Investigation into the economic future of the conventional service stations of Great Falls

Stephen Albert Sahly

The University of Montana
AN INVESTIGATION INTO THE ECONOMIC FUTURE OF THE
CONVENTIONAL SERVICE STATIONS OF GREAT FALLS

By

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Dean, Graduate School

Date
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CHAPTER I

INTRODUCTION

The Conventional Service Station

The conventional service station derives its income from two sources; the sale of commodities and payments for services. Commodities include but are not limited to gasoline, oils and lubricants, tires, batteries and accessories as well as replacement parts and special promotion items. Such items as rental vehicles, LP gas and sporting goods are frequently sold at stations. Some food items may also be marketed. Service payments include but are not limited to the mounting and balancing of tires, automobile tune-ups, installation of replacement parts, wrecker service and battery charging. It is important to note that the service income is the main factor differentiating the conventional service station from its petroleum competitors.

Contrasting with conventional service stations are the "shoppees," auto wash-gasoline tie-ins and auto Clinics or car-care centers, all of which are thought to be the vanguard of present and future marketing trends.¹ The Circle K

¹William Loney, Agent, Continental Oil Company, April 28, 1971.
convenience store-gasoline tie-ins as well as SuperAmerica are examples of the "shoppee" while Otto-Shine is an example of the auto wash-gasoline tie-in. There are no auto or car-care clinics in the Great Falls area as yet, although Moore's Mobil, specializing in auto diagnosis, might be placed in this category. The concept focuses on automobile diagnosis with its related service generated income as well as aggressive marketing of replacement parts and TBA (Tires, Batteries and Accessories) at the location. The car-care center may or may not have a gasoline tie-in. Along with these examples, one might point out such an operation as Save-ur Self Service, which is a compromise between the "shoppee" and the auto wash.

The General Problem Setting

The following points are considered. As of August 23, 1970, Great Falls had 106 gas stations. Eight of these stations were closed. Only one out of five service stations was highly profitable. The branded oil sold at certain discount stores, in some cases, was sold for less than the cost to the same brand station operator.

These facts are just a few of many which give evidence to only one aspect of the problems of the service station.

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In an industry where the growth potential is great, not only in the primary market (that market for petroleum products) but also in the after-market, (the market for TBA and all goods related to the automobile other than petroleum products), it would seem that the local service station should not be in the predicament which it faces today.

The problems of the conventional service station fall into several main areas. There are problems of a definite marketing nature. This is evidenced by such facts as that although service stations represent 62 per cent of total automobile battery outlets, they account for only 29 per cent of battery replacement sales. There are problems of an ecological nature which is a two-fold area; petroleum and the environment which gives rise to problems such as the leaded-unleaded controversy and its secondary market impact and secondly, problems of service stations and the community which relate to zoning and aesthetic considerations such as the boarded up station in the local neighborhood. Organizational problems also affect the service station. An example of this type of problem is the operation of both conventional stations and the cut-rate stations within the same city by a major oil company. Economic problems cannot be overlooked either. The current trend of consumer economy and self service directly affects the conventional service station.

The independent gasoline dealers are rapidly being replaced as are the independently run branded service stations. The service station, per se, though not faced with extinction, is faced with rough times ahead, the reasons for which will be investigated. The economic future and in turn the viability of the conventional service station are appraised in this paper.

The Research Problem

The research problem is an investigation and an attempt to forecast the economic future of the conventional service station. The policies, objectives and plans of the major oil companies of this area, the changing economy and the requirements and policies of the local community are considered.

Research Objective

It is the objective of this study to determine the economic future of the conventional service station and, in light of this determination, arrive at certain recommendations for Great Falls service stations as to number, mode of operation, marketing technique and responsibility toward the community.

Procedures of the Study

The study is broken into three main parts. The market for petroleum products and related items (the secondary
or after-market) and major oil companies, their policies, expectations and plans for future operations are considered in part one. Competition on the local level is presented in the second part. The local service stations as well as their relationship to the City of Great Falls, ownership, requirements to run a station and the views of managers comprise the third part of this study.

Personal interviews constituted the primary method of research. An interview format which was used in the interviews with the local dealers is presented in Appendix A. The interviews with the competitors and district representatives of the major oil companies were unstructured. Secondary data were drawn mainly from industry periodicals as well as local publications.

Major oil companies were reluctant to divulge plans or expectations for the future. Their opinions on the methods of marketing petroleum products in the years ahead would have been a significant addition to the study.
CHAPTER II

MAJOR OIL COMPANIES AND THE SERVICE STATION

The Market

The market in which the service station exists is a large one. In 1969, U. S. gasoline service stations accounted for over $25.1 billion in sales and were the sixth largest retail industry.¹ During the last ten years, the number of service stations has increased from 209,700 to 222,000 with average annual sales of $114,000 in 1969.

The approximate cost per year for ten years and 100,000 miles for a $3,185 car is shown in Table 1. From this table one may derive that the car owner spends $379.70 per year on gas, tires, oil, and maintenance or repairs alone, all of which could potentially go to the service station. In 1970, tire, battery and accessory (TEA) sales amounted to nearly $1 billion or an increase of 200 per cent over the previous five years.²

### TABLE 1

**HIGH COST OF A CAR**

<table>
<thead>
<tr>
<th>Item</th>
<th>10 Years</th>
<th>100,000 Miles (Costs are rounded)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$3,185 Car</td>
<td>10 Years</td>
<td>100,000 Miles</td>
</tr>
<tr>
<td>Car</td>
<td>$ 3,185</td>
<td>3.2¢ depreciation</td>
</tr>
<tr>
<td>7,200 gallons gas/oil</td>
<td>1,896</td>
<td>1.9 gas and oil + tax</td>
</tr>
<tr>
<td>Insurance</td>
<td>1,722</td>
<td>1.7 insurance</td>
</tr>
<tr>
<td>Maintenance/repairs/tires</td>
<td>1,901</td>
<td>1.9 tires, parts, maintenance, accessories</td>
</tr>
<tr>
<td>Parking and tolls</td>
<td>1,805</td>
<td>1.8 garage, tolls, parking</td>
</tr>
<tr>
<td>State and Federal Taxes</td>
<td>1,353</td>
<td>1.4 taxes</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$11,862</td>
<td>or 11.9¢ per mile</td>
</tr>
</tbody>
</table>

The average number of miles driven is increasing and in turn gasoline consumption is increasing. United States and Montana gasoline consumption data for the last six years and the percentage increases are presented in Table 2.

**TABLE 2**

SALES OF AUTOMOTIVE GASOLINE
(Millions of Gallons)

<table>
<thead>
<tr>
<th>Year</th>
<th>United States</th>
<th>Per cent Change</th>
<th>Montana</th>
<th>Per cent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965</td>
<td>68,818</td>
<td></td>
<td>324</td>
<td></td>
</tr>
<tr>
<td>1966</td>
<td>71,857</td>
<td>4.4</td>
<td>317</td>
<td>2.2</td>
</tr>
<tr>
<td>1967</td>
<td>74,116</td>
<td>3.1</td>
<td>331</td>
<td>4.4</td>
</tr>
<tr>
<td>1968</td>
<td>78,325</td>
<td>5.7</td>
<td>336</td>
<td>1.5</td>
</tr>
<tr>
<td>1969</td>
<td>81,924</td>
<td>4.6</td>
<td>336</td>
<td>0.0</td>
</tr>
<tr>
<td>1970</td>
<td>85,521</td>
<td>4.4</td>
<td>355</td>
<td>5.7</td>
</tr>
</tbody>
</table>

Source: Ethyl Corporation.

The data presented in this table and above give the impression of a rather constant gasoline market growth and rather rapid growth in TBA or secondary items. Growth in Montana has been erratic. Major oil companies are extremely reluctant to divulge market information, thus making a quantitative analysis of the Montana, and in particular, the Great Falls market, less certain due to estimation. On a qualitative basis, more definite conclusions may be reached.

It may be observed in Table 2 that Montana sales during the last five years have had an average growth rate
of about 3.7 per cent while the United States average has been 4.4 per cent. Montana ranked 39th in gasoline consumption as of 1970 and whereas automobile registrations rose 3.4 per cent nationally, they rose only 1.3 per cent in Montana. These data imply that Montana is a relatively weak market compared with the national average.

The Montana gasoline market is especially weak compared with other marketing regions, and prices and the profit margin tend to be low. Twenty years ago the price of gasoline was only three cents lower than it is today and ten years ago it was actually one cent higher. The relatively static characteristic of Montana gasoline prices over the years is shown in Chart 1 below. While the gasoline prices have held at about the same level, the tax portion of the gasoline price has been rising, leading one to conclude that either costs or profits or both have declined. Both costs and margins have in fact declined. The increased use of such facilities as the Continental Pipeline from Billings to Great Falls and similar improvements have helped to lower the cost of gasoline and yet on a national basis, Montana is still a high cost area. Profit margins in Montana have borne much of the tax increase as the cost of gasoline to the consumer remains about the same.
Dealer Tank-Wagon Prices (without tax)
Butte, Montana^a

Chart 1.—Fifty years of gasoline prices*

*The first forty years are represented by the footnote (a). The price level for 1970 was inserted to show current prices and is represented by footnote (b).


