

THE IMPACT OF INDUSTRIAL DEVELOPMENT ON
RURAL SMALL TOWNS - THE NEED FOR AN
INTEGRATED PLANNING APPROACH: A CASE
STUDY OF WINKLER, MANITOBA

BY

BRIAN RICHARD BADGER

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the University of Manitoba in partial fulfillment of the requirements
of the degree of

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ABSTRACT

This Study details the impact of industrial development on the municipal fiscal, housing and land development sectors of Winkler between 1966 and 1976.

A brief location, historical, demographic, commercial and retail sector analyses is provided to aid in establishing a perspective on how industrial development did have an impact on Winkler and how it changed over the years.

Various fiscal cost revenue impact methods are discussed as to how they will be applied in this Study and what components and variables should be analyzed.

The impact of industrial development on the four major fiscal components (revenue, assessment, expenditures, taxation) is substantially detailed. Contrary to numerous similar studies it was found that industrial development had a positive net fiscal impact on Winkler. Certain performance criteria are identified as being helpful in establishing future planning and policy implications regarding the location of industry in rural small towns and their ability to fiscally accommodate industrial development and its spin-off community growth.

The impact of industrial development on the housing and land development sectors was appreciable in this Winkler Study. It was found that those impacts were manifested most in the price and supply of housing, and the emerging land development patterns of increases in rural residential building permits and an overbuilt residential lot supply.

Planning performance criteria relating to location of industrial development in small towns and the utility of this type of study are also discussed.

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CHAPTER I

The Impact of Industrial Development on Rural Small Towns:

The Need for an Integrated Planning Approach

A. INTRODUCTION

Since World War II and especially in recent years, industries have been seeking new plant locations in small rural towns and rural regions.

The decision of industries to locate in small rural towns has been predicated on several factors; the most important being cheaper land and labor costs and preferential tax advantages.¹

One of the concerns of the planner and town administrator that has arisen is with the impact of industrial development on small rural towns. An article by Summers (1976) entitled, "Small Towns Beware: Industry can be Costly" aptly sums up why the planner and town administrator should want to use various impact assessment techniques to determine whether an industry (either existing or proposed) is or will have a net positive or negative impact on a small town and its surrounding region.²

Summers (1976) analyzed a compendium of impact studies on more than 700 industrial plants in 245 communities in 34 states between 1945 and 1973. The general conclusions reached by Summers' analysis were that many of the industries brought unanticipated constraints on added revenue and that the costs to a town to accommodate the industry were under-estimated. Conversely, an anomaly arose when the naive mentality or "articles of faith" held by the general public, planners and town administrators has been that industry will bring economic relief to the

small rural towns that are faced with high unemployment rates, increasing property taxes, decreasing assessment bases and accelerating municipal service costs. Therefore, prudence and forethought should be used in the future by town administrators and planners if, instead of asking "How may we get industry to locate in our community?" they were to ask:

- . "Should we attempt to attract industry to our community",
- . "What will be the positive and negative impacts of industrial development on our community",
- . "Can our community handle or support industrial development"
- . "Will industrial development and its related growth overburden our local services".

To ensure prudence and forethought in future community development the town administrator and planner could use various impact assessment methods to be able to answer the above questions in a far more rigorous and detailed procedure than they have been able to in the past.

The issue that industrial development was not always a net fiscal benefit to a small town has been recognized by planners for numerous years. Yet only in the last several years have planners and administrators really attempted to systematically analyze this issue. Also, the "state of the art" of fiscal impact analysis has really only come into its own in the last several years whereby many of the impact assessment methods have been tried and proven.

B. PURPOSE OF THIS STUDY

Winkler is a small town in Southern Manitoba that was heavily promoting industrial development between 1968 and 1975. During that period numerous industries located in the Town. Associated with this industrial growth was the attraction of people to Winkler to live and work for these industries. The Town was rapidly changing from a small agricultural service centre function to one of a strong rural industrial centre. The Mayor and Town Council were beginning to perceive that a change not only in the Town's way of life was occurring but also in terms of the municipal fiscal sector and also the housing market and land development sectors. They realized that the industrial growth had meant new employment opportunities and other positive factors, but there also may be negative impacts associated with the industrial growth. As found in the study done by Summers (1976) industry can be a net fiscal cost to a town rather than a net fiscal gain.

As well, several studies found that industrial development had an impact on the housing and land development sectors of a town in terms of supply, demand, price, and availability. These findings were sometimes used as an aid in future policy formulation or planning matters.

The purpose of this Study is threefold:

- 1) To assess whether the industrial development that occurred in Winkler was a net fiscal gain or fiscal cost to the Town. This will be accomplished through using a cost revenue impact analysis approach.
- 2) To assess whether industrial development had an appreciable impact on the housing and land development sectors of Winkler.

- 3) To extrapolate from this Study clues that can be highlighted as being both useful in future studies of this kind, and as they relate to community development planning.

C. WHY WINKLER FOR THE STUDY AREA

Winkler was chosen as the Study area for two reasons:

- 1) Winkler was the fastest growing town in Manitoba between 1970 and 1975 because it had promoted industrialization during this period. The Mayor and Town Council wanted to know "what impact has industrial development had on the Town's municipal fiscal sector and also its housing and land development sectors". The Town made a request to the Manitoba Department of Industry and Commerce to see if they would study the Winkler experience.
- 2) The Manitoba Department of Industry and Commerce through its Regional Economic Planning and Policy Research Section (REPPR) felt that this would be a unique opportunity for a study of the impacts of industrial development on a small town. Even more encouraging was the fact that the Mayor and Town Council lent their support in providing information to us as well as supporting our study by requesting that local businessmen be cooperative with us.

From the REPPR point of view, the opportunity to do a study of this nature with both the political and Provincial Government's backing was quite unique; and a Study Team was formed.

D. HOW THE WINKLER INDUSTRIAL IMPACT STUDY EVOLVED

The Winkler Study Team consisted of 2 senior regional analysts, 1 regional analyst (the author - on contract) and a statistician and research assistant who were used when required. The Study Team approached this Study in the following manner:

- . definition of issues as determined through interviews with Town officials, government officials, using secondary data and findings and other methods. Numerous Team meetings were held at this time to establish what should be studied and gain an appreciation for the issue.
- . review existing literature on the issues and identify the various factors to be studied and the range of possible analytical methods that could be used.
- . fine-tuning the factors to be studied, data requirements and appropriate analytical methods to be used.
- . analysis and interpretation of data (data either primary or secondary in nature) and possible policy and planning implications.
- . presentation of Study findings to the Town of Winkler and also other Government departments.
- . further refinement of findings to be utilized in future policy implications and formulation.

E. ASSUMPTIONS AND LIMITATIONS

Associated with this type of Study are several assumptions or limitations that should be discussed and are as follows:

- 1) Numerous studies had to be reviewed to gain an appreciation for the issues and to find appropriate methods to be used.
- 2) There were numerous methods used in this Study. Much time was spent determining whether the method would work in terms of:
 - a) theoretical and practical applicability
 - b) data availability and "fit"
- 3) Frustration would arise when, for example, you worked through a formula and found your answer was not intelligible so the method and/or variables would either have to be reworked or not used.
- 4) Derivations required to a formula or method would have to be reviewed by the Study Team and economists to ensure validity and rigorousness to original intent of the method.
- 5) Most importantly, it should be stressed that the methods used were appropriate but it's not to say they were the most appropriate in every case.
- 6) Unfortunately there was no single text book that contained all these methods used in this Study. Therefore much time was spent on literature review. Since this Study was completed there have been several reference books written that do offer a compendium of methods. This would certainly help lessen the cost of such a study in the future.
- 7) As to the cost of doing such a Study, it would certainly be less in the future. The fact that the methodology and data base would be established would certainly lessen the cost. As well the very detailed analyses done in the Study would certainly not all be required in similar studies in the future. Experience gained by the Study Team would be useful in isolating those methods

which were useful and which ones were only of marginal utility.

It is this experience factor that can be very important to a planner in future if time was a constraint in a study (which it usually is in most government or private sector planning jobs).

- 8) Basically, there were several methods used in this Study to assess the impact of industrial development on Winkler. The important point is not how good the methods were, but how the results provided the Study Team with a unique perspective or understanding of the impacts of industrial development on the municipal fiscal sector and the housing and land development sectors in Winkler. The perspectives provided both the Study Team and Town officials with a basis for understanding not only what did happen as a result of industrial development, but clues as to what may happen in the future in Winkler.

This information is very valuable and it is a rare opportunity that the Study Team could spend the time (3 man years) and several thousand dollars (computer time, etc.) to study the Winkler situation. Also, the cooperation of the Town, industries and the Department of Industry and Commerce greatly aided in the completion and success of this Study.

F. THE THREE INDUSTRIES THAT HAD THE MOST SIGNIFICANT IMPACT ON THE TOWN OF WINKLER

During the 1966 - 1976 period numerous industries located in Winkler. Three firms had the greatest impact on the Town in terms of their size and labor requirements. In evaluating the impact that industrial development had on Winkler between 1966 and 1976 the three

largest industries in Winkler were used in the fiscal impact cost revenue analysis. A brief description of each industry follows:

Monarch Industries Ltd.

This firm is involved in the manufacture of heavy castings, industrial pumps and other associated heavy metal products. It was established in Winkler in the mid 1970's and had an initial work force of 125 people.

Triple E Ltd.

This firm manufactures recreation trailers and was established in the mid 1960's in Winkler and has enjoyed several expansions as a result of the great demands for its product. The firm employs approximately 225 people.

Kroeker Seeds Ltd.

This firm is agricultural based and processes agricultural products and is a distributor of agricultural products. It has been established for over 20 years in Winkler and has a work force (varying with the particular season) of approximately 180 people.

These three firms will be referred to as the "Study firms" throughout the text of this Study.

It was felt that these firms were representative of industrial development in Winkler for several reasons:

- . they are three different types of industry.
- . all three are labor intensive operations.

- . the combined labor force of these three firms constitutes 75 percent of the total industrial workforce in Winkler and 25 percent of the overall employment figure.
- . these three firms constitute the largest tax contributors to the municipal revenue by comparison to any other industry in Winkler.

G. THESIS ORGANIZATION

Chapter I deals with identifying the historical background to rural industrialization and how it has impacted on small towns. As well the purpose of this Study and its assumptions and limitations are also discussed.

Chapter II highlights the demographic and socio-economic factors and changes in the retail commercial and industrial sectors of the Town. It also points out how the role of Winkler as an agricultural service centre was surpassed by its new industrial development focus that it assumed between 1968 and 1975.

Chapter III deals with the purpose of fiscal impact studies, the various methods used, the major components to be analyzed in such a Study and their assumptions.

Chapter IV is the detailed analysis of the various components (taxation, revenue, expenditure and assessment), and highlights specific fiscal impacts of industrial growth in Winkler.

Chapter V deals with the impact of industrial development on the housing and land development sectors in Winkler, specifically housing supply, demand, market value, availability and important development patterns in the Town and region.

Chapter VI highlights numerous policy implications that have arisen as a result of the finding in Chapters IV and V in terms of the Winkler situation.

Chapter VII discusses the utility of this type of Study as applied in a general sense.

Chapter VIII discusses how the purpose of the Study was fulfilled as well as offering some personal views on the utility of the Winkler Study.

Chapter I - Footnotes

1. G.F. Summers, et al, Industrial Invasion of Non-Metropolitan America - A Quarter Century of Experience (New York, 1976), pp. 1-2.
2. G.F. Summers, "Small Towns Beware: Industry Can Be Costly" in American Society of Planning Officials, May 1976, pp. 20-21.

CHAPTER II

A Community Profile of Winkler

A brief location, historical, demographic and commercial sector analyses of Winkler is essential in acquiring an understanding of the Town itself and will aid in establishing a perspective on how industrial development did have an impact on Winkler.

A. LOCATION

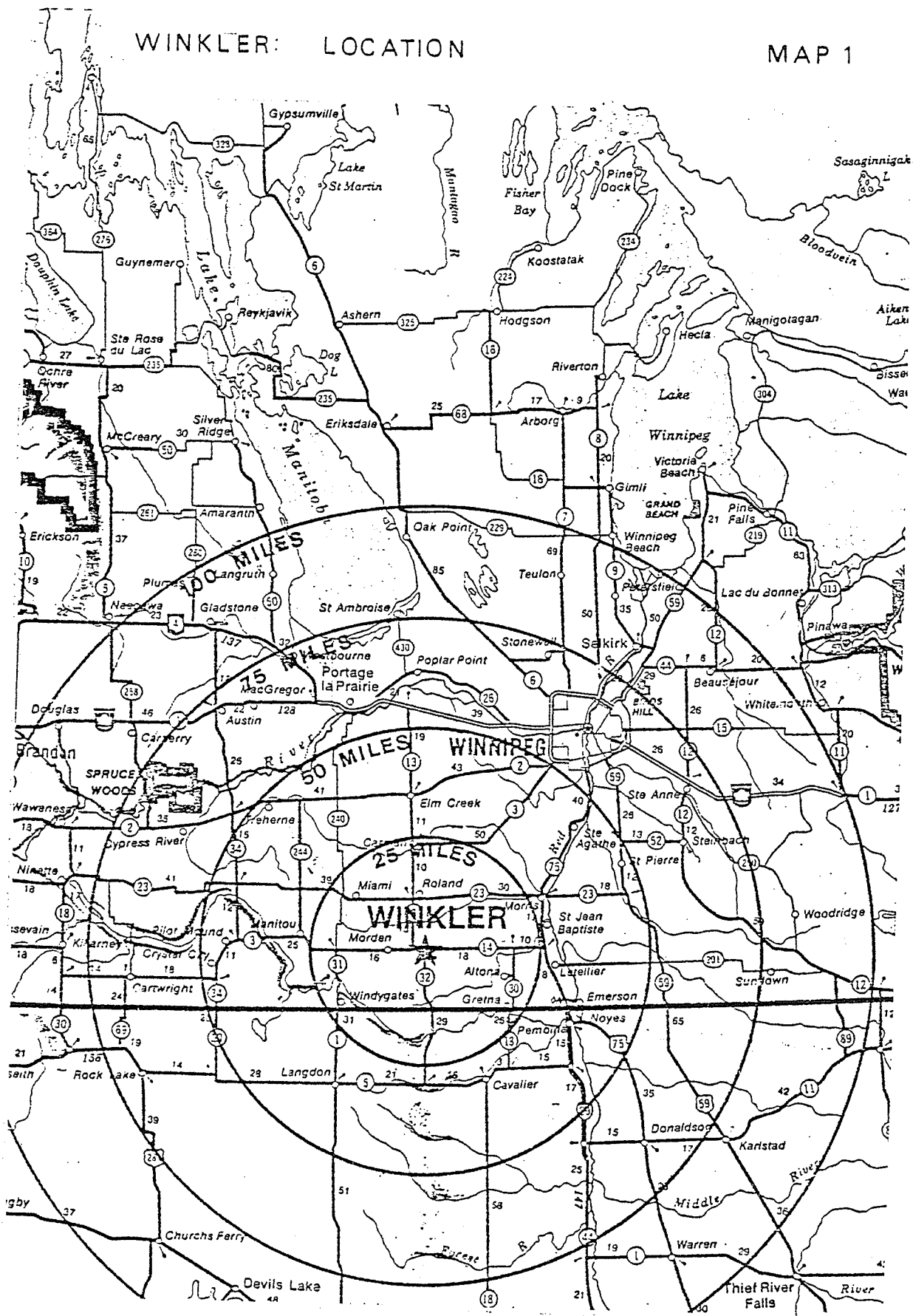
Winkler is a town of 4,400 people located approximately 70 miles southwest of Winnipeg, Manitoba (Map 1).¹ Winkler is located in an area commonly referred to as the Pembina Valley Region, which has some of the better agricultural land in Manitoba due to excellent climatic and soil conditions.

Winkler is connected to Winnipeg via two major traffic arteries, P.T.H. No's 14 and 75 and P.T.H. No's 14 and 3; and P.T.H. No. 32 connects Winkler to the Canada - United States border to the south.

The distance between Winkler and Winnipeg (70 miles) precludes any great degree of economic dependence by Winkler on Winnipeg. The major urban competitor of Winkler in the Pembina Valley Region is Morden, a town of about the same population located 7 miles directly west of Winkler. Although Winkler lagged behind Morden for many years in terms of services, Winkler now is virtually equal to Morden in these terms now. Morden's advantage in the past was due largely to the fact that several provincial and federal agency offices were located there. At present both towns are vibrant, growing communities; with Winkler

WINKLER: LOCATION

MAP 1



catching up in the last few years since "it has experienced a surge in its industrial sector which has attracted previously unavailable services, such as, for example, the legal profession".²

B. HISTORICAL BACKGROUND

The historical development of Winkler is associated with the history of the Mennonite movement in Manitoba. The first Mennonites came to southern Manitoba in 1876. The Mennonites, because of their experience on the Russian Steppes, were master farmers and as such recognized the potential of the land in southern Manitoba for farming. A Federal Order-in-Council established the West "Reserve", a tract of land on which these people soon developed a village system according to the European "Straszendorfer" pattern. The village concept as a particular form in the rural residential system has played a significant role among the Mennonite people in southern Manitoba.

A railway siding was established by the C.P.R. in Winkler in 1892 and a village site was laid out on Section 4-3-4 W.4.M. based on the western grid system. Winkler established itself as a service and rail node and grew slowly until 1906, when it was incorporated as the Village of Winkler. During the 1920's Winkler's function was one of being a distribution centre for European immigrants into the rural agricultural system of southern Manitoba. Winkler acted unofficially as the "capital" of the West Reserve during the 1920's. Over the next 30 years Winkler grew slowly with a change in status to the Town of Winkler in 1954.³

C. DEMOGRAPHIC ANALYSIS

The population of Winkler is estimated at 4,400 people (June 1, 1977) by the Manitoba Health Services Commission, probably an optimistic figure by 200 people.

Table 1 illustrates the population change and rate of growth for Winkler as compared to five Pembina Valley market centres, and also the remaining 12 market centres as a group for the period 1951 - 1976 period (see Appendix I for all Tables).

The Federal Census data illustrates that market centres experienced an average population growth of 57.6 percent over the 1951 - 1976 period. The Pembina Valley market centres experienced a population growth rate almost double that of the remaining market centres. The Pembina Valley centre's average growth was 1,538 (1951) to 2,792 (1976) or an 81.5 percent increase. In comparison the other market centres grew from an average of 1,439 (1951) to 2,115 (1976) or a 47.0 percent increase. Winkler experienced a 181.7 percent growth rate over this period that far surpasses all other market centres by a wide margin. Morden's growth rate, in comparison over this period, was 108.7 percent.

Winkler's growth since 1951 (Table 1) has not been uniform as shown by both slow growth and fast growth stages. Prior to 1951 population growth was minimal with very little change over the years. Between 1951 and 1956 there was an increase of 300 people and between 1956 and 1961 an increase of 900 people was experienced, due partly to annexation of land on the southern boundary of Winkler. The 1961 - 1966 period showed a minimal population increase of 40 people followed by an increase of 400 in the 1966 - 1971 period.

The 1971 - 1976 period had the largest population increase of 766 (Federal Census) or 1,307 (M.H.S.C. Statistics), as shown in Table 2, which compares Winkler's growth rate to the other market centres.

The spectacular population growth of Winkler during the 1971 - 1976 period can largely be attributed to industrial development and its spin-off growth in the tertiary sector. The increased employment opportunities as a result of industrial development had drawn people to Winkler over this period. The average annual population growth rate for Winkler during this period is 7.4 percent with a cumulative growth rate for the period of 37.0 percent (Table 3). The growth rate was moderate between 1971 - 1973, but the 1973 - 1974 interval realized a sharp rise of 632 people, or an 18.0 percent increase. Moderate growth rates were experienced between 1974 and 1976.

Up until 1974 Winkler had always been smaller than Morden; the exceptional growth rate of 1973 - 1974 resulted in Winkler surpassing Morden in population size.

Population Change by Age Group

Table 4 illustrates that the population of Winkler and Morden underwent a general aging trend between 1961 and 1971. Both communities experienced declining proportions of their population falling in the 0-14 age category. At the same time, in the proportion of the population in the 65 plus age category, Winkler exhibited a decline of 4 percent in the 1951 - 1961 period, however in the 1961 - 1971 period the proportion of the population in this age group rose by 1.5 percent. Morden exhibited a steady decline in the working age category of 3.3 percent overall in the 1951 to 1966 period followed by 2.2 percent

increase in the 1966 - 1971 period. The sharp rise in the median age may be largely attributed to a dramatic decline in the birth rate in the 1966 - 1971 period.

The M.H.S.C. age specific population statistics (Table 5) shows the change in population by year for the 1971 - 1976 period for both Winkler and Morden. Both towns showed increases in all three age groups, especially in the working age group (15-64). The working age group accounted for 56 percent (730) of the total population increases, with the 0-14 age group accounting for another 16 percent of the total increase of 1,307 people. In comparison, Morden had 66 percent of the population increase attributable to increases in the working age category, with a 25 percent increase in the 0-14 category. Table 6 shows the age specific breakdown by the five year intervals.

Net Migration

Net in-migration was an important factor in the growth of southern Manitoba towns in the 1951 - 1971 period, accounting for 33.0 percent of the total population growth for this period.

Table 7 and 8 provide net migration estimates for the southern Manitoba market centres. The net migration figures show a continuation of a fairly strong inflow of retirement age persons, but is clearly a secondary factor as compared to the youth dominated net migration trends.

Winkler had a total net in-migration of 1,095 persons representing over 66 percent of its total population increase of 1,642 persons. Morden's net in-migration of 778 persons was 55 percent of the total population increase of 1,404 persons over the same period.

Table 9 illustrates the heavy net in-migration that both Winkler and Morden experienced in the 1971 - 1976 period. Winkler experienced a net in-migration of 1,198 persons or 92 percent of the total population increase during this period, while Morden experienced a net in-migration that accounted for 94 percent of its total population increase.

The heaviest in-migration occurred in the younger age categories (0-14) and the younger half of the working age category (15-34).

