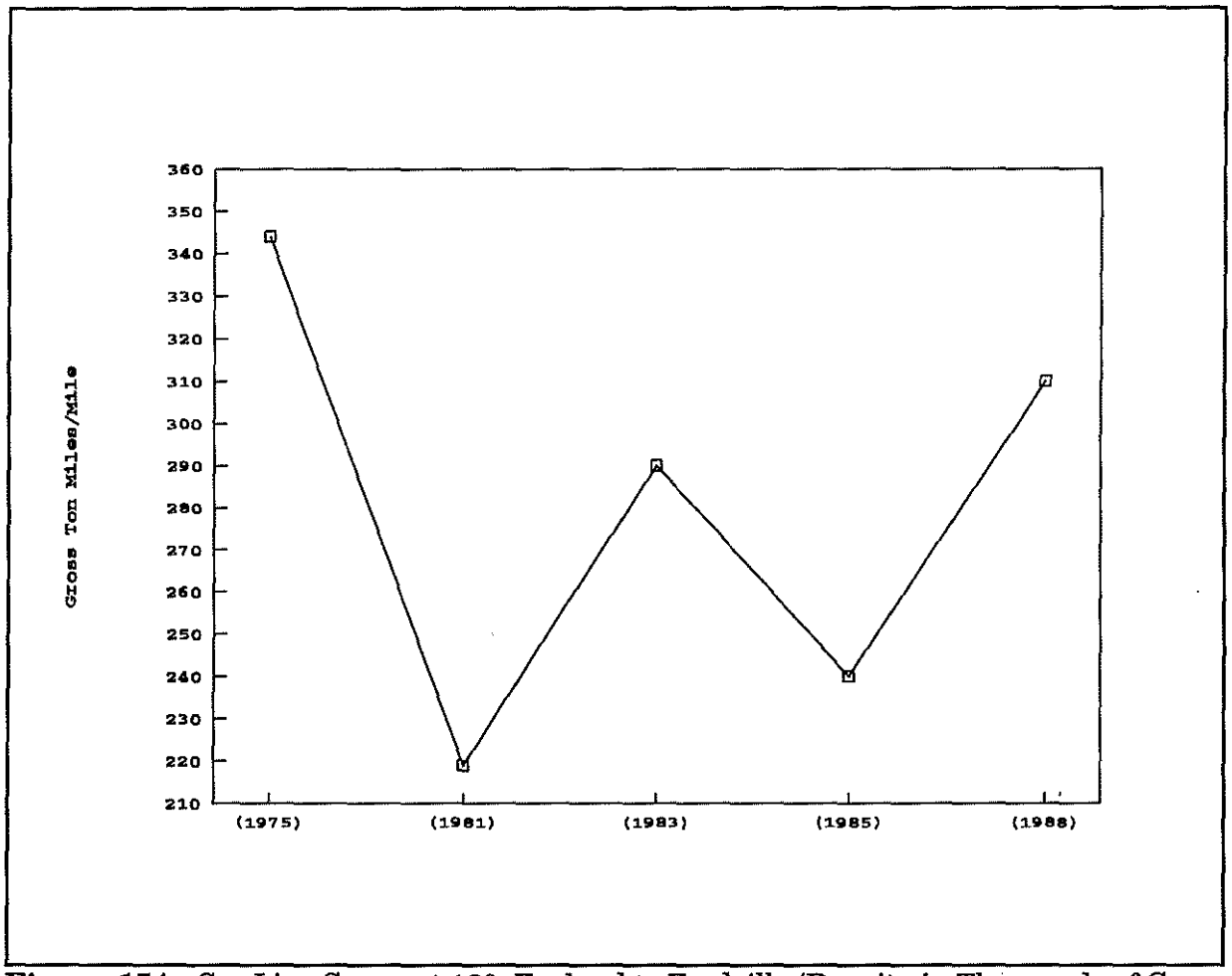


Figure 154: Soo Line Segment 139, Egeland to Fordville (Density in Thousands of Gross Ton Miles per mile)

Soo Line Segment 142: Fordville to Devils Lake

The Fordville to Devils Lake line has lost grain traffic since 1986 (Figure 155).

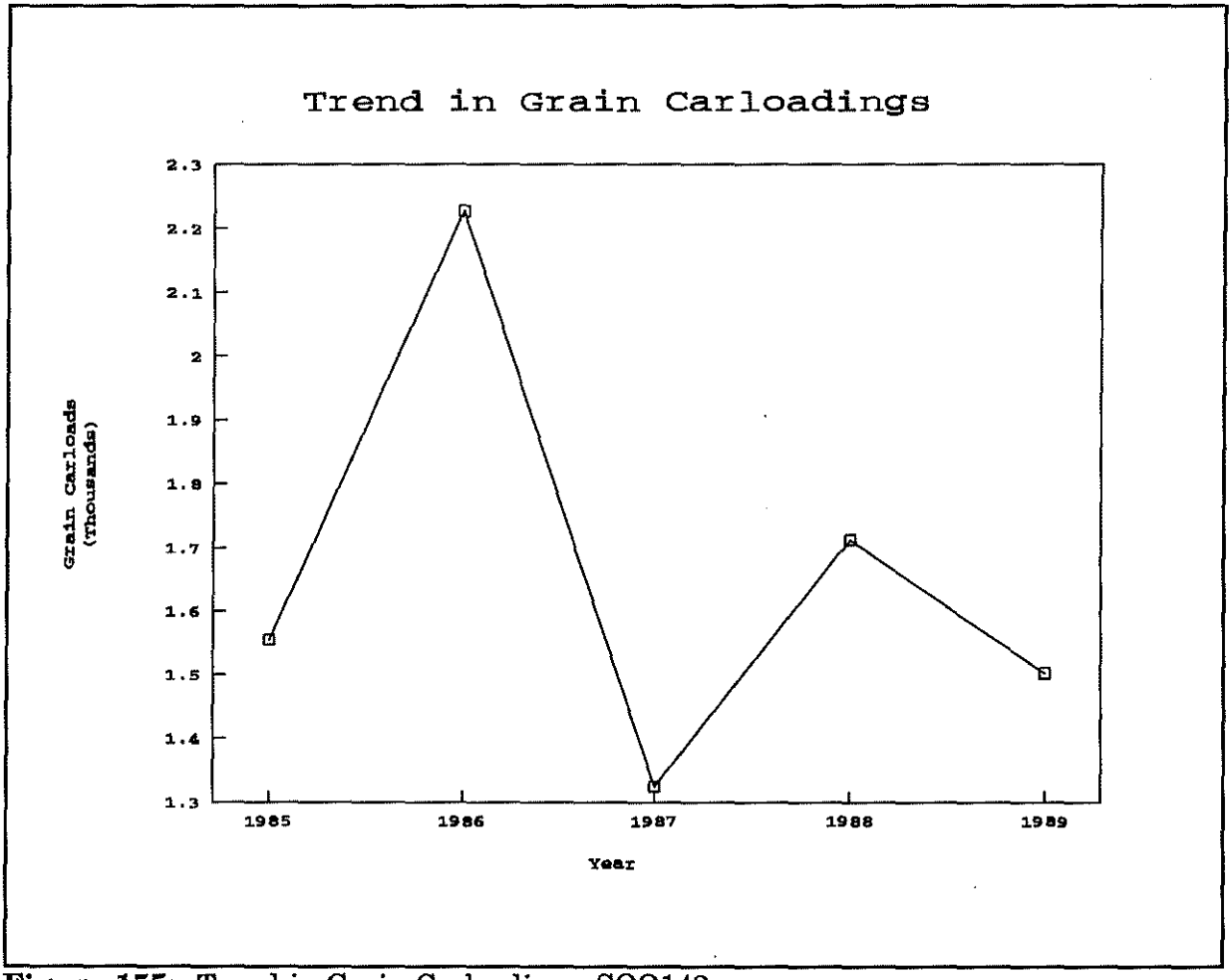


Figure 155: Trend in Grain Carloadings; SOO142

Truck modal share has increased since 1986 (Figure 156), but is still below ten percent. From 1975 to 1981 total density fell nearly 50 percent (Figure 157). The line did not regain the traffic, but continued to lose it throughout the 1980's. Nevertheless, as Table 7 depicts, the Fordville to Devils Lake line still generated over 28 grain cars per mile in 1989. Thus, with an overall traffic density of 185,000 GTMM, the line is still in the viable range. However, further decreases in grain traffic could be problematic.