The static prices of the Montana market in general, can be compared with Great Falls, which is considered to be a depressed gas price area in relation to the other areas of the state. Although the established gasoline market price should be approximately four cents higher, the large amount of cut-rate business in the Great Falls market has depressed the local price. Though independents or cut-rate outlets account for only about 25 per cent of the total number of gasoline outlets, they account for almost 50 per cent of the retail gasoline business. The 50 per cent figure includes sales of such name brand operations as Valu Mart and Otto-Shine, which are both Conoco operations but which are considered discount outlets. Otto-Shine prices are on a major brand level but the free car wash with a fill-up constitutes a discount. In the interviews with service station operators, it was found that most felt that they were unable to compete with Otto-Shine. This will be discussed below in Chapter IV.

One company representative described Great Falls as the worst market in the region while correspondence from another oil company described Great Falls as a highly profitable market. It should be pointed out that the optimistic company is currently moving into discount operations and away from the traditional service station concept. They have been experiencing growth of around 10 per cent per year, which is unusually high among the major oil companies.
Montana is characterized by a relatively sparse population and high unit transportation costs. These facts, along with the static gasoline prices, the advent of discount gas, and seasonal characteristics have made Montana and especially Great Falls a low profit market for most oil companies in comparison to their operations in other parts of the nation. Only one oil company was decidedly optimistic about the market. The other major oil companies did not consider Great Falls or Montana a particularly profitable market and in a couple of cases, the opposite was the fact.

Past Performance

Gasoline sales data were characterized by slow growth. Tires, batteries, and accessories, or TBA, are items of special market importance. TBA and service make up more than half of the station's gross profit.\(^3\) The trend of service station TBA sales is shown by the following examples:

1. Though retail service stations account for 62 per cent of total battery outlets, they account for only 29 per cent of battery replacement sales.\(^4\)
2. Tire sales have risen 183 per cent since 1965, from $192 million to over $500 million but only 16 per cent of buyers purchase their tires from service

stations while 54 per cent buy tires at a branded tire store.\textsuperscript{5} Also, the market is declining for oil company branded tires as stations turn to major brand tires.\textsuperscript{6}

3. Oil usage (gallon/vehicle/per year) will fall from 6.4 in 1969 to an estimated 3.7 in 1975, based on the extended service intervals common with new cars.\textsuperscript{7} Servicing is also less frequent.

These three points, together with the fact that more people are doing their own maintenance and more people are taking their cars in to the auto dealers to satisfy stiffer warranty requirements, mean that the service station faces not only a tighter gasoline market, but also a lower profit potential in TBA.

**The Problem of Dealer Turnover**

Changes in station management, for the most part, represent the inability of a service station to survive in the competitive environment in which it exists. A portion of turnovers result from non-economic factors, but the majority are the direct result of economic problems.


\textsuperscript{7}F. P. Glazier, and N. E. Summer, "The Decreasing Relative Demand for Lubricants," *Sun Oil Company*, April, 1970.
Turnover represents a key indicator of the economic future of service stations in our economy and thus the current trend becomes of primary importance. The levels of dealer turnover are shown in Tables 3, 4 and 5 below.

In a study by the American Petroleum Institute, beginning with 1968, a station was defined as a "retail service station, (a) in which the reporting company has a real estate interest either through ownership or lease, (b) are dealer operated on a lessee basis and (c) are actually in operation or available for operation at the end of the calendar year." Based on the tables for 1970, turnover at more than 87,300 dealer-operated stations, owned or leased by supplying companies, was 4.0 per cent for terminations beyond the control of supplier or dealer (resulting from such things as illness, retirement, death, military service and highway changes) and 20.7 per cent for terminations occurring for all other reasons. Of the stations at which turnover occurred for any reason, 11.4 per cent had two turnovers and 1.9 per cent had three or more turnovers. Table 5 relates the incidence of turnover to station size and tends to indicate a higher rate of success as the size of the station increases.8

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8Dealer Turnover At Service Stations - 1970, Report Number 17, American Petroleum Institute, Washington, D.C.

9Ibid.
TABLE 3

API DEALER TURNOVER REPORT
REPORT OF DEALER TERMINATIONS FOR 1967, a 68, 69, & 70 b

<table>
<thead>
<tr>
<th>Item</th>
<th>1970 b</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
</tr>
<tr>
<td>A. Number of dealer stations available for operation at end of calendar year</td>
<td>83,361</td>
</tr>
<tr>
<td>B. Dealer terminations at these stations:</td>
<td></td>
</tr>
<tr>
<td>(1) For reasons beyond control of the supplier or dealer</td>
<td>3,497</td>
</tr>
<tr>
<td>(2) For all other reasons</td>
<td>18,066</td>
</tr>
<tr>
<td>(3) Total for all reasons</td>
<td>21,563</td>
</tr>
</tbody>
</table>


aRefinements in definitions have been made with the result that year-to-year comparability has been affected to an unknown, but probably not major, extent.

bExcludes one company which was included in previous years.

cTotals reflect the exclusion of three companies unable to supply the information. For comparability with the previous year, the original 1967 and 1968 data have been adjusted by the exclusion of these three companies.
<table>
<thead>
<tr>
<th></th>
<th>1969°</th>
<th></th>
<th>1968°</th>
<th></th>
<th>1967°</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>Per Cent Turnover</td>
<td>Number</td>
<td>Per Cent Turnover</td>
<td>Number</td>
<td>Per Cent Turnover</td>
</tr>
<tr>
<td>89,333</td>
<td>---</td>
<td>92,977</td>
<td>---</td>
<td>92,825</td>
<td>---</td>
</tr>
<tr>
<td>4,008</td>
<td>4.5</td>
<td>4,040</td>
<td>4.3</td>
<td>4,058</td>
<td>4.4</td>
</tr>
<tr>
<td>17,964</td>
<td>20.1</td>
<td>17,676</td>
<td>19.0</td>
<td>16,062</td>
<td>17.3</td>
</tr>
<tr>
<td>21,972</td>
<td>24.6</td>
<td>21,716</td>
<td>23.3</td>
<td>20,120</td>
<td>21.7</td>
</tr>
<tr>
<td>Stations Terminations</td>
<td>Number</td>
<td>Per cent Distribution</td>
<td>Number</td>
<td>Per cent Distribution</td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td>--------</td>
<td>-----------------------</td>
<td>--------</td>
<td>-----------------------</td>
<td></td>
</tr>
<tr>
<td>Once</td>
<td>16,201</td>
<td>16,181</td>
<td>86.7</td>
<td>85.8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>16,201</td>
<td>16,181</td>
<td>75.1</td>
<td>73.7</td>
<td></td>
</tr>
<tr>
<td>Twice</td>
<td>2,125</td>
<td>2,312</td>
<td>11.4</td>
<td>12.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4,250</td>
<td>4,624</td>
<td>19.7</td>
<td>21.0</td>
<td></td>
</tr>
<tr>
<td>Three times</td>
<td>303</td>
<td>309</td>
<td>1.6</td>
<td>1.6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>909</td>
<td>927</td>
<td>4.2</td>
<td>4.2</td>
<td></td>
</tr>
<tr>
<td>Four or more times</td>
<td>49</td>
<td>57</td>
<td>.3</td>
<td>.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>203</td>
<td>240</td>
<td>1.0</td>
<td>1.1</td>
<td></td>
</tr>
</tbody>
</table>

TABLE 5

STATIONS AND TERMINATIONS GROUPED ACCORDING TO STATION VOLUME
TOTAL YEAR 1970 AND 1969 AS REPORTED BY SOME COMPANIES

<table>
<thead>
<tr>
<th>Where Station Volume Is:</th>
<th>Less than 100,000 gallons per year</th>
<th>100,000 to 200,000 gallons per year</th>
<th>More than 200,000 gallons per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970 Dealer stations active at end of calendar year</td>
<td>9,615</td>
<td>21,539</td>
<td>53,568</td>
</tr>
<tr>
<td>1969 Dealer stations active at end of calendar year</td>
<td>8,219</td>
<td>22,443</td>
<td>55,491</td>
</tr>
<tr>
<td>1970 Dealer terminations for all reasons during year</td>
<td>3,316</td>
<td>6,971</td>
<td>10,870</td>
</tr>
<tr>
<td>1969 Dealer terminations for all reasons during year</td>
<td>3,642</td>
<td>7,226</td>
<td>10,587</td>
</tr>
<tr>
<td>1970 Per cent terminations</td>
<td>34.5</td>
<td>32.4</td>
<td>20.3</td>
</tr>
<tr>
<td>1969 Per cent terminations</td>
<td>41.3</td>
<td>32.2</td>
<td>19.1</td>
</tr>
</tbody>
</table>