The heavy in-migration of young persons can largely be attributed to the employment opportunities that became available as Winkler experienced strong growth in its industrial and tertiary sectors of the local economy.

Population in the Municipalities Surrounding Winkler and Morden

A population analysis of villages, towns and municipalities in the Winkler area reflect in part the increasing influence of Winkler as a town in a distinct region.

Table 10 illustrates the population changes for the three rural municipalities of Stanley, Rhineland and Roland for the period 1961 - 1976.

The analysis indicates that a rapid rate of population loss occurred in the region surrounding Winkler in the 1961 - 1976 period with a marked slowing of population decline in the 1971 - 1976 period. The R.M. of Stanley actually experienced an increase of 6 percent in this 5 year period.

The 1961 - 1976 population loss in the region is largely attributed to the rapid decline in farm population, while non-farm population increased significantly over the same period. This is supported by the

increasing employment opportunities in the industrial sector in Winkler during this period. In 1971, over 33 percent of Stanley's employed labor force were working in either Winkler or Morden, while similarly significant portions of the labor force in the Rhineland R.M. and Roland R.M. were employed in Winkler or Morden. The population increase that occurred in the R.M. of Stanley in the 1971 - 1976 period and the slow down of the population loss in the R.M.'s of Rhineland and Roland paralleled the rapid growth in population and employment opportunities in the industrial sector in Winkler, and to a lesser degree in Morden.

Ethnic Composition

The overwhelming portion (over 90 percent) of Winkler's population is Mennonite, as is the population in the region surrounding Winkler. The uniformity of the ethnic composition is an important factor in the social composition of Winkler.⁴

Population Projections - Winkler

Population projections are an important factor in the planning of future urban growth and resulting land development requirements. In the past, population projections for small towns have been tenuous exercises at best. Attempts to realistically predict what may happen in a small regional system have largely been futile. Winkler is an excellent example, as a few years ago it was considered a no-growth centre with a stable population. To predict how the rapid industrial development that occurred in the late 1960's to mid 1970's would affect population growth at a point in the early 1960's would have been futile. The dramatic

change in the local economy as a result of industrialization had dramatic impacts on the population increase in Winkler.

Using the M.H.S.C. statistics of 3,600 (1975) people, Winkler's growth rate has averaged 4.8 percent per year over the 1971 - 1975 period.⁵ Using these figures, the 1981 projected population is 4,800 people, with a possible annexation adding 350 people. The 1981 population will be 4,800 to 5,100 people and resulting planning decisions as to land development requirements, and water and sewer requirements should be based on this population base level.

D. WINKLER'S FUNCTION AS AN URBAN CENTRE

In the last decade Winkler has experienced a significant change in the composition of its economy. During the 1950's and early 1960's, Winkler's role was similar to most other small prairie towns in that it functioned as a service centre providing tertiary services to its residents and the surrounding area that engaged in primary agricultural production. Since the mid 1960's the secondary (industrial, commercial) sector of Winkler's economy has assumed an every increasingly more important role in Winkler's economy.

The Regional Analysis Program of the Manitoba Department of Industry and Commerce rates Winkler as a market centre with a region trading area population of 10,000, encompassing approximately 338 square miles.⁶

The Change in Commercial and Service Sector, (1968 - 1976)

Winkler's role as a commercial and business centre has strong competition from such towns as Morden, Carman and Altona.

The following changes have been documented in the commercial and business sector in Winkler since 1968:

- 1) Change in the number of commercial, business and professional service establishments.
- 2) Change in the value of retail sales.
- 3) Change in the number and value of commercial building permits.
- 4) Change in the value of commercial assessment.

The trade and service sector of Winkler increased dramatically from 1968 to 1976, from 86 to 144 establishments, representing a 67.4 percent increase (Table 11). The greatest change occurred in the 1971 - 1972 period, with a 26.3 percent increase in the number of commercial establishments. The commercial group which accounted for the greatest increase in number was the "food and beverage" establishments which increased from 6 to 16 in number (166.7 percent increase), followed by the "professional service" group which increased in number from 7 to 18 (157.1 percent increase) and the "furniture, appliances, and radio" group which increased in number from 5 to 10 (100.0 percent increase). The greatest increase in number of establishments in absolute terms was the "other groups" classification, increasing by 16 outlets but represents only a 53.3 percent increase on a percentage basis.

Table 12 illustrates that on an individual outlet basis, the number of "eating places" (2 to 7) and the number of "grocery stores" (2 to 6) account for the greatest number of increase in the "food and beverage" group. In the "professional group" the number of accountants increased the most, from 1 to 4. Table 12 graphically depicts the amount of change in the number of commercial businesses and professional service

establishments between 1968 and 1976. The greatest change occurs in the 1971 - 1972 period.

The growth in the number of commercial business and professional service establishments in Winkler is associated with the healthy population growth rate during the 1968 to 1976 period.⁷

The Change in the Value of Retail Sales (1968 - 1975)

The value of retail sales in Winkler (Table 13) rose from \$5 million (1968) to \$24.98 million (1975). Between 1969 and 1970 the value of retail sales declined slightly. Between 1971 and 1972 the value of retail sales rose precipitously from \$4.22 million to \$17.50 million, a 314.7 percent increase. The growth in the value of retail sales can largely be attributed to the population growth in Winkler itself over the 1968 - 1975 time period.⁸

The Change in the Number of and Value of the Commercial Building Permits (1968 - 1975)

Table 14 indicates the number and value of commercial building permits issued for Winkler between 1968 and 1975. Over the years, the number and value of the permits fluctuated up and down. In 1974 the largest number of permits (30) were issued for new construction and renovations. Between 1973 and 1974 the number of permits nearly doubled, with the value of the permits more than quadrupling from \$87,000 to \$1,665,000. Again, the increase in the number and value of commercial building permits is associated with the increased demand from

the annual increase in population in Winkler during the 1968 to 1975 time period.⁹

The Change in the Value of Commercial Assessment (1973 - 1976)

Previous to 1973, the building assessment values were not divided into separate commercial and industrial components, but were aggregated. From 1973 to 1976 the commercial and industrial assessments were disaggregated. Table 15 illustrates that the greatest increase (18.6 percent) in commercial building assessment occurred between 1973 and 1974, and increased in 42.3 percent between 1973 and 1976.¹⁰

E. SUBJECTIVE ASSESSMENT OF THE CHANGE IN WINKLER'S URBAN FUNCTION

The rapid growth of the Town of Winkler in the 1966 - 1976 period was due mainly to the employment opportunities arising from the expansion in the commercial and industrial sectors as well as the migration of retired people from the rural areas to Winkler. Prior to 1966 Winkler was similar to most prairie towns in that it was basically a service centre offering tertiary services to a trading area engaged primarily in agricultural production.

While the numerous changes in Winkler's population and economy have been discussed earlier it is useful to subjectively depict these changes in terms of their significance. In this manner a broader perspective is gained by portraying a composite of the variables used to show the changes in the population and economy. This will aid in showing which factors were significant in the change in Winkler's urban function between the 1950's and 1970's.

A "Subjective Assessment of Change Matrix" is shown on the following page. The variables are subjectively rated as to whether there was little or none, some or a significant change to them over time. This matrix will aid in showing the interrelationship between the variables and how they have changed over time.

Subjective Assessment Change Matrix

Variable	Magnitude of Change		
	None/Little	Some	Significant
1. Winkler Population Change			
Prior to 1951	X		
1951 - 1956	X		
1956 - 1961		X	
1961 - 1966	X		
1966 - 1971		X	
1971 - 1976			X
2. Population Change by Age Group			
(0-14) 1951 - 1961	X		
1961 - 1966		X	
1971 - 1976			X
(15-64) 1951 - 1961			X
1961 - 1966	X		
1971 - 1976	X		
(65 +) 1951 - 1961			X
1961 - 1966			X
1971 - 1976	X		
3. Net Migration			
1951 - 1956	X		
1956 - 1961			X
1961 - 1966		X	
1966 - 1971		X	
1971 - 1976			X
4. Change in Number of Commercial Business and Professional Establishments			
1968 - 1971		X	
1971 - 1976			X
5. Change in Value of Retail Sales			
1966 - 1971		X	
1971 - 1976			X
6. Change in Value of Commercial Building Permits			
1966 - 1971		X	
1971 - 1975			X

F. SUMMARY

The matrix has graphically depicted the interrelationships between expansion of the industrial and commercial growth, and its spin-off population growth. Related to the population growth is the growth in the value of the retail sales, commercial building permits and number of business establishments in Winkler.

In the 1950's and early 1960's Winkler functioned basically as an agricultural service centre. Beginning with the industrial development in the mid 1960's, Winkler's urban function was dynamically changing with the spin-off population growth and their needs for more goods, services and business establishments. Winkler's agricultural service centre function was changed to a rural small town industrial growth centre providing more urban-oriented goods and services. There was a healthy and buoyant business climate associated with this change in urban function and it was apparent through to the mid 1970's.

Chapter II - Footnotes

1. Manitoba Health Services Commission - Winkler Population, 1977.
2. Municipal Planning Branch, Winkler Development Plan, Part 1, Research - Surveys and Analyses (Winnipeg, 1976), p. 3.
3. Ibid., pp. 7-8.
4. Ibid., p. 26.
5. Manitoba Health Services Commission, 1975 statistics, op. cit.
6. Manitoba Department of Industry and Commerce, Manitoba Community Reports for Winkler, 1968 - 1976.
7. Ibid., 1968 - 1976.
8. Trade and Commerce Magazine, 1968 - 1976.
9. Town of Winkler Building Permits, 1968 - 1975.
10. Ibid., 1973 - 1976.

CHAPTER III

A Review of the Major Fiscal Impact Studies and Methods

A. HISTORY

Fiscal impact analyses (synonymous with cost revenue analyses) have been used by planners for over forty years as outlined by the classic literature review done by Mace (1961).¹ The fiscal impact evaluation was first used in the 1930's public housing efforts to rationalize the replacement of deteriorated housing due to negative local fiscal effects. In the early 1940's fiscal impact analysis was used to evaluate the local fiscal benefits of the new land use as compared to the old land use in the urban renewal process. Fiscal impact analysis in the 1950's was used to determine the impact of the single family home on local school districts during the massive suburbanization movement. Fiscal impact analysis was used in the 1960's to evaluate the economic effects of the master plan. As well during the 1960's the movement towards fiscal stability in declining areas was manifested in the annexation of peripheral growing areas to the declining areas. Fiscal impact analysis was used in these annexation proposals to evaluate the cost versus revenue associated with specific annexation proposals. In the 1970's fiscal impact analysis was used mainly in the form of determining the impact of large scale developments on alternative land use plans.²

Six major fiscal impact methods were derived during the 1930 - 1970's period to analyze cost revenue impacts. Basically straight forward and simple in nature, these methods do not represent rigorous

forecasting techniques but rather they represent ad hoc analysis techniques for estimating cost revenue impacts of developments, either existing or proposed.³

B. PURPOSE

The purpose of fiscal impact analysis is to determine whether existing or proposed developments have or will generate sufficient taxes to be able to pay for the additional municipal services they require to operate. A major concern of local governments today is that some land uses may have adverse fiscal impacts on the local government fiscal structure. This concern is reflected in the growing interest in the use of fiscal impact analysis to measure and evaluate the impact of land development projects on local government finances. More than ever, both small and large cities are undertaking fiscal impact studies in assessing various alternative future community development schemes and attendant policy options that they have to evaluate, prioritize and eventually choose the alternative most suited to their individual community.

The major objective of a fiscal impact study may vary according to the specific organization sponsoring the study. The different sponsors can be grouped into several major categories, such as the development industry, anti-development groups, non-profit groups and also the public sector. The public sector is defined as local, regional, provincial and federal governments.

The development industry usually sponsors fiscal impact studies to present to a government body in order to gain approval for a proposed development. More often than not, the development study is initiated in

response to community objections to the development proposed by that specific developer. Community objections may centre around the issue of possible tax burdens that may be inflicted by a proposed development.

Anti-development groups may use the fiscal impact study to establish that a development may have a negative fiscal impact on their community and use this information in their attempt to defeat the development proposal.

Non-profit entities such as universities are generally concerned with advancing the state of the art by improving methods, conducting studies for community groups and possibly venture into fiscal policy implications based on their studies.

The different levels of government representing the public sector use the fiscal impact analysis in various ways. For example, regional governments are usually interested in economies and diseconomies of scale associated with amalgamation of local/regional services, intra-regional fiscal flows, differential impact of growth on the fiscal sector among communities in the region and the most cost-effective location of new development within the region.

Fiscal impact studies are generally used for two major purposes by a federal government; first, to provide information and evaluation on the fiscal impact of certain federal assistance programs involving housing or community economic development; and second, to develop and refine general methods and techniques to be presented as guidelines to local governments which usually do not have the manpower or monetary resources to sponsor this type of work.

Local governments use the fiscal impact study to determine the impact of existing or proposed development on the welfare of their

community. In addition local governments, usually through the planning or zoning boards, have to frequently assess the results of privately sponsored fiscal impact studies submitted to the local government. As a result the planning board will have to respond to specific development proposals, and will use the fiscal impact study as one of the methods to evaluate a development proposal.

Planners and administrators of a community often carry out impact analysis on individual developments or will hire consultants to study the impact of community growth on the fiscal sector of the community. The planner must consider both the short term fiscal implications of specific land developments, and also the long term implications of community growth as they impact on the community development goals in the future.⁴

The focus of most fiscal impact studies to date has been on the primary fiscal impact of new developments. The secondary impact of new development on the fiscal structure usually has not been included in the fiscal impact studies to date. Certainly from a community development perspective, the secondary impact of new development and its fiscal implications should be a required section of a planning fiscal impact study. Secondary developments include the following:

- . "increased demand for housing and services as a result of industrial development.
- . increased demand for housing and services as a result of commercial development
- . increased demand for goods and services resulting from residential development".⁵

C. REPRESENTATIVE CASE STUDIES

The focus of this Study is on the impact of industrial development on the fiscal structure of a small town. Whereas in the past, most communities were anxious to attract new industry in anticipation of net fiscal surpluses accruing to the community, the community frequently ignored the fact that the new industry required in-migration of labor. This in-migration of labor into the community required new physical services to accommodate the labor pool attracted by the industry. The cost of providing these physical services were sometimes more than the tax revenues that would accrue from the new development. For example, Garrison (1971) in his study of the impact of new industry on local government finances in 8 small Kentucky towns, found that in 6 of the 8 cases studied, the net fiscal impact was negative.⁶ Garrison attributed the negative fiscal impact to the in-migration of new households with school age children. The additional costs to the community were largely due to the addition of new students to the local school systems. Garrison does indicate that the negative impacts did tend to lessen over time.

Shaffer and Tweeten (1974) measured the net economic changes from rural industrial development in Oklahoma and concluded that the net economic public sector gains were small.⁷ In fact, the fiscal impact of over half the industries were negative on either the municipal finance sector or the school district sector. The negative cost was recovered through increased taxes on the community and as such some citizens of the community were adversely affected by this rural industrial development. The most affected groups in the community were the retired, the elderly and the farmers in the school district.

The private sector gained most in terms of net economic gain from industrial development in the small rural community. The industry supplied jobs (its primary impact) and the spending of wages by the industrial employees on local goods and services constituted the secondary impact.

Shaffer and Tweeten concluded that while the net fiscal gain for the public sector is small, another aspect of the small gains or negative impact to the public fiscal sector is that the new industry, after paying for its services, does not add sufficient revenue to the community to enable it to expand other public programs. Essentially, these two points do not support the general article of faith that new industry is a tax bonanza for the rural community.

Loewenstein's (1963) study of the impact of new industry on suburban districts concluded that there was generally a positive fiscal impact resulting from industrial development.⁸ The important point to note is that the positive impact was attributed to the relatively small number of households that moved into the community to seek employment at the new industry. Loewenstein states "In order to improve their finances, suburban municipalities should seek out and encourage expansion of industries which not only have a high value of assessment per employee but also have employees who are not apt to relocate their residences in the face of an industrial move."⁹

Hirsch (1964) examined the impact of various industrial sectors on a major public sector expense - the school system and developed a model to illustrate the fiscal impact that five different industries would have on the municipal fiscal sector. Hirsch illustrated how the five different industries would have a negative fiscal impact whereas the

expansion of ten other types of industries would generate a positive fiscal impact on the school system.¹⁰

On the basis of the above mentioned studies, the supposed fiscal benefits from industrial developments in small rural towns generally were minor in scale. Frequently the costs to accommodate both industry and the in-migration of labor to live in the town and work at the industry exceeded the tax benefits accruing to the town from the industry. The important question to be answered then is what are the primary and secondary fiscal impacts that a small rural community should anticipate due to the proposed industrial development proposed in their community.

D. THE FIVE MAJOR FISCAL IMPACT METHODS

The planner or town administrator has to determine which fiscal impact methods are appropriate for the specific type of cost revenue analysis being done, the assumptions associated with each method and the data requirements needed to be able to analyze the particular situation. These are situations that require the use of multiple fiscal impact methods concurrently.¹¹

Listokin and Burchell (1978) identify five major fiscal impact methods that can be used in cost revenue analyses and are summarized as follows:

1) Per Capita Multiplier

This is one of the most popular and versatile methods, which involves determining the average municipal costs per person or average school costs per pupil either to evaluate an existing

situation or to project future municipal or school costs. This method is appropriately used in moderate sized cities with moderate growth rates.

2) The Case Study Method

This method is frequently used in cost revenue analysis of developments in either very large or very small cities. This method identifies costs and revenues associated with specific developments such as development of industrial parks in a small town and determines whether a net benefit or loss is accruing to the local government.

3) Service Standard Method

This method is similar in its application to the Per Capita Multiplier and is used in small to mid size moderate growth communities. This method uses census data to identify municipal manpower requirements needed to service existing or projected population using a ratio indicator. The ratio indicator outlines municipal manpower requirements for such services as police, fire and school staff required to handle the existing or projected population, thus providing an estimate of fiscal requirements if future growth is anticipated.

4) Comparable City Method

This method is becoming ever more popular and is used to compare service ratios of similar size cities or a combined average of many

cities. This method assumes that cities of similar size and growth rate will expend money on municipal services in a similar manner. Deviation in spending patterns can be attributed to specific forces that require more emphasis in one city as compared to cities. For projection purposes ratios of future to current expenditures can be compared for similar sized cities to estimate future local servicing requirements.

5) Proportion Valuation Method

This method is used to determine the fiscal impact of new non-residential development such as industrial growth. This method determines a share of the municipal costs associated with a development based on its proportion of the total local real property valuation in determining whether a development is a net benefit or cost to a community.

E. MAJOR COMPONENTS OF A COST REVENUE ANALYSIS STUDY

The detailed analytical steps involved in applying the five fiscal impact methods to a cost revenue analysis are outlined in Burchell and Listokin (1978). Various other sources (Garrison (1971), Shaffer and Tweeten (1974), Loewenstein (1965), Hirsch (1964 and 1969), Summers (1976), Sternlieb (1973) Mueller and Shaenman (1974), Mueller and Dawson (1973), Mace (1963), Barnes and Raymond (1955), and Arathoon (1973)) all have used similar methods from which detailed analytical steps were derived to use in the Winkler Study. As well interviews with municipal finance administrators with the Manitoba Government were instrumental in providing a sound methodological base for the Winkler Study.¹²

Common to most or all of these studies are the major components involved in a cost-revenue study. The four major components are:

- 1) Revenue - associated with a development in terms of various types of taxes paid to the municipality.
- 2) Expenditure - associated with accommodating the new development in terms of municipal infrastructure, fire and police protection being the major expenditures made by a community.
- 3) Assessment - of real property of developments is integral to the strength of a community's tax base and its ability to accommodate future development.
- 4) Taxation - is affected by new development in terms of the change in the tax rate and the distribution of taxes by sector associated with new development in a community.

In most fiscal cost revenue analyses, these four major components are analyzed in detail. A compendium of the analytical steps involved in the various case studies cited earlier have been highlighted in the Winkler Study; based on their applicability and availability of data to complete the fiscal cost revenue analyses used in this Study.

The four major components of a cost revenue study will be analyzed using several of the fiscal impact methods or combinations thereof to

determine whether industrial development was a net benefit or cost to the Town of Winkler.

F. SOME BASIC ASSUMPTIONS ASSOCIATED WITH A FISCAL COST REVENUE

ANALYSIS

Fiscal cost revenue analysis assumptions as defined by Listokin and Burchell (1978) and adopted in this Study are as follows:

- 1) Only the direct impact of industrial development in terms of the costs incurred and the revenues that accrued to the Town of Winkler will be analyzed. The costs include the operating and, more importantly, the capital expenditures incurred by the Town to accommodate industrial growth.
- 2) Usually a time series analysis is done when comparing costs and revenues.
- 3) The analysis deals only with government revenues and costs but does not include private costs passed on to the developer or consumer.
- 4) Its major use is to determine the cost and revenue implications associated with residential or industrial development in a community. The fiscal cost revenue analysis may be used as a predictive or post hoc tool, as used in the Winkler Study.
- 5) The range of local services provided by a community are supported mainly by local property taxes. As a result, increases in local servicing costs have an important impact on local property owners. The increasing demand for fiscal cost revenue analysis to determine the impact of industrial development on local

government services is of vital importance to property owners these days.

As well, a fiscal cost revenue analysis is used to determine the difference between the cost of providing the municipal services to accommodate industrial development as compared to the municipal revenue it generates. For example, the cost revenue method was used in two fiscal contexts in this Study:

- 1) The Cost Revenue Analysis of the Community Growth Associated with Industrial Development on Education Expenditures in Winkler.
- 2) The Cost Revenue Analysis of Winkler's Two Industrial Parks.

G. KEY INDICATORS USED IN A COST REVENUE ANALYSIS STUDY

As cited earlier there were four major components involved in a cost revenue fiscal impact analysis, those being revenue, expenditures assessment and taxation. In analyzing each major component several key indicators are used universally in most, all, or combinations of the fiscal impact studies reviewed for this Study.