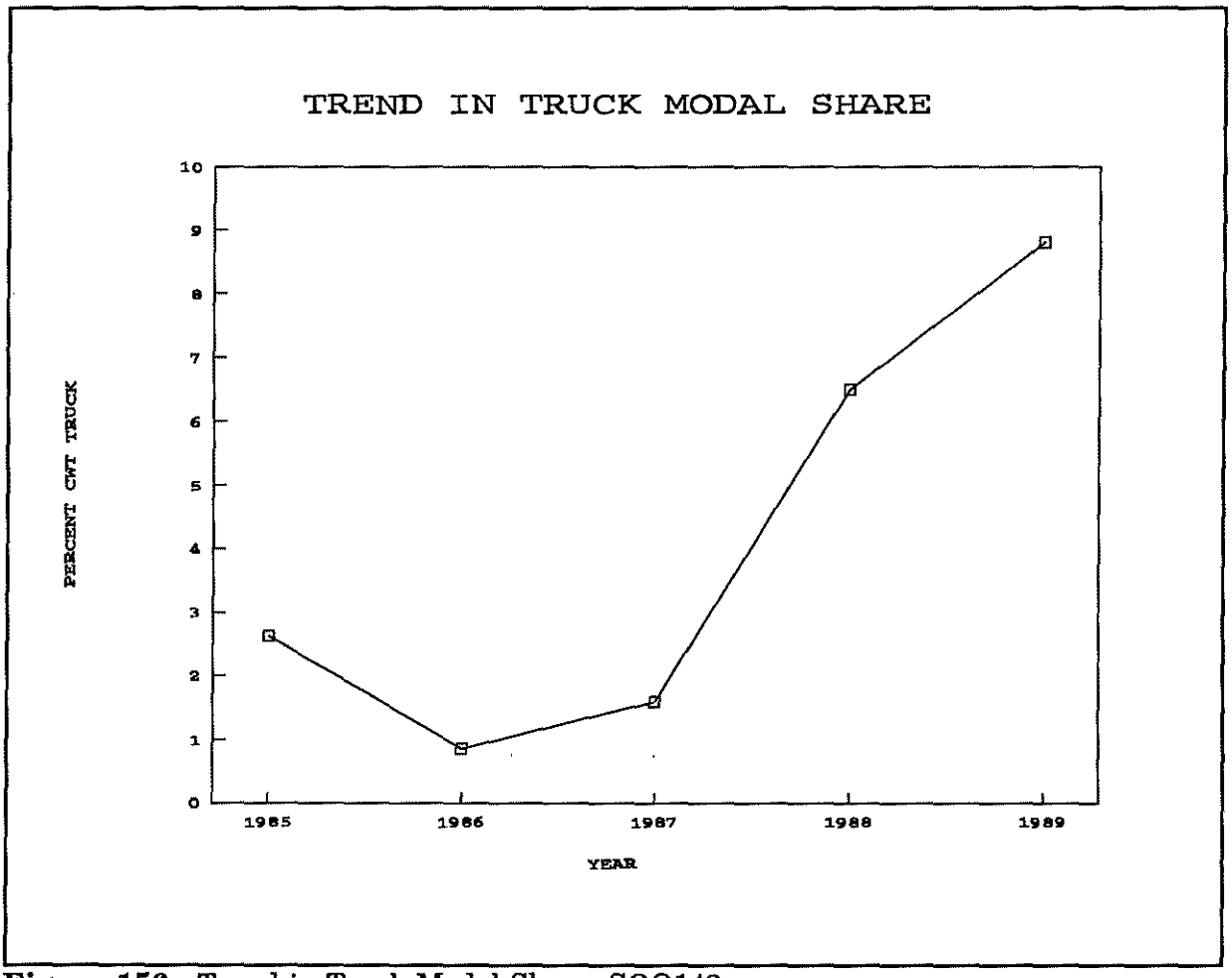


Figure 156: Trend in Truck Modal Share; SOO142

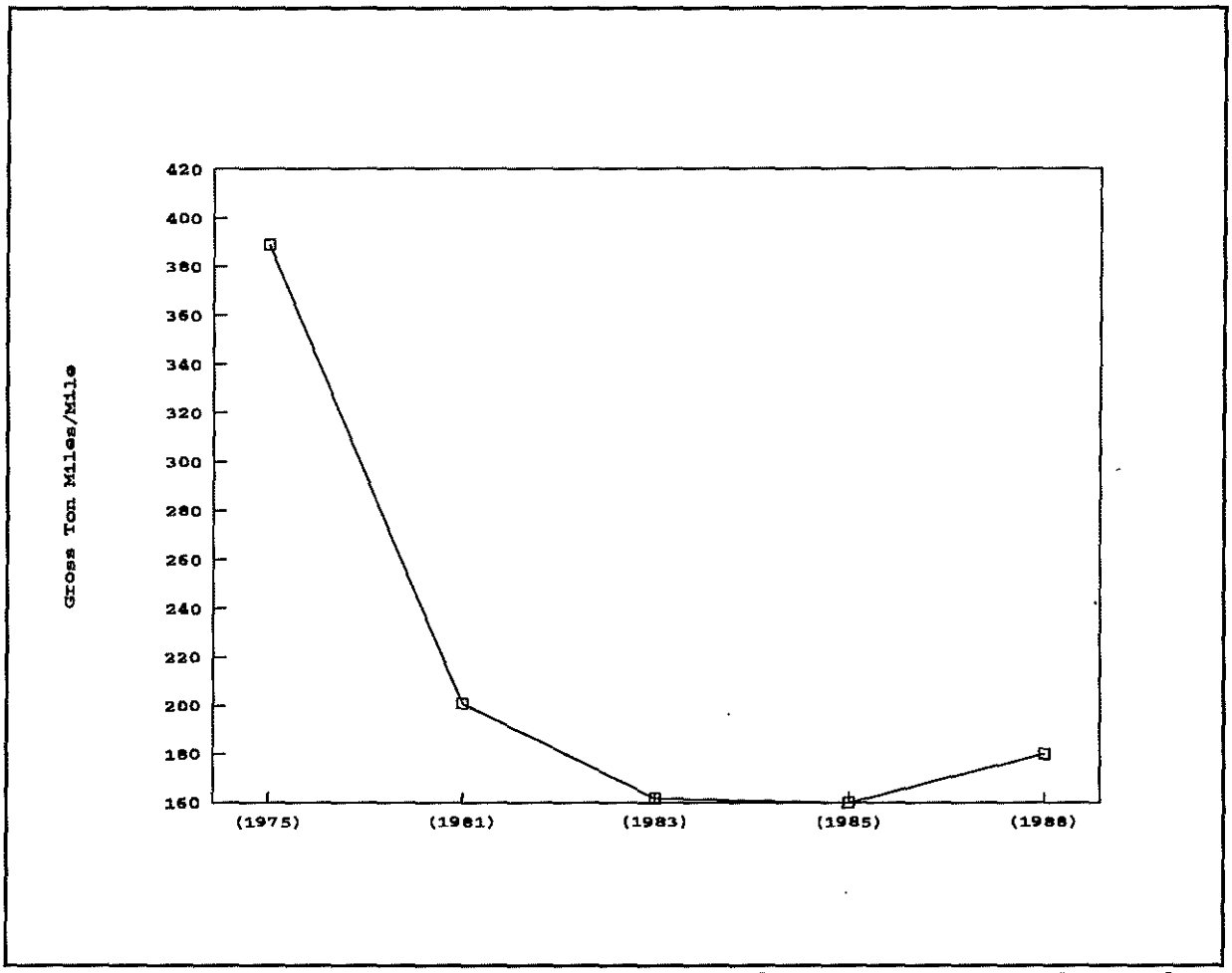


Figure 157: Soo Line Segment 142, Fordville to Devils Lake (Density in Thousands of Gross Ton Miles per mile)

Soo Line Segment 144: Fordville to Oslo, MN

Grain carloadings are down on the Fordville to Oslo, MN line from the high in 1986 of 1,176 carloads (Figure 158). Truck modal share has been less than 4 percent the

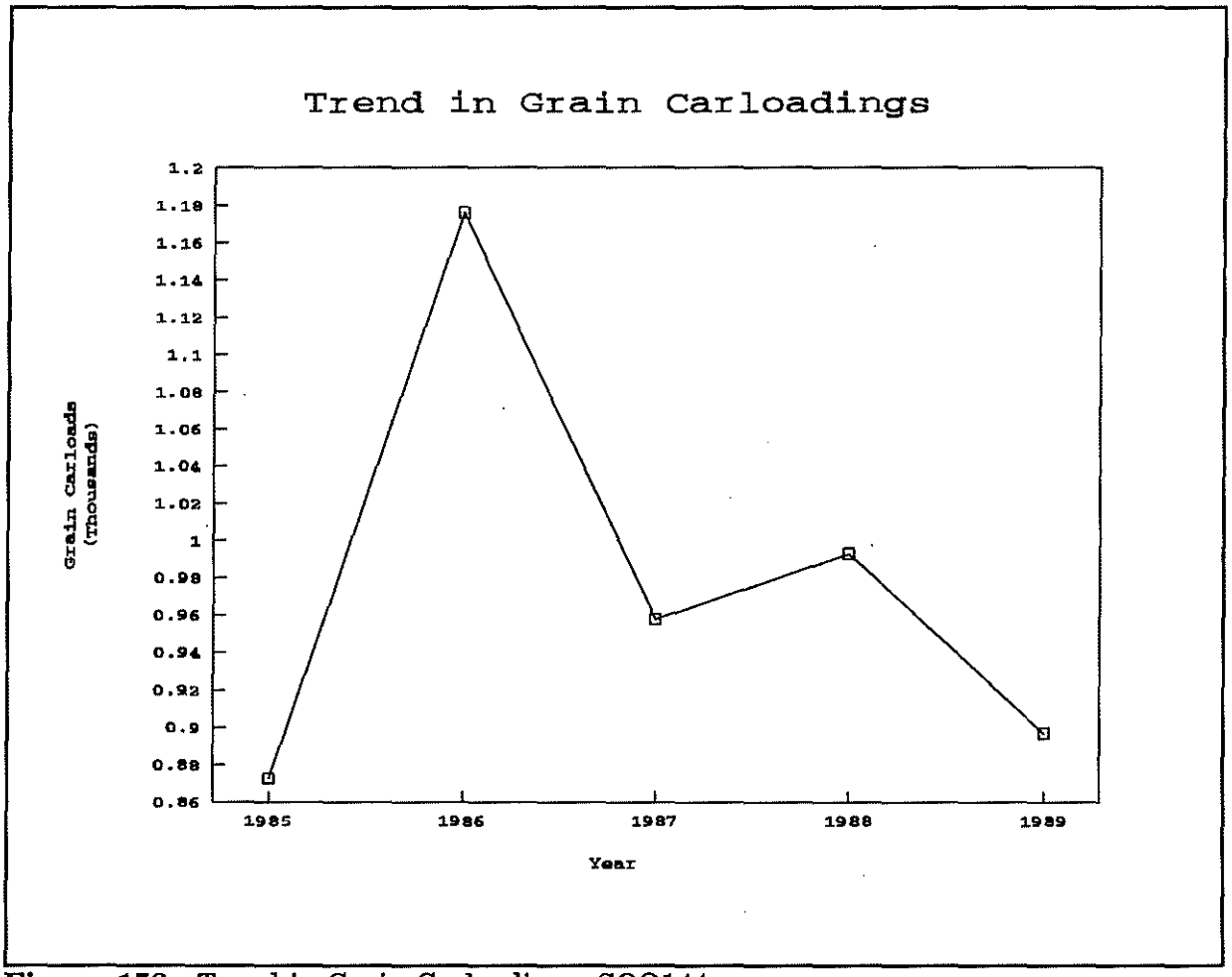


Figure 158: Trend in Grain Carloadings; SOO144

past five years (Figure 159). Total density surpassed 1 million GTMM in 1983 and again in 1988 (Figure 160). With 26 grain cars per mile (Table 7), the line appears to be viable in the near future, being a critical bridge/connector line.