The data in Tables 3, 4 and 5, above emphasize the magnitude of the dealer turnover problem. The problem of obtaining and retaining qualified dealers in some areas of the country is so great that certain oil companies are trying to recruit dealers on a "franchise" basis and are promising a specified annual take-home pay ($17,000 in one instance) for operators.\textsuperscript{10} The question arises whether such a plan would work in Great Falls if deemed necessary. There are only two Kentucky Fried Chicken outlets, one Big Boy outlet, and one McDonald's outlet, but there are over one hundred gas outlets in Great Falls and one of the basic tenets of franchising is control of the number. What would a franchise be worth in an area where there are as many as fourteen other units identical to your own and over one hundred competitors in general? It is doubtful that the franchise concept would be effective and the probability is great that the program would simply become one of subsidies. While one major oil company (with a large share of that portion of the Great Falls gasoline market controlled by the major oil companies) stated that the dealer turnover is not a problem among its dealers, one of the other major oil companies has had four of its eleven stations change hands in the last year. The latter company has a relatively small share of the market. A strong dealer organization and

efforts on the part of the consignee were cited as factors contributing to low turnover of the one company while long hours and low profits were cited by the other company for its high turnover rate. The implication here was raised above, (Table 5). The more successful stations (as evidenced by market share or number of gallons pumped) enjoyed a lower rate of dealer turnover.

Dealer turnover is a key index of the position of the oil company in the market as well as a major problem of market efficiency. A company that has suffered in the market place need not only regain customer support but must also regain dealer support. More will be said concerning the local dealer and turnover in Chapter IV below.

Expectations

Five major oil companies were contacted and asked what their market expectations were for the next five years. The replies, excepting one company, were similar in that the companies expected continued growth at approximately the present rate of 2 to 4 per cent per year. They felt that profitability would remain about the same due to the extremely competitive nature of the industry. As mentioned above, the gasoline sales for Montana increased at about 3.7 per cent annually over the last five years and at about 6 per cent for Great Falls. Factors important to the expectations of the petroleum market in Great Falls are the potential growth of
the tourist industry, expansion of Federal programs and government spending, and the rate of expansion of self-serve and cut-rate gasoline operations. In forecasting a continuation of the present growth rate, one assumes that the major oil companies have taken the tourist market into consideration, and yet in considering forecasts, none of the major oil companies really mentioned what effect discount gas operations are expected to have on their market shares and future operations.

The current rate of national motor vehicle population increase is nearly 12,000 units per day. While Montana (due mainly to population and geographical factors) lags behind the nation in the percentage growth rates and a magnitude of various industry indicators, it still possesses an increasing petroleum market. Whether this market will be big enough to sustain its participants is in question. All oil companies expressed an affirmative opinion but only one was definitely optimistic.

**Plans for Future Operations**

Querying oil companies concerning their plans for future operations, yielded indecisive results. Two companies declined any comment due to the "sensitive nature" of what they considered proprietary information. The other respondents were very general.

Taking into consideration both the correspondence with the major oil companies and the interviews with the
local representatives, one may expect either a rather static number of conventional service stations or a downward trend in the number in Great Falls in the future. One company pointed out that the number of retail outlets will remain static for the near future and that new outlets will replace older ones as the industry "works out" the overbuilding of the last five years. The fact that overbuilding has taken place was mentioned in a number of the interviews with local dealers and will be discussed to some extent in Chapter IV.

No company expressed any specific plans when questioned about the transition away from the conventional service station concept in the future. Great Falls has only one diagnostic type of service station and that is associated with a Mobil station. Mr. Moore, the lessee, stated that it was his idea to turn toward this type of operation and that Mobil Oil did not encourage the move, although he did not say they discouraged it. The diagnostic center concept is growing in other parts of the country (mainly large metropolitan areas) but none of the major oil companies expressed any interest in developing the concept in Great Falls. American Oil, Humble, and Conoco have car-care centers in other locations but do not plan any here. The implication is that they do not feel that the Great Falls market warrants the $180,000 to $250,000 plus, which is generally required.\footnote{"What Marketers Are Learning From New Generation Car-Care Centers," \textit{National Petroleum News}, December, 1970, p. 52.}
center is intended to capitalize on the profitable TBA and service market rather than to rely on the gasoline market.

Discount operations or specialty operations are another area of development to which some major oil companies are turning. Conoco has outlets at Valu-Mart and at Otto-Shine and though not definite, it is probable that this type of operation will be expanded.\(^{12}\) In some parts of the nation, major oil companies are changing marginal stations into unbranded or off-branded gasoline stations.\(^{13}\) Phillips Petroleum has done this both nationally and in Great Falls. The station at the corner of Tenth Avenue South and Ninth Street is an example. This station, though owned by Phillips, carries the brand name of Nugget Gas. This latter approach to discount gasoline marketing appears to be more of an attempt to save a marginal or failing station rather than a switch in basic marketing policy. A marginal or failing station has demonstrated that it cannot survive in the market operating as a conventional service station. It is hoped by the major oil company that by stripping the station and cutting its overhead (featuring only gasoline), some profit can be made. These discount operations, where volume is stressed, have had a significant impact on the conventional service


station. Many dealers feel that they cannot compete for the gasoline business and as mentioned before, discount operations account for almost 50 per cent of the Great Falls market. Although the only majors to have entered the discount business in Great Falls are Conoco and to some extent Phillips, and although the others expressed no particular plans to do so here, the future may dictate a shift in marketing policy, based on the impact of discounts.

To the major oil company it is not a question of conventional service stations, car-service centers, self-serves, or convenience store tie-ins, but simply a retail service station "mix". That "mix" which will prove most profitable is what will evolve in future operations. The future will probably see a reduction in the number of conventional service stations and yet due to the services they provide and the desire on the part of a large portion of the public for these services, some conventional service stations could have a long life expectancy.
CHAPTER III

COMPETITION AND THE SERVICE STATION

Performance

The competitors of conventional service stations are represented in three main lines; gasoline competition, service competition and product competition. Circle K and Convenient Mart, Gasamat, SuperAmerica and Otto-Shine are examples of operations which specialize in high gasoline volume. Circle K and Convenient Mart are "quick-stop" grocery store-gasoline tie-in operations relatively new to the Great Falls area. Each store has two gasoline pumps which are self service. Gasamat is strictly a gasoline (self-serve) operation. SuperAmerica merchandises from lawn furniture in the summer to toboggans in the winter, along with gasoline. The merchandise sold is tied into the gasoline sales through the use of stamps which allow the buyer to purchase the merchandise at discount prices. Otto-Shine is a car wash gasoline tie-in. The car wash is free with a purchase of twelve gallons or more. Montgomery Wards and Valu-Mart are the primary competitors in automobile service. Valu-Mart is a discount shopping center featuring both a large automotive department and service department. Both Wards and Valu-Mart compete with the conventional
service station in automotive products and TBA as well as services. Osco and Skaggs, which are termed "discount drug stores", also compete in the parts and accessories market, featuring especially low prices on such items as oil, auto waxes, spark plugs and additives.

As was mentioned above, it is estimated that cut-rate stations now have half of the Great Falls gasoline market even though they comprise only about 25 per cent of the number of outlets. The average monthly sales for a conventional station was cited as being about 14,400 gallons but in less than a full year of operation, the four Circle K outlets have been averaging over 33,450 gallons per month each. The mean gallonage per month for Otto-Shine is over 100,000 gallons. SuperAmerica also pumps over 100,000 gallons per month. These high figures per outlet account for the high market share of the discounts. Growth in the past has been over 10 per cent per year for these outlets in Great Falls.

The service station is met with equally stiff competition in automotive products and accessories. The Valu-Mart auto department has averaged a 15 to 20 per cent growth rate over the last four years and expects this rate to continue.¹ Skaggs and Osco also have experienced a considerable

¹Danny Justice, Manager, Valu-Mart Automotive Department, July 16, 1971.
growth rate with Skaggs citing a total growth of 30 to 40 per cent in its automotive sales over the last two and a half years.\textsuperscript{2}

Valu-Mart included service business in the previously mentioned growth figures. Wards has experienced about a 13 per cent average growth rate over the past five years and this figure also includes both products and services.\textsuperscript{3}

\textbf{Prices - A Comparison}

Price comparisons for services and products at four establishments are shown in Tables 6 and 7. The establishments selected are by no means all-inclusive, but are intended to be representative of four different types of outlets of the automotive service and TBA industry. The four outlets do not include specialty establishments and thus a comparison of a greater number of services and products is possible.

Questions of quality of product, quality of service and warranty arise in comparing prices. It is beyond the scope of this paper to compare the outlets used in the price comparisons on these other basis. As far as possible, prices have been obtained for like services and products.