These indicators will be outlined for each major component and the reason for their use will be outlined. These indicators have been drawn from a compendium of fiscal impact studies based on their applicability to the Winkler Study. These indicators were drawn from the following sources:

- | | |
|-----------------------|--------------|
| Burchell and Listokin | (1978) |
| Garrison | (1977) |
| Shaffer and Tweeten | (1974) |
| Loewenstein | (1965) |
| Hirsch | (1964, 1969) |

Summers	(1976)
Sternlieb	(1974)
Mueller and Shaenman	(1974)
Mueller and Dawson	(1973)
Mace	(1963)
Barnes and Raymond	(1955)
Arathoon	(1973)

From each of the studies the key indicators were pieced together to provide a comprehensive basis for the cost revenue fiscal impact analysis in this Study and are grouped by major fiscal components:

1) Municipal Revenue

Based upon the studies cited earlier, the following indicators were identified as being paramount to an analysis of the municipal revenue component:

- . property tax payments by the residential, commercial and industrial sectors.
- . business taxes paid by industries.
- . sensitivity analyses of changes in the revenue as it affects the tax base.
- . the impact that industrial development had on revenues accruing to the community.
- . detailed cost-revenue analysis of specific industrial developments.

The various studies reviewed highlighted the fact that revenues are integral to fiscal solvency of any community. The major sources of revenue (property taxes) for a community have to be analyzed to

determine the net gain or loss in revenues associated with industrial development once the property tax revenues are balanced against the municipal costs to accommodate industrial development. This is the major theme of a cost revenue analysis as done in the numerous sources cited earlier.

2) Municipal Assessment

Universal to all the impact studies cited is an analysis of the assessment base of a community and how residential or industrial development contributes to the assessment base. The following indicators have been identified as integral to a cost revenue analysis:

- . time series analysis of the change in the assessment base.
- . a comparison of the contribution made by the respective residential, commercial and industrial sectors.
- . a detailed analysis of how specific industrial development has contributed to growth in the assessment base.

One of the most fundamental arguments for encouraging industrial development has been the benefit to the municipal sector that the increased assessment brings as a function of residential, commercial or industrial development.

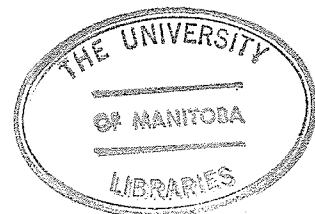
Premised on the community's assessment base is the community's ability to pay capital and operating expenditures and also to discharge its debt. A healthy assessment base contributed to a lower mill rate while proportionately the tax rate is set to allow the community to function as needed.

3) Municipal Expenditures

In a cost revenue analysis the other major component of the municipal balance ledger is municipal expenditures as compared to municipal revenues. Municipal expenditures in the various fiscal impact studies are analyzed in terms of current expenditures and capital expenditures and how these are affected by residential and industrial development. A common method used in analyzing municipal expenditures is the Comparable City Method where allocation of municipal expenditures by one community are compared to other cities or an average for all cities in a state, nation or province. This comparison yields an indication of how a community's expenditure pattern is affected by residential or industrial development as compared to other cities. Accordingly the following indicators have been used in the various fiscal impact studies reviewed for this Study:

- . a time series analysis of local expenditure patterns - both current and capital.
- . per capita expenditures as compared to other cities.
- . direct municipal expenditures made to accommodate residential or industrial developments with specific methods outlined to allocate these expenditures correctly as in the case of municipal education expenditures.
- . an analysis of threshold limits for various municipal services to determine the amount of current and capital expenditure that should be budgeted for a specific time period.

By establishing the above indicators a community can determine the impact that residential or industrial development has had on its municipal expenditure pattern.



By comparing the municipal expenditures for specific developments versus the revenues in the form of business and property taxes accrued to a community by specific developments, the planner or administrator can extrapolate whether similar future developments will be a net gain or loss to the community through use of the various indicators identified.

4) Municipal Taxation

Integral to an analysis of the municipal taxation component is the net benefit or loss to the community associated with industrial or residential development. This can be determined by an analysis that includes the following indicators:

- . time series analysis of the residential/industrial tax load and distribution respectively.
- . analysis of the impact of industrial development on the tax rate and whether it is a net benefit or loss to the municipal sector using methods adopted from the sources cited.
- . time series analysis of the municipal mill rate and how its been affected by industrial development.

By determining the above indicators the impact that residential or industrial development has had can be determined and the financial solvency of a community can be outlined.

G. SUMMARY

By identifying and employing the numerous indicators and methods drawn from the compendium of fiscal impact studies reviewed, a comprehensive basis for a detailed fiscal cost revenue impact analysis

is established. These indicators and methods were adopted in terms of their applicability to the requirements of this Study. As well numerous conversations with Municipal Finance Department personnel and Town of Winkler officials resulted in a better understanding of the requirements for a rigorous cost revenue analysis as presented in the next chapter.

Chapter III - Footnotes

1. Ruth L. Mace, Municipal Cost-Revenue Research in the United States: A Critical Survey of Research to Measure Municipal Costs and Revenues in Relation to Land Uses and Areas, 1933 - 1960, Chapel Hill: Institute of Government, University of North Carolina, July, 1963.
2. R.W. Burchell and D. Listokin, The Fiscal Impact Handbook, (The Centre for Urban Policy Research, New Jersey 1978), pp. 257-259.
3. Ibid., pp. 4-10.
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6. C.B. Garrison, "New Industry in Small Towns: The Impact on Local Government" in National Tax Journal, December 1971, pp. 493-500.
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11. Personal Interview with M.R. Dennis, Director of Municipal Finance, Manitoba Department of Municipal Affairs.
12. Ibid.

CHAPTER IV

Analysis of the Impact of Industrial Development on the Four Major Fiscal Components (1966-1976)

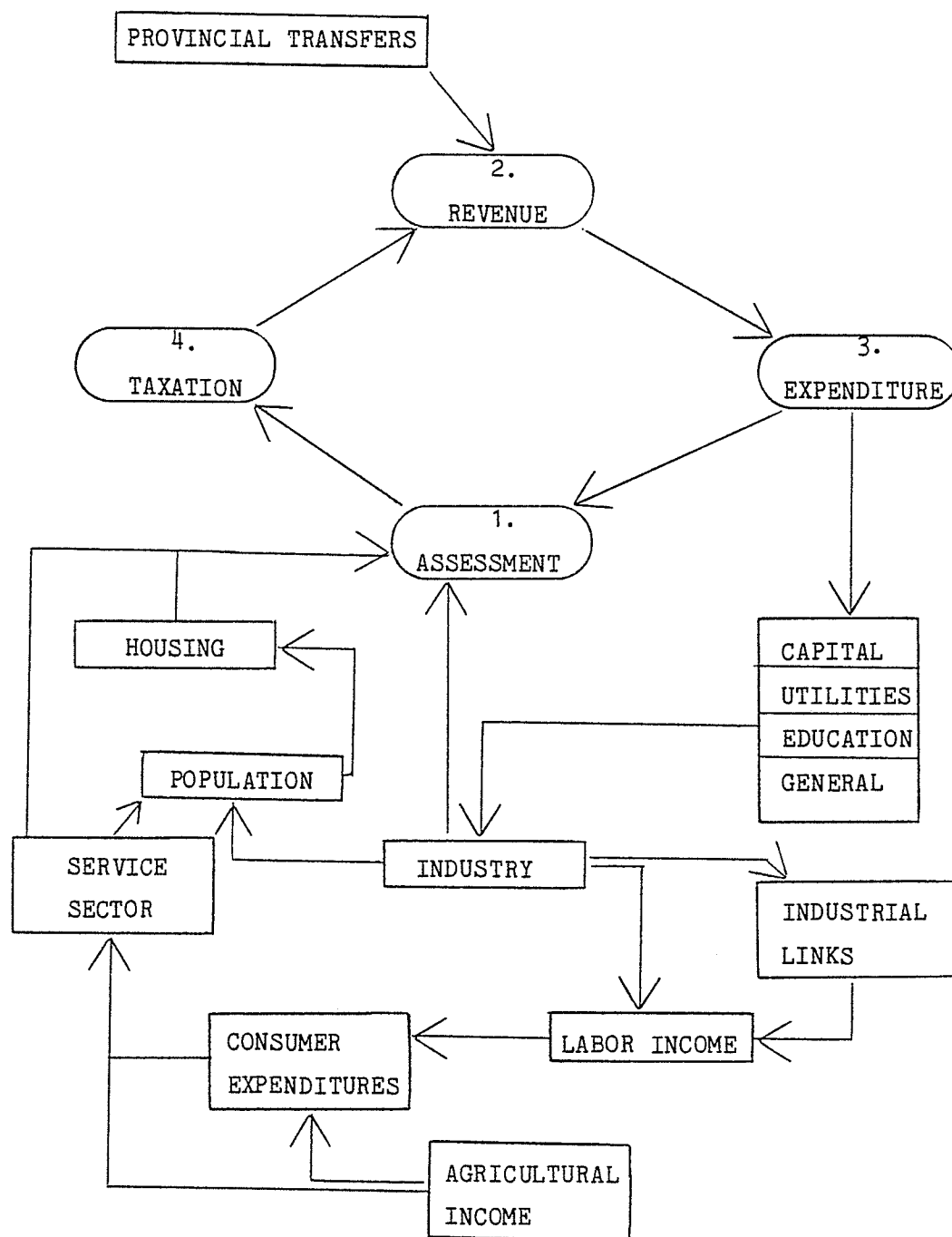
A. INTRODUCTION

Rural communities have actively sought industrial development primarily because it was felt industry brought financial benefits to the community. Several beneficial effects that industrial development may have on a community are:

- . assessment can be increased and by extension property tax revenues can expand.
- . municipal services can be improved through increased municipal revenue.
- . property taxes of the average homeowner can be lowered.
- . the tax base of the community can be stabilized.
- . the incomes of the people in the community can be increased making it easier for the community to increase its revenues by raising taxes.

Figure 1 illustrates a model that is a derivation of several municipal finance sector models and indicators developed or used by Hirsch (1961), Arathoon (1973), Summers (1976), Sternlieb (1974), Mueller and Shaenman (1974) and Mace (1963). Important to note are the four major components that have been identified in the case studies cited above as being integral to a cost revenue analysis of development on the municipal fiscal sector. It is important that such a cost

FIGURE 1



THE RELATIONSHIP BETWEEN THE COMMUNITY
ECONOMY AND THE MUNICIPAL FINANCE SECTOR

revenue analysis contain the four major components (revenue, taxation, assessment, and expenditures) and how these were affected by industrial development in Winkler. Accordingly, that is how this fiscal cost revenue analysis using various fiscal impact methods has been organized.

A financially solvent small community will be more attractive to prospective industrial or commercial concerns than a financially unstable community. Figure 1 illustrates the relationship between the community economy and the municipal finance sector of the community. To briefly explain the interface of the various components of the model, the relationship evolves around local economic development (such as industry or a commercial enterprise) generating labor income (primary impact), a secondary impact of labor income in supporting or linked industries and general growth in the service sector, all of which generates population growth and demands for housing and municipal services.

However, there are certain costs associated with industrial development and related economic activity in linked industries and the service sector. Additional costs in the form of capital expenditures may have to be made by the community in order to accommodate the industrial development and related economic activity. Capital expenditures may be necessary to create and service the industrial park and provide municipal services such as sewer and water lines. The increased economic activity usually will attract additional population from outside the community. Capital expenditures may have to be made to accommodate the new residents. These additional capital expenditures have proved to be an onerous burden to the community in some cases (Garrison, 1971; and Shaffer and Tweeten, 1974). The municipal fiscal

impact analysis of industrial development on Winkler to follow will attempt to unravel the total costs and benefits associated with industrial development in Winkler between 1966 and 1976.

B. THE KEY QUESTIONS OF A FISCAL COST REVENUE IMPACT ANALYSIS

The following list of questions were felt to be key indicators of a fiscal cost revenue analysis based on the studies cited earlier and the indicators used in these studies:

- 1) Did industrial development expand the assessment base of Winkler?
- 2) Did industrial development increase local revenue?
- 3) Did industrial development expand the local expenditures and allow for additional expenditures for the Town of Winkler to choose as they wanted?
- 4) Did industrial development and the attendant population increases in Winkler place an onerous burden on the local education budget?
- 5) Did industrial development affect the level of capital expenditures and debt?
- 6) Has industrial development affected local tax levels; the local tax rate, the distribution of taxes, and its relationship to personal income?

To provide detailed answers to the above questions several specific indicators and fiscal impact methods have been used.

C. FORMAT

The fiscal cost revenue analysis has been structured according to the six questions listed above. For each of the six questions a standard format as listed below will be used.

- 1) The overall municipal finance picture of Winkler will be analyzed for the period 1966 to 1976, and this will be compared to the municipal finance picture of the adjacent Town of Morden and to the composite picture of all Towns in Manitoba so that a comparison picture can be established.¹
- 2) A series of measurements of fiscal "health" or solvency will be employed to determine whether Winkler is better off or worse off as a result of industrial development.
- 3) The connections between specific elements such as assessment to others such as revenue, and to changes in the community and its subcomponents of industry, housing, and population change will be indicated as accurately as possible.
- 4) The direct impact of the three largest industrial plants in Winkler on the municipal finance sector of Winkler will be analyzed.

The four major fiscal components will be analyzed in the following order:

1. Assessment
2. Revenue
3. Expenditure
4. Taxation

D. ANALYSIS OF THE FOUR MAJOR FISCAL COMPONENTS

1. Assessment

The Change in the Assessment Base of Winkler (1966 - 1976)

The additional assessment that is brought to a community by industrial development is the most fundamental argument for local community economic development. Increased assessment can benefit the public economy of a community because the prime revenue source is the tax or assessed values of land and buildings in the community (see Appendix II for all Tables).

The best indicator of a community's ability to pay for its operating and capital expenses and ability to discharge its debt is the level of taxable assessment, from which is derived the mill rate. A healthy assessment base allows for a lower mill rate while still having a high enough tax rate so that the community can function properly.

Table 1 illustrates how Winkler's taxable assessment has steadily increased at a cumulative rate greater than the Provincial average for all towns. Several years in particular showed sharp rises in Winkler's taxable assessment, those being 1968 with a 13.3 percent increase, 1971 showed a 14.6 percent increase and a 17.9 percent increase in 1976. These specific years do not coincide with the years of greater population growth in Winkler, but rather follow population growth. Also, the sharp increases in 1968 and 1971 can largely be attributed to Provincial reassessment measures. For example, approximately 9.5 percent of the 14.6 percent increase in 1971 can be attributed to the Provincial reassessment.

In terms of a per capita basis of the Winkler population, the taxable assessment has consistently been higher than the average for all Manitoba towns, but not as high as Morden's per capital taxable assessment.

From 1966 to 1970 the taxable assessment per capita for Winkler rose steadily but began to fall after 1970; this being explained by the fact that attendant population growth during this time offset the increases in assessment. The 1975 - 1976 period saw taxable assessment increase at a far greater pace than the population growth. The next section will deal with one of the focal points of this research, that being just how much of the increased taxable assessment can be attributed to industrial development that occurred in Winkler between 1966 and 1976.

The Increase in Industrial Assessment in Winkler (1966 - 1976)

Table 2 indicates that industrial assessment in Winkler increased from \$318,770 (1966) to \$1,396,000 in 1976, a 337 percent increase, while taxable assessment as a whole increased only 102 percent over the same period. The important point is that industrial assessment as a percentage of the total assessment increased from 8.2 percent (1966) to 17.5 percent (1976), more than double. The years showing the biggest increases in the industrial assessment - taxable assessment ratio, in rank size order, were 1975 - 1976 (51.5 percent), 1969 - 1970 (37.4 percent) and 1972 - 1973 (17.7 percent).

The fact that the industrial total assessment ratio is increasing allows for the potential situation to occur where the tax load on the residential sector could either be lessened or prevented from rising as fast without such an increase in this ratio. This potential situation

lessened only slightly between 1973 and 1975 when industrial assessment dropped slightly, coincidental with the sharp rise in housing completions and residential assessment. This allowed the trend towards an even greater proportion of industrial assessment. The opening of Monarch Industries Ltd. in Winkler in 1975 allowed for industrial assessment to once again be proportionate with total assessment.

To briefly recap what occurred between 1966 and 1976; industrial expansion occurred between 1969 and 1973 with a levelling out in 1974 and 1975, while residential growth continued through 1973 and 1974 in response to the industrial expansion, and levelled out in 1974 and 1975.

The Industrial-Commercial/Residential Assessment Ratio

A rational indicator of the financial health and solvency of a community is the ratio of the industrial-commercial assessment to residential assessment, which measures the proportion of the community's tax load which is carried by the industrial-commercial sector versus the residential sector.

The industrial-commercial/residential assessment ratio should be in the order of 40-60. The 40-60 ratio is commonly used in municipal finance but lacks any rigorous empirical analysis. Table 3 indicates that Winkler has been within this 40-60 ratio between 1973 and 1976, and that the ratio itself has remained fairly constant over time even with major changes occurring in Winkler. The general conclusion that can be drawn from Table 3 is that Winkler has experienced a healthy, solvent industrial-commercial residential assessment ratio.

In contrast, Morden's industrial-commercial sector has been consistently smaller (average of only 27.8 percent of taxable assessment

versus 38.5 percent for Winkler) while the residential assessment has been larger for Morden (72.4 percent) than Winkler (61.0 percent).

While prior to 1972 separate residential and commercial assessment figures were not tabulated, it can be deduced from analyzing the industrial assessment figures in the previous section that the industrial-commercial/residential assessment ratio has become healthier over the time period studied.

The next section will illustrate just how much the three study firms have had an impact on the growth of the assessment base in Winkler.

The Impact of the Taxable Assessment Base of the Three Study Firms on the Growth of the Assessment Base in Winkler

Table 2 illustrates the major contribution that the three Study firms have made to the growth of the assessment base in Winkler. For example, in 1966 the taxable assessment of the Study firms comprised only 1.9 percent of the total community assessment, while in 1976 the figure was 10.7 percent of the total assessment. In 1966 the Study firms accounted for 24.2 percent of industrial assessment for Winkler as compared to 61.3 percent of the total industrial assessment in 1976. There would be a major impact on community finances, if one of the three Study firms were to fail in business.

The analysis reveals that the Study firms are obviously vital to the financial health and solvency of Winkler as a whole and to the ability of the residential sector to pay the rate of taxes established.

2. Revenue

Source

One of the major sources of revenue (Table 4) for Winkler are the property and business taxes, yet the property and business taxes have dropped from 85.8 percent of total revenue (1970) to 80.2 percent (1975). Winkler is not as dependent upon internal sources of revenue as it once was, shown by the fact that 95.1 percent of revenue was internally-derived in 1970 versus 93.6 percent in 1975.

As the Town of Winkler has grown, an increasingly important source of revenue for the Town has been the business tax, which is a tax which assesses a business at 15 percent of its annual rental value (Table 5). The Province of Manitoba has given towns and cities such as Winkler full authority to levy such a tax. The amount of business tax collected by the Town is an important indicator, as it is a measure of economic expansion in the local business sector. The business tax as a source of revenue for Winkler has risen from \$13,308 (1966) to \$48,554 (1975), a 365 percent increase; and as a proportion of total taxes collected it has risen from 4.8 percent (1966) to 5.4 percent (1975). In comparison, the business tax constituted only 1.7 percent of Morden's tax revenues in 1975 and 4.5 percent of tax revenues for the Provincial town average in 1975.

Business Taxes and Property Taxes of the Three Study Firms as a Source of Revenue for the Town of Winkler

Table 6 illustrates that the Study firms contributed very significantly to the Town's source of revenue. For example, in 1976 the

Study firms contributed \$402,447 to the Town's coffers, or 9.9 percent of the total taxes collected by the Town in 1976. During the 1966 - 1976 period the Study firms contributed approximately 6.4 percent of the total tax revenue for Winkler.

Table 7 indicates that the Study firms accounted for \$17,811 in business taxes as a source of revenue for Winkler, or 36.7 percent of the total business tax imposed by Winkler.

The essential point to note is that the Study firms are contributing an increasingly larger amount of taxes to the total tax revenue collected by the Town.

The Sensitivity of Winkler's Tax Base to Changes in Revenue

The concept of the stability of a Town's tax base is related to the growth of its industrial-commercial assessment base. The key factor in the stability of a community's tax base lies in its diversification. To illustrate the point, the question that arises is whether only a few industries contributing to the major share of the Town's revenue from taxes or is the tax revenue spread evenly among several industries so that if one industry should fail in business, the impact on the municipal finance structure will not be severe. For example, the Study firms contribute 61 percent of the Town's industrial assessment or 9.9 percent of the total tax revenue for Winkler (Table 8). It can be safely concluded that the Study firms dominate the industrial economy of Winkler. Triple E Ltd. has 5.3 percent of the total taxable assessment of Winkler. The 1976 mill rate of 129.7 and 15 percent business tax would mean Triple E Ltd. contributed approximately \$66,886 into Winkler's coffers. If Triple E Ltd. were to fail and Winkler were to

maintain similar levels of service, a tax increase of approximately 8 mills would be required.

To be entirely correct in the above analysis the following would need to be incorporated into the analysis. For example, 28.3 mills of the 129.7 mills is for the Provincial Education Foundation Program and is established by Statute. If the Study firms were not located in Winkler, the taxation would not have to be accounted for by other sources in Town. Therefore, by subtracting the foundation levy the total (business and property) tax revenue would be \$55,545, instead of \$66,886. The mill rate increase accordingly would be 7.1 instead of 8. To the typical homeowner in Winkler with a home assessed at \$5,000, the saving would be \$28.50 on his tax bill because of Triple E Ltd.

It can be concluded that the benefits of the Study firms in terms of relieving the tax burden on the residential sector in Winkler are very significant.

3. Expenditure

Impact on Local Expenditure Patterns

Both the town administrator and planner must concern themselves with determining how industrial development has affected the expenditures of the community. The planner may ask a number of relevant questions in determining the impact of industrial development on local expenditure patterns of the community; such as:

- 1) Has industrial development in Winkler given the Town a certain amount of leeway for increasing expenditures in areas that it chooses?