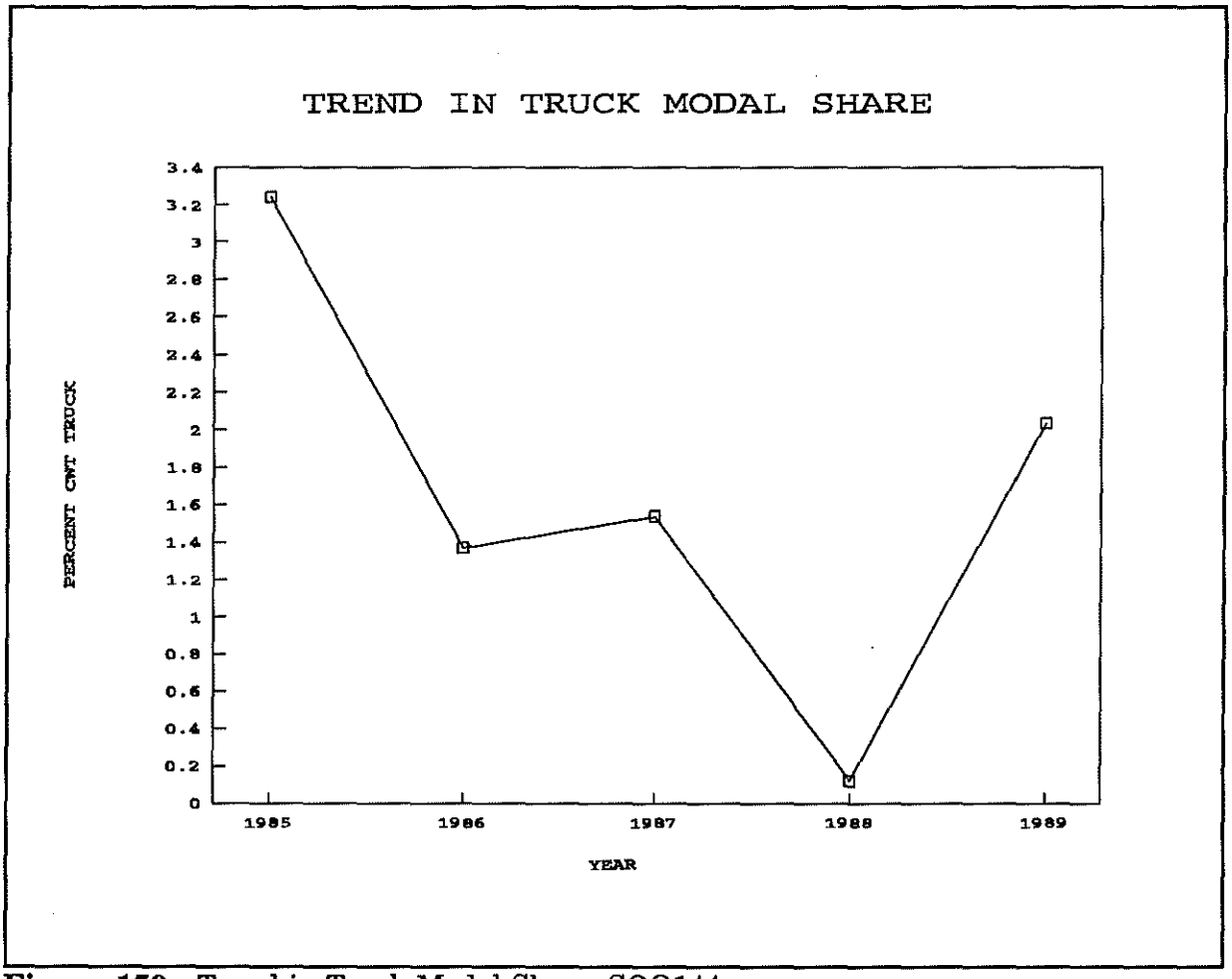


Figure 159: Trend in Truck Modal Share; SOO144

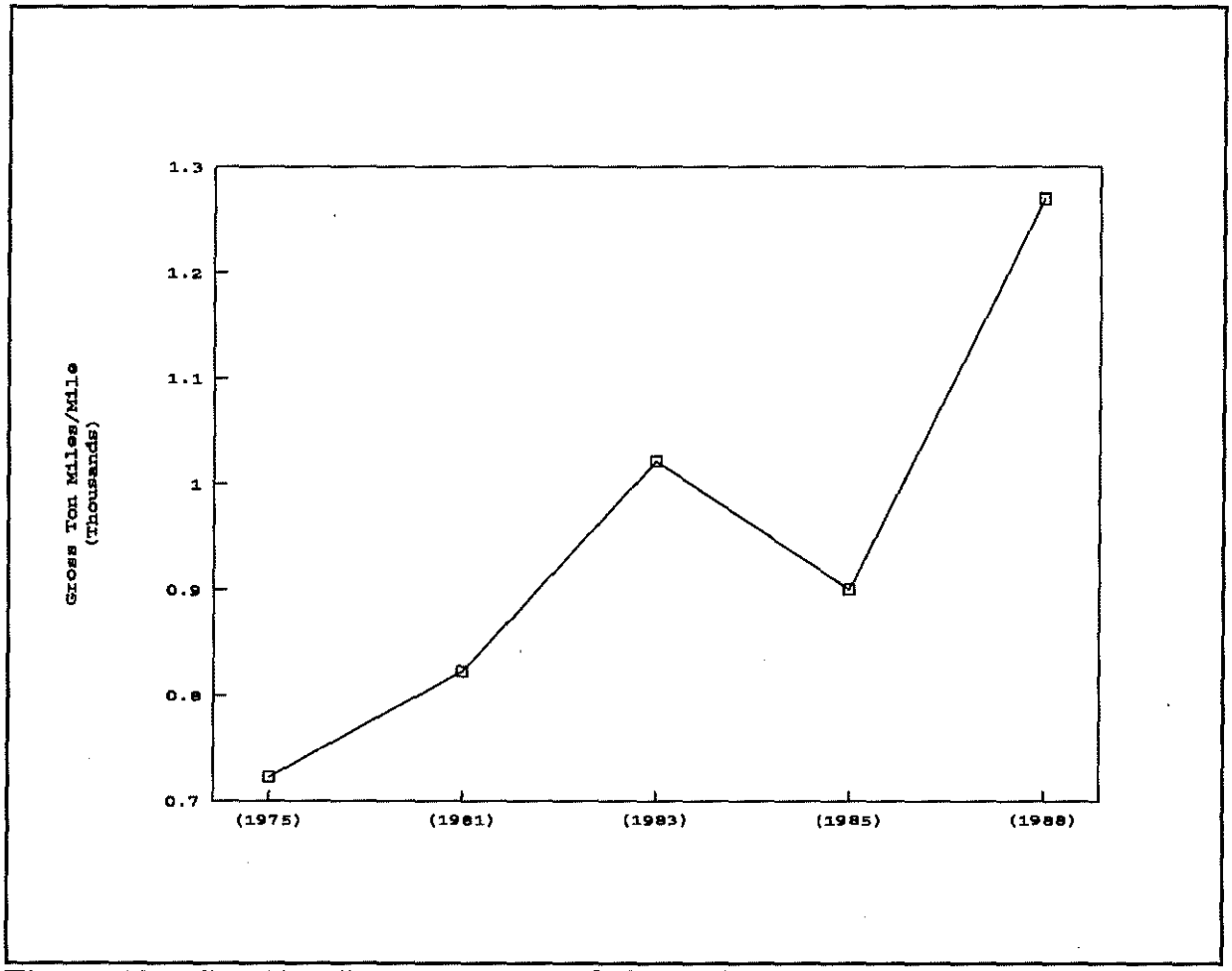


Figure 160: Soo Line Segment 144, Fordville to Oslo, MN (Density in Thousands of Gross Ton Miles per mile)

Soo Line Segment 145: Oakes to Hankinson

Grain shipments on the Oakes to Hankinson line have increased overall since 1985 (Figure 161). Truck modal share peaked in 1987 at 32 percent but fell to 10 percent in

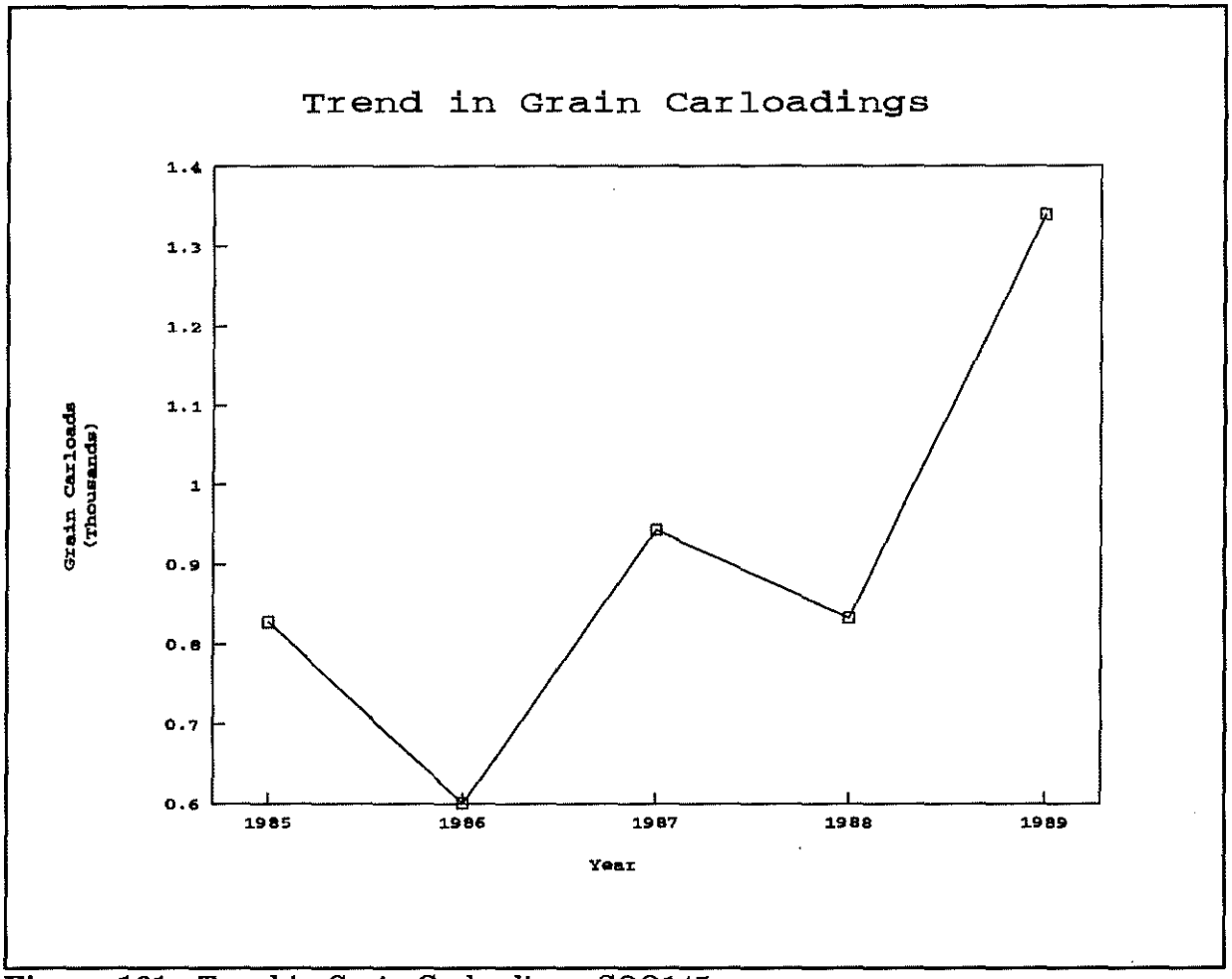


Figure 161: Trend in Grain Carloadings; SOO145

1989 (Figure 162). The line gained in total density in 1985 (Figure 163). Much of the line's increases came at BN's expense.

As Table 7 shows, the Oakes to Hankinson line generated 23 grain cars per mile in 1989. Coupled with a traffic density of over 400,000 GTMM, the near-term viability of the line looks fairly strong. However, any loss in overhead traffic, coupled with a moderate decline in grain traffic, could spell trouble for the line in future years. Furthermore, it

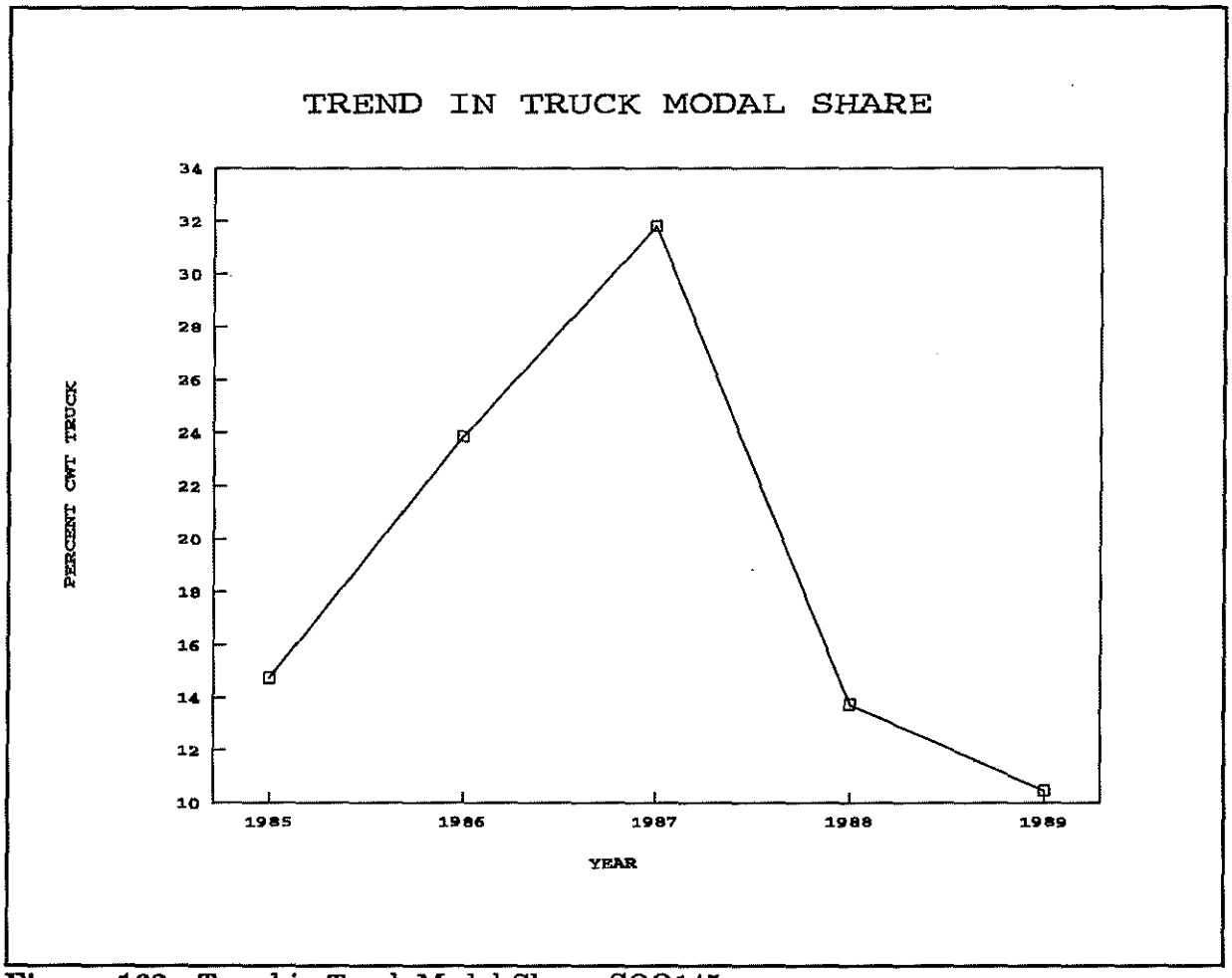


Figure 162: Trend in Truck Modal Share; SOO145

should be noted that the line is in direct competition with the RRV&W shippers for grain traffic in this area.