\textsuperscript{2}Ron Duffin, Store Manager, Holiday Village Skaggs, July 17, 1971.

\textsuperscript{3}Norm Smith, Manager, Wards Automotive Department, Great Falls, June 16, 1971.
# TABLE 6

A COMPARISON OF PRICES FOR TYPICAL SERVICES

<table>
<thead>
<tr>
<th>Service</th>
<th>Valu-Mart</th>
<th>Wards</th>
<th>Average Service Station&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Bison Motors (Ford)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lube-job and oil change</td>
<td>$ 2.50</td>
<td>$ 2.00</td>
<td>$ 3.00</td>
<td>$ 2.50</td>
</tr>
<tr>
<td>Tune-up</td>
<td>18.88*</td>
<td>18.50</td>
<td>18.00</td>
<td>28.50&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Install points, plugs, condenser</td>
<td>10.50</td>
<td>(c)</td>
<td>9.50</td>
<td>17.00&lt;sup&gt;d&lt;/sup&gt;</td>
</tr>
<tr>
<td>Brake-job</td>
<td>45.00*</td>
<td>30.00*</td>
<td>22.00 to 42.00</td>
<td>49.20**</td>
</tr>
<tr>
<td>Adjust valves</td>
<td>3.00 to 7.00</td>
<td>NA***</td>
<td>10.50</td>
<td>10.90</td>
</tr>
<tr>
<td>Balance wheels</td>
<td>1.95 ea</td>
<td>2.00 ea</td>
<td>2.50 ea</td>
<td>3.50 ea</td>
</tr>
<tr>
<td>Repack wheel bearings</td>
<td>3.50</td>
<td>4.00</td>
<td>5.00</td>
<td>5.50</td>
</tr>
<tr>
<td>Service call</td>
<td>NA***</td>
<td>NA***</td>
<td>3.00 min</td>
<td>8.00</td>
</tr>
<tr>
<td>Install muffler</td>
<td>4.50</td>
<td>4.00</td>
<td>7.00&lt;sup&gt;e&lt;/sup&gt;</td>
<td>7.00</td>
</tr>
<tr>
<td>Replace universal joints</td>
<td>7.50 ea</td>
<td>6.00</td>
<td>7.50 ea</td>
<td>11.00</td>
</tr>
<tr>
<td>Install shock absorbers</td>
<td>2.50 ea</td>
<td>2.25 ea</td>
<td>5.00 to 8.00&lt;sup&gt;e&lt;/sup&gt;</td>
<td>5.40</td>
</tr>
<tr>
<td>Focus lights</td>
<td>NA***</td>
<td>5.00</td>
<td>5.00</td>
<td>5.50</td>
</tr>
<tr>
<td>Alignment</td>
<td>8.80</td>
<td>10.50</td>
<td>13.00</td>
<td>10.95</td>
</tr>
<tr>
<td>Rotate tires</td>
<td>2.50 all</td>
<td>1.00 ea</td>
<td>2.00 all</td>
<td>.75 ea</td>
</tr>
</tbody>
</table>
TABLE 6—Continued

<table>
<thead>
<tr>
<th>Service</th>
<th>Valu-Mart</th>
<th>Wards</th>
<th>Average Service Station</th>
<th>Bison Motors (Ford)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flush cooling system</td>
<td>$ 7.50\textsuperscript{f}</td>
<td>$ 6.50</td>
<td>$ 6.00</td>
<td>$11.00</td>
</tr>
<tr>
<td>Repair tire</td>
<td>2.00</td>
<td>1.50</td>
<td>2.50</td>
<td>NA\textsuperscript{***}</td>
</tr>
<tr>
<td>Maintenance per hour</td>
<td>8.00</td>
<td>9.00</td>
<td>6.00</td>
<td>11.00</td>
</tr>
</tbody>
</table>

\*Including parts  
\**Excluding parts  
\***Service not available

\(\textsuperscript{a}\) Three different branded stations were contacted and the average of the prices quoted is listed except where a large price variance was noted.

\(\textsuperscript{b}\) Price includes rebuilding carburetor, excluding parts.

\(\textsuperscript{c}\) Wards refused to install points, plugs and condenser unless it is part of a complete tune-up.

\(\textsuperscript{d}\) Includes tune-up of electrical system.

\(\textsuperscript{e}\) Installation is generally free if merchandise is furnished by the station.

\(\textsuperscript{f}\) Price includes anti-freeze.
TABLE 7
A COMPARISON OF PRICES FOR TYPICAL PRODUCTS

<table>
<thead>
<tr>
<th>Product</th>
<th>Valu-Mart</th>
<th>Wards</th>
<th>Average Service Station</th>
<th>Bison Motors (Ford)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plugs, points and condenser</td>
<td>$8.60</td>
<td>$11.80</td>
<td>$15.80</td>
<td>$16.05</td>
</tr>
<tr>
<td>Oil (10W30)</td>
<td>.53</td>
<td>.60</td>
<td>.85</td>
<td>.75</td>
</tr>
<tr>
<td>STP or equivalent</td>
<td>.79</td>
<td>.79</td>
<td>1.65</td>
<td>NA*</td>
</tr>
<tr>
<td>Carburetor cleaner</td>
<td>1.28</td>
<td>1.39</td>
<td>1.35</td>
<td>2.05</td>
</tr>
<tr>
<td>Gasoline additive</td>
<td>.52</td>
<td>.69</td>
<td>.75</td>
<td>NA*</td>
</tr>
<tr>
<td>Windshield cleaner</td>
<td>.56</td>
<td>.99</td>
<td>.65</td>
<td>.65</td>
</tr>
<tr>
<td>Wiper blades (pair)</td>
<td>2.78</td>
<td>4.00</td>
<td>4.00</td>
<td>4.60</td>
</tr>
<tr>
<td>Anti-freeze</td>
<td>1.59</td>
<td>1.39</td>
<td>3.00</td>
<td>NA*</td>
</tr>
</tbody>
</table>

*NA is here used to mean not available.

For items where the type of car or engine was important, a 1970 Ford V-8 with a 390 cubic inch engine was used as the control standard.

See footnote (a) of Table 6.

Price is for a quart of solution or an approximately equivalent amount.

For wiper blades, the prices for rubber refills were used.
The large variance in prices which a consumer faces in supplying the needs of his car are shown in Tables 6 and 7. The service price differentials, for the most part, are based on the different charges per hour which one will observe, go from a low of $6.00 for a service station to a high of $11.00 at Bison Ford. Factors influencing the hourly rates are union strength, training and industry wage scales. A question which arises is why, though their hourly rates are the lowest, do service stations charge the second highest rates for particular jobs? Possible answers are higher relative overhead than Wards or Valu-Mart, and a higher margin on service business. The rates charged by Bison Ford show why service station dealers did not consider them competition. On the other hand, the low prices charged by Valu-Mart help to explain the fact that dealers felt they were unable to compete with such operations. Further analysis is provided in Chapter IV.

Service stations quoted prices for products as much as 200 per cent higher than the prices for similar products at either Wards or Valu-Mart. Bison Ford even sold oil at a cheaper price than the average service station.

There are two extreme pricing policies; high volume, low margin and low volume, high margin with many variations in between. Competitors of the conventional service station have successfully emphasized the volume approach to marketing. The fact that the latter sell on volume and charge
lower prices does not mean that as a practice they sell at only a fraction above cost. Margins for one discounter ranged from a low of 4 per cent on oil to a high of 45 per cent on tires while another operation, charging lower prices on most items than service stations, attempted to maintain a margin of approximately 40 per cent for the whole operation.

Service station customers have difficulty understanding why they are charged $.53 for a quart of Texaco oil at Skaggs and $.85 at a Texaco station. The service station operators explain that they install it free and inspect the car. However some customers may not need or want this "free" service.

The service station provides service, products, and gasoline. Market share data indicate that the conventional service station is losing its gasoline market position. Based on the price data shown in Tables 6 and 7, it is understandable why discounters have experienced growth in related products and services as well.

The opinion is sometimes expressed that discounters sell inferior merchandise, which may be true for some items, but certain products which are identical sell at drastically different prices.

Today, there is a trend toward economy. Due to the rising cost of goods and services, people are looking for

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the best prices and are willing to do many service-type functions which they previously paid to have done. Service stations which rely on selling services and products to the motorist must re-evaluate their pricing and marketing policies if they wish to maintain their market position.

**Anticipated Future Performance**

Unlike the oil companies, which generally were guarded in their optimism concerning the future market, the discounters were optimistic. Mr. Smith of Wards said that with the growing TBA after-market and the increased price consciousness of the buyer, their type of operation could not help but be optimistic. As was previously mentioned, Wards has averaged a 13 per cent growth rate over the last five years while Skaggs and Valu-Mart have done even better. Forecasts for growth rates at least as great as those of the past, were given.

One would have to say that the service station's competitors in both the discount gas and TBA areas are predicting and are prepared for increasing future business.