- 2) Has industrial development increased operating expenditures per capita in Winkler? How much of this increase can be attributed to development and how much to inflation?
- 3) Has industrial development distorted municipal capital expenditures in Winkler, that is, by increasing the capital projects budget, have other budgetary areas or resources been deprived?
- 4) Has industrial development resulted in an influx of new residents to Winkler who are demanding more and different types of services?

The Changes in Municipal Expenditures for Winkler

Table 9 illustrates the change in municipal expenditures for Winkler, as compared to Morden and all Manitoba towns between 1966 and 1975. Over the period 1966 - 1975 the municipal general expenditures for Winkler rose from \$309,225 to \$1,468,153, or a 374.8 percent increase. For Morden the expenditures rose from \$354,376 to \$1,411,373, or a 298.3 percent increase; and for all Towns expenditures rose from \$10,439,280 to \$25,932,969, or a 148.4 percent. Winkler's increase in municipal expenditures were of a higher percentage than both Morden and all Towns. This analysis is meaningful viewed only in light of several other comparisons, such as per capita expenditures, differences in levels of municipal services between communities and the effects of inflation are considered.

Comparative Costs: Current Expenditures Per Capita

A Comparison between Winkler, Morden and all Towns

The use of the per capita costs variable allows for a more definitive picture of how municipal costs have been affected by community growth.

These costs can be compared among towns, yet it must be emphatically stated that per capita cost comparisons have certain inherent problems, those being:

- 1) Services and service levels vary between communities, therefore making comparisons difficult.
- 2) Per capita measures are absolute in nature and do not reflect how the costs are financed. For example, are high municipal expenditures financed by the industrial-commercial sector or by the residential sector.

Table 9 illustrates that per capita municipal expenditures for Winkler rose steadily from 1966 to 1970, concomitant with steady population growth, an increase in the level of municipal services and the impact of inflation. However, between 1970 and 1972 per capita expenditures declined, attributed mainly to the increase in population during this period. In 1974 - 1975 per capita expenditures rose precipitously. Several reasons can be offered for this spectacular rise in per capita expenditures, those being that inflation reached its peak, population growth had levelled off in 1974 - 1975 but the impact of previous community growth was finally being reflected in the operating expenditures.

The general expenditures per capita were consistently higher for Winkler than both that of Morden and the average for All Towns in

Manitoba from 1966 to 1972. Since 1972 general expenditures per capita have been consistently lower than Morden's and the average for All Towns in Manitoba. This trend is difficult to explain precisely; a plausible explanation is that expenditures per capita may be decreasing due to the realization of scale economies with the benefits of earlier expenditures now being evidenced in the Town's budget.

The Analysis and Comparison of Expenditure Patterns

The following analysis will show differences in how Winkler, Morden, and all other Towns in Manitoba distributed their expenditures. This analysis of how municipal expenditures are allocated between budgetary functions among the communities provides one way of determining the impact of industrial development in a community. Hopefully the analysis can provide some insight as to whether the expenditure difference is as a result of improved municipal services or for extension of services to accommodate community growth.

Table 10 indicates the difference in budgetary spending between Winkler, Morden, and all Manitoba Towns.

From the analysis, it appears that Winkler is willing to go into debt to improve its community services in addition to having to respond to strong community growth pressures. Debt charges were almost twice the Provincial average in 1974, with allocations to fiscal reserves being high to finance future expenditures. Expenditures on roads and sidewalks, both related to community growth, were also high. The high levels of capital expenditures on economic development was a conscious choice made by the Town of Winkler.

Winkler's expenditures on other services reveal certain patterns; crime rates are low so the cost of police protection is low, expenditure on education suggest a basic - no frills approach, expenditures on environmental planning are low, and welfare expenditures are low.

Morden's expenditure pattern contrasts fairly sharply with Winkler's expenditure patterns. Morden's fiscal approach seems to be one of "pay as you go", with debt charges being low and a major allocation (21 percent of the total budget) to financial reserves. Morden appears to have less propensity to spend on Town improvements (i.e. recreation, roads, and sidewalks). The important question is whether this is a result of community aspirations as to what they desire; a logical response to Morden's steady rate of growth rather than Winkler's spectacular rate of growth or is it because Morden already had developed these services. The most plausible reason is that Morden developed earlier than Winkler and therefore Winkler has had to continually develop its services, more so than Morden.

Macro Analysis of Change in Expenditures

Table 11 summaries Winkler's change in expenditures between 1970 and 1975. The important question to be answered is whether community growth has resulted in a change in budget expenditure emphasis over time. Another question to be answered is whether service needs changed as a result of community growth.

Between 1970 and 1975 the overall increase in expenditures was 113 percent. Only one budget item actually showed a decrease over this time period, and that was social welfare showing a small decrease.

Expenditure items which increased at a rate less than the overall average of all expenditure items were:

- 1) education
- 2) total fiscal charges
- 3) general government
- 4) transportation
- 5) environmental health.

Expenditure items which increased at a rate greater than the overall average were:

- 1) monies into own funds
- 2) debt charges
- 3) fire and police
- 4) public health
- 5) environmental planning
- 6) economic development
- 7) recreation and culture.

The key question is whether or not these greater than average increases were the result of community growth. The economic development increase was a clear choice that the Town followed in promoting an industrial development program. The protective budget increase was partially attributed to growth associated with industrial development. The environmental planning, public health, recreation, and culture increases probably reflect changing citizens perceptions of needs in their community. However, the two most significant expenditure items in terms of dollar outlay were the two fiscal items with a total of \$286,360 or 26 percent of general expenditures. The heavy increases in the fiscal items reflect the heavy capital expenditures the Town

outlayed that was necessary for industrialization and for accommodating resulting population growth.

Total Expenditure for Accommodating Residential
Growth Related to Industrial Development in Winkler

It is important to analyze the costs of industrial development and resulting residential development in terms of assessing the costs of servicing this residential development in comparison to the revenues the Town derived from taxation of this residential component. This calculation will yield a crude but effective indication of the fiscal impact of industrial development. The calculation involves the following formula:

1) Costs

Persons per dwelling unit X Municipal Property Tax Levied per
Capita

2) Revenues

Assessed valuation per Dwelling Unit X Tax Rate

Accordingly, the calculations for Winkler would be as follows:

1) Costs

3.69 persons per dwelling unit X \$262.48 = \$968.55 X 172 units =
\$166,590.80.

2) Revenues

\$5,000 per unit X 105 mills = \$525 X 172 units = \$90,300.

3) Deficit

\$443.00 per unit X 172 units = \$76,290.80.

Based on these calculations, the employees of the three Study firms who chose to live in Winkler cost more to service than they returned in

revenues to the Town. As a result of the net deficit associated with residential development, towns like Winkler must strive to develop a strong industrial and commercial assessment base. One plausible reason for the magnitude of the deficit in Winkler is the relatively low average age of the employees and the relatively large family size. This deficit should be viewed in light of the benefits being returned to the Town by the industrial-commercial sector.

Cost-Revenue Analysis of the Impact Community Growth Associated with Industrial Development had on the Educational Expenditures in Winkler

One of the most critical questions in a municipal fiscal impact analysis is whether or not industrial development and attendant population increases have placed a burden on the local school system. Two major reasons why education expenditures need to be examined are that they comprise such a high proportion of the total municipal expenditure (approximately 30 percent in 1975) and secondly that education expenditures are fairly sensitive to community growth or decline.

The significant component of the education costs analysis is whether the costs of educating the school age children of the additional residents who have come into Winkler to secure employment in the industries are matched by the revenue received in taxes. The critical points in this analysis are whether or not the industrial workers are taxpayers in Winkler or live outside Town and how many school age children do they have. To clarify, if all the industrial workers live outside the Winkler school area then no costs would be imposed on the school division. Conversely, if the industrial workers lived in

Winkler, paid the school tax but did not have school age children the resulting costs to the Town would be minimal. The extreme situation would be where all the industrial workers lived in Winkler, had several school age children and lived in older houses with lower assessments, then the overall impact on the education expenditures would be great.

The Winkler Industrial Employee Survey provided general demographic characteristics, from which was derived an average number of children per family (see Appendix III).

This figure can then be used in a simple cost revenue analysis that can be developed using the following methodology.³

- 1) Public school children per dwelling unit X school property taxes levied per student = local education costs per dwelling unit.
- 2) Assessed valuation of average dwelling unit X school tax rate = average revenue generated per dwelling unit.
- 3) Estimated revenue surplus or deficit = (1) - (2).

Accordingly, the computations for the industrial workers in 1976 are:

1) Cost

Average 1.44 children per family X \$443.33 = 638.38 per dwelling unit.

2) Revenue

Average assessed value \$5,000 X 37.3 mills = total education tax
= \$186.50 total taxes per dwelling unit.

3) Surplus or Deficit

Revenue deficit = \$638.38 - \$186.50 = \$451.88 per dwelling unit
for each industrial worker.

The deficit for the industrial workers living in Town would be as follows:

- 1) Cost = \$638.38 X 200 = \$127,676.16
- 2) Revenue = \$186.50 X 200 = \$ 37,300.00
- 3) Deficit = (1) - (2) = \$ 90,376.16

Despite the fact that it appears from the above calculations that individual dwelling units do not pay their way in school costs, the whole concept of education costs and benefits must include the education taxes paid by the three Study firms. Only with the inclusion of school taxes paid by the industries would an accurate account of the impact of industrial development on the education expenditures be possible to develop. For example, the calculation of the impact is as follows:

School Taxes paid by Industry (1976) - 62 mills X assessed value
of industries = \$733,730 = \$45,468.94

Actual Deficit = \$90,376 - \$45,468.94 = \$44,907.16

The deficit on the education budget is decreased to \$44,907.16 with the inclusion of the amount of school tax paid by the industries.

The Impact of Industrial Development on the Level of Capital Expenditures and Debt in Winkler

Major demands for capital expenditures (such as sewer, water, road and recreation facilities) are made when a community experiences population growth and/or industrial development. Although capital expenditures bring major benefits to the population such as improved municipal services and attractiveness for industrial development, at the same time capital expenditures can impose severe costs on a small town. Also, a heavy emphasis on capital expenditures can shift budgeting

priorities in that capital expenditures are constraining current expenditures. Similarly, if capital expenditures benefit only one sector of the community to the detriment of the other sectors then the issue of equity is raised. Cognizant of the above considerations, this section will address the following questions:

- 1) Did industrial development and subsequent residential development create heavy demands for capital expenditures?
- 2) Did this community growth increase debt levels?
- 3) How does Winkler's debt load compare to other communities?
- 4) How does Winkler's level of debt compare to the community's ability to pay off that debt?
- 5) Do capital expenditures and debt restrict or influence the flexibility in the Town's budget?
- 6) Did the industrial parks pay their way?
- 7) What major capital facilities must be planned for in the future?
- 8) Are major municipal services reaching threshold levels in Winkler?

The Importance of Capital Debt Analysis

One of the most significant indicators of a community's financial health is its level of capital debt. The measure of capital debt is one major way that a community can assess whether it should undertake additional capital expenditure either to promote or accommodate community growth or to improve the level of services in a community. The important implications of capital debt are that the level of capital debt can influence the taxes, patterns of capital expenditures, service levels and the overall attractiveness of communities. Whereas the

actual magnitude of debt may not in itself be critical, the important point is the relationship of total debt and its annual carrying costs to measures of the ability of the community to pay. A number of approaches can be employed to measure a community's ability to handle its debt load; including debt levels, debt per capita, growth in debt, the equalized assessment to debt ratio and the level of carrying charges in relation to total expenditures. These various indicators will be discussed in this section.

Winkler's Level of Capital Debt

Table 12, illustrates the level of Winkler's capital debt, which rose from \$464,010 (1966) to \$1,390,556 (1975). Winkler's level of capital debt has consistently been well above the figures for both Morden and for all Manitoba towns between 1966 and 1975.

Winkler's higher level of capital debt definitely reflects the willingness of its Town Council to invest in the future development of the community. This willingness to invest also reflects the pressures being exerted on the municipal services as a result of both industrial and residential growth. It must also be noted that Winkler developed later than Morden and other Southern Manitoba towns - hence a current high level of debt to bring services up to a desirable standard.

Table 13 illustrates the change in Winkler's level of debt and shows that it has been growing faster than for Morden or the average for all Manitoba towns. The following years are most significant in terms of percentage increase in debt along with the budgetary item:

1968: \$407,764 (sewer, water and area)

1972: \$149,547 (sewer, water, force main, paving and sidewalks)

1975: \$423,000 (paving and sidewalks)

The type of services that were provided indicate that the expenditure and debt has been predominately growth related (sewer, water, paving) although a small portion can be attributed to upgrading of existing services.

Winkler's Capital Debt Per Capita and Equalized Assessment Debt Ratio

The capital debt per capita ratio for Winkler has consistently been above the Morden and all Manitoba town averages, as shown in Table 12.

The major reason for the increasing capital debt per capita is the substantive industrial development and related residential development that has occurred especially in the years 1967 - 1968, 1972 - 1973, and 1974 - 1975. The increase in capital debt generally either precedes or coincides with population growth. A point to note is that if per capita debt is increasing it does not necessarily mean the average tax payer's debt load is increasing. The tax load on a residential property is related not only to the mill rate, but also to the commercial-residential assessment ratio. The situation in Winkler is one where the commercial-industrial assessment rate is increasing, thereby making the debt load on the residential sector not so severe. Both 1973 and 1975 were critical years for high increases in the capital debt where per capita capital debt rose 33.7 percent and 22 percent respectively. Fortunately in both cases per capita increases go up by less of a percentage than actual debt because of coincidental population increases in Winkler.

The assessment to debt ratio is a ratio used to measure the change in level of debt in relation to the major ways that a community can pay off that debt. Since the major revenue source for a community is the tax on assessed property value, the assessment to debt ratio is a better indicator of a community's ability to pay than is the debt/capita ratio. Table 14 illustrates the change in assessment debt ratio between 1966 and 1976. Again Winkler's ratio has been consistently higher than both Morden and the average of all Manitoba towns. Again, this reflects Winkler's willingness to increase its levels of debt to either promote development in the Town or as a response to community growth.

Allocation of Capital Expenditures in Winkler

The previous sections have established that Winkler's debt levels are high. The question to ask at this point is whether this is a direct result of industrial development and resulting community growth.

Table 15 indicates that the change in the level of capital expenditures for the years 1966 to 1976. The capital expenditures have been categorized as to whether they were necessary for industrial development as compared to residential development. During this time period approximately 64 percent of the capital budget was allocated to expenditures for the Town generally or for residential development, with only 36 percent being expended on the industrial sector.

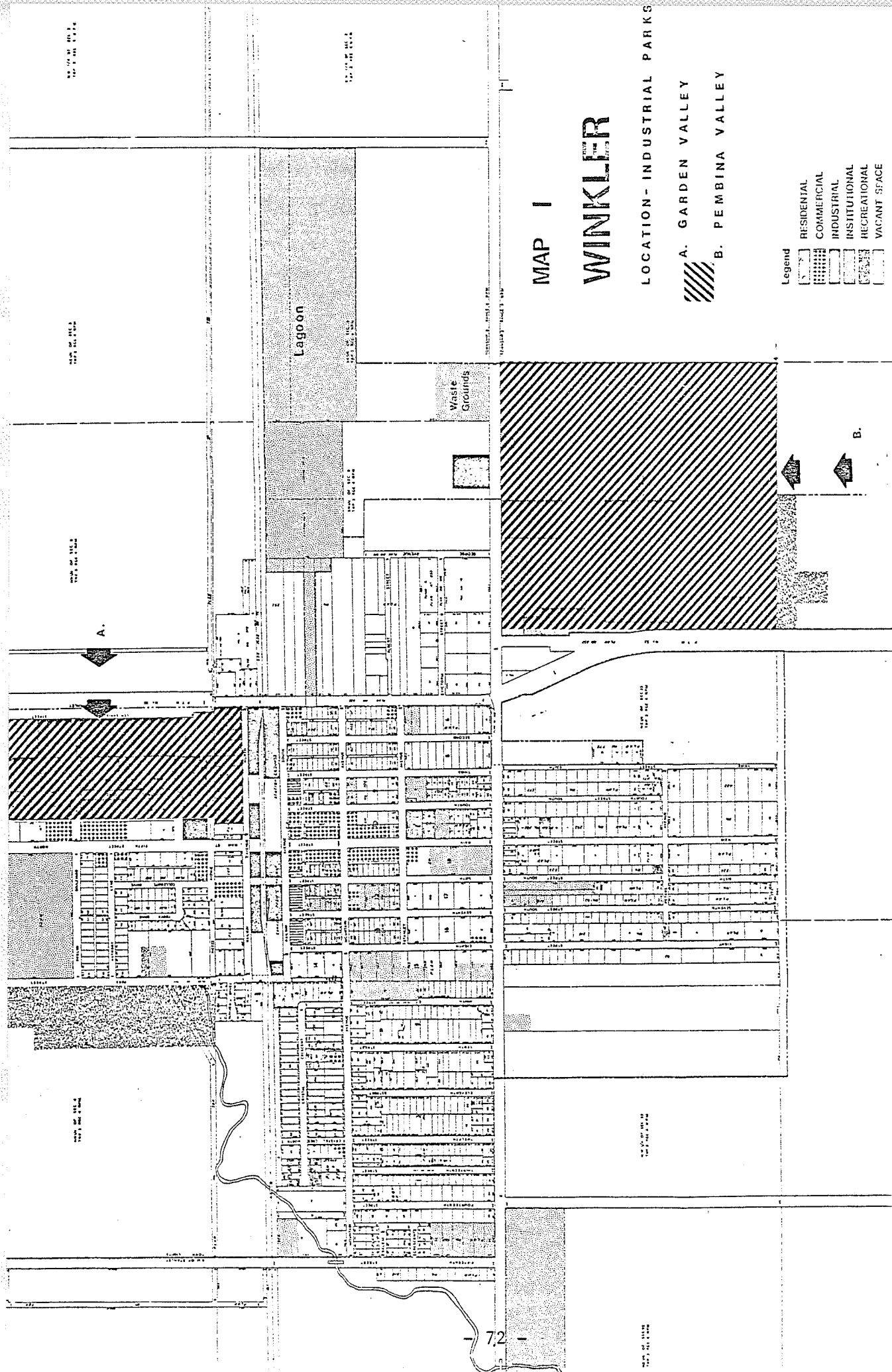
The most single significant expenditure item has been the expenditure by the Town to develop the two industrial parks. A cost revenue analysis will be carried out to determine the net benefit or loss from the development of those two industrial parks.

A Cost-Revenue Analysis of Winkler's Two Industrial Parks

The Town has developed two industrial parks, Garden Valley and Pembina Valley (Map 1), over the last ten years. This section will analyze the costs of developing the industrial parks versus the revenues derived from the two industrial parks.

Cost-Revenue Analysis - Garden Valley Industrial Park

The Garden Valley Industrial Park consists of 63.6 acres, of which only 4.7 acres are currently vacant. It is situated in the northeastern section of Town and was developed in the 1966 - 1967 period. The Town installed the basic service infrastructure even though the land was privately owned. Up until 1974 - 1975, the Town offered a two year property tax exemption for industries locating in the Park. The total property assessment in the park in 1975 was \$1,506,890 with business tax being \$129,070 (Table 16). This yielded \$208,448 in tax revenue to the Town. The capital costs associated with developing the Park were \$481,000 with current annual debenture costs of \$60,000 and annual operating costs estimated at \$57,389. Total annual carrying costs were in the order of \$117,389. The net annual direct benefits from the Park are approximately \$91,059 and would be slightly higher if the 4.7 acres of vacant land were put to a higher use. It must also be pointed out that the Town granted tax exemptions to some tenants of the Park prior to 1974 - 1975, therefore the net benefits could be higher. This practise of granting tax exemptions to attract industry is one of the pitfalls many small towns run into in their striving for industrial development.



Cost-Revenue Analysis of the Pembina Valley Industrial Park

In 1974 the Town developed the second industrial park on 189.5 acres of municipality owned land. The Park is about 50 percent occupied with 98 acres currently unoccupied. The prime occupant is one of the Study firms used in this Study. The Park returned \$103,094 in tax revenue in 1976 based on \$694,080 worth of property assessment and \$83,060 in business assessment. Capital costs incurred by the Town to develop the Park were approximately \$371,000 (Table 17). The majority of the capital cost (\$226,000) was met by debentures with annual payments of \$30,000. Combining these debenture payments with annual operating costs of \$54,253 and costs of financing the remaining capital costs (\$105,000) the total operating costs came to approximately \$85,253. Net benefits returning to the Town are approximately \$7,841, a reasonable return considering the fact that the Park is only 50 percent occupied. Taking into account revenue from additional land sales (98 acres) and the additional revenue derived from future industrial assessment the net direct benefits to the Town will rise considerably above the current rate of return.

An Analysis of Future Capital Expenditures to Accommodate Community Growth

To accommodate community growth in the next five years \$1,384,000 will be required for major capital facilities (Table 18), financed 30 percent by internal monies and 70 percent financed through debentures.

Three major capital works projects comprise most of the total capital works budget:

- 1) \$550,000 (40 percent) of total projected capital works budget will be spent on redeveloping the sewage disposal system which is reaching its threshold capacity as a result of great pressures placed on it by community growth.
- 2) \$500,000 (36.1 percent) of total projected capital expenditures will be spent on paving and road development.
- 3) Improvements to the water and sewer systems will be necessary to accommodate further community growth for a sum of \$175,000.

The major portion of the capital expenditures will be needed to upgrade the two major physical facilities of the Town - the sewer system and the water system. These two physical plants have managed to suffice the last few years without major capital expenditures, yet recent community growth has placed great pressures on these systems, straining them to near capacity or capacity. An overview of each system follows:

The Sewer System

In the next year, the major capital expenditure facing Winkler is redevelopment of the sewage treatment system. The existing lagoon treatment system is reaching its capacity and will have to be completely redeveloped at a different location. Whereas, a 1974 study estimated the lagoon storage capacity as being sufficient for some time, the lagoon surface area has a capacity of approximately 4,800 people.⁴ At current growth rates the Town's population is close to this capacity population figure. The following computations illustrate the capacity projections.