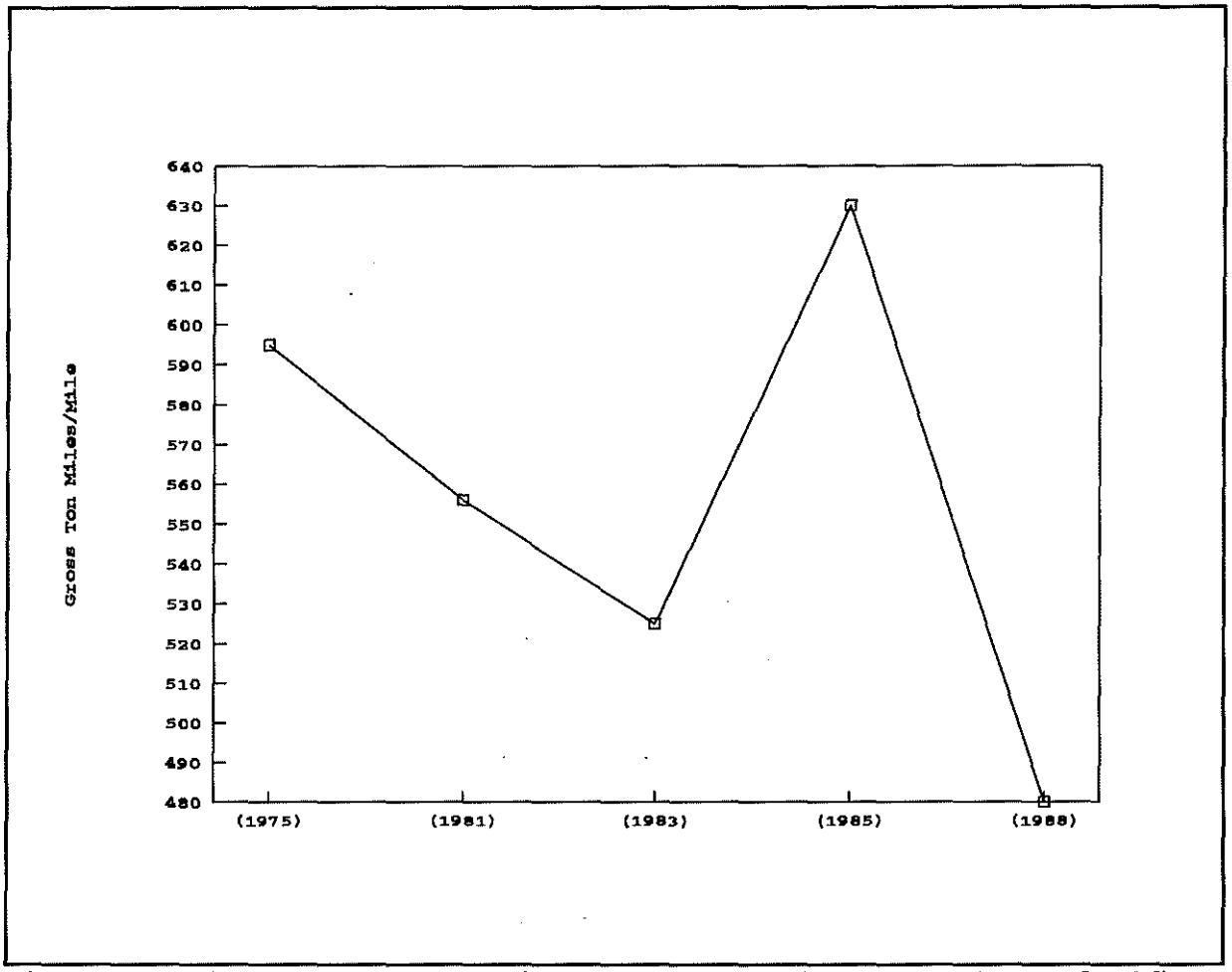


Figure 163: Soo Line Segment 145, Oakes to Hankinson (Density in Thousands of Gross Ton Miles per mile)

Soo Line Segment 146: Devils Lake to Drake

After 1986, the Devils Lake to Drake line experienced declines in grain carloadings (Figure 164). Meanwhile truck modal share, at less than 1 percent in 1985, grew to 14

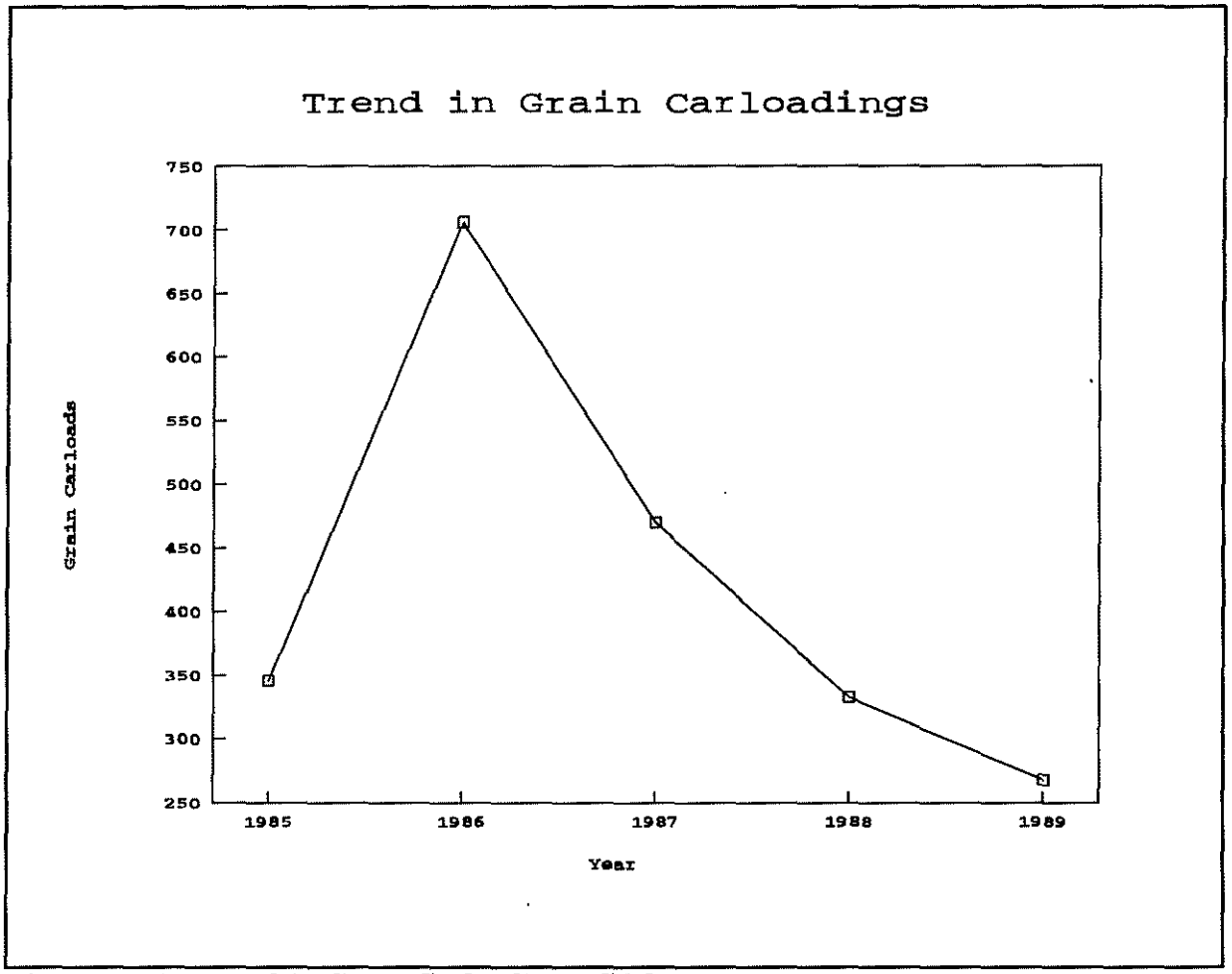


Figure 164: Trend in Grain Carloadings; SOO146

percent (Figure 165). Traffic density has fallen since 1975 (Figure 166). The drought and competition from the BN at Rugby, Leeds, and Devils Lake have decreased traffic on the line.

As Table 7 shows, the grain traffic density is less than five cars per mile. Thus, with no non-grain traffic, the future of the line is unclear, even though it has an overall traffic density of 185,000 GTMM. The Baker to Drake subsegment of the line is on the

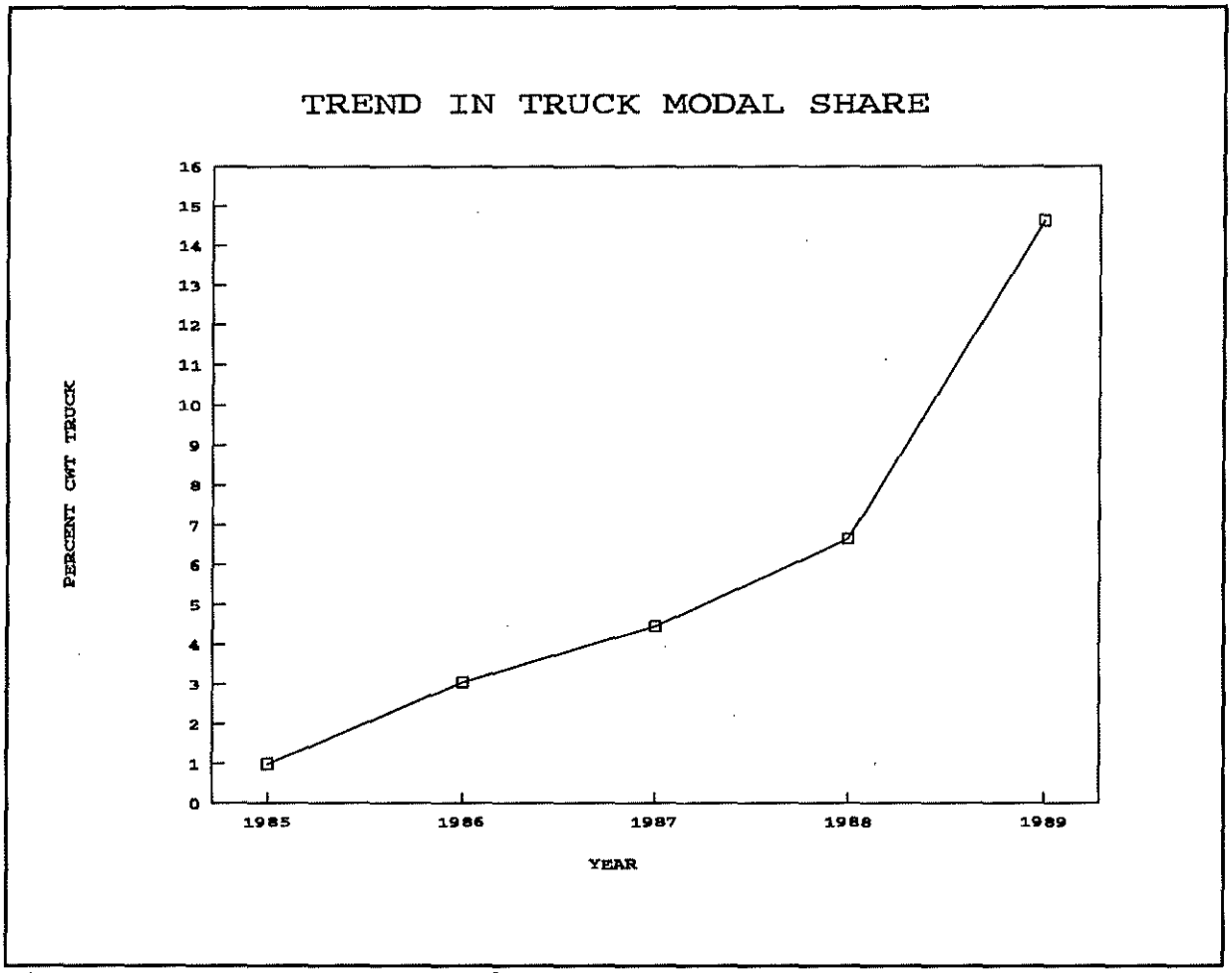


Figure 165: Trend in Truck Modal Share; SOO146

Soo Line's abandonment map. The viability of the segment of the line has been affected in recent years by BN subterminals at Rugby and Towner.