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5Norm Smith, Manager, Wards Automotive Department, Great Falls, June 16, 1971.
CHAPTER IV

THE LOCAL SERVICE STATION

Who Owns The Station

Most Great Falls service stations are owned by the oil company and leased to the dealer. This arrangement is characteristic of most parts of the nation and seems to prove most satisfactory to both parties although it may not always be profitable for the dealer. Automatically renewable, annual leases are general. Alternatives to this arrangement were found to be salaried manager operation, private ownership, and the double lease back. Phillips Petroleum operates two stations under the salaried manager plan, and the Holiday Texaco station is an example of the privately-owned station.

The advantages of the lessee operation are greater freedom for the dealer, greater profit potential, and the opportunity to be one's own boss. The disadvantages are a greater mortality risk in the smaller volume stations, less stability of income, lack of security such as a pension fund unless he provides his own, the chance of losing one's investment, and restraints of the lease.

The advantages and disadvantages of the lease operation are almost opposite for the manager plan. Unless the manager is on an incentive plan, he does not stand to gain
as much from a successful operation as the lessee. The manager is simply an employee and as such may lack the initiative, enthusiasm, and dedication demonstrated by the lessee. This is not a new problem but becomes much more evident in an operation such as a service station. Incentive plans are an effective means of increasing manager effectiveness. The smaller the level of operation, the greater are the factors suggesting a manager operation because his pay will be small but more secure.

On the basis of only a small sample, privately-owned station operators were found to be the most independent as to brand in that they could change whenever they wished. The lack of privately owned stations in Great Falls tended to give an indication of their limited success. Large jobbers own and operate profitable private stations in Eastern states but it is on a scale much larger than is being considered in Great Falls, both in number of stations and in volume per station.

Requirements to Open and Run a Station

In an article appearing in the February, 1969, Changing Times, entitled "Going into Business: Gas Stations," E. K. Williams & Company reported that net profit for their clients, including the dealer's salary, averaged $4,500 to $14,500 with top dealers making over $24,000 consistently. The higher figures sound impressive but the stations described by Williams and Company, (a business-management service exclusively for service station operators) are not representative of Great Falls. Williams and Company considers stations
pumping under 17,000 gallons as small and that describes most of the stations in Great Falls, where the average gallonage per month was only 14,399 in 1969.\(^1\) The ramifications of this are obvious when it is recalled that dealer turnover increases and the success ratio decreases in smaller stations. Keeping in mind that Williams data (Table 8) are for a 30,000 gallon per month station while the average Great Falls station pumps under 15,000, it can be seen in Table 8 what Williams and Company describes as the investment requirements of a new station.

### TABLE 8

**INVESTMENT REQUIREMENTS OF A NEW STATION**

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>gasoline (10,000 gals.)</td>
<td>$3,000</td>
</tr>
<tr>
<td>oil and transmission fluid (250 gals.)</td>
<td>350</td>
</tr>
<tr>
<td>gear oil and grease (400 lbs.)</td>
<td>80</td>
</tr>
<tr>
<td>tires and tubes (100)</td>
<td>2,300</td>
</tr>
<tr>
<td>batteries (25)</td>
<td>370</td>
</tr>
<tr>
<td>accessories</td>
<td>1,000</td>
</tr>
<tr>
<td>vending machine merchandise</td>
<td>200</td>
</tr>
<tr>
<td>tools and equipment (lubrication and tune-up equipment, tire changer, battery charger, jack, etc.)</td>
<td>3,500</td>
</tr>
<tr>
<td>Deposits and prepaid expenses</td>
<td></td>
</tr>
<tr>
<td>electricity, phone, water</td>
<td>200</td>
</tr>
<tr>
<td>heat</td>
<td>70</td>
</tr>
<tr>
<td>uniforms</td>
<td>100</td>
</tr>
<tr>
<td>Insurance</td>
<td>200</td>
</tr>
<tr>
<td>Escrow and counseling</td>
<td>125</td>
</tr>
<tr>
<td>Stamps and premiums</td>
<td>150</td>
</tr>
<tr>
<td>Supplies, permits, licenses, small tools, daily books, advertising</td>
<td>675</td>
</tr>
<tr>
<td>Cash requirements, including bank account</td>
<td>2,300</td>
</tr>
<tr>
<td><strong>Total investment required</strong></td>
<td><strong>$14,620</strong></td>
</tr>
</tbody>
</table>


---

If one is taking over an existing station, the cost figures may be lower. Most Great Falls dealers cited a figure of from $6,000 to $10,000 based on today's costs. Several made the point that when they started, they had insufficient working capital and that limitation was often the greatest stumbling block of the beginning station. Most said it was approximately sixty to ninety days before any profit was realized. A profit picture of a medium-sized station (25,000 to 40,000 gallons per month) in its third month of operation is shown in Table 9. It may be noted that items other than gasoline account for more than half of the total gross profit. The fact that a service station merchandises much more than gasoline is significant.

Since more than half of the gross profit comes from other than gasoline, great importance must be placed on the service end of the business. To have service one must have an adequate number of well-trained personnel. Based on the interviews with dealers which are described later in this chapter, it was found that conventional service stations employ from four to eight people with approximately two-thirds being part time. Most dealers cited the problem of not being able to obtain a sufficient number of qualified people. The inability to pay competitive wages appeared to be the main reason. The smaller the station the greater the problem became. Customers demand service, speed, and product knowledge when they drive into a station and unless these can be provided, the chances of the station's succeeding were found to be small.
TABLE 9

THE PROFIT PICTURE OF A MEDIUM SIZED STATION

<table>
<thead>
<tr>
<th>Item</th>
<th>Sales</th>
<th>Gross Profit</th>
<th>Percentage Gross Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>29,000 gallons of gasoline</td>
<td>$9,860</td>
<td>$1,895</td>
<td>19</td>
</tr>
<tr>
<td>Motor oil</td>
<td>491</td>
<td>216</td>
<td>45</td>
</tr>
<tr>
<td>Vending machine</td>
<td>181</td>
<td>54</td>
<td>30</td>
</tr>
<tr>
<td>Tires and Tubes</td>
<td>589</td>
<td>150</td>
<td>25</td>
</tr>
<tr>
<td>Batteries</td>
<td>99</td>
<td>29</td>
<td>30</td>
</tr>
<tr>
<td>Accessories and parts</td>
<td>1,182</td>
<td>510</td>
<td>43</td>
</tr>
<tr>
<td>Lubrications</td>
<td>141</td>
<td>141</td>
<td>100</td>
</tr>
<tr>
<td>Labor</td>
<td>904</td>
<td>904</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$13,447</strong></td>
<td><strong>$3,899</strong></td>
<td></td>
</tr>
</tbody>
</table>

Operating Expenses

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wages</td>
<td>$1,350</td>
</tr>
<tr>
<td>Payroll tax</td>
<td>59</td>
</tr>
<tr>
<td>Insurance, license and taxes</td>
<td>99</td>
</tr>
<tr>
<td>Depreciation</td>
<td>46</td>
</tr>
<tr>
<td>Supplies and tools</td>
<td>32</td>
</tr>
<tr>
<td>Stamps/premiums</td>
<td>260</td>
</tr>
<tr>
<td>Rent and utilities</td>
<td>560</td>
</tr>
<tr>
<td>Laundry - uniforms</td>
<td>38</td>
</tr>
<tr>
<td>Station car</td>
<td>32</td>
</tr>
<tr>
<td>Discount, refunds, shortages</td>
<td>27</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>187</td>
</tr>
<tr>
<td><strong>Total expenses</strong></td>
<td>$2,690</td>
</tr>
</tbody>
</table>

Net profit, including dealer's salary: $1,209
Net profit (percent): 9

Along with factors of service, speed and knowledge, the motorist wants convenience, which means being able to buy gasoline when he wants it. Dealers have found it necessary to stay open more hours of the week and thus the demands on the manager for long hours or in obtaining competent help are greater. In talking to dealers in Great Falls, it was found that most worked from sixty to ninety hours per week, with the average being about seventy. Not all of that time was spent at the station but a great deal of it was. Lack of adequate help was the primary contributing factor and the long hours were one of the primary complaints of the dealer. The aspect of hours is one which favors the manager operation, wherein he gets paid for the long hours.

Besides the investment, the ability to hire qualified personnel, and the willingness to put in long hours, the dealer must bring to the station expertise and management skill. The amount of record keeping required of a service station is much greater than that realized. Failure to keep adequate records and carrying too many accounts receivable are two of the primary causes of service station failure. Along with the record keeping requirement, the dealer must display not only the ability to sell his products but also the managerial skill to obtain greater performance from his employees. With the greater portion of station help being part time,

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there is a continual problem of lack of dedication and attention to doing a good job. Few things will turn away a potential customer as quickly as an employee who appears unkempt, disgruntled, or disinterested in his job or in the customer.