Storage Capacity of the Winkler Sewage Lagoon

Minimum Days of Storage	= 210
Maximum Storage	= 63,300,000 gallons
Per Capita Consumption	= 50 gallons/day
Town Population = 4,400 x 50 gal/day	= 220,000 gallons.

$$\begin{array}{rcl} \text{Current Storage} & = & \underline{63,300,000} \\ \text{Consumption} & 220,000 & = 297 \text{ days} \end{array}$$

Maximum Population that can be Accommodated -

$$\begin{array}{rcl} \text{Maximum} & = & \underline{63,300,000} \\ & 50 (X) & = 210 \text{ days} \end{array}$$

X = maximum population

X = 6,028 people

Therefore, the sewage lagoon facility must be replaced in the next few years. However, the Town has in effect "bought time" by implementing some remedial measures such as adding an additional storage cell, adding aeration to the primary cell and ensuring that the lagoon cells are empty at the start of the winter. Even more important is the fact that the Town has started to control the dairy waste (whey) from the local creamery that had placed great demands on the biological ability of the lagoon system to handle waste. None of the three Study firms currently placed a significant demand on sewer facilities.

Water Supply Service

Water consumption by the Town has increased at an annual rate of 18.3 percent in the last ten years, and 40 percent in the last three years alone due largely to the result of population growth. A more important indicator is that per capita consumption has increased an average of 15 percent per annum. The rapid population growth has necessitated major capital expenditures on the water system over the past five years. Over the next five years, some significant capital expenditures will have to be made and this has significant ramifications in lieu of the Town's current debt situation. The overall water system is reaching a number of individual thresholds beyond which will entail major capital expenditures. It will be difficult, though, to determine specific times for reaching certain thresholds as several factors are involved in the capacity projections, such as, population per capita consumption and water demand by non-residential uses. The Winkler water system will be facing three thresholds:

1) Aquifer Capacity

The estimated capacity of the Winkler aquifer is 2,600 acre feet per year or 706,710,000 gallons, assuming natural recharging. Winkler's current annual consumption is 167.4 acre feet or 45.5 million gallons, but all the aquifer is not only for Winkler's use. It is estimated that an additional 25 - 30 million gallons are drawn by industries and farm residences. In addition the R.M. of Stanley plans to tap into the aquifer in the near future.

2) Water Treatment Capacity

The water treatment capacity is 400,000 gallons per day or 146 million gallons per year. The annual average daily consumption

is approximately 178,000 gallons. If the Town's growth rate continues at the rate it has experienced in the last five years, then capital expenditures will be required to increase water treatment capacity within the next five year period. This is a primary capital expenditure item.⁵

3) Water Storage Capacity

A "rule of thumb" for a town's water storage capacity is that it should have the storage capacity of at least the amount of the daily maximum demand in order to comply with fire protection needs and an additional safety factor in case of equipment breakdown. The present water storage capacity is approximately 290,000 gallons. The maximum daily demand is in the order of 400,000 gallons. Consequently, the current storage capacity is somewhat deficient and may need to be increased with future population growth.

4. Taxation

The Impact of Industrial Development on the Tax Load Distribution in Winkler

One of the major reasons for encouraging industrial development is that the increased revenue accrued to the Town allows for improvement of the community while easing the tax burden on the residential sector. Therefore, a critical factor to examine is the financial health of the community as depicted in the distribution of its tax load. To address the above concept, the following questions must be dealt with:

- 1) The Tax Load on the Residential Sector: Has the residential tax payers' position been improved or has it deteriorated?
- 2) The Tax Load on the Typical Household: Has the average tax bill increased or decreased over the period 1966 - 1976?

Analysis of Winkler's Mill Rate

The Mill Rate imposed by a community measures the level to which a community is being taxed, although a higher Mill Rate does not necessarily mean higher levels of revenue accruing to the municipal coffers. For example, an increase in the community assessment base would produce the same result with a constant Mill Rate. Therefore, comparisons between communities are not particularly meaningful due to:

- . differences in levels of assessed value between communities.
- . differences in the proportion of assessed value which is commercial property, industrial property and residential property.

For these specific reasons, a meaningful analysis can only concern itself with Winkler specifically.

Table 19 illustrates the change in Winkler's mill rate between 1966 and 1975. Several significant observations can be drawn from this table and are as follows:

- 1) Between 1967 and 1968 Winkler's Mill Rate rose concomitantly with the expanding expenditures and major capital debt. The Mill Rate remained constant for the 1968 - 1969 period and rose steadily between 1969 and 1972.
- 2) In 1972 coincident with a provincial reassessment whereby the residential and commercial mill rates were separated and with

provincial fiscal reforms transferring more revenue to local governments; the Mill Rate dropped for the residential sector of Winkler (-28.7 percent) but increased for the commercial-industrial sector (+4.3 percent).

- 3) The greatest industrial development occurred in 1972 and 1973 which accounted for the Mill Rate for commercial properties remaining fairly constant with the residential Mill Rate actually dropping. Revenues accrued from industrial taxation were high in this period and this obviously benefited both the commercial and especially the residential sector.
- 4) The combination of general inflation and rising population resulted in the Mill Rate soaring in 1974.
- 5) The commercial Mill Rate increased at a faster rate than the residential rate. The critical question to be answered is whether or not the Town's residential sector is carrying a lesser tax load than the industrial/commercial sector over time.

The Comparative Residential/Industrial Tax Load

Table 20 summarizes the relative tax loads for each sector, as computed by using the assessment ratio and the Mill Rate and applying it to total assessment. For example, in 1976 the industrial-commercial sector in Winkler had approximately 40 percent of the total assessment and provided approximately 49 percent of the Town's tax revenue. The residential sector provided approximately 51 percent of the community's revenues from property taxes.

In comparison, the industrial-commercial sector in Morden had approximately 28 percent of the total assessed value and provided 34

percent of Morden's total tax revenue. The residential sector had 72 percent of the total assessed value and provided 66.3 percent of the total tax revenues. The industrial-commercial sector still carries a greater load than the residential sector, but not to the extent as is the case in Winkler. Winkler's overall greater industrial-commercial assessment means a much lighter tax load for the residential sector in Winkler.

The proportion of taxes imposed on the industrial-commercial sector as a percentage of total taxes imposed increased from 31.6 percent (1970) to 44.9 percent (1975), which reflects the spectacular rise of the industrial-commercial assessment in Winkler. Table 21 illustrates the changes in total tax contributions made by the industrial-commercial sector, with an 84.8 percent increase (\$443,749 to \$820,169) between 1970 and 1975. The impact that this increase has in the residential tax load is analyzed in the following section.

The Typical Residential Household Tax Load in Winkler

One of the supposed benefits of industrial development in a community is that it may help to lower the individual residential tax bill. The taxes on a typical home will be analyzed between 1966 and 1976. To perform this analysis though, it is necessary to determine the effect that the Provincial reassessment of property in 1971 had on assessed values in Winkler.

The Effect of the Provincial Reassessment on Assessed Values in Winkler

For the years 1969 - 1976, an assessed value of \$5,000 was used as an average assessment for a house in Winkler. The method used to estimate the effect of the Provincial reassessment of 1971 on the average assessed value of a house in Winkler is outlined as follows in Table 22.

The average percentage increase per annum was 5.1 percent; therefore the 1971 increase due to reassessment equals (14.6 percent - 5.1 percent) 9.5 percent. This means that a house assessed at \$5,000 in 1969 and 1970 would be reassessed at approximately ($\$5,000 \times 9.5$ percent) \$5,475 from 1971 onwards.

Table 23 shows the calculations for the tax bill of the reassessed house between 1966 and 1976. It must be noted that Provincial home owner grant were initiated in 1972 and as a result a total tax bill and net tax bill were derived. The total tax bill is the most significant for this research, as it indicates tax levels if the Provincial programs had not been instituted.

The tax load for the average house rose steadily between 1966 and 1976 except for a major decline in 1972 and 1973. This decline was concomitant with the period of greatest growth in the industrial sector, major revenue transfers from the Province to the local governments, and also the joining of Winkler to the Provincial Foundation Program which placed a greater tax load on the industrial-commercial sector. The years of major total tax increases were, in rank order, 1974 - 1975 (40.3 percent), 1967 - 1968 (22.3 percent) and 1970 - 1971 (12.9

percent). Coincidentally these were years immediately following major growth in the industrial sector.

The Impact of the Three Study Firms on the Residential Tax Rate in Winkler

An effective yet simple method will be used to relate the tax revenues derived from the three Study firms and housing demands associated with the employees of the three Study firms to the capital costs to the Town of servicing the growth associated with employees.

Table 24 illustrates the formula used as derived from Gerweck (1973) and Groves and Riew (1963) while Table 25 shows the calculation.⁷ The formula is based on the hypothetical tax rate if the three Study firms had not been located in Winkler. It is important that the formula be elaborated on so as to establish some of the assumptions that are made, and which are presented below.

- 1) The costs of providing services for a new resident is assumed to be equal to the average cost of all residents of the community. For example, additional capital costs necessary to accommodate new residents would not be viewed separately but are assumed to be chargeable to all residents of the community.
- 2) The cost figures are only average costs and do not account for threshold costs. For example, the average cost curve for a service like sewage treatment may rise as a result of new construction then fall over time as scale economies are achieved.
- 3) It must be assumed that there are no major or extraordinary costs such as tax subsidies, special loans or capital works not directly payable by industry.

- 4) It must be assumed that the new residents do not use any more or less of the physical infrastructure than does the average citizen already living in the community. Also, it must be assumed that the level of municipal services does not increase or decrease in quality as a result of the new immigration of residents.
- 5) Although fiscal concerns are a high priority in terms of net fiscal gain or loss from industrial development there is the issue of the role and focus the local Town Council plays in deciding community growth strategies. If the Town Council considers the creation of job opportunities for its residents as an important consideration, then a certain level of tax burden must be accepted in fulfilling the job creation function. Fiscal impact analyses should detail both the impact on the private as well as the public economy.
- 6) The formula does not account for the indirect or induced employment growth associated with the industrial development and the increased tax revenues provided by these induced services or the costs attributed to them.
- 7) The formula assumes the new industry jobs are net jobs, that is, the employees were not previously employed in the Town.
- 8) The fiscal benefits of the three Study firms are assumed to be continuous with no accounting for business slowdowns or collapse.

Net Benefit From the Study Firms to the Residential Sector

The analysis (Table 25) indicates that the net difference in the tax rate if the three Study firms had not located in Winkler would be approximately an 11 mill increase. In terms of revenue not accruing to

the Town, the 11 mills would mean an approximate loss of \$71,000. More importantly, this 11 mill loss applied to a single-family household assessed at \$5,000 would mean residential taxes would be \$53.00 higher per household. Therefore it can be concluded that the presence of the three Study firms in Winkler has had a significantly positive impact on the residential sector in Winkler, supporting it to the tune of an average of \$53.00 per household.

Major Factors That Could Have Resulted in a Negative Fiscal Impact on Winkler

Several major factors were operative in the Winkler situation that would have resulted in increased costs to the community if these factors had not been present; and are as follows:

- 1) A large number of the industrial workforce (45 percent of total) lived outside Winkler and commuted to the industries. The result is that the Town received the benefits of the increased industrial and commercial assessment and taxes but fortunately did not have to provide municipal services to accommodate this large percentage of the workforce who commute.
- 2) For several reasons such as changing demographic structure, rural population losses and excess school room capacity, the industrialization did not result in a substantial increase in education costs.
- 3) A large portion of the industrial labor force for the Study firms already resided in Winkler.
- 4) The fact that the Study firms are "dry" industries and environmentally non-disruptive or natural resource "demanding"

resulted in a minimum burden being placed on the water and sewer distribution systems and also the general environment.

- 5) The fact that many of the industrial workers were young singles/ married without children meant the education costs to the Town would not be burdened.

E. PLANNING AND POLICY IMPLICATIONS

Planning for Future Municipal Capital Development Projects in Winkler

Despite the fact that industrial development in Winkler during the last 1960's and early 1970's has more than paid its way in terms of direct costs, the resulting induced community growth has placed heavy demands on the municipal infrastructure of Winkler.

The various debt indicators (per capita debt, the assessment-debt ratio, and debt carrying charges) have all risen as a result of capital expenditures necessitated to accommodate community growth that can be attributed largely to industrial development. The assessment-debt ratio (a measure of the Town's ability to pay off its debt) is 26.5 percent, which is close to the upper limit of 30 percent allowed by the Manitoba Municipal Board.⁸

The high level of debt can affect current expenditures in categories that are discretionary, such as recreation, at least until the capital requirements and debt charges moderate.

As a result of the community growth between 1971 and 1975 the Town is faced with the fact that two of its most essential services, water

treatment and sewage treatment, are reaching their capacity to accommodate future community growth.

This fact combined with the fact that the Town has nearly reached its borrowing capacity limit, means that sound fiscal management must occur in the next few years.

Fiscal Management Implications for the Town

As a result of the requirement for expanded municipal services versus the ability to pay situation that has arisen, the Town will have to carefully program and manage its expenditures over the next five years to ensure that the essential capital development expenditures, particularly the water and sewage treatment facilities, can be adequately financed in order to maintain the existing levels of service.

The Town Council should carefully assess all new industrial development proposals submitted to analyze their impact on the community's fiscal sector, particularly any requirements arising for extensive capital expenditures. These capital expenditures would like arise particularly in the situation where an industry would cause an influx of new population. For this reason, any industrial development proposals should be analyzed in terms of where the labor pool is being attracted from. Industries to be promoted would be ones that can take advantage of untapped community resources, for example, women because it would place less demand on community services.

Implications for Government Planners and Administrators

Based on the studies cited earlier and also this first hand analysis, several implications arise that planners and administrators

must consider when prospective developers want to locate in small, fiscally fragile towns. Some of these implications that planners and administrators must consider are:

- 1) They should relate the capital expenditure and land use development plans to each other in order to more effectively deal with community growth and its impact on the municipal finances.
- 2) They should always assess a community's municipal finance picture before evaluating industrial development proposals or in directing prospective industrial developers to specific communities.
- 3) They should encourage communities to take full advantage of the planning and growth possibilities within the capital expenditure plan and the land use development plan in order to effectively deal with community growth and its fiscal implications.

A least-cost growth plan should be formulated. The most important criteria to use in assessing the financial solvency of communities are identified below:

Key Indicators to be Analyzed in a Municipal Fiscal Sector Analysis

The following indicators are integral to determine the impact of industrial development on the municipal fiscal sector. A municipal fiscal sector analysis, using various fiscal impact methods must address the following indicators:

- . assessment ratio
- . municipal service thresholds and capacities
- . debt levels such as assessment-debt ratios per capita levels and carrying charges

- . tax levels in relation to income
- . school capacities.

These indicators lead to assumptions that can be made in terms of industrial development that can be encouraged in a community when:

- . debt levels are manageable
- . school space is available
- . assessment bases are weak or declining and need economic uplift
- . the municipal services have available capacity or where expansion would not debilitate the fiscal health of a community
- . existing tax levels are high in relation to income where industrial development and its taxes could ease the tax burden on the residential sector of a community.

Conversely, assumptions can be made in terms of discouraging industrial development in a community when:

- . the municipal services are at capacity or over-utilized which would require costly capital expenditures by the community to be able to accommodate industrial development
- . the schools are at capacity or overcrowded
- . municipal debt levels are high and where industrial development would only increase these levels
- . industrial development would place an increasing burden on the tax load of the taxpayers.

F. SUMMARY

The following benefits and disbenefits of industrial development as analyzed in this Chapter are summarized below:

- 1) There is now a strong solvent industrial-commercial/residential assessment ratio.
- 2) The tax revenue of the three Study firms alone provided a saving of \$53. in taxes to the average home owner.
- 3) A disbenefit is that the employees of the three Study firms cost more to service than they returned in revenue to the Town. This deficit of \$76,290. should be weighed in light of the benefits being returned to the Town by the industrial-commercial sector.
- 4) Another disbenefit is the educational expenditure associated with community growth largely as a result of industrial development. The deficit after accounting for school taxes paid by industry yields a \$44,907. loss to the community.
- 5) Countering these disbenefits is the approximate \$100,000. net revenue accrued from the two industrial parks. So one can see that even with a very successful industrial development program, the benefits and disbenefits to the municipal fiscal sector are roughly even. This illustrates the sensitivity of a small town's fiscal solvency and how small towns can get into fiscal problems if industrial growth and community growth are not managed wisely. The saving factor is that the industrial development has a positive impact on the average home owner in terms of the tax revenues from the industrial sector providing a significant relief on the annual homeowner's tax payment (\$53.).
- 6) Despite the fact that industrial development has paid its way the resulting induced community growth has placed heavy demands on the municipal infrastructure of Winkler. The various debt indicators (per capita debt, assessment-debt ratio and debt

carrying charges) have all risen to accommodate community growth that can be largely attributed to industrial growth.

On the balance ledger industrial development has paid its way in Winkler. Yet the Town must carefully program and manage its expenditures over the next five years to ensure that the upgrading of municipal services needed can be adequately financed in order to maintain the existing levels of service. Small towns have run into fiscal problems by paying out more to accommodate industrial development and its induced community growth than it has received in tax revenue from this combined growth.

The utility of this post facto fiscal cost revenue analysis has been to highlight actual benefits and disbenefits associated with industrial development. Such a rigorous analysis would not have been done for a future predictive type of development situation. Yet a post facto study such as this can be used as a basis for a predictive analysis in future major studies if the need should ever arise.

Chapter IV - Footnotes

1. Source of all information in this Chapter is the Department of Municipal Affairs "Statistical Information Respecting the Municipalities of the Province of Manitoba, 1966 - 1976.
2. Based on the methodology used in G. Sternlieb, et al., Housing Development and Municipal Costs, (New Brunswick, 1973).
3. All costs for the Town of Winkler were proportioned to either the residential or industrial sectors and then to particular areas according to a number of criteria.
4. Reid, Crowther and Partners, Consulting Engineers and Planners, Submission to the Manitoba Municipal Board, 1974.
5. Municipal Planning Branch, Winkler Development Plan, Part 1, Research - Surveys and Analyses, (Winnipeg, 1976), pp. 64-65.
6. Ibid., pp. 62-65.
7. J. Gerwack, "The Effect of Industrial Growth on the Local Real Estate Tax: An Expanded Model", Land Economics, pp. 397-401.

and

H. Groves and I. Riew (1963), "The Impact of Industrial Development on Local Taxes - A Simple Model", "The National Tax Journal", pp. 137-146.

8. Municipal Planning Branch, Winkler Development Plan, Part 1, Research - Surveys and Analyses, (Winnipeg, 1976), p. 83.

CHAPTER V

The Impact of Industrial Development the Housing Sector and Land Development Process in Winkler (1971 - 1975)

A. PURPOSE

The purpose of this section is to study the impact of industrial development on the housing sector in Winkler. Also, as shown in the previous Chapter, municipal costs associated with residential development can be substantial and it is important to detail the change in the residential sector of Winkler. As this is the most important secondary impact associated with industrial development, trying to account for commuting patterns of the industrial workers and the availability of locally unemployed persons and how these two characteristics affect the housing demand situation is a formidable task. An attempt will be made to make as accurate an estimation as possible based on the data restrictions associated with this type of analysis.

B. REVIEW OF THE LITERATURE

It is quite clear on the basis of several studies, that additional industrial jobs mean new house construction. Equally apparent is the fact that the number of new houses generated by industrial development in a community cannot be predicted with much certainty. For example, Dauoust (1954), found that when 300 new jobs from a new industry were

created in a small Michigan town, there were 14 new houses constructed in the town having a market value of \$360,000.¹

Davis (1963) in another study reported that substantial residential expansion occurred with an influx of industry in the latter part of the 1950's. Thus, 224 homes valued at \$3.0 million were built as a result of industrial development in the town.²

A study by Uhrich (1974) of the impact of a plant on a South Dakota town reported 115 new houses and 9 new mobile homes being built as a result of the industry locating in that town.³

The impact of industrial development on the housing sector in a small town cannot be predicted and planned for accurately unless additional characteristics such as work force composition and the local/regional labor supply are considered. This is an important factor based on the evidence supplied by Dauoust (1954) and Garth (1953).⁴ The towns they studied were of similar size and the new industries in each town had work forces of similar size. Yet, in one of the towns only 14 new houses were built, while in the other town 353 new houses were built. The striking difference in new house construction was due to the commuting patterns of the workers of the two towns. In the town that had only 14 new houses built, the industrial workers commuted from nearby towns and villages; whereas in the town that had 353 new houses built, there was little competition from neighbouring communities in providing workers with new housing or any other service.

The potential for new industry's impact on the local housing sector is also dependent on the number and type of labor that is demanded by the new industry. If a small town has an underutilized labor supply and the skill types required by the industry can be met locally, then there

will be little immediate impact by the new industry on the local housing sector. Obviously, by utilizing locally housed unemployed persons, the industry can meet its labor needs without significantly drawing on the outside labor. The effect would be to minimize the demand for new housing in the town.

On the other hand, Arathoon (1974) found that demand for industrial land on Saltfleet township led to a bidding up of land prices in the surrounding area. As well, speculation by industry and developers on land in the area meant that farmers could no longer purchase the farm land because it began to exceed the feasible economic limits of farming. Arathoon reports that between 1963 and 1971 industrialization and associated land speculation increased land prices between 250 and 300 percent and led either to complete abandonment of farming or to land not being farmed to its full potential.⁵

Yeates and Lloyd (1963) studied the impact of industrial development associated with the Area Development Agency, in their work entitled Impact of Industrial Incentives: Southern Georgian Bay Region, Ontario.⁶ They found that housing prices were 20 percent higher in a town affected by the ADA program as compared to an average for 23 other Ontario centres during roughly the same time period. Yeates and Lloyd reported that the housing price increases in towns affected by the ADA were comparable with price increases in larger metropolitan centres where the pressure on housing prices is acknowledged as being more severe (in the order of 30 percent increases in a two year period, 1965 - 1967).