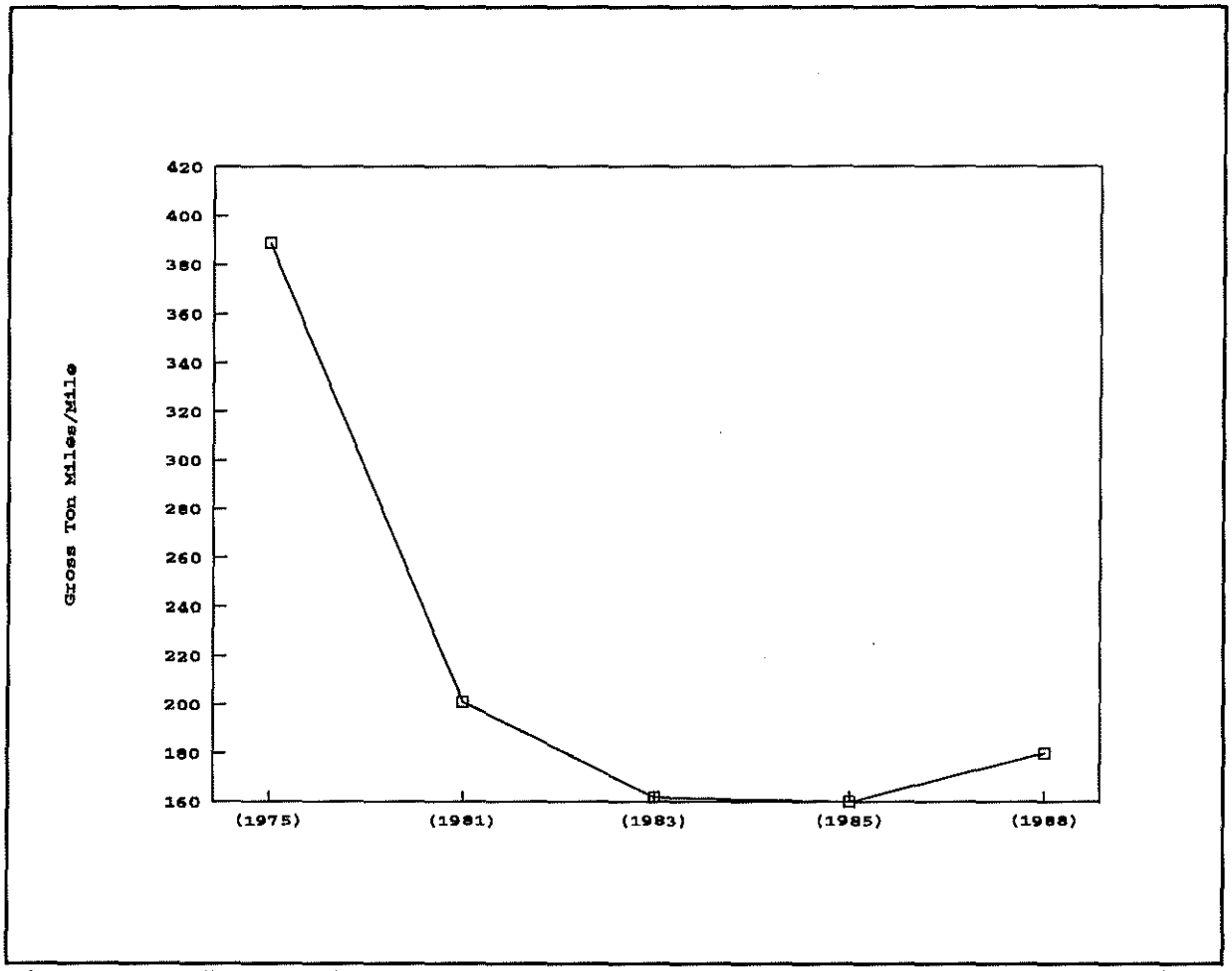


Figure 166: Soo Line Segment 146, Devils Lake to Drake (Density in Thousands of Gross Ton Miles per mile)

Soo Line Segment 147: LaMars to Fairmount

The grain carloadings on line segment 147 have fluctuated since 1985, but ended with an increase in 1989, at 459 carloads (Figure 167). Truck modal share declined

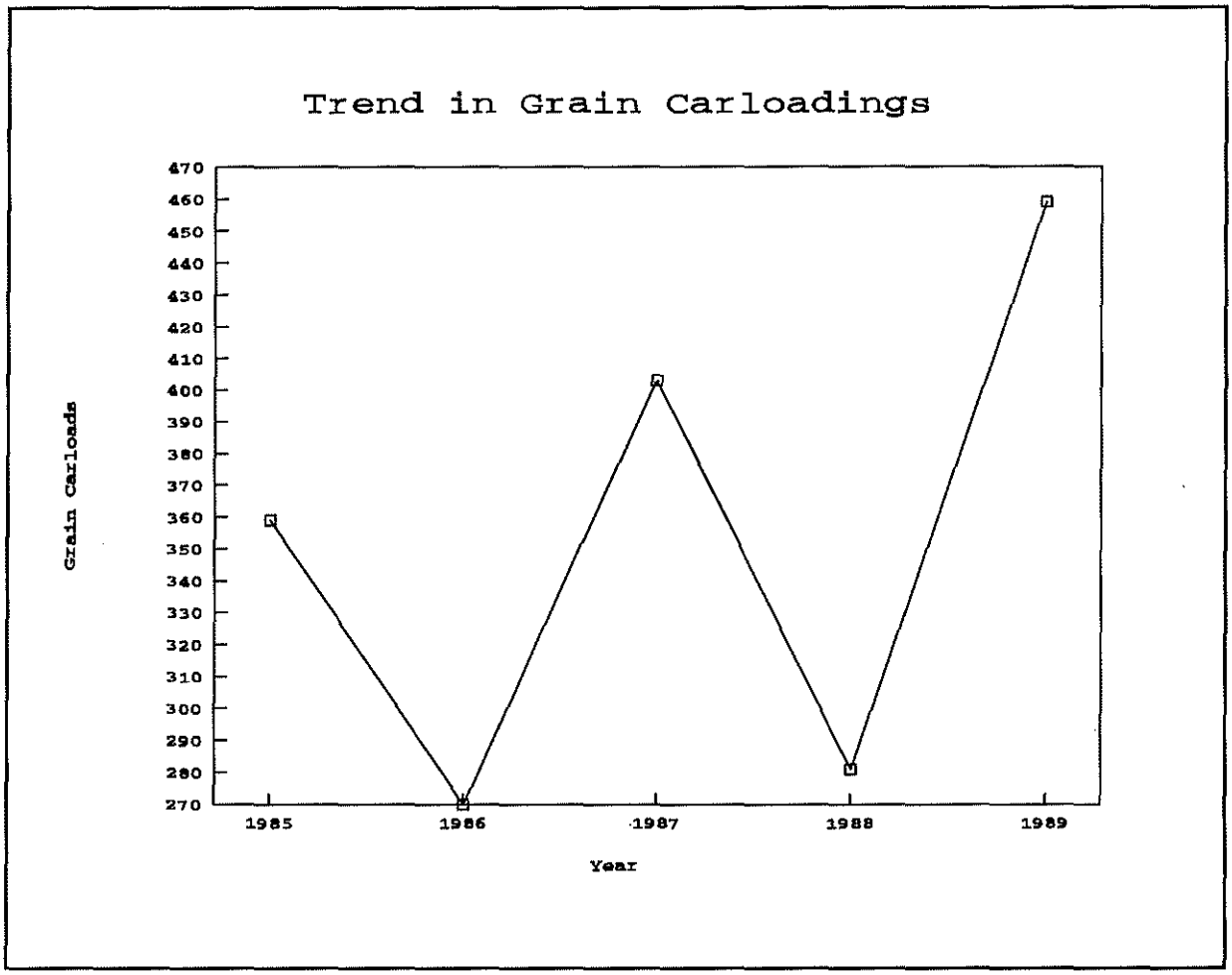


Figure 167: Trend in Grain Carloadings; SOO147

during the period until it was less than 1 percent in 1989 (Figure 168). Density is up from 1975 to nearly 185,000 GTMM in 1988 (Figure 169).

As Table 7 shows, the line generates 43 grain cars per mile, plus 80 non-grain cars per mile. Thus, the near-term viability of the line appears to be solid.

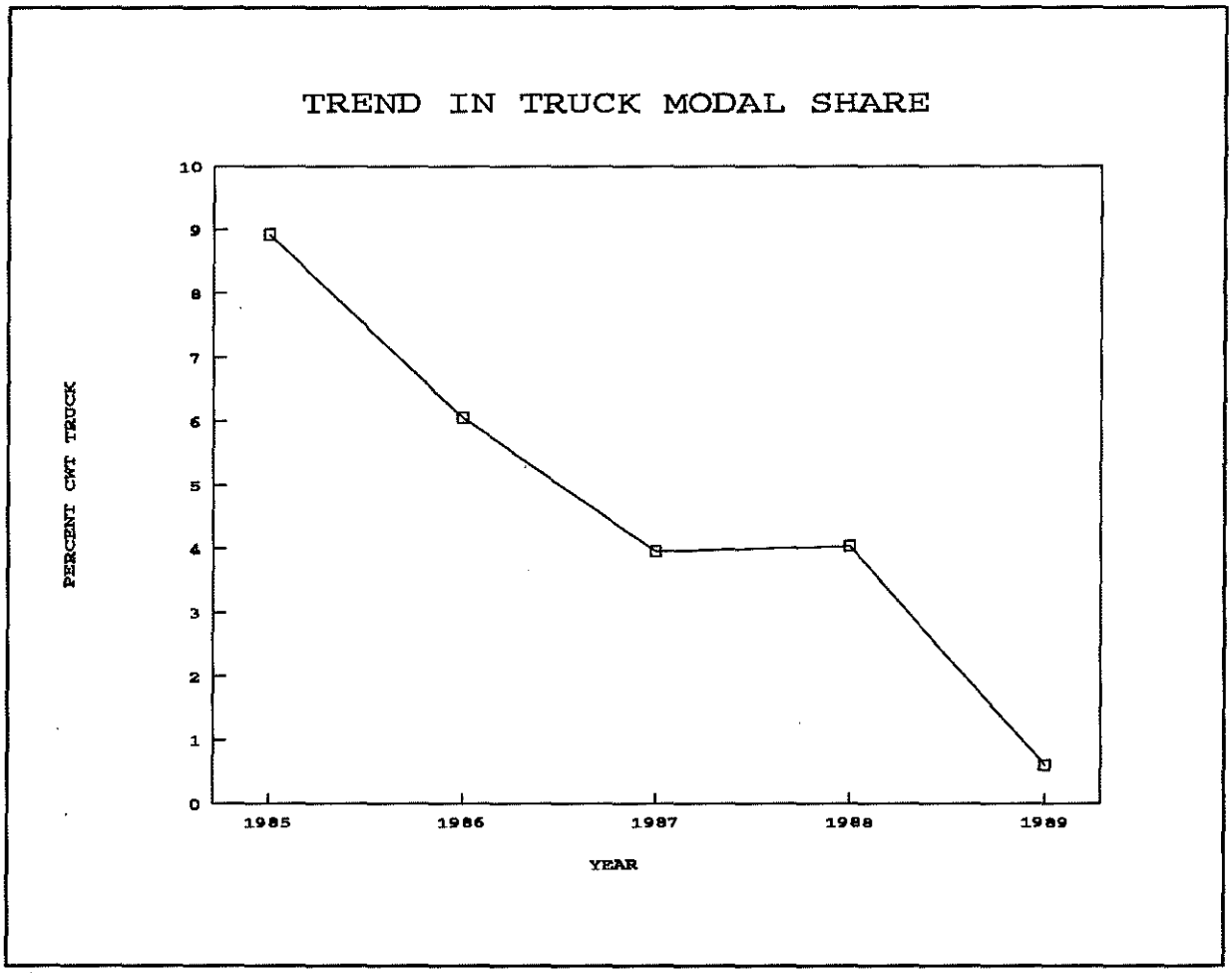


Figure 168: Trend in Truck Modal Share; SOO147

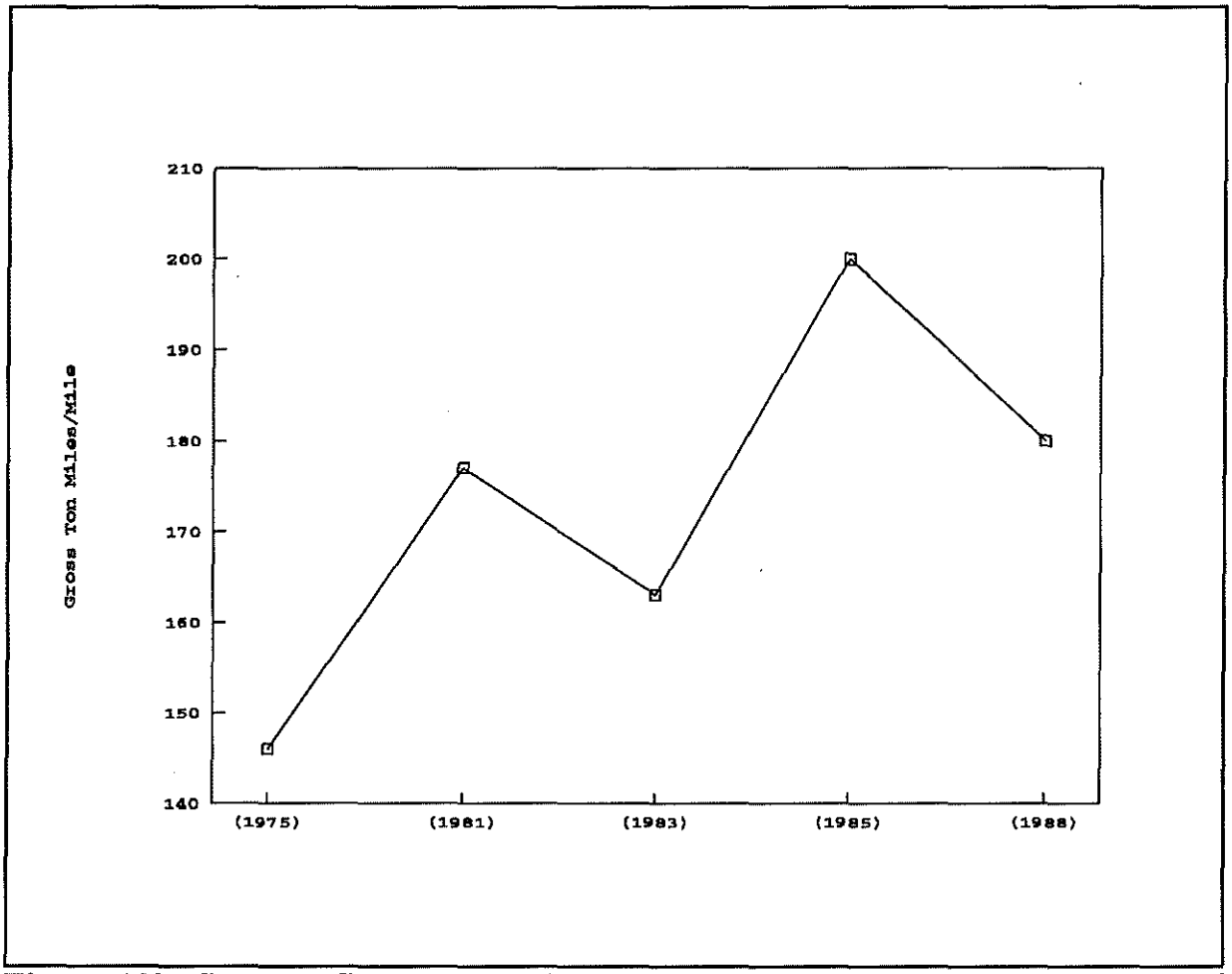


Figure 169: Soo Line Segment 147, LaMars to Fairmount (Density in Thousands of Gross Ton Miles per mile)