With over half of the gross profit coming from sales other than gasoline, it becomes apparent how important the marketing function of the dealer is. This function is all too often left to chance and the expectation that advertising on the part of the oil company will "turn" the sale. Oil companies today are taking an ever-increasing part in helping the dealer to succeed through both technical and managerial training programs. This will help but is not enough. Other possible solutions are discussed below in regard to employees and marketing.

The Manager and What He Thinks

The interviews involved eight stations of different product brands and service characteristics. The interview form is shown in Appendix A (pages 61 - 64). The dealers were encouraged to add their own comments as well as answer the questions. Characteristics used in deciding station selection were, (a) volume, (b) remodeled or unremodeled, (c) related enterprises such as truck or trailer rental, some specialty such as auto diagnosis, (d) qualified mechanic on duty, (e) whether leased, managed, or independent operation, and (f) the product brand.
Many interesting points came from the interviews with the dealers. Concerning the history of the dealers, none of them cited money as the reason for their leasing a station. The most prevalent reason was the desire to be their own boss. All but one of the dealers had had some experience in either the petroleum industry or automobile industry prior to leasing a station. Dealers worked hours ranging from a low of forty-eight to a high of ninety hours per week. The high number of hours worked, to a great extent, may explain why none of the dealers interviewed had jobs outside of the station. As mentioned above, the inability to obtain reliable help and the desire on the part of the major oil company for the station to stay open seven days a week were cited as the main reason for the long hours. The longest tenure as a dealer was twenty-five years.

The questions dealing with the current economic position of the stations also revealed some interesting points. Tenth Avenue South is purported to be the busiest street in the State. As was expected, sales volume increased the closer the station was to Tenth Avenue South. There was a considerable range in sales volume between stations on Tenth Avenue. Station size is not necessarily characteristic of volume since one rather small station reported pumping over 40,000 gallons during the summer peak, which was much higher

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3Robert A. Wells, Executive Vice-President, Great Falls Chamber of Commerce, May 6, 1971.
than most other stations of comparable size. An unexpected characteristic found along Tenth Avenue was the reliance on regular customers. Regular customers are important to any station because of the stability of sales generated. One dealer on Tenth Avenue reported that approximately half of his total volume came from regular customers. The station loyalty found on Tenth Avenue was unexpected due to the high amount of transient traffic on that particular street.

Gasoline was cited as the least profitable item and yet the most essential. Not only did gasoline bring people into the station, but it contributed more to gross than any other single item. In smaller stations gasoline often fails to cover total overhead, which means that the station must rely on "backroom" generated gross which would otherwise generally contribute a great deal to net profit. The factor of volume seems to be the great dividing line among the large, small, successful, and unsuccessful stations. It is often difficult to determine whether volume is a cause or an effect.

Most stations experience a volume increase during the months of June, July, and August. This characteristic is greater toward Tenth Avenue South and gives weight to the importance of tourism and summer vacation travel in the area.

Competition and the service station was an interesting question and one which led the dealers into the most discussion. Dealers did not feel they were really in competition with parts dealers and specialty outlets such as muffler and
shock absorber shops. They did express strong feelings concerning their competition with self-service and cut-rate stations as well as discount stores. Most felt that although they did not compete on price, the service and quality that they offered more than made up for the price difference. Most felt that this type of operation constituted unfair competition. The sale of brand name oil at a discount house for less than the service station pays for it is a real dilemma. The dealer cannot argue inferior quality and it is extremely difficult to recapture the business. Examples of items which are traditionally purchased at stations but are now rapidly gaining in sales at discount stores are oil, spark plugs, and such items as STP. The dealers feel that though the price is cheaper elsewhere, the extra service provided by the station in changing oil and lubricating a car compensates for the difference. None felt that they effectively competed with an operation such as Otto-Shine.

Most dealers felt that the number of stations should in some way be regulated and a few felt that the Circle K type of operation should be banned, not because of aggressive competition but primarily because of safety. Florida has very tight regulations concerning self-service gasoline operations and while Montana has minimal regulations, some consideration has been given to tightening gasoline dispensing requirements here.

To the station operators a growth rate of around 10 per cent was commonly considered essential for a service station to keep up with the economy, although with the growth of cut-rate operations and the relative decline in market share, assuming prices stay about the same, the 10 per cent figure will prove difficult to maintain. Most dealers did not seem overly optimistic about the future and yet only one expressed definite thoughts of getting out of the business. This was for other than economic reasons, however. The dealers acknowledged the thinning margins on gasoline but said that increasing volume and "backroom" revenues partly offset the relatively small profit on gasoline. They said that increasing emphasis on cutting costs was required while none said anything about taking steps to increase TBA and profitability in other lines.

The Service Station and the City of Great Falls

In investigating the economic future of the conventional service station, the relationship of the station and its operation to the community must be considered. The station itself (as it concerns physical appearance, esthetics and reputation) is one of the largest advertising signs the station possesses and the good or bad image which the station presents to the public can mean success or failure.

In 1970, the Building Inspector's Office of the City of Great Falls conducted a survey of the service stations
located within the city. The purpose of the study was to review the city's land use policy, physical development, and aesthetic standards of automobile service stations and to determine if city action was required to control the growth and quality of gasoline outlets. The following information was learned from that survey:

1. As of 1970 there were 106 stations and ten bulk plants within the corporate limits of the city.

2. At the time of the survey, eight stations or 7.5 per cent were closed.

3. Construction had been started or permits had been issued for six stations.

4. Great Falls has approximately one station for every 550 people.

5. A large percentage of the stations had one or more illegal signs on the premises.

6. Concerning general appearance and upkeep, 52 per cent of the total stations rated in the good to very good category while 48 per cent rated in the poor to fair category.

7. A general factor noted was that the newer stations had larger lot sizes than the older ones.

The survey proved several points: first, that there is a large number of service stations in Great Falls, many of which are below standards in general appearance; secondly, that the major oil companies are making an effort to upgrade their stations, both in efficiency and in appearance; and

finally, that the City of Great Falls exercises very little control over service stations.

Concerning the matter of appearance, it should be pointed out that customers, to a great extent, relate station appearance to the quality of product and the service they expect from that station. Coupling this with the fact that elimination of poor stations and the demolition of abandoned or outmoded stations can actually increase the sales of the existing stations, there are strong reasons for remodeling and/or elimination of marginal stations. For example, American Oil had seven stations in Pensacola, Florida. After remodeling five, destroying one, giving one away, and building two new ones, American Oil did nearly three times the business with the same number of stations. This procedure might be employed successfully in Great Falls. The major oil companies have been undertaking a remodeling program which is especially evident on Tenth Avenue South. The newly remodeled stations reported increases in sales of as much as 20 per cent after the remodeling. All of the major oil companies plan on continuing the general upgrading of their stations in the future.

Representatives of the City Building Inspector's Office believe in a policy of laissez-faire and except for


the proposed ordinance found in Appendix B\textsuperscript{8} have proposed little direct control over the dispensing of gasoline in the City of Great Falls. A business license and the meeting of certain fire requirements was found to be about all that was required to sell gasoline. Certain property requirements existed but were easy to satisfy. The proposed ordinance would have had the greatest impact on self-service type operations. It was primarily safety oriented and imposed nominal restraints. Regulation of self-service stations for safety in other states is growing and possibly should be looked into here.

The City of Great Falls has no definite plans for control of the physical number of stations. It was felt that the large number resulted from the rapid building over the past five to ten years, due to both the Minuteman program growth and because of certain economic policies on the part of the oil companies. It was further felt that the weaker stations would disappear without the intervention of the city and that economics would keep the number in check as effectively as the city could.\textsuperscript{9} It was not felt that abandoned stations were a problem of the city now nor would they be in

\textsuperscript{8}Appendix B is a proposed ordinance which was submitted to the Great Falls City Council but which was never acted upon. It should be noted that the term "service station" in the proposal was very broad and applied to any establishment dispensing gasoline.

\textsuperscript{9}Donald E. Swingley, Great Falls City Building Inspector's Office, June 1, 1971.
the future. The view was also expressed that the abandoned or below standard stations hurt the oil company more than they hurt the city.

**Local Service Stations and Their Future**

A definite quantitative answer as to the appropriate number of stations is beyond the scope of this investigation. No one interviewed expressed the desire to have the number of stations reduced. Many expressed the desire for some sort of limit but that was all. Great Falls is unusual in that it can support more stations than could most cities its size. The city has been described as a "mealtime" location and as was mentioned above, Tenth Avenue South is purported to be the busiest street in the state. The fact that Great Falls is so centrally located means that most people will stop here to eat and probably to fill their gas tank.