Yeates and Lloyd observed that the annual increases in house prices prior to industrial development were about 5.7 percent, but after the impact of industrial development the increases quickly rose to 12 to 15

percent annually. They also point out that the steep increases in house and land prices made home ownership very costly in comparison to the hourly wage rates provided by the new industries.

They found that many of the workers working in the Town commuted from a radius of 25 to 30 miles. They also concluded that there was a correlation between the apparent labor shortage in the Town and the physical shortage of houses of the right price for the income earned by the industrial employee.

They concluded that the industrial development program had the impact of:

- . fundamentally altering the balance of supply and demand in the housing and land market;
- . creating new demand schedules for most types of labor and several commodities.

C. THE IMPACT OF INDUSTRIAL DEVELOPMENT ON THE HOUSING SECTOR IN WINKLER

Much of the spectacular population growth in Winkler between 1971 and 1975 has been attributed to rapid industrial development and its creation of many jobs in Winkler. The influx of workers to the industries created a severe demand for housing in Winkler and resulted in a housing shortage crisis in Winkler in 1973 and 1974 (as indicated by Town officials).⁷ The housing sector and the impact that industrial development had on it will be analyzed as follows:

- 1) by the number of housing sales by type (1971 - 1975)
- 2) by the number of new residential starts (1971 - 1975)

- 3) by the percentage change in sale price of housing by type (1972 - 1975)
- 4) by a comparison of the average sale price of housing in Winkler to Winnipeg.

Number of Housing Sales by Type (1971 - 1975)

Table 1 shows the number of housing sales by type for Winkler. Between 1972 and 1975 there was a 71.1 percent increase in the number of yearly housing sales, which reflects the fast growth rate of Winkler during this period. This high percentage increase in yearly housing sales suggests a very active and growing housing market, as reflected by the number of new housing starts (Table 2). Interestingly, in 1974 (the year of the apparent housing crisis) there were more sales of older houses, which may be explained by the fact that in a tight housing market, even the older and less desirable yet more affordable housing will tend to be bought up (see Appendix IV for a description of housing types).

Overall, new housing sales comprised slightly more than one half of all housing sales, probably because there was an increasingly higher percentage of new housing coming into the market (Table 2).

Number of New Residential Starts (1971 - 1975)

Table 2 shows the number of new residential housing starts. Between 1972 and 1975 there was a 264.0 percent increase in the number of residential starts in Winkler in response to the fast population growth

TABLE 1

WINKLER - NUMBER OF HOUSING SALES BY TYPE (1971-1975).

Housing Type	No. Of Sales	% Of Yearly Total	No. Of Sales	% Of Yearly Total	No. Of Sales	% Of Yearly Total	No. Of Sales	% Of Yearly Total	No. Of Sales	% Of Yearly Total	Housing Type as % Of Total No. of Sales (1971-1975)		
1) Older/Cheaper Frame													
	01	7	8.4	3	4.4	4	5.5	17	16.5	22	18.6	53	11.9
	07	11	13.3	11	15.8	5	6.9	13	12.6	8	6.8	48	10.8
	08	9	10.8	14	20.3	10	13.7	9	8.7	8	6.8	50	11.2
	21	5	6.1	1	1.5	2	2.7	1	1.0	1	.9	10	2.2
	40	6	7.2	1	1.5	3	4.1	4	3.9	4	3.4	18	4.0
	49	4	4.8	4	5.8	5	6.8	12	11.7	3	2.5	28	6.3
Sub Total	42	50.6	34	49.3	29	39.7	56	54.4	46	39.0	207	46.4	
2) Newer/Better Built													
	11	15	18.1	12	17.4	6	8.2	8	7.7	10	8.5	51	11.5
	15	24	28.9	22	31.8	36	49.3	34	33.0	58	49.1	174	39.1
	20	-	-	1	1.5	1	1.4	2	2.0	1	.9	5	1.0
	34	2	2.4	-	-	1	1.4	3	2.9	3	2.5	9	2.0
Sub Total	41	49.4	35	50.7	44	60.3	47	45.6	72	61.0	239	53.6	
TOTAL No. Of Sales/Year	83	100	69	100	73	100	103	100	118	100	446	100	
% Increase No. Of Sales 1971 -													

NOTE: Only Predominant housing Types Used

NOTE: Only Predominant housing Types Used - there are a couple other housing types in Winkler, but they didn't have significant sales volume to warrant inclusion. This analysis represents 96.5% of all housing sales between 1971 and 1975.

SOURCES: Municipal Affairs - List of Property Sales for Town of Winkler 1971-1975.

See Appendix IV for details.

TABLE 2 THE NUMBER OF NEW RESIDENTIAL STARTS (1971-1975)

PERMIT TYPE	1971		1972		1973		1974		1975	
	NUMBER OF STARTS	CONS-TRUCTION COST	NUMBER OF STARTS	CONS-TRUCTION COST	NUMBER OF STARTS	CONS-TRUCTION COST	NUMBER OF STARTS	CONS-TRUCTION COST	NUMBER OF STARTS	CONS-TRUCTION COST
1) RESIDENTIAL										
New single family dwellings	32	450,000	25	362,200	56	989,500	83	1,992,500	90	2,205,550
New duplex dwellings	-	-	-	-	-	-	1	50,000	-	-
New multiple family dwellings	2	96,000	-	-	1	56,000	2	572,000	1	33,000

Source: Town of Winkler Building Permits.

TABLE 3

PERCENTAGE CHANGE IN AVERAGE SALE PRICE OF HOUSING BY TYPE (1972-1975)

HOUSING TYPE	1972-1973		1973-1974		1974-1975		1972-1975	
01	11.7%		6.5%		51.9%		80.7%	
07	1.5		27.3		50.8		94.7	
08	18.1		41.3		-9.8		50.6	
11	8.8		24.4		36.5		84.8	
15	11.9		32.8		18.6		79.3	
20	19.7		58.6		-11.7		67.9	
21	-27.6		157.5		-19.1		50.7	
34	-		24.9		45.0			(1973-1975)
40	23.2		32.7		63.7		167.5	
49	9.2		28.9		6.3		49.7	

during this period (much of this growth, as mentioned, is attributable to industrial development).

Percentage Change in Average Sale Price of
Housing by Type (1972 - 1975)

Table 3 illustrates the percentage change in the average sale price of housing by type in Winkler between 1972 and 1975.

In a high demand situation in a tight housing market, such as that which Winkler experienced between 1972 and 1975, older housing can command market prices closer to new housing prices. Conversely, in a low housing demand situation, older housing commands a much lower price. That is, older housing would have a low market value in a low housing demand situation; but in a high demand situation, older housing would command high market value and still be affordable to potential house buyers. Yet, a new house having a higher initial selling price will not be subjected to as high a market value increased compared to the original purchase price, otherwise the sale price would likely be beyond the purchasing power of house buyers. This is a plausible explanation for some of the high percentage increase in housing prices for some of the older housing types compared to new housing. Housing Type 21, a category of older housing, underwent a 151.5 percent increase in sale price in the 1973 - 1974 period due to high demand. In comparison, Housing type 15, a relatively new housing type, underwent a 32.8 percent increase for the 1973 - 1974 period - about one-fifth of the percentage increase of Housing Type 21.

The housing analysis revealed the following salient points:

- . Between 1972 and 1973, new housing types had a significantly higher percentage increase in sale price than the older housing types.
- . Between 1973 and 1974, the average percentage increase in sale price was significantly higher for older housing types (49 percent) compared to newer housing types (35.2) percent.
- . In the 1973 - 1974 period, the percentage increase by housing type was virtually the same. The overall percentage increase for the 1972 - 1975 period, however, was higher for older housing types than for newer housing types.

Interestingly, three housing types (08, 20, 21) showed actual decrease in average sale price in the 1974 - 1975 period. This finding must be qualified by the fact that all three housing types had shown very high increases in the 1973 - 1974 period, and with the lessening of the housing demand between 1974 and 1975, it is quite reasonable that their average sale price declined.

Of the 10 predominant housing types in Winkler, 5 showed the greatest percentage increases in sale price in the 1973 - 1974 period, with 3 of the 5 being older housing types. The most accurate indicator of inflationary pressure would be the older housing types.

Another plausible reason for a stabilization or small decrease in housing prices in the 1974 - 1975 period for some housing types is the introduction of large number of new residential units onto the market in 1975 (Table 2). The influx of a large number of new housing units eased the high demand - high price situation in Winkler and likely caused housing prices to level off and terminate the high inflationary

increases that had occurred during the 1973 - 1974 period. The amount of "lead time" in the subdivision development process would also be a critical factor accounting for a large number of new housing units coming on to the market in Winkler all at once and consequently having a major impact on housing prices in a small-scale housing/economic system such as Winkler.

A Comparison of the Average Sale Price of Housing in Winkler to Winnipeg (1972 - 1975)

Table 4 shows a comparison of the average sale price of houses in Winkler as compared to Winnipeg for the period 1972 - 1975. Interesting to note is the increasingly higher percentage that the average Winkler house price is of the Winnipeg average house price. It increased from 58.1 percent in 1972 to 69.7 percent in 1975.

During the 1972 - 1975 period, the housing sector in the whole country experienced extremely high price increases due to the impact of inflation on land, labor and materials; the high housing demand created by the World War II baby boom who were entering the family formation stage of the life cycle (placing a high demand on single family dwellings); the higher cost of borrowing mortgage money; etc. The housing sector in Canada's metropolitan areas was most affected by the high demand for housing, and therefore, most vulnerable to the inflationary spiral of housing prices. Generally, housing prices in the rural areas did not increase as rapidly as they did in the major metropolitan areas of Canada.

It is significant, therefore, when a rural town shows housing price increases - even increases which merely approach the increases in major

TABLE 4 A Comparison of the Average Sale Price of Housing in Winkler to Winnipeg (1972-1975)

<u>AVERAGE SALE PRICE Of Housing</u>		1972	1973	1974	1975
1) Winkler		11,400	14,419	19,277	23,325
2) Winnipeg		19,620	21,651	27,900	33,468
Winkler Price As Percentage of Winnipeg Price.		58.1	66.6	69.1	69.7
Average A/S Ratio By Housing Type					
	01	36.5	32.7	30.7	20.2
	07	35.5	35.0	27.5	18.2
A/S= <u>ASSESSMENT</u>	08	35.3	29.9	21.2	23.5
Sales Price	11	32.4	29.8	23.9	17.5
	15	33.9	29.8	22.4	18.9
% Change In Sale Price	20	28.9	24.1	15.2	17.2
= $\frac{1/A}{1/S} \frac{1973}{1972}$ -					
	21	28.5	39.4	15.3	18.9
1/A /S 1972	34	-	29.0	23.2	16.0
= \bar{x}	40	40.7	33.7	24.9	15.2
	49	35.4	32.5	25.2	23.7
AVERAGE A/S RATIO BY YEAR		34.1	31.5	22.9	18.9

PERCENTAGE CHANGE
IN AVERAGE SALE
PRICE OF HOUSING
USING A/S RATIO
(WINKLER ONLY):

TABLE 5

	1972-1973	1973-1974	1974-1975	1972-1975	1973-1975
1. Winkler	8.2	37.9	21.1	80.6	66.9
2. Winnipeg*	10.4	28.9	20.0	70.3	54.6

* M.L.S. - Winnipeg Real Estate Board 1972 - 1975.

Sources: Municipal Affairs - List of Property Sales for Town of Winkler

M.L.S. - Winnipeg Real Estate Board (1972-1975)

urban centres. The fact that Winkler showed a significantly higher percentage increase in the average housing price than Winnipeg did (Table 4) begs an explanation. Obviously, above and beyond the inflationary increases that were common to both Winkler and Winnipeg, there were additional market forces at work in Winkler in order for housing prices there to have higher percentage increases than Winnipeg's housing prices.

In interviews with Town officials and Provincial Land Assessors, it was confirmed that the influx of workers to the new industries was the key factor contributing to the extraordinary percentage increases in housing prices. Just the addition of some 125 new employees into Winkler's three industries caused severe demand for accommodation.⁸ The high housing demand that occurred had the effect of increasing housing prices at least 10 percent to 12 percent more than would have occurred if there had not been such high demand. These findings are consistent with the findings of Arathoon (1974) and Yeates and Lloyd (1963) that the impact of industrial development on the housing sector artificially increased housing prices at least 10 to 15 percent more than would have occurred had there been no industrial development and no consequent influx of workers.

D. CONCLUSION - HOUSING

The increase in housing prices caused by the introduction of new industries in a small town is one of the detrimental impacts of industrial growth. Although there are some parties who do benefit from this situation (such as existing home or land owners who wish to sell, construction labor, building contractors, speculators, and lawyers and

the real estate industry), it is both the long-term resident and the newcomer to the community who inevitably has to pay the increased housing prices to secure shelter in the community.

E. THE IMPACT OF INDUSTRIAL DEVELOPMENT ON THE LAND DEVELOPMENT PROCESS
IN WINKLER

Introduction

This section of the Study will look at the following two impacts of industrial development:

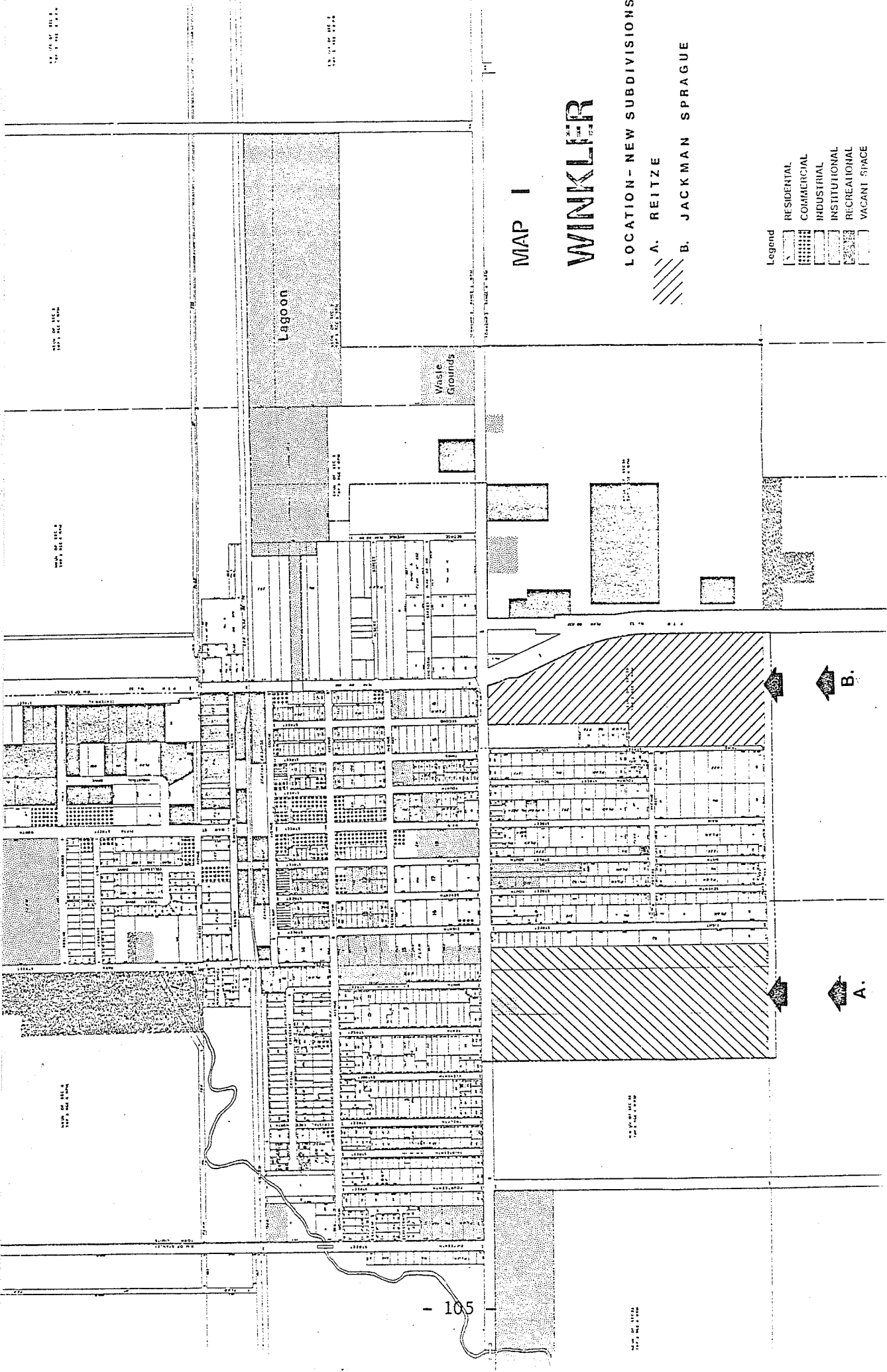
- 1) impacts on the land within the Town.
- 2) impacts on the region surrounding Winkler.

With rapid industrial development in Winkler in the early 1970's, the demand for housing increased sharply and in 1973 - 1974 this resulted in a serious shortage of housing. Conditions were favorable then for a developer to provide badly need housing units in return for secure and reasonable profits.

The Competing Land Developers

There were basically two parties in the land development process in Winkler. One party was F.J. Rietze whose subdivision plan for the North East Quarter Section 33, Township 2, Range 4 was approved in 1975. There are approximately 186 lots in this subdivision (Map 1).

The second major land development group was Jackman Sprague Ltd. Gary Jackman was the manager of the Co-op Lumber store in Winkler and has recently been appointed the Town of Winkler Development Officer.



MAP I

WINKLER

LOCATION - NEW SUBDIVISIONS

A. REITZE

B. JACKMAN SPRAGUE

- Legend
- RESIDENTIAL
 - COMMERCIAL
 - INDUSTRIAL
 - INSTITUTIONAL
 - RECREATIONAL
 - VACANT SPACE

Jackman Sprague Ltd. initially assembled land adjacent to the southern boundary of Winkler in the first half of 1974. The land was of mixed use; there was some agricultural and there were a few older houses on the site. On September 24, 1974, a Jackman Sprague request that their land be annexed to the Town of Winkler was granted by resolution of the Town Council of Winkler and the R.M. of Stanley. In addition, several government departments approved the annexation (Municipal Affairs and the Department of Agriculture). In the meantime, Jackman Sprague had been filing subdivision proposal plans to the Municipal Board, assuring the Board that they felt that the subdivision was badly needed and they planned to have growth over a two to three year period after which they felt it would be completely utilized. Complicating both the Jackman Sprague and Rietze subdivision approval processes was the Reid Crowthers and Partners report that the present sewage treatment facilities of the Town of Winkler are overloaded and therefore would not handle both the Jackman Sprague units and the Rietze housing units coming "on line" in a close time sequence. The Manitoba Municipal Board would not consider the Jackman Sprague subdivision until such time as the Town of Winkler provided adequate flood protection measures and sewage treatment facilities (December, 1974).

The Town by a resolution dated August, 1974 indicated their intentions to improve the existing sewage treatment facilities in early 1975 and that flood protection would be adequate by then, also. It is clear that the two proposed subdivisions required the Town to upgrade some of its capital facilities as the proposed subdivisions could not be approved until such work was done.⁹

The Major Impacts on the Town

The major impact on the Town was one of "lead-lag effect" in planning housing units for projected population growth. The problem was that two major subdivisions totalling close to 400 single family housing units inappropriately came "on line" at the same time due to a lack of accurate demographic/industrial employee information. A letter of October, 1974 from Jackman Sprague's lawyer to the Municipal Board reported that there was an immediate housing need of 100 units or more due to the location of Monarch Industries Ltd. in Winkler.

If the developers, Town officials and government planners had known, however, that 55 percent of all Monarch employees (Employee Survey) would live outside the Town, their projected housing demand figures would have been far less and their resulting capital commitments for community infrastructure more appropriate. The end result of this lack of information is the situation as it exists today:

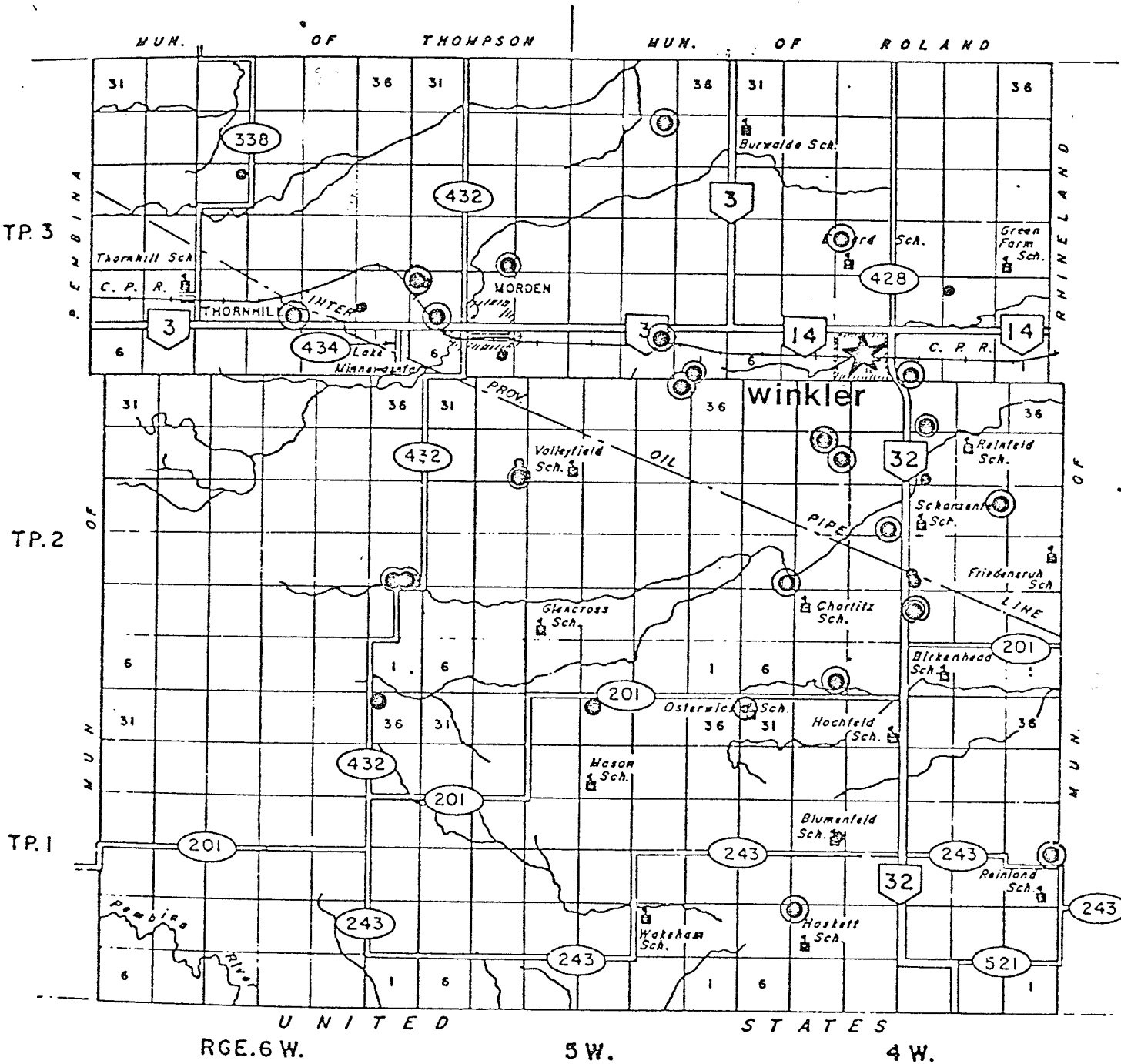
- 1) There is an oversupply of and underdemand for housing units due to commuting and migration patterns of industrial employees.
- 2) The Jackman Sprague subdivision is virtually empty and may become a "white elephant" as most of the growth has been concentrating either in Rietze's subdivision, other areas of the Town or outside the Town boundaries.
- 3) The Jackman Sprague subdivision is not as aesthetically well located as Rietze's subdivision as it is situated directly across from P.T.H. 32 and the new Pembina Valley Industrial Park. The Rietze subdivision is located to the west and as such as better locational characteristics than the Jackman Sprague subdivision (see Map 1).