Soo Line Segment 149: Max to Bismarck to Wishek

The Max to Wishek line lost grain carloads after 1986 (Figure 170) as truck modal

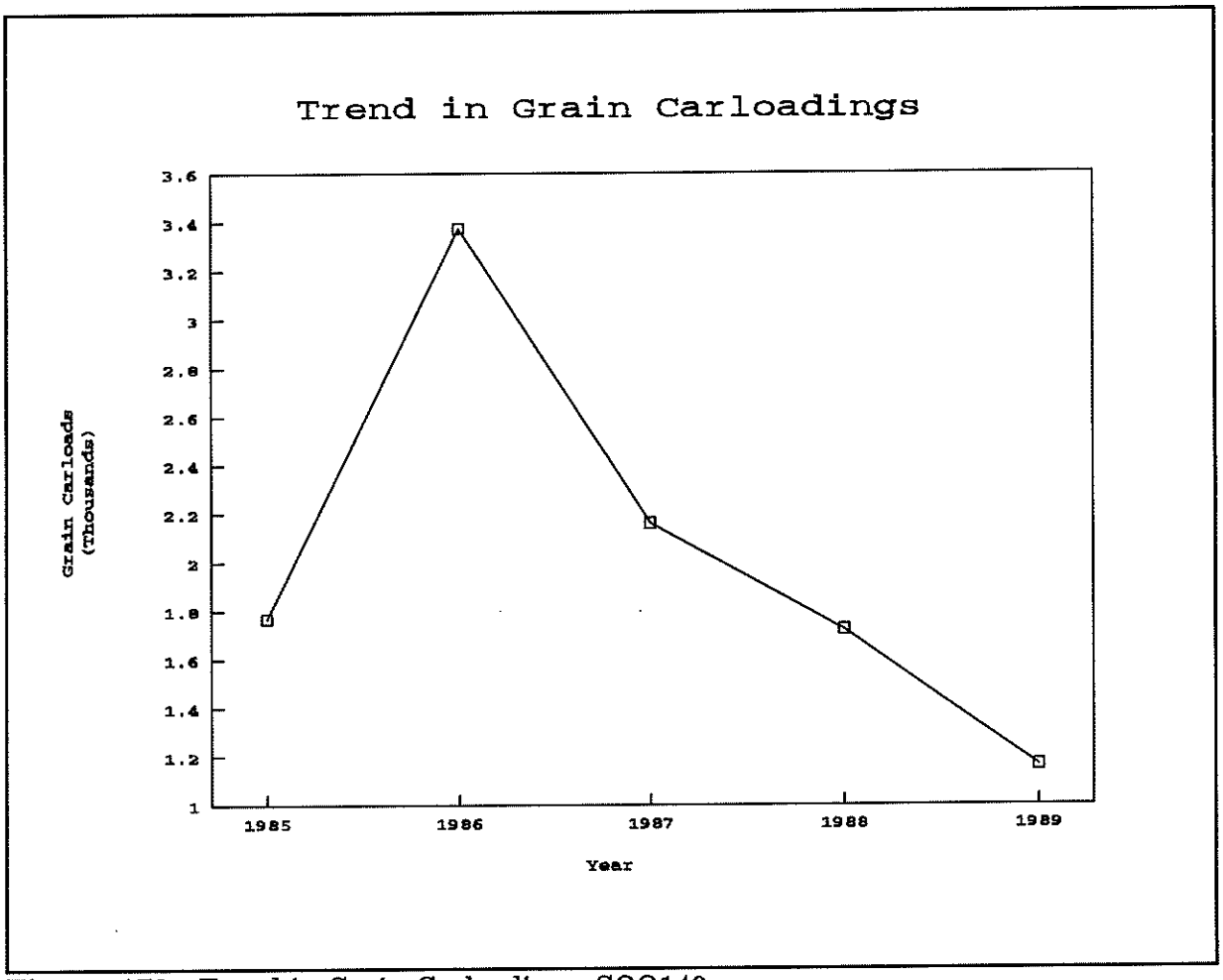


Figure 170: Trend in Grain Carloadings; SOO149

share grew (Figure 171). In 1985, a large fall in traffic density occurred (Figure 172). Drought is the main reason behind the fall in traffic.

This line has since been leased to a short-line operator. As Table 7 shows, the line generated seven grain cars per mile in 1989. The non-grain traffic is sparse--two cars per mile. Thus, the viability of the line as a Soo Line segment appears poor. However, short-line operation should enhance the near-term viability of the segment. However, its future is still unclear. The key to future success may be the recapture of grain from trucks. As

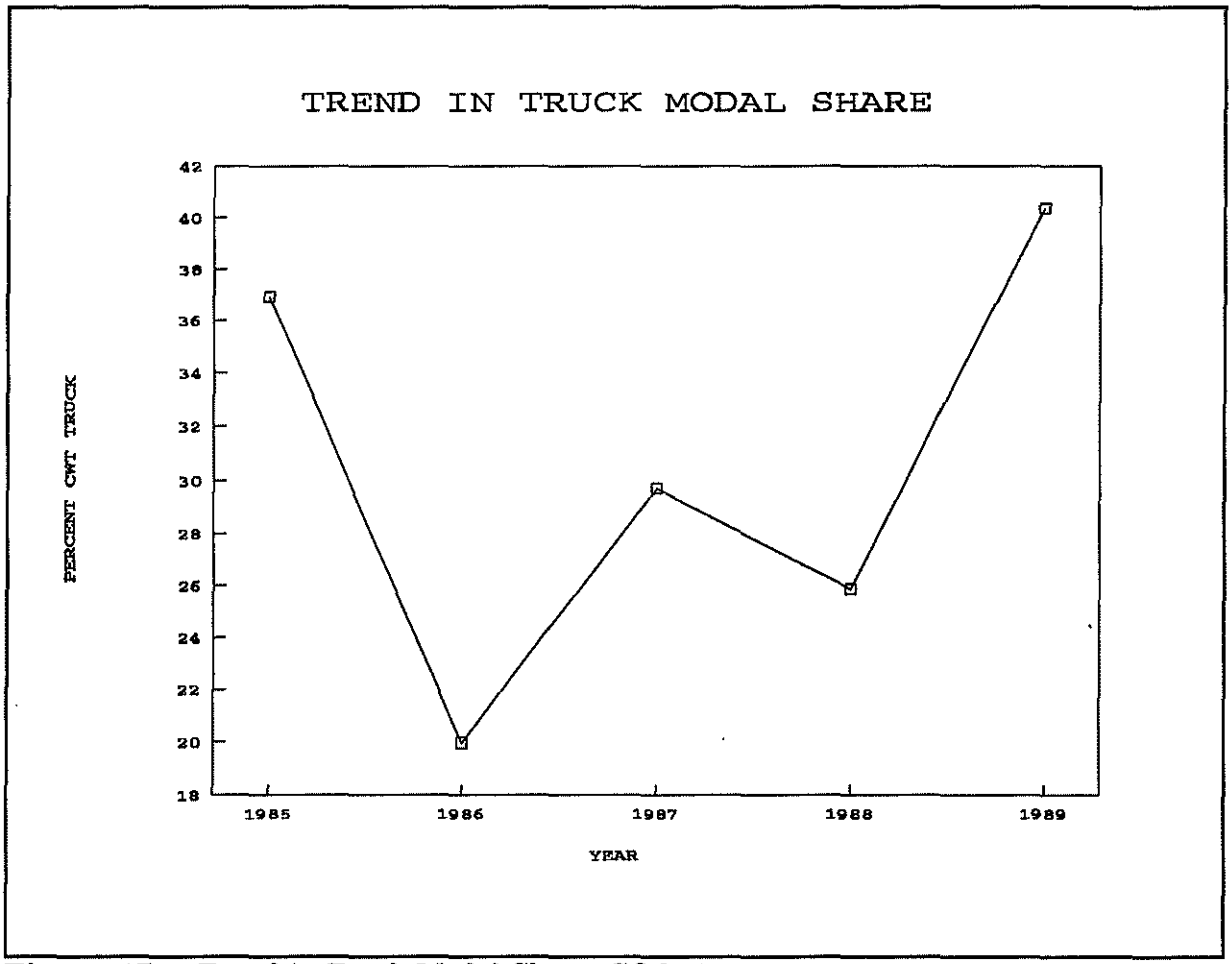


Figure 171: Trend in Truck Modal Share; SOO149

Figure 171 shows, trucks captured over 40 percent of the grains and oilseeds in 1989.

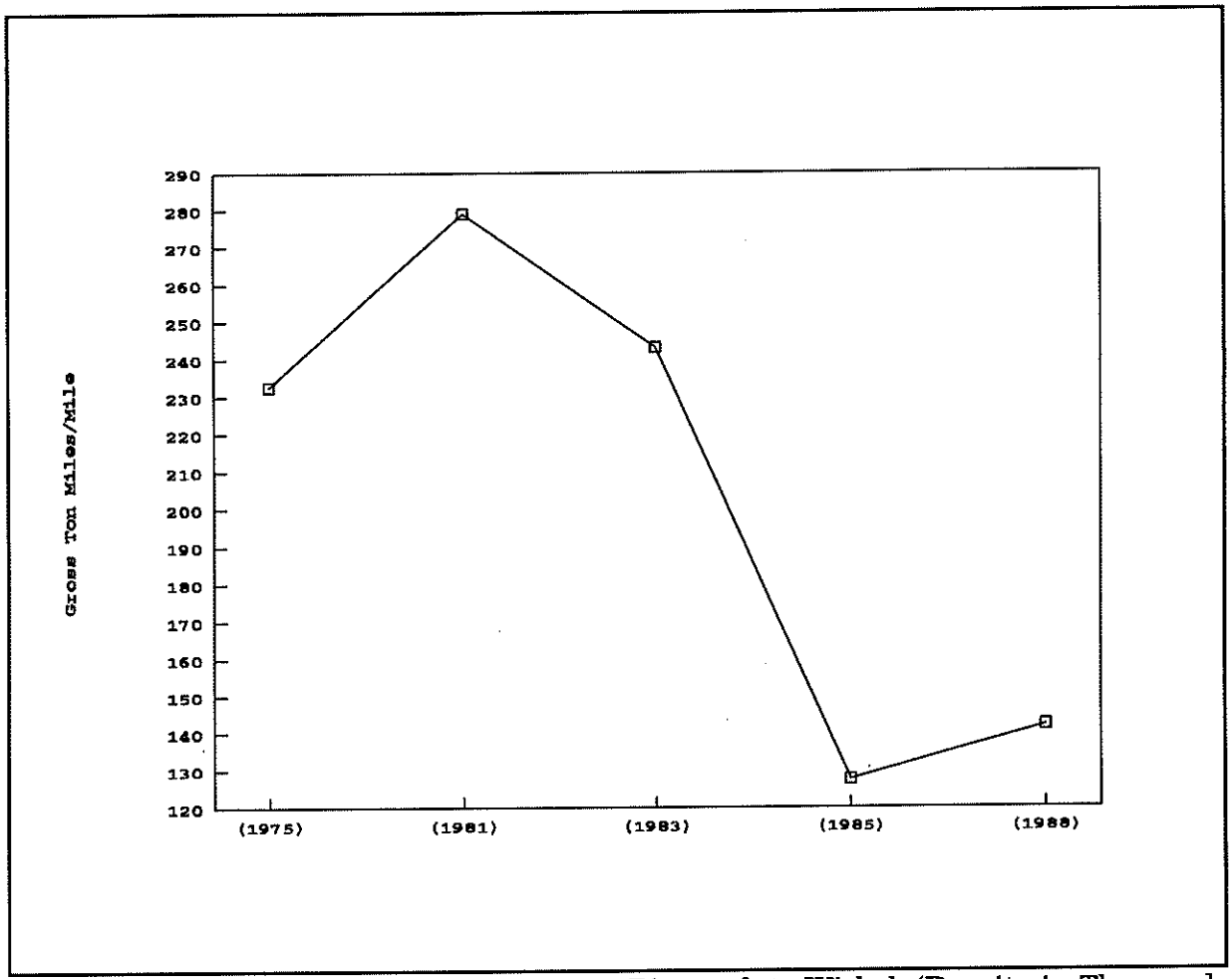


Figure 172: Soo Line Segment 149, Max to Bismarck to Wishek (Density in Thousands of Gross Ton Miles per mile)