When asked about the proposed interstate by-passing the city, most dealers seemed unconcerned and felt it would not really be a problem. The advent of the self-service gas operation does pose a recognized problem to the service station. The feeling was expressed that in the long run, people would return to the conventional service station and yet, most dealers had strong feelings about self-service operations. It was estimated that cut-rate, self-serve, and other specialty operations now command about 50 per cent of the Great Falls gasoline market whereas these operations comprise less than 25 per cent of the outlets.
The number of stations closed at any one time was not serious and yet 8 per cent being closed cannot be overlooked. The number of dealer turnovers as discussed in Chapter II was considerable. It seemed that a reshuffling process was continually taking place and in Great Falls the process was considerably greater for some brands than others. Obviously the stronger the brand, the less are the problems of dealer turnover. The size of the station and probability of success relationship was alluded to above. Dealer shortage or turnover problems are also prevalent in other cities besides Great Falls. In some cities, as mentioned in Chapter II, oil companies are even trying the franchise method to obtain dealers.\textsuperscript{10} This would indicate that dealer turnover is not just a Great Falls problem but is an industry problem.

The Economic Trend

The market for petroleum products was described in Chapter II and expectations were presented. Some of the shortcomings of the conventional service station concerning marketing were also presented. The problems of Great Falls stations in marketing have been included in Chapter V under recommendations.

The sales ratios are shown in Table 10. The set of data on the left represent the minimum sales by product, per

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thousand gallons of gasoline, suggested by one oil company for a dealer to be successful. Those on the right represent the average sales ratios for all Great Falls service stations for the year 1969.\textsuperscript{11}

**TABLE 10**

**A COMPARISON OF SALES RATIOS**

<table>
<thead>
<tr>
<th>Minimum Suggested Sales Ratio</th>
<th>Average Great Falls Sales Ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil and ATF</td>
<td>$17.00</td>
</tr>
<tr>
<td>Tires and Tubes</td>
<td>25.00</td>
</tr>
<tr>
<td>Batteries</td>
<td>5.00</td>
</tr>
<tr>
<td>Accessories and Parts</td>
<td>38.00</td>
</tr>
<tr>
<td>Lubrication</td>
<td>5.00</td>
</tr>
<tr>
<td>Labor</td>
<td>30.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$120.00</strong></td>
</tr>
</tbody>
</table>

These data indicate a potentially profitable opportunity for Great Falls service stations. It should be remembered, though, that the Great Falls data are averages, and that the spread may be great. A few large stations on Tenth Avenue can counter balance a lot of marginal stations falling short of the suggested sales ratios. One infers from the data, though, that the average Great Falls station is "making it". One should keep in mind that the sales ratios fail to

take into consideration the costs faced by the dealer. The data obtained in dealer interviews seemed to coincide with that in the Table in that dealers did not complain about sales other than gasoline.

The more gasoline pumped, theoretically, the more volume and hence the more income there will be from non-gasoline items. Herein lies one of the main principles of the success of the station, based on size and volume. If the dealer could increase gasoline sales, income from the gasoline may not rise much but increased profits in other areas should be experienced.

There has been an increase in gasoline consumption resulting from a general increase in the number of miles driven per year. Combining this with the national increase of traveling and outdoor recreation and Great Falls' close proximity to both Glacier and Yellowstone National Parks, one would reasonably expect a favorable future for the petroleum industry in Montana and Great Falls. Service station sales represented 9 per cent of total retail sales in Montana during 1969. The total gasoline sales in 1969 represented 1,140 gallons per registered vehicle.\(^\text{12}\)

A number of station operators expressed the opinion that what appears to be a present problem for service stations will diminish as the excessive number of service

\(^{12}\)The Petroleum Industry in Montana, Rocky Mountain Oil and Gas Association, Montana Petroleum Association, 1969.
stations constructed in the last ten years shrinks and as the market and economy grow. The major oil companies acknowledged the stiff competition and the requirement for increased marketing efforts but appeared conservatively optimistic concerning the Great Falls market.
CHAPTER V

CONCLUSION

Summary

The market, performance, dealer turnover, expectations, and plans were discussed in Chapter II. It was found that although the overall market for petroleum products and TBA was strong, the Montana market is relatively weak, both in volume and in profit. In regard to performance, it was shown that conventional service stations were falling behind in share of the market, both in gasoline sales and in TBA sales. The decrease in TBA was especially important since these sales made up over 50 per cent of a station's gross profits. Dealer turnover was then analyzed because of its importance as an indicator of the economic future of a service station in the economy. It was pointed out that management at one station in four changes each year. Expectations were then reviewed and it was pointed out that most oil companies expressed guarded optimism concerning future operations. One company representative expressed definitely pessimistic views (the company had one of the smallest shares of the Great Falls market) while correspondence with another company was very optimistic. Plans for the future, generally speaking, were for a continuation of the present service station "mix"
with improvement or replacement of existing stations. No company representative expressed plans to increase the number of conventional service stations and one source, citing overbuilding during the last five years, felt that the number of stations might be decreased.

The competition facing service stations was reviewed in Chapter III. Competition in gasoline sales had grown to where non-conventional service stations or gasoline outlets had gained approximately 50 per cent of the local market. Past growth rates for both discount gas and product (TBA) outlets were observed to be much higher than for service stations. From price comparisons the differences in marketing policy, wherein discounters relied on volume and service stations relied on margin could be seen. In discussing future performance, the competitors expressed definitely optimistic views citing the market potential and past growth in TBA. A trend away from paying high prices for services and the demand for economy were mentioned in support of the competitors' forecasts.

It was pointed out in Chapter IV that the greatest portion of conventional service stations in Great Falls as in the rest of the nation, were run on a lease basis. Operating the station takes a great deal more than the motorist may realize, considering that the conventional station in Great Falls had approximately four to eight employees and did well over $100,000 in business per year. Emphasis was given to the need for accurate records, knowledge of product
and operation, effective management, and attention to fulfilling the needs of the motorist. Interviews with lessees revealed that long hours and the inability to obtain adequately qualified help at the wage the station was able to pay were the biggest problems encountered. Most dealers were pessimistic about the future and yet only one expressed any intention of quitting the business. All dealers had strong feelings about discount operations and especially the Circle K operation. In investigating the relationship of the service station to the City of Great Falls, it was determined that the city follows a policy of limited control. It was the opinion of the head of the Building Inspector's Office that a closed or abandoned station was more harmful to the oil company than to the surrounding neighborhood and thus would not be much of a problem because the company would probably not allow the condition to exist for long. The City of Great Falls has very few regulations controlling the dispensing of gasoline and many service station operators expressed the feeling that certain regulations should be enacted controlling self-service operations. In considering the future of Great Falls service stations the opinion was expressed that probably there were not too many stations in Great Falls. This was based on the fact that the dealers, though pessimistic, did not express any intentions of getting out of the business. It was also based on the assumption that service stations can at least maintain, if not improve their present share of the
market compared with non-conventional gasoline outlets. If the competitors continue to increase their share of the market (both gasoline and TBA) at the current rate, this opinion would obviously be incorrect.

Conclusions and Recommendations

The basic conclusions arising out of this study are that the conventional service stations of Great Falls are losing their market share to the competition. Also, unless some changes take place, the number of stations will be too great for the market and one will see a rising incidence of dealer turnover and closed and/or abandoned stations.

Today, as mentioned above, people are more price conscious and are willing to do more things which will save them money. These factors are working directly against the conventional service station concept. There will always be service stations as long as they provide the services the motorist wants, but the number could be greatly reduced from what it is now.

Changes in marketing could do much to aid the service station. The manager and his employees must be made aware of the importance of seeing to the motorist's total needs rather than just to his gasoline needs or periodic maintenance. All too often, a potential sale is missed because the worker was not interested enough in the car passing the pumps to notice the bad tire, the broken light, or the frayed fan belt. Awareness and the desire to grasp sales opportunities must be
increased if market share is to be retained or increased.

A second recommendation would be to change from a strictly low volume, high margin policy to a semi-high volume policy. Using oil as an example, a station operator could lower the price of his oil to be competitive with discounters and charge for the installation, which is now usually "free" with the purchase of the oil. For the oil change customers the total price would be approximately the same as before and the person who needs only a quart or two would have no reason to go to a discount outlet. Under present pricing policies, many people buy oil at a discount store and when the service station attendant informs them that they are low on oil, they go home and put in the oil themselves. The recommended change in pricing policy does not apply only to oil but to many other products as well. The service station provides a service but having the service station attendant put in a can of STP is not worth the extra $1.00 it costs. How many more tires and batteries would be sold at a service station if the operator were willing to make less per unit?