- 4) In June of 1976, the Jackman Sprague subdivision was sold for approximately \$600,000 - a 100 percent profit was made on this serviced land (land and servicing originally cost approximately \$300,000).
- 5) The purchasers of the Jackman Sprague subdivision have acquired the only large subdivision tract available within the Town boundaries (barring any further annexations) - yet in its present usage it is known as a "white elephant" subdivision. In addition, the carrying costs on \$600,000 could be as high as \$60,000 per year - costs which will ultimately have to be passed onto the consumer. Potentially, therefore, this land may always have a higher price tag than other serviced land in Winkler or outside the Town boundaries.¹⁰

Impacts on the Region

The fact that a serviced lot in the Jackman Sprague or Rietze subdivisions sells at \$6,000 - \$7,000 has, in effect, forced many potential house buyers to buy land outside the Town boundaries.

Map 2 indicates residential building permits issued outside Winkler for 1976 - February 1977 and shows a proliferation of housing construction in close proximity to Winkler by people who work in Town, but find it cheaper to live outside the Town. To purchase and service a lot outside Winkler would cost approximately \$3,000 or one half the price of a lot inside Winkler (an estimate established in conversation with J. Steedsman, Senior Land Assessor, Morden Land Titles Office).



MAP 2



Scale
1" = 3 miles

Residential Building Permits Around Winkler
1976 - February, 1977 Indicated by Circle (C)

F. THE NEED FOR SOUND DEVELOPMENT PLANNING

If planners, developers and Town officials had known the residential location patterns of the work force for the three major industries, they might not have planned two new subdivisions of 400 lots total. As the situation now stands, there is housing available for at least the next five years. Considering the carrying costs and the inability of the Jackman Sprague subdivision to attract house buyers, the Town has been left with an expensive potential eye sore. Considering that the original reason for the development of the Jackman Sprague subdivision was that it would be used to accommodate the population growth resulting from the Monarch plant and the other two major plants, this unnecessary commitment of capital has been one detrimental impact of industrial development on the Town of Winkler.

Another detrimental impact has been the scattered housing developments in the countryside that are consuming good farm land. It is apparent that there is a need for more planning and control of growth in Winkler and its region, at least to the extent of managing key services which may impact greatly on the social, economic and fiscal health of the Town and its surrounding area.

Planners must use a more comprehensive approach in the analysis of a housing sector study rather than being caught in an embarrassing situation as was the case in Winkler. It is paramount that a more comprehensive approach be taken rather than risk the municipal fiscal cost implications associated with a "white elephant" subdivision, but then again if planners were made more responsible for their actions would this have occurred or would it occur again.

G. SUMMARY

Findings - Housing and Land Development

- 1) There was an overall 81 percent price increase in old and new houses in Winkler in the 1972 - 1975 period, compared to a 70 percent increase in Winnipeg during the same period. The difference in price increases between Winkler and Winnipeg indicates that there was at least a 10 percent to 12 percent price increase most likely attributable to rapid industrial development in Winkler.
- 2) The cost of houses in Winkler became an increasingly large percentage of the cost of houses in Winnipeg (from 58 percent to 70 percent) during the 1972 - 1975 period. This was a significant trend because rural house prices are seldom subjected to the same demand pressures as metropolitan house prices (Winnipeg experienced great inflationary pressures on housing after 1972). Further, average incomes in Winkler are not as high as average incomes in Winnipeg and the diversity of accommodation is much less in Winkler than Winnipeg (thus reducing the options available to the lower income groups seeking accommodation in Winkler).
- 3) There was the problem of a "lead-lag" effect in planning the supply of housing units in Winkler. Initially, there was an insufficiency of or "lag" in housing units available for the population growth in Winkler (growth attributable, to a large extent, to industrial development). The problem reached a peak of severity in 1973 and 1974; and in 1974, older and less

desirable houses increased in price more than newer and more desirable houses, indicating that a price ceiling or limit of affordability was reached by house buyers in Winkler. There was a stabilization or decrease in average house prices in 1975 due to the introduction of a large number of new housing units on the market, representing a "lead" in or excess of housing available for the demand level at the time. This inappropriate addition to the housing stock likely occurred because of the nature of the subdivision approval process which puts a large number of units on the market at the same time and an overestimation of the housing requirements for the Monarch labor force which consists of an extraordinarily high percentage (55 percent) of commuters.

- 4) There is, at present, an oversupply of and underdemand for housing units in Winkler, likely related to the cost of housing and the extremely high proportion of commuters in the Town's labor force.
- 5) Because of the rapid increase in the cost of serviced lots and housing in Winkler, there has been a trend of residential construction and house sales outside Winkler - thus accentuating the commuting phenomenon, reducing potential residential tax revenues to Winkler and consuming farm land.
- 6) The Town of Winkler has assumed the burden of paying some of the servicing costs of the subdivision (which is virtually empty) without the benefit of serving the original purpose of its approval - that of providing housing for the labor force needs of Monarch and the population growth of Winkler.

- 7) The cost increases of the subdivision due to speculation and the non-productive carrying costs of an almost empty subdivision will eventually be passed onto house buyers, which may restrict the type of housing that can be built in the subdivision and can be afforded by Winkler residents.

Planning and Policy Implications

- 1) Rapid industrial growth had a large impact on the requirements for and price of Winkler's housing stock. This high demand for housing has also affected the type and location of residential growth through the development of two subdivisions and construction outside Town boundaries.
- 2) The demand and the supply required of new dwellings is not accurately predictable by "rule of thumb", previous situations, or examples elsewhere. Rather, such calculations should be based on considerations such as the capacity of the existing housing stock to absorb growth; the expected net growth of the Town and the labor force; the unemployment rate of local labor; the type and amount of labor required by new industry; the proportions of commuters, migrants and local labor in the labor force; the income level of the population and the price of different forms of housing.
- 3) The Town of Winkler, administration and provincial planners should consider conducting housing and labor force studies (to determine the kind and amount of housing required) before major decisions on approving and servicing subdivisions, in order to efficiently stage housing delivery and effectively manage growth.

The Town should influence the type (perhaps to include alternative housing types), location and timing of housing built in Winkler as housing availability has important social as well as economic consequences.

- 4) In a socio-economic system as vulnerable to change as Winkler's there is a need for more planning and management by the Town in order to efficiently stage and control the cost of services and to develop the physical, social and economic shape of the community to meet the community's needs.

Chapter V - Footnotes

1. G.F. Summers, et al, Industrial Invasion of Non-Metropolitan America - A Quarter Century of Experience, New York, 1976, p. 79.
2. Ibid., p. 79.
3. Ibid., p. 79.
4. Ibid., p. 80.
5. D.N. Arathoon, "Evaluating the Economic Impact of Industrial Development: An Application to Saltfleet Township", Unpublished Master's Thesis, 1972.
6. M.H. Yeates and P.E. Lloyd, Impact of Industrial Incentives: Southern Georgian Bay Region, Ontario, Geographical Paper No. 44, Ottawa, 1970.
7. This point was made at a meeting with Town officials on March 23, 1977. Between 1971 and 1976, Winkler received 1,198 (net) migrants, approximately 56 percent were in the 15 - 65 age category (M.H.S.C. statistics).
8. Winkler Industrial Employee Survey of the Three Study Firms.
9. Municipal Affairs - Winkler File.
10. Numerous conversations/meetings with government officials, Town officials, real estate people and various others all were used to provide various perspectives on the housing situation in Winkler.

CHAPTER VI

Community Planning and Development

Recommendations - Winkler, Manitoba

A. RECOMMENDATIONS

The conclusions drawn from the impact analyses carried out can be used in formulating the following community planning and development recommendations:

- 1) That the Town of Winkler discourage large scale location or expansion of industry at present, in order to provide a period of moderate growth and "cooling down".
- 2) That the Town use the opportunity it has at present to assess the effect of industrialization on its social, economic, and cultural structure and general well-being, and that the Town consider its planning options for the future and decide the kind of growth and direction it should take.
- 3) That the Town integrate its policies and strategies for growth in a Development Plan which will include a capital expenditures plan, policies for population growth and industrial growth, plans for the provision of services etc.
- 4) That the Town carefully program its expenditures over the next five years so that essential infrastructure can be financed and existing service levels can be maintained.
- 5) That the Town practice management so as not to exceed the capacity of the sewer and water systems and other systems. Presently under-utilized infrastructure such as housing

subdivisions should await increased demand through natural population increase to avoid the problems of "imported" growth.

- 6) That further industrial development proceed only when conditions for such development are suitable: that is, when there is a need for additional employment and the required labor is available locally; when key factors such as sewer and water facilities, municipal borrowing capacity, and other necessities are in place and available; and when the local economy has the capacity to absorb competition for labor and capital and the social and cultural system of the Town has the capacity to integrate change in the present and long-term.
- 7) That in the event of promoting industrial development, the Town encourage firms offering the most benefits to Winkler. The Town should favour industries indicating a willingness to hire labor that is local, relatively unskilled, and includes women; favor industries with strong economic linkages and low dependence on energy, sewer and water facilities, and high-risk markets; and favor industries with concern for and involvement in the community.
- 8) That labor force and infrastructure surveys be conducted by the Town or jointly by the Town and the large industries, and Statistics Canada data be used to determine the supply of, demand for, and location of labor, various services, etc. to avoid mis-timed staging of growth.
- 9) That the Town solicit the co-operating of large firms in establishing manpower policies that most benefit the Town.

- 10) That the Town and industries jointly plan to enhance the vitality of the community and the work force by improving job training, conditions promoting job satisfaction, housing, and other important facets of life in Winkler.
- 11) That the Town and local entrepreneurs attempt to further develop the service sector in order to increase community income and the level of amenities and to enhance the attractiveness of Winkler to its residents.
- 12) That the matter of industrial development in small towns such as Winkler be looked at by government in terms of local conditions rather than in the light of large-scale urban, economic and social perspectives.

It is hoped that these strategies will be used both by the Town of Winkler and the government planners as major input into the next Winkler Development Plan and any Regional Planning study that may be initiated.

B. SUMMARY

To this end, a set of planning performance criteria should be established to aid in the following:

- . selecting appropriate types of industry for particular communities in need of economic development.
- . directing development proposals to communities where the development is likely to do the most good or the least harm.
- . making the best fit between an industry and a community - minimizing costs such as social differences, school costs, infrastructure deficiencies and housing shortages, and maximizing

benefits from industrial linkages, payroll spending and service purchases.

The Winkler Study provides a basic procedural analysis and highlights some of the performance criteria for assessing industrial impacts and their implications on community planning and development strategies.

In subsequent studies these performance criteria can be analyzed as to the specifics of the community being studied. The purpose of this Study has been to identify which indicators to use, how to apply them specifically and to make some basic assumptions on the findings as to suggested policy and planning recommendations for the future in Winkler.

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CHAPTER VII

Utility of this Type of Study

A. THE UTILITY

One has to ask "What is the utility of a fiscal and housing sector impact analysis? What possible benefits will it have in future community planning and development?" In response, it can be said that a study of this kind, by focusing on what has happened in the community, can provide some intelligence as to where the community wants to and should go in the future? Winkler, for example, was at a kind of threshold. The Town Council had recently made major decisions which radically changed the economic and social fabric of the community. The development of the industrial park and the introduction of a major outside employer marked major turning points in the community's development. This impact study has provided the Town with an opportunity to reflect on the implications of those decisions - to assess the changes that have taken place; to add the benefits and to subtract the costs. More importantly, the Study provides the community with a way of looking at the future. In particular, the Study can assist the Town in developing a community development strategy for the future. For example, this impact study can assist in answering the following questions:

- 1) Does the community want to further industrialize given the expected costs and benefits?

- 2) What kind of industry does the community want, indigeneous or imported; based on the local resource base or using imported materials; large size or small size; new or old?
- 3) Is industrial development the only option available? For example, are there opportunities in the service sector?

If a community opts for further industrial development, a study of this kind can assist them in planning for urban growth; it can allow them to use these impact assessment methods as planning tools to provide an integral component of the development plan and the capital expenditures plan to plan for growth. In particular, using these tools with intelligence from a study of this kind can ensure that planning policies and guidelines are reasonably accurate and rational.

B. GENERAL PLANNING POLICY AND IMPLICATIONS

A study of this nature can provide integral inputs into the community development or regional development planning policies and implications. Listed below are general statements which convey ideas relevant to existing planning policy or the need for future policy.

- 1) Public money may be wisely spent as part of a local/regional planning study to prepare a location assessment guide to determine where industries' site selection would bring maximum benefit to the local public.
- 2) Low wage, low-skill industries should be guided to communities with a surplus of low-skilled labor; as a first stage to a progressive upgrading of the labor force and type of industry locating in a community.

- 3) Acknowledging the fact that private industry must maximize their capital gains, it is likely that some communities which do not attract private capital could nevertheless, support low-skilled low-profit industries. In these cases, it may be equitable to use public money to subsidize the formation of local cooperatives and/or public profit-making enterprises.
- 4) When industrial development does occur in a community, it must be ensured that the local residents are not bypassed by the industry's employment requirements. Training programs should be implemented to benefit the local residents.
- 5) Comprehensive analyses (as in this Study) should be carried out by the respective planning authorities to ensure that small towns that will receive municipal grants to provide the necessary infrastructure to accommodate industry have self-generating growth potential. Otherwise, the public money should not be used on towns that have an irreversible negative growth situation.
- 6) Long range development strategies involving both the private and government sectors should be promoted in order to begin to address the problems of local/regional development problems. This would necessitate close liaison between local and regional planning authorities.
- 7) There is a growing demand by the public on the government and its planners to provide them with social, fiscal and economic impact studies to make them aware of the type and extent of changes that industrialization may bring to their communities.
- 8) The impact that industrialization may have on the housing sector, municipal infrastructure, social fabric, economic sector and

school system should be analyzed before and with each successive industrial development to determine when the "break point" is likely to be reached so that it can be adequately accounted for in the local development plan.

- 9) The impacts that industrialization in non-metropolis areas will have on agricultural land has been well documented. It is paramount to have strong policies that will ensure that good agricultural land is protected from rural industrial encroachment in the future.
- 10) Lastly and very importantly, town administrators and planners must utilize the latest methods available to ensure that accurate input is used in preparing policy guidelines for their community development plans. Previously, lack of knowledge on the part of the Town administrator and planners about the various methods (such as fiscal and housing impact assessments), has resulted in innaccurate and inefficient utilization of a community's resources. Hopefully, as these various techniques are tried and perfected, they will be used increasingly more in the applicable planning context and ultimately realizing a more integrated approach to community planning.

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CHAPTER VIII

Conclusions on the Winkler Study

A. SUMMARY

It is the objective of every research study undertaken that it be successful both in terms of knowledge gained and also that its purposes be fulfilled as best possible. I believe this Study has accomplished both points. To reiterate, the purpose of this Study was threefold:

- 1) To assess whether industrial development that occurred in Winkler was a net fiscal gain or fiscal cost to the Town. This will be accomplished through using a cost revenue impact analysis approach.
- 2) To assess whether industrial development had an appreciable impact on the housing and land development sectors of Winkler.
- 3) To extrapolate from these findings, clues that can be highlighted as being both useful in future studies of this kind and also as they relate to community development planning.

Each purpose will be discussed respectively as to the findings of this Study.

To illustrate, the findings as they relate to the first purpose are as follows:

- 1) That the industrial development that did occur between 1966 and 1975 did ultimately result in a net fiscal gain to the Town.
- 2) That although there was a net fiscal gain from industrial development there were several potential pitfalls that could have resulted in industrial development being a net fiscal cost

to the Town. Fortunately the Town of Winkler did not encounter too many pitfalls but this may not have been the case for other towns.

- 3) To illustrate the potential pitfalls that could have occurred, a large number (45 percent) of the industrial workforce commuted to Winkler. If these workers had lived in Winkler then the Town would have had to provide municipal services to a substantially greater number of people. This likely would have altered the municipal finance picture of the Town quite significantly, maybe even to the point where even the increase in tax revenue due to the industrial growth may not have offset the potential increase that may have been required to provide municipal and social services to these commuters if they had lived in Town.
- 4) Another potential pitfall the Town did not fall into was the fact that education costs did not rise substantially as a result of industrial development. The excess school capacity and the fact that 45 percent of the industrial workforce commuted so not all their children used Winkler's schools negated a significant increase in school expenditure. Yet in other situations there could have been a significant increase in school expenditures especially if more of the workforce lived in Winkler and there was not the excess school room capacity that was available.
- 5) Another potential pitfall the Town averted was the fact that industrial firms locating in Winkler were of the "dry type" industry not "wet" industry. Therefore, there was much less demand put on the municipal water and sewer systems than if there were "wet" industries present which would have been more

costly for the Town to service. In fact the Town had had a bad experience with a creamery as it required a large amount of water and resulted in a strain on their sewage lagoon. The Town felt it was too costly to service this creamery and as a result was attempting to discourage any further location of "wet" industries in Town.

- 6) The Town had to be fairly effective in their fiscal management abilities as to accommodate the industrial and spinoff growth it had to make major expenditures on all their municipal services. The Town borrowed substantially to accomplish this, risking the fact that they would have to attract more industrial growth to enhance the industrial to residential tax base ratio.

Other towns may not have been as prudent or wise in their fiscal management abilities; fortunately Winkler was able to wisely manage their municipal finances.

As for the findings as they relate to the second purpose it was felt that the findings did fulfill the intent of the purpose. The findings indicated that there were several appreciable impacts that occurred to the housing and land development sectors in Winkler. These findings are as follows:

- 1) The rise in Winkler housing prices between 1972 and 1975 (when industrial development was greatest) was at least 10-12 percent higher than Winnipeg and even Morden, a similar sized town. Much of this price increase can be attributed to the demand for housing caused by people moving to Town to work for the new industries.

2) The housing shortage in 1973 and 1974 was softened due to the lead-lag time required to bring new housing "on line" which occurred in 1975. After 1975 the housing prices did not rise as rapidly as supply was beginning to meet the demand as new subdivisions were brought "on line".

3) The Town assumed the burden of servicing a developer's subdivision that ultimately was not required as the population growth forecasted due to Monarch Industries was not as significant as the developer had forecasted. Unfortunately both the Town and government planners went along with the developer's housing forecasts and the subdivision approvals were granted. In the end the demand for this subdivision never materialized leaving the Town with a "white elephant" subdivision and with costly services in the ground that would not be recovered until the housing was built which would be much later.

Based on these factors it can be said the industrial development and its related population growth did have an appreciable impact on the housing and land development sectors in Winkler.

With regards to the findings as they relate to the third purpose, many pertinent findings or clues were derived from the various analyses that would be useful as an aid in future similar studies and also community development planning.

For example, regarding the municipal fiscal analysis certain performance criteria were identified that should be utilized in establishing whether a Town should encourage or discourage industrial growth. To illustrate, industrial development in a community could be encouraged where:

- . debt levels are manageable.
- . school space is available.
- . the municipal infrastructure has the capacity or expansion would not debilitate the community.

Conversely, performance criteria were suggested to assess whether industrial development should be discouraged when:

- . the municipal services are at capacity and the Town could not afford to upgrade their municipal services.
- . the schools are at or exceeding capacity.
- . municipal debt levels are high and the industrial tax revenue would not significantly offset these high debt levels.

These performance criteria could be established as part of a permanent monitoring system whereby the sensitivity of a Town's municipal finances could be easily determined should a new development be proposed. This set up could easily be implemented by either the Town or government planner. In fact, as part of the development approval process these performance criteria could be used to assess whether a proposed development could be accommodated by a Town or whether it would be a net fiscal cost to the Town.

With the municipal fiscal health of many cities today being threatened as expenditures are approaching revenues, performance criteria could be established as an ongoing monitoring system that would be fairly inexpensive to implement but very helpful in aiding a municipality in making future policy and development decisions.

B. ADDITIONAL THOUGHTS ON FINDINGS

Not only are the measurable findings important in analyzing the impact of industrial development on a small town but the intangible findings are also important to understand.