Soo Line Segment 151: Wishek to Oakes

Drought also reduced traffic on line segment 151 in 1987. Grain traffic has since rebounded above its 1985 level, as shown in Figure 173. Truck share, which dipped to 13

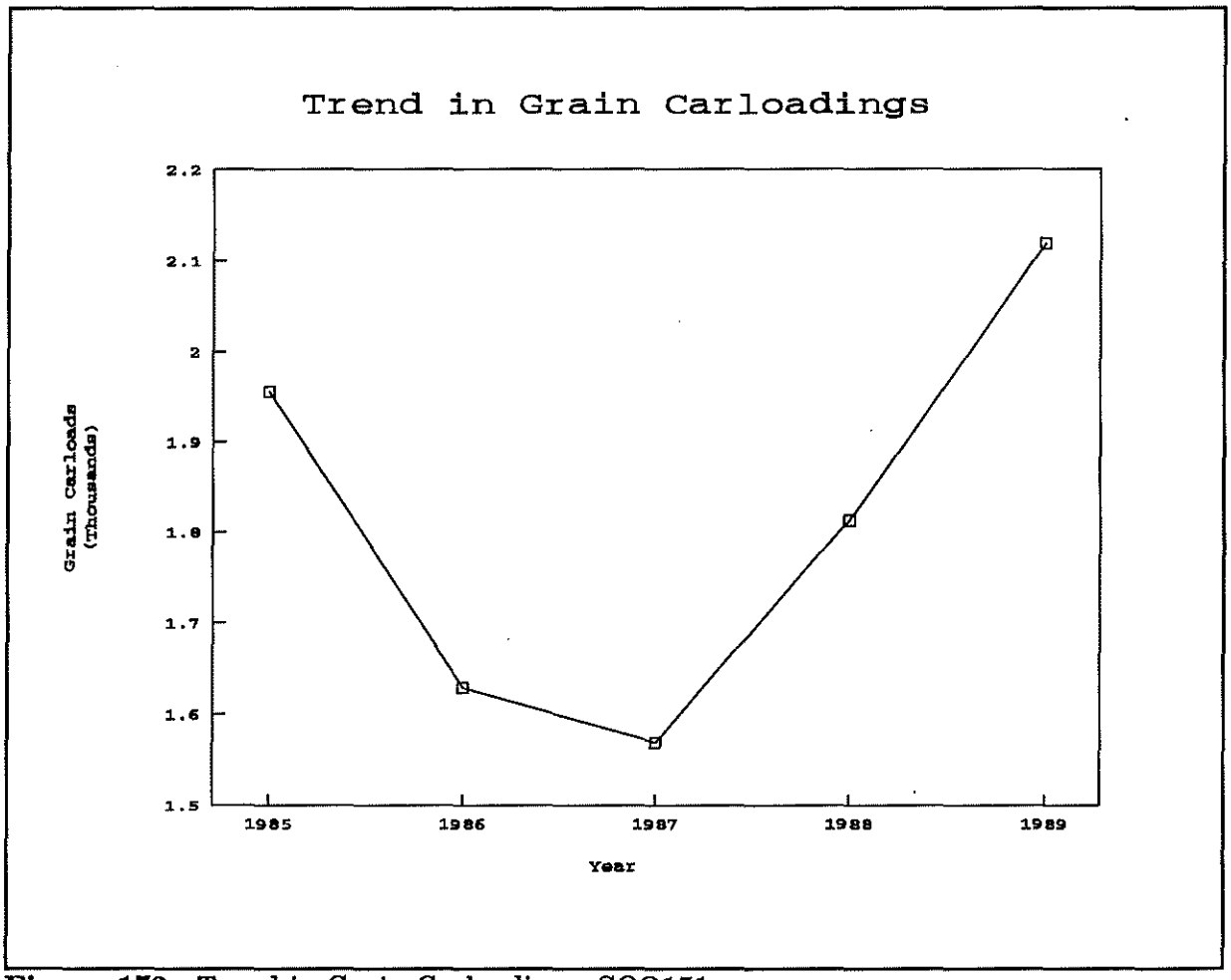


Figure 173: Trend in Grain Carloadings; SOO151

percent in 1988, fell for most of the five year period (Figure 174). Overall traffic density is up from 1975, but is not as high as in 1985 (Figure 175).

This segment has also been leased to a short-line operator. As Table 7 depicts, the Wishek to Oakes segment generated 24 grain cars per mile in 1989. However, there is little non-grain traffic. There is some potential for the recapture of traffic from trucks, as truck modal share stands at 17 percent. But the eastern part of the line is in direct

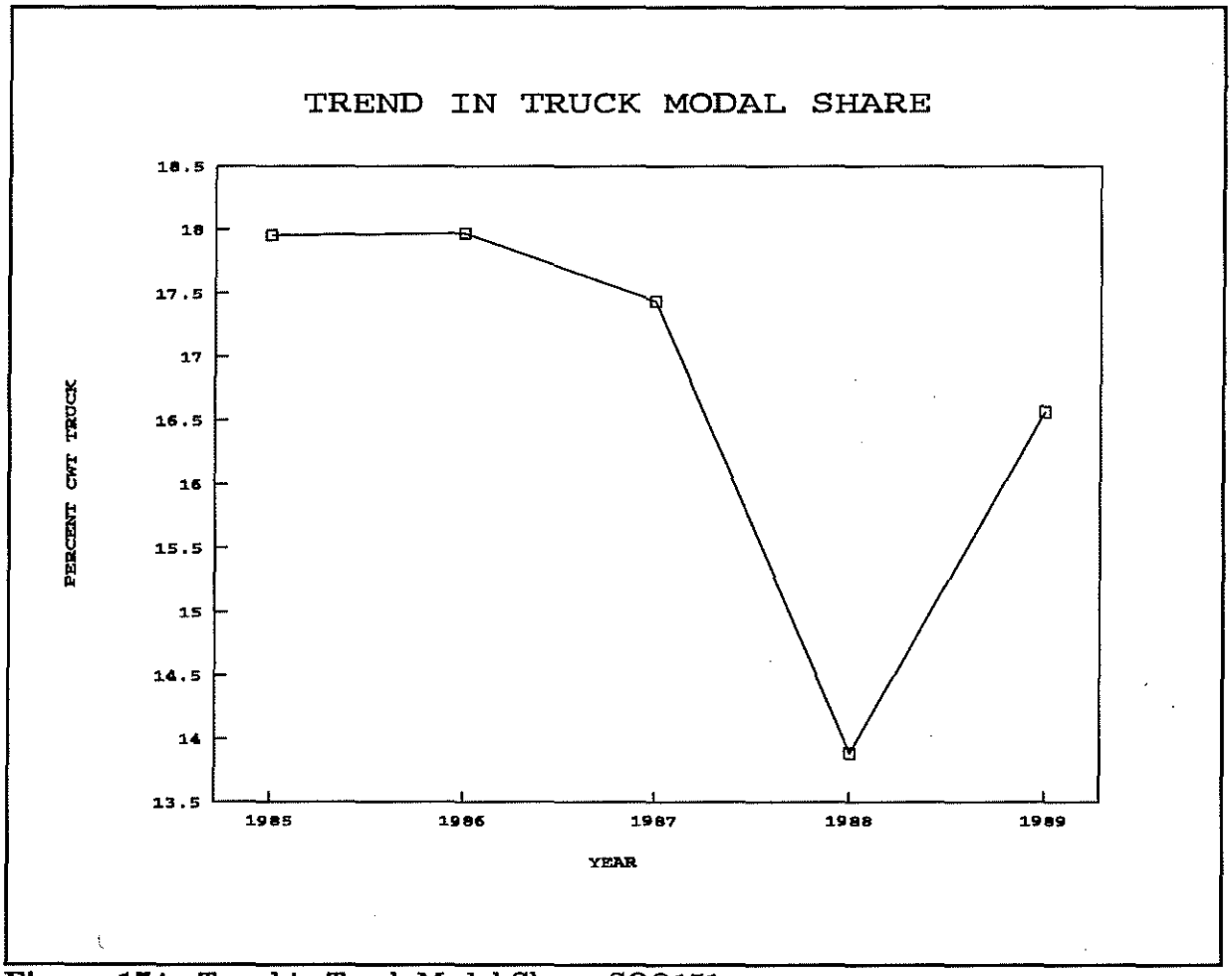


Figure 174: Trend in Truck Modal Share; SOO151

competition with RRV&W facilities at Edgeley and Berlin. Overall, the line is in poor physical condition, which may impact its future viability.

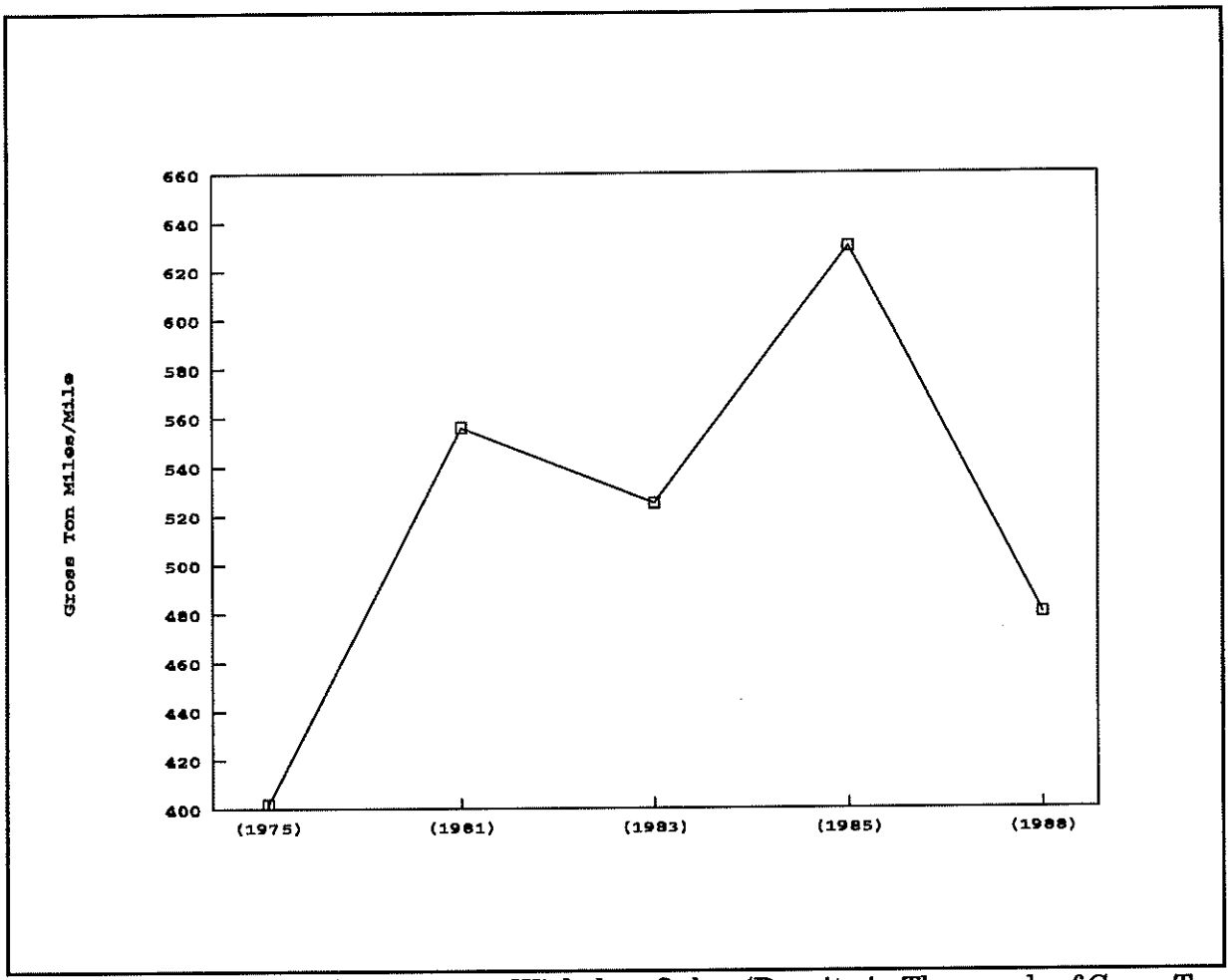


Figure 175: Soo Line Segment 151, Wishek to Oakes (Density in Thousands of Gross Ton Miles per mile)