The major oil companies offer extensive technical, managerial and marketing training courses to dealers to better prepare them for serving the customers' automobile. There appeared to be a real lack of communication between the two, however. In interviews (except from one brand) it was noted that the station operators seldom made reference to their relationship to the oil company and appeared to themselves as a sole business entity. There was no talk of a dealer-oil
company association or organization. Most dealers went into the service station business for independence and yet very few could survive if it were not for the assistance, promotions and other services of the parent company. The station manager who refused to follow the marketing suggestions of the company cannot blame the company when people stop frequenting his station because of poor inventories, station upkeep, and customer relations. On the other hand, high dealer turnover, long hours and failure to realize investment potential on the part of the dealer are problems for which the company is partially responsible. Pricing policies, as well as others, though supposedly set at the station, are greatly influenced by the oil company. Certain changes on the part of the oil company such as quantity purchasing, payroll support for low profit hours, rent variations and product commissions could do much to reduce the dealer turnover problem as well as strengthening and upgrading the dealer organization. Many dealers complained at having to stay open seven days a week and were critical of the oil companies urging them to stay open more hours per day. The evening hours generate little profit and the hours from approximately 11:00 p.m. until about 6:00 a.m. generally generate no profit at all. It is suggested that the oil companies could subsidize the station on a sliding scale for the night hours that the station remained open. This recommendation could cost the oil company money but (staying open these hours helps the brand name more
than the individual station) it would improve dealer relations as well as helping to maintain the company position in the community through having the stations open more hours.

A last recommendation is that the dealer be aware of the economic and marketing changes taking place in the retailing operations in which he deals and that he alter his traditional approaches and styles to suit the new competitive environment. Too many dealers are carrying on their business as they have done for years and until something drastic takes place, will do so in the future. The oil companies must assume greater responsibility in helping the dealer to realize his potential. The dealer, as his part of the bargain, must do more to meet competition and to halt his shrinking share of the Great Falls market.

Recommendations for Further Research

Due to a rapidly changing makeup of the local market, it would be difficult, at best, to determine an optimum number of service stations for the Great Falls market. Establishing whether or not Great Falls does or does not have too many stations was beyond the scope of this paper. Research into the pricing policies of the petroleum industry of Montana is of greater importance and need. Prices, as described in Chapter II, have held at about the same level for a number of years. Research into the pricing policies should include
the cost of refining, transportation costs, marketing costs and taxes.

This investigation has dealt only slightly with the feelings, attitudes and motivations of the dealers. Further research into this particular area could contribute greatly to the effectiveness of training programs, to the reduction of dealer turnover problems and to increasing the effectiveness of dealers as sales representatives of the petroleum industry.

A final area of research which comes to mind concerns the environment in which we live. Little research has been carried out in the area of community or city planning and the service station. Research in this field of study is especially important as the need for urban planning and ecological development grows. Attempts to determine the best use of the land have been made but for the most part have been ineffective and shallow. Service stations cannot be overlooked in an evaluation of their place in the community because of the space they take up and the aesthetic factors which surround them.
APPENDIX A
GREAT FALLS SERVICE STATION INTERVIEW FORMAT

HISTORY

1. Name and location, also brand if affiliated. ________

2. Do you own the station? Yes No Lease it? Yes No Other? ____________

3. How long have you been at your present location? ___

4. How long have you been in the Service Station Business?

5. Did you work for someone else first or what prior experience did you have? __________________

6. Why did you go into this business?
   For the money? ________________________________
   To be your own boss? __________________________
   For other reasons? (Would you please describe.) ___

7. How many hours per week do you work at the station and on related activities?
   7 - 40 hours ____ 51 - 60 hours ____
   41 - 50 hours ____ 61 - 70 hours ____
   over 71 hours ____

8. How many employees do you have? ____ Full time ____
   Part time ____
9. Do you have employment or businesses other than the service station? Yes No If so, what? ____________

10. Is it your intention to remain in this business indefinitely? _________________________________

11. How has your income changed in the last few years with respect to the following categories?
   Gasoline sales _________________________________
   Oil and Lube Service _____________________________
   Maintenance _________________________________
   Tires, Batteries, Accessories __________________

12. Approximately how much did you have to invest when you started business? __________________

13. Did you buy or lease an existing station or start out new? ________________________________

CURRENT ECONOMIC POSITION

14. To what degree do you rely on discounts or subsidies from the distributor or others? __________

15. Approximately how much gasoline do you pump during the months other than June, July or August?
   Less than 10,000 gallons _____
   10,001 to 15,000 gallons _____
   15,001 to 20,000 gallons _____
   20,001 to 30,000 gallons _____
   30,001 to 50,000 gallons _____
   over 50,000 gallons _____

During the months of June, July and August, which category best describes your sales figures? ________
16. Of your sales, approximately what percentage comes from:
   Tires, batteries and accessories _______
   Oil and lube service _______
   Gasoline sales _______
   Maintenance _______
   Other _______

17. Does gasoline revenue cover overhead? _______

18. Which is the most profitable item overall sold at your station? _______ Least profitable? _______

19. If you could change your station right now, what changes would you make? ____________________________

20. What changes have you made recently and why? _______

21. What do you feel you can do to improve your earnings (expansion, advertising, etc.)? _______

22. To what extent do you feel you are able to compete with other service stations?
   To a great degree ______
   As well as most ______
   To a lesser degree ______

   With car washes and specialty stations?
   To a great degree ______
   As well as most ______
   To a lesser degree ______

23. To what degree do you feel that competition from specialty operations such as Gasamat, Otto-Shine, and SuperAmerica affects you? _______

24. Do you feel that you are competing with muffler shops, auto-parts dealers and similar businesses? Yes No
FUTURE EXPECTATIONS

25. What do you consider the business outlook to be for service stations in the next few years?
   Optimistic (Growth of around 10% per year) ______
   Hopeful (Growth of 5 to 9% per year) ______
   Uncertain (Growth of 0 to 4% per year) ______
   Pessimistic (Operating at a loss) ______

26. Do you feel your business will grow and if so, about how much? ______ In which particular areas?

27. What changes, if any, do you plan for the future in this business?
   In product line ________________________________
   In work force ________________________________
   In expansion ________________________________

   Do you plan any changes in the types of services you offer?  Yes  No

28. What changes would you like to see take place:
   Concerning major oil companies? __________________
   Concerning Great Falls? _________________________
   Concerning legislation? __________________________

   If you wish to answer any question at greater length, please feel free to continue the answer below.
APPENDIX B

GREAT FALLS SERVICE STATION PROPOSAL

THERE IS HEREBY ADOPTED FOR THE PROTECTION OF LIFE, LIMB, PROPERTY SAFETY AND WELFARE OF THE GENERAL PUBLIC THE HEREIN SET RULES AND REGULATIONS ON THE OPERATION OF GASOLINE AND DIESEL FUEL SERVICE STATIONS:

For the purpose of this Article the following definitions shall apply:

(a) Dispensing Pump:
Dispensing pump shall mean a pump or other device for dispensing gasoline or diesel fuel into containers or vehicles.

(b) Service Station:
A service station shall mean any establishment dispensing gasoline or diesel fuel.

(c) Attendant:
Shall mean the owner, operator, lessee or licensee of the service station involved, or, a person employed by and at said station.

LICENSE FEE:

It shall be unlawful for any person, firm or corporation to operate a service station who shall not have first obtained a license as hereinafter provided.

The Annual fee for such license shall be $_______ payable in advance.
BOND AND INSURANCE:

The applicant for a service station license shall file with the City a bond in the sum of $5,000.00 conditioned that he will in good faith perform all things required of him by the laws of the City. Said bond to be filed with the City Clerk and approved by the City Attorney and Governing body.

Prior to the issuance of said license the applicant shall also file with the City Clerk a general liability policy or a written certificate of the same, issued by an Insurance carrier authorized to do business in the State of Montana with bodily injury limits in the amount of $100,000.00 per person; $200,000.00 per accident and property damage in the amount of $50,000.00 per accident.

ATTENDANT REQUIRED:

(a) Every service station, as hereinafter defined, shall have at least one attendant, whose primary duty is to dispense gasoline and/or diesel fuel; on duty at all times during the operation of the service station.

(b) It shall be unlawful for any person other than an attendant who has reached his eighteenth birthday, to dispense gasoline at any service station except as hereinafter provided.

(c) A person who has reached his sixteenth birthday but has not reached his eighteenth birthday, may dispense gasoline as a service station attendant,
and the owner, lessor, operator or licensee of a service station may employ such person to dispense gasoline, provided that said person:

(1) Shall be supervised at all times by an attendant who has reached his eighteenth birthday.

The Council finds this Ordinance is necessary for the immediate preservation of the public health and public safety and determines that it shall take effect immediately upon its passage and publication.
LIST OF REFERENCES

CORRESPONDENCE


Lupul, W. M., Marketing Manager, Staff Department, Husky Oil Company. June 14, 1971.

McJoynt, T. J., Regional Vice President, Western Region, American Oil Company. June 3, 1971.


INTERVIEWS


Swingley, Donald E., Great Falls City Building Inspector's Office. June 1, 1971.

Wells, Robert A., Executive Secretary, Great Falls Chamber of Commerce. May 6, 1971.

NOTE: Eight service stations were used as the basis for Chapter IV. Their individual identities are to be kept in confidence at their request.
MISCELLANEOUS


PERIODICALS


PUBLICATIONS