Soo Line Segment 153: Wishek to Ashley

Line segment 153, Wishek to Ashley, shipped fewer grain carloads in 1989 than in 1985, but does not otherwise exhibit a clear trend (Figure 176). Truck modal share on the

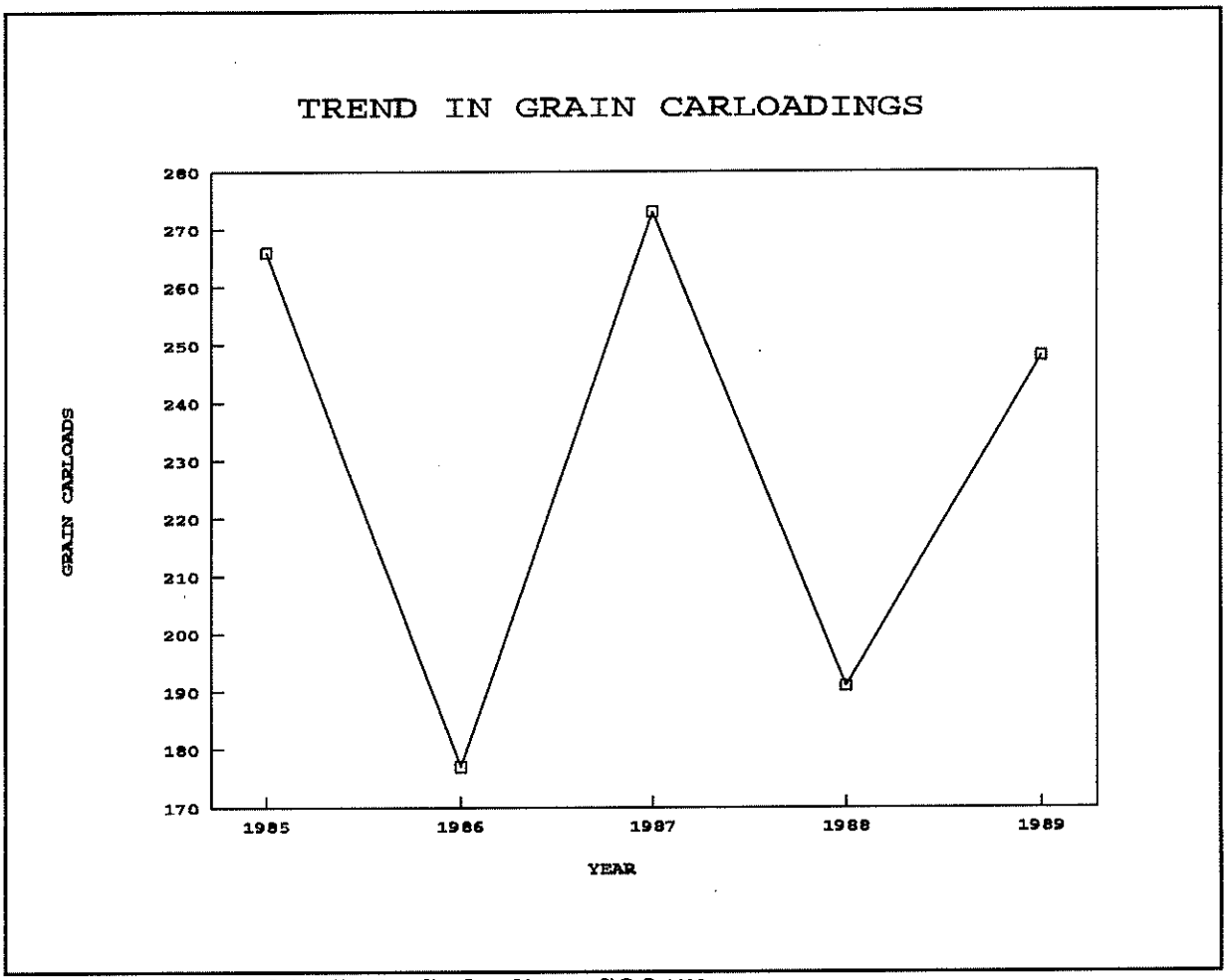


Figure 176: Trend in Grain Carloadings; SOO153

other hand fell until 1989 when it jumped up to 18 percent (Figure 177). Traffic density is down since 1983 (Figure 178). Drought has diminished agricultural shipments in the area. Also where there were three elevators on the line before, there is only one in Ashley remaining.

As Table 7 depicts, the line generated 13 grain cars per mile in 1989. With no non-grain traffic, the line appears to be marginally viable at best.

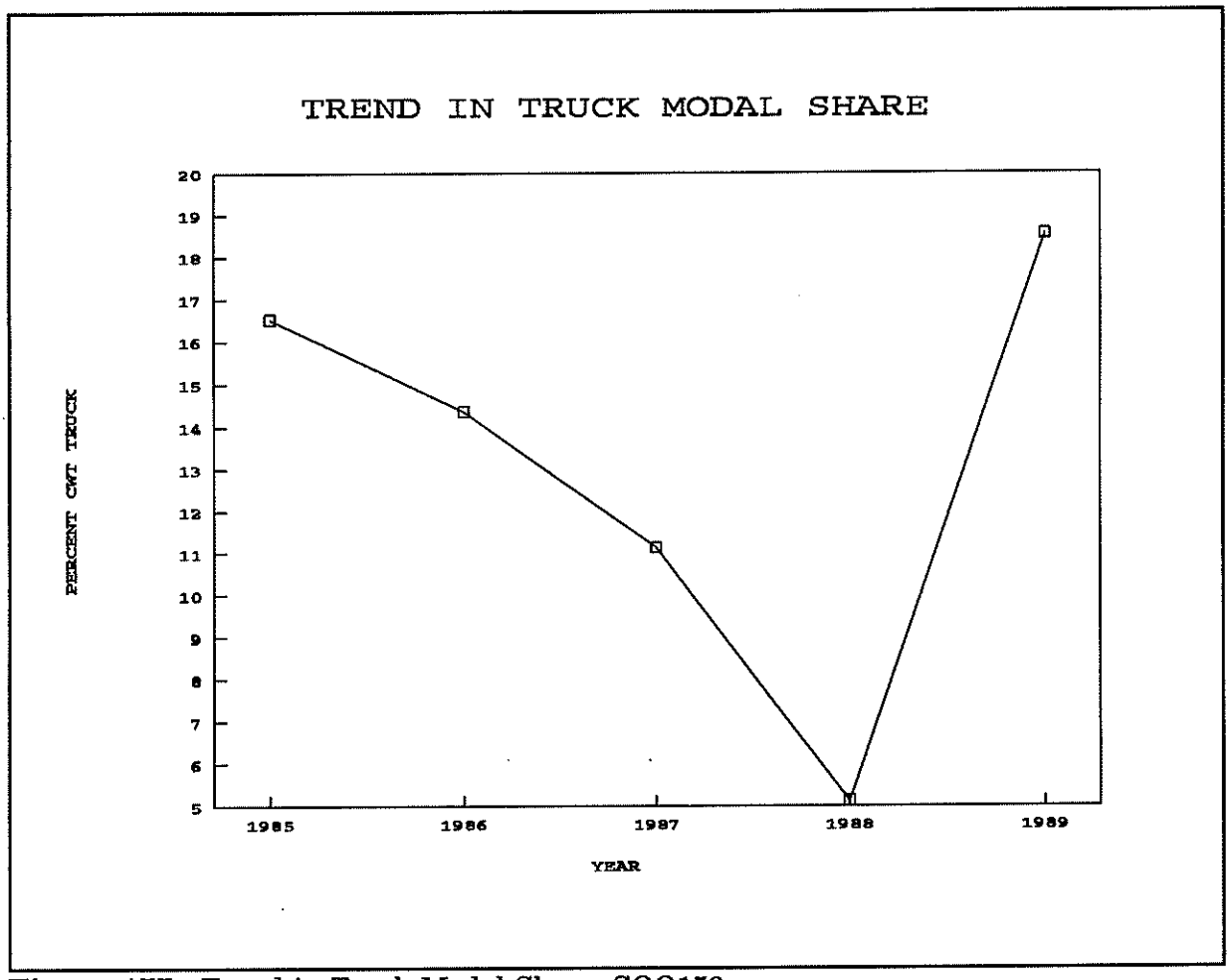


Figure 177: Trend in Truck Modal Share; SOO153

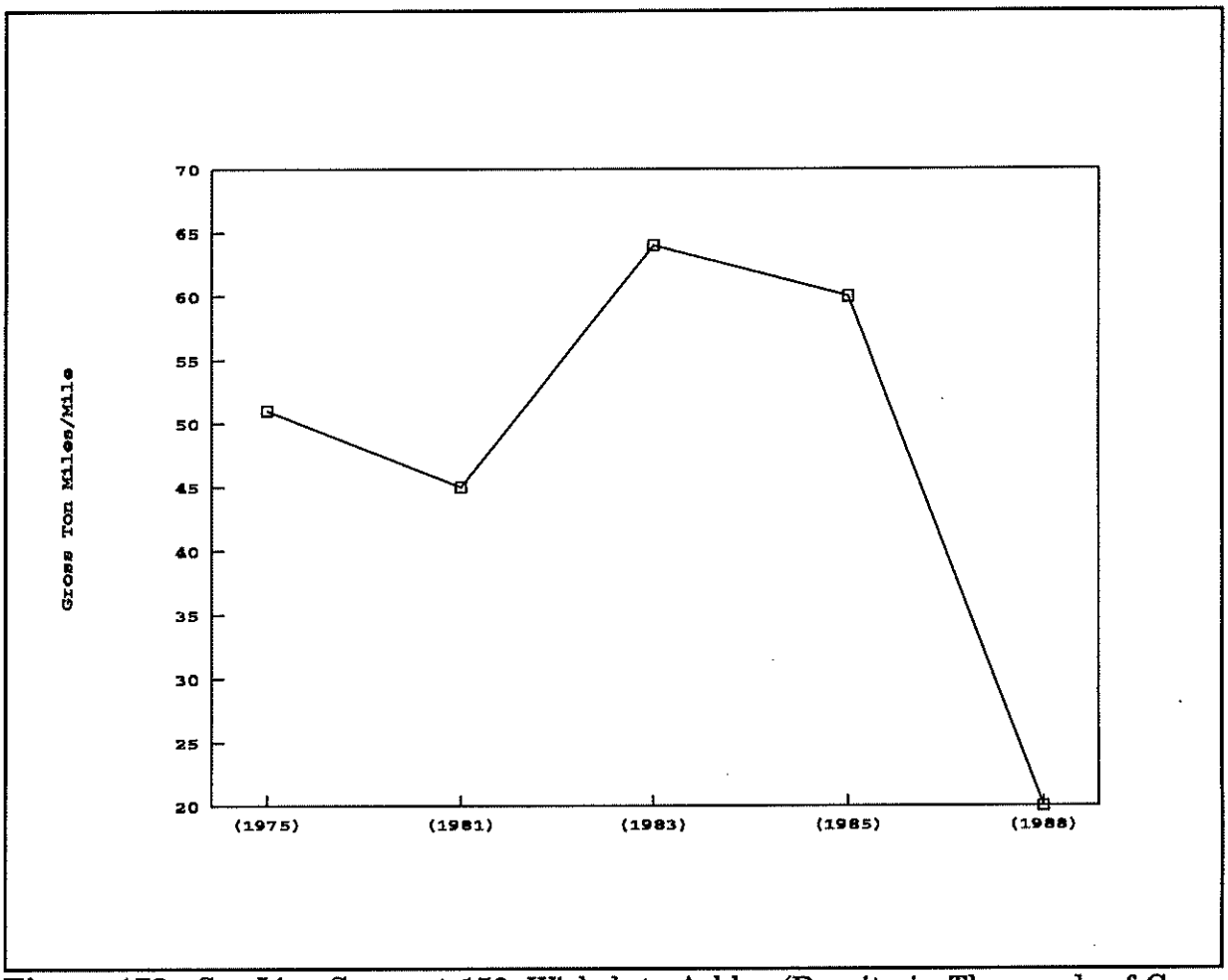


Figure 178: Soo Line Segment 153, Wishek to Ashley (Density in Thousands of Gross Ton Miles per mile)