For example, the demand for housing caused housing prices to rise quite dramatically. Unfortunately the industries that created this population growth and housing demand and subsequent increases in house prices were not paying their average worker enough to be able to afford these houses. So while the industries were creating new jobs they weren't paying the workers enough to be able to buy a house that had risen substantially in price, due to worker demands for this housing (a Catch-22 situation). This sequence of events led to several conditions arising:

- 1) Workers would commute from a far distance rather than move to Town.
- 2) Spouses would have to take up jobs to afford the housing.
- 3) Indiscriminate subdivision in Winkler's environs was occurring on good farm land as it was cheaper to build a house on an acreage using a septic tile and field rather than pay twice as much for a serviced lot in the Town.

Regarding the municipal fiscal analysis it was increasingly apparent as to just how fragile or sensitive a small town's fiscal situation is. It is understandable how in many studies reviewed for this research the overall findings were that industry was a net cost to a small town. If small towns are not wise in their fiscal management it's quite understandable how one or two major new developments could quite easily have a detrimental effect on the municipal finances. The balance

between fiscal solvency and insolvency is quite fine, it would appear for many small towns. A good understanding of a town's fiscal setup is required and only then can one acquire the sensitivity necessary to make intelligible decisions regarding fiscal and growth matters. This is the challenge for planners and administrators in the future, to be able to establish the sensitivity of a town's fiscal setup to new developments. As discussed earlier the performance criteria monitoring system would be a good basis to acquire an understanding of a small town's fiscal situation. Hopefully, the towns in the future will implement such a system as the complexity of these matters will require it moreso in the future.

C. ENDING

The benefits of this type of study to a planner can be significant. The benefits are measured not only by how successful the findings were but also how one's thought processes, knowledge and skills can be advanced through such a Study. It is those benefits that are most applicable to the everyday planning experiences.

The benefit to the "client" or "reader" lies in the presentation of results and organization of such a Study. Therefore the Study serves two purposes; one of expanding the skills of the researcher and also the presentation of meaningful findings to a client or reader. Although both of these groups may view the combination of these perspectives differently, they should represent a more meaningful understanding of the situation as a whole.

For the Town of Winkler, the results of this Study were very significant. The Town had within one decade been transformed from a

small agricultural centre to a bustling rural town industrial centre and had experienced many changes in its way of life as a result. These changes were not always viewed as being positive by the Town and that is why they requested this Study. Fortunately the Town managed its fiscal affairs wisely and reaped the benefits of industrial development. Many towns have not been so lucky.

Hopefully in future, studies of this type will aid planners and administrators in reducing the propensity for detrimental impacts of industrial development on small towns. We have the knowledge and methods to do it, we must assign the time and money to carry it out.

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APPENDIX I - CHAPTER II

TABLE 1

POPULATION SIZE AND CHANGE: SOUTHERN MANITOBA MARKET CENTRES 1951 - 1976

		POPULATION SIZE					POPULATION CHANGE				
		1951	1956	1961	1966	1971	1976 ¹	1951 - 1961 # %	1961 - 1971 # %	1971 - 1976 # %	1951 - 1976 # %
<u>PEMBINA VALLEY</u>											
Altona	1438	1698	2026	2129	2122	2480		588 40.9	96 4.7	358 16.9	1042 72.5
Carman	1867	1884	1930	1922	2030	2272		63 3.4	100 5.2	242 11.9	405 21.7
Morden	1862	2237	2793	3097	3266	3886		931 50.0	473 16.9	620 19.0	2024 108.7
Morris	1193	1260	1370	1339	1399	1572		177 14.8	29 2.1	173 12.4	379 31.8
Winkler	1331	1634	2529	2570	2983	3749		1198 90.0	454 18.0	766 25.7	2418 181.7
SUB TOTAL	7691	8713	10648	11057	11800	13959		2957 38.4	1152 10.8	2159 18.3	6268 81.5
<u>OTHER</u>											
MARKET CENTRES	17263	20567	21689	23887	24184	25377		4426 25.6	2495 11.5	1193 4.9	8114 47.0
TOTAL	24954	29280	32337	34944	35984	39336		7383 29.6	3647 11.3	3352 9.3	14382 57.6

1. 1976 Census Final Population Counts.

Source: Canada Census

TABLE 2

POPULATION SIZE AND CHANGE: SOUTHERN MANITOBA MARKET CENTRES 1971 - 1976

SOUTHERN MANITOBA MARKET CENTRES	POPULATION SIZE		POPULATION CHANGE 1971 - 1976	
	1971	1976	#	%
Pembina Valley:				
Altona	2190	2759	569	26.0
Carman	2091	2736	645	30.8
Morden	3294	4299	1005	30.5
Morris	1461	1906	445	30.5
Winkler	3124	4431	1307	41.8
SUBTOTAL	12160	16131	3971	32.7
OTHER MARKET CENTRES				
	26514	28463	1949	7.4
TOTAL	38674	44594	5920	15.3

Source: Manitoba Hospital Services Commission.

TABLE 3

POPULATION CHANGE BY YEAR 1971 - 1976

YEAR	<u>WINKLER</u>			<u>MORDEN</u>		
	POPULATION	ANNUAL % CHANGE	CUMULATIVE CHANGE %	POPULATION	ANNUAL % CHANGE	CUMULATIVE CHANGE %
1971	3124	6.1	6.1	3294	4.1	4.1
1972	3316	3.9	10.0	3430	3.6	7.7
1973	3444	18.4	28.4	3555	8.9	16.6
1974	4076	0.2	28.6	3872	4.3	20.9
1975	4086	8.4	37.0	4037	6.5	27.4
1976	4431			4299		

Source: Manitoba Hospital Services Commission

TABLE 4

POPULATION CHANGE BY AGE GROUP 1951 - 1971

A. WINKLER

CENSUS YEAR	AGE GROUP						TOTAL
	0 - 14		15 - 64		65+		
	No.	% of Total	No.	% Of Total	No.	% Of Total	
1951	424	31.9	774	58.1	133	10.0	1331
1956	506	31.0	921	56.3	207	12.7	1634
1961	809	32.0	1363	53.9	357	14.1	2529
1966	733	28.5	1399	54.4	438	17.1	2570
1971*	780	26.2	1650	55.4	550	18.4	2980

B. MORDEN

CENSUS YEAR	AGE GROUP						TOTAL
	0 - 14		15 - 64		65+		
	No.	% Of Total	No.	% Of Total	No.	% Of Total	
1951	567	30.4	1091	58.6	204	11.0	1862
1956	689	30.8	1281	57.3	267	11.9	2237
1961	849	30.4	1578	56.5	366	13.1	2793
1966	919	29.7	1712	55.3	466	12.0	3097
1971*	810	24.8	1875	57.5	575	17.7	3260

* Population counts are random rounded.

Source: Census Canada

TABLE 5

POPULATION CHANGE BY AGE GROUP 1971 - 1976

A. WINKLER

Year (June 1)	AGE GROUP						TOTAL
	No.	0 - 14 % of Total	No.	15 - 64 % Of Total	No.	65+ % Of Total	
1971	948	30.3	1723	55.2	453	14.5	3124
1972	1021	30.8	1824	55.0	471	14.2	3316
1973	1045	30.3	1884	54.7	515	15.0	3444
1974	1094	29.8	1980	54.0	591	16.1	3665
1975	1189	29.1	2266	55.5	631	15.4	4086
1976	1318	29.7	2453	55.4	660	14.9	4431
TOTAL INCREASE	370		730		207		1307
% OF TOTAL INCREASE	28.3%		55.9%		15.8%		100%

B. MORDEN

Year (June 1)	AGE GROUP						TOTAL
	No.	0 - 14 % of Total	No.	15 - 64 % Of Total	No.	65+ % Of Total	
1971	858	26.0	1856	56.3	580	17.6	3294
1972	878	25.6	1962	57.2	590	17.2	3430
1973	909	25.6	2049	57.6	597	16.8	3555
1974	920	25.2	2123	58.1	603	16.5	3655
1975	1028	25.5	2369	58.7	640	15.9	4037
1976	1112	25.9	2515	58.5	672	15.6	4299
TOTAL INCREASE	254		659		92		1005
% OF TOTAL INCREASE	25.3%		65.6%		9.1%		100%

TABLE 6 POPULATION CHANGE BY 5 YEAR AGE GROUPS 1971-1976

AGE GROUPS	WINKLER			MORDEN		
	1971	1976	CHANGE 1971-76	1971	1976	CHANGE 1971-76
0 - 4	316	477	161	246	390	144
5 - 9	316	428	112	294	335	41
10 - 14	316	413	97	318	387	69
0 - 14 SUBTOTAL	948	1318	370	858	1112	254
15 - 19	299	430	131	305	385	80
20 - 24	247	385	138	207	376	169
25 - 29	176	320	144	196	336	140
30 - 34	167	246	79	161	253	92
35 - 39	133	202	69	146	196	50
15 - 39 SUBTOTAL	1022	1583	561	1015	1546	531
40 - 44	134	167	33	145	177	32
45 - 49	152	166	14	185	162	-23
50 - 54	131	174	43	154	211	57
55 - 59	149	163	14	172	200	28
60 - 64	135	200	65	185	219	34
40 - 64 SUBTOTAL	701	870	169	841	969	128
65 - 69	143	190	47	178	217	39
70+	310	470	160	402	455	53
TOTAL	3124	4431	1307	3294	4299	1005
MEDIAN AGE	26.9	26.3		32.5	29.1	

SOURCE: Manitoba Hospital Services Commission.

TABLE 7

SOUTHERN MANITOBA MARKET CENTRES 1951 - 1971

SOUTHERN MANITOBA MARKET CENTRES	NET MIGRATION					INCREASE DUE TO NET IN-MIGRATION 1951-1971%
	1951-56	1956-61	1961-66	1966-71	1951-1971	
<u>PEMBINA VALLEY</u>						
ALTONA	43	111	-16	-90	48	7.0
CARMAN	-41	9	-22	47	-7	0.0
MORDEN	183	392	123	80	778	55.4
MORRIS	-59	-3	-164	-7	-233	0.0
WINKLER	159	744	-127	319	1095	66.3
SUBTOTAL	285	1253	-206	349	1681	40.9
<u>OTHER MARKET CENTRES</u>	1668	-676	975	-4	1963	28.4
TOTAL	1953	577	769	345	3644	33.0

Source: RAP Descriptive Data Update Vol. 1 TABLE D3

TABLE 8

NET MIGRATION ESTIMATES BY AGE GROUP 1961 - 1971

AGE GROUP	WINKLER ESTIMATED NET MIGRATION	MORDEN ESTIMATED NET MIGRATION
0 - 4	-37	-53
5 - 9	-47	-40
10 - 14	- 6	+14
15 - 19	+3	+18
20 - 24	-41	-23
25 - 34	-96	-68
35 - 44	+12	-15
45 - 54	+22	+30
55 - 64	+160	+107
65+	+222	+233
TOTAL	+192	- 149 - +203

TABLE 9

NET MIGRATION ESTIMATES BY AGE GROUP 1971 - 1976

AGE GROUP	WINKLER ESTIMATE (MHSC)	MORDEN ESTIMATE MHSC
0 - 4	210	112
5 - 9	117	93
10 - 14	98	94
0 - 14 SUBTOTAL	425	299
15 - 19	114	68
20 - 24	87	72
25 - 29	73	130
30 - 34	72	59
55 - 39	35	36
15 - 39	381	365
40 - 44	35	31
45 - 49	36	18
50 - 54	22	30
55 - 59	40	53
60 - 64	63	60
40 - 64 SUBTOTAL	196	192
65 + 69	65	48
70+	131	43
TOTAL (MHSC)	1198	947
TOTAL (CENSUS)	631	553

TABLE 10: POPULATION CHANGE IN SURROUNDING MUNICIPAL AREAS 1961-1976

POPULATION SIZE					POPULATION CHANGE %			
	1961	1966	1971	1976	1961-66	1966-71	1971-76	1961-1976
STANLEY:								
Farm	4076	3669	2781	-	-10.0	-24.2	-	-
Non-Farm	891	1133	1538	-	+27.2	+35.8	-	-
Total	4967	4802	4319*	4572	- 3.3	-10.1	+5.9	- 8.0
RHINELAND:								
Farm	4820	4006	3318	-	-16.9	-17.2	-	-
Non-Farm	1183	1333	1458	-	+12.7	+ 9.4	-	-
Total	6003	5339	4776	4550	-11.1	-10.5	-4.7	-24.0
ROLAND:								
Farm	1032	905	652	-	-12.3	-28.0	-	-
Non-Farm	476	472	456	-	- 0.8	- 3.4	-	-
Total	1508	1377	1108	1032	- 8.7	-19.5	-6.9	-31.6
TOTAL AREA:								
Farm	9928	8580	6751	-	-13.6	-21.3	-	-
Non-Farm	2550	2938	3852	-	+15.2	+17.5	-	-
Total	12478	11518	10203	10154	- 7.7	-11.4	-0.5	-18.6

Source: Canada Census

TABLE 11

BUSINESS AND PROFESSIONAL SERVICES (1968-1976)

	1968	1969	1970	1971	1972	1973	1974	1975	1976	TOTAL %
APPAREL AND ACCESSORIES GROUP	6	6	6	7	11	11	11	11	11	
Total % Change*										83.3
AUTOMOTIVE GROUP	17	17	17	17	17	19	19	19	19	
Total % Change*										11.8
BUILDING MATERIALS AND HARDWARE GROUP	9	9	9	9	10	10	12	14	15	
Total % Change*										66.7
GENERAL MERCHANDISE GROUP	6	6	5	6	9	9	9	9	9	
Total % Change*										50.0
FOOD AND BEVERAGE GROUP	6	6	10	9	12	15	15	16	16	
Total % Change*										116.7
FURNITURE APPLIANCES AND RADIO GROUP	5	5	5	6	9	9	10	10	10	
Total % Change*										100.0
PROFESSIONAL GROUP	7	7	9	10	17	18	17	17	18	
Total % Change*										157.1
OTHER GROUPS	30	30	34	35	40	41	43	44	46	
Total % Change*										53.3
TOTAL NUMBERS	86	86	95	99	125	132	136	140	144	67.4

SOURCE: Manitoba Community Reports (1968-1976), Department of Industry and Commerce, Winnipeg, Manitoba.

TABLE 12

BUSINESS AND PROFESSIONAL SERVICES IN WINKLER (1968-1976)

	1968	1969	1970	1971	1972	1973	1974	1975	1976
<u>APPAREL AND ACCESSORIES GROUP</u>									
Children's Wear	1	1	1	1	2	2	3	3	3
Family Clothing Stores	2	2	2	2	3	3	3	3	3
Jewellery Stores	2	2	2	2	3	3	3	3	3
Ladies' Wear	1	1	*	1	2	2	2	2	2
Men's Wear	-	-	*	*	*	*	*	*	*
Shoe Stores	-	-	-	*	*	*	*	*	*
Tailors	-	-	-	*	*	*	*	*	*
<u>AUTOMOTIVE GROUP</u>									
Body Repairs	2	2	2	2	2	1	1	1	1
Bulk Oil Dealers	4	4	4	4	4	4	4	4	4
Implement Dealers	4	4	4	4	4	4	4	4	4
Motor Vehicle Dealers	2	2	2	2	2	4	4	4	4
Service Stations	5	5	5	5	5	6	6	6	6
<u>BUILDING MATERIALS AND HARDWARE GROUP</u>									
Building Contractors	3	3	3	3	4	4	5	5	5
Hardwares	3	3	3	3	3	3	3	3	3
Lumber Yards	3	3	3	3	3	2	3	3	3
Woodworking	-	-	-	-	-	1	1	1	1
Floor Covering	-	-	-	-	-	-	-	2	2
Glass and Mirror Shops	-	-	-	-	-	-	-	-	1
<u>GENERAL MERCHANDISE GROUP</u>									
Catalogue Sales Offices	2	2	1	2	2	2	2	2	2
Department Stores	2	2	2	2	3	3	3	3	3
General Stores	2	2	2	2	4	4	4	4	4
<u>FOOD AND BEVERAGE GROUP</u>									
Bakeries	1	1	1	1	1	1	1	1	1
Eating Places	2	2	5	5	6	6	6	7	7
Eating Places with Beverages	-	-	-	-	-	-	-	-	-
Grocery Stores	2	2	2	2	4	6	6	6	6
Liquor Commission	-	-	-	-	-	-	-	-	-
Locker Plants	-	-	-	-	-	-	-	-	-
Meat Markets	-	-	1	-	-	*	*	*	*
Super Markets	1	1	1	1	1	2	2	2	2

TABLE 12 Continued

1968 1969 1970 1971 1972 1973 1974 1975 1976

FURNITURE APPLIANCES AND
RADIO GROUP

Electrical Appliances	1	1	1	1	4	4	4	4	4
Furniture Stores	2	2	2	2	2	2	3	3	3
T.V. and Radio Repairs	2	2	2	3	3	3	3	3	3

PROFESSIONAL GROUP

Accountants	1	1	1	1	4	4	4	4	4
Chiropractors	-	-	1	1	1	1	-	-	-
Dentists	-	-	-	-	-	-	1	1	1
Lawyers	2	2	2	2	4	4	4	4	4
Medical Doctors	3	3	4	5	6	6	5	5	5
Optometrists	1	1	1	1	1	1	1	1	2
Veterinarians	-	-	-	-	-	-	-	-	-
Psychiatrists	-	-	-	-	1	2	2	2	2

OTHER GROUPS

Banks	1	1	1	1	1	1	2	2	3
Barbershops	2	2	3	3	3	3	3	3	3
Beauty Parlours	2	2	2	2	3	4	5	5	5
Billiard Parlours	-	-	1	1	1	1	-	-	-
Bowling Alleys	-	-	-	-	-	-	-	1	1
Coin Laundries	1	1	2	2	2	2	2	2	2
Drug Stores	2	2	2	2	2	2	2	2	2
Dry Cleaners	**	**	2	2	2	3	2	2	2
Egg Grading Stations	1	1	1	1	1	1	1	1	1
Electrical Contractors	1	1	1	1	1	1	1	1	2
Florists	-	-	-	-	-	-	1	1	1
Funeral Parlours	1	1	1	1	1	1	1	1	1
Grain Elevators	3	3	3	3	3	3	3	3	3
Hatcheries	1	1	1	1	1	-	-	-	-
Insurance & Real Estate	3	3	3	3	5	5	5	5	5
Machine Shops	2	2	2	2	2	2	2	2	2
Painters & Decorators	-	-	-	-	1	1	2	2	2
Photographers	1	1	1	1	1	1	1	1	1
Plumbing and Heating	3	3	3	3	3	3	3	5	5
Printers	1	1	1	1	1	1	1	1	2
Road Contractors	-	-	-	-	-	-	-	-	-
Shoe Repairs	2	2	2	2	2	2	2	1	1
Theatres	-	-	-	-	-	-	-	-	-
Upholsterers	1	1	-	-	-	-	-	-	-
Music Shops	1	1	1	2	2	2	2	2	2
Fabric Shops	1	1	1	1	2	2	2	1	1

*With Others

**Coin With Laundry

SOURCE: Manitoba Community Reports (1968-1976), Department of Industry and Commerce, Winnipeg, Manitoba.

Table: 13 WINKLER'S RETAIL SALES 1966 - 1975

<u>YEARS</u>	<u>RETAIL SALES (\$)</u>	<u>PERCENTAGE CHANGE</u>
1966	4,300	Over Previous Year
1967	4,900	13.9
1968	5,000	2.0
1969	5,100	2.0
1970	4,067	25.3
1971	4,220	3.7
1972	17,500	314.7
1973	19,950	14.0
1974	23,045	15.5
1975	24,980	8.3

Source: Trade and Commerce Magazine 1966 - 1975

Table: 14 WINKLER'S COMMERCIAL BUILDING PERMITS 1966 - 1975

<u>YEARS</u>	<u>NUMBER OF PERMITS</u>	<u>VALUE OF PERMITS</u>
1966	13	250,950
1967	7	229,950
1968	12	83,750
1969	6	169,000
1970	14	208,900
1971	9	93,850
1972	10	302,339
1973	16	387,000
1974	30	1,655,050
1975	17	141,800

Source: Town of Winkler

Table: 15 WINKLER'S COMMERCIAL ASSESSMENT 1973 - 1976

<u>YEARS</u>	<u>ASSESSMENT</u>	<u>PERCENTAGE CHANGE</u>
1973	\$1,322,330	Over Previous Year
1974	1,568,450	18.6
1975	1,723,130	9.8
1976	1,882,190	9.2
1973-1976		42.3

Source: Town of Winkler

APPENDIX II - CHAPTER III

Table: 1 TOTAL TAXABLE ASSESSMENT/CAPITA 1966-1976

Winkler

Year	Total Taxable Assessment	Percentage Change (Cumulative)	Population	Assessment/ Capita
1966	3,943,440	-	2570	\$1,534.41
1967	3,963,500	0.50 (0.50)	2570	1,542.22
1968	4,491,770*	13.3% (13.8)	2570	1,747.77
1969	4,822,810	7.36 (21.16)	2570	1,876.58
1970	5,067,980	5.08 (26.24)	2570	1,971.98
1971	5,809,220*	14.6 (40.84)	2983	1,947.44
1972	5,978,080	2.9 (43.74)	3316	1,802.80
1973	5,922,530	-0.9 (42.84)	3444	1,719.67
1974	6,320,550	6.7 (49.54)	4076	1,550.67
1975	6,747,840	6.76 (56.3)	4086	1,651.45
1976	7,955,170	17.89 (74.19)	4431	\$1,795.34

Morden

Year	Total Taxable Assessment	Percentage Change (Cumulative)	Population	Assessment/ Capita
1966	4,299,900	-	3097	1,388.41
1967	6,043,120	40.5% (40.5)	3097	1,951.28
1968	6,135,450	1.51% (52.03)	3097	1,981.09
1969	6,288,000	2.5% (54.53)	3097	2,030.35
1970	6,869,200*	9.2% (63.73)	3097	2,218.02
1971	7,057,780	2.7% (66.43)	3294	2,142.62
1972	7,293,920	3.31% (69.76)	3430	2,126.51
1973	7,533,030	3.3% (73.03)	3555	2,118.99
1974	8,365,340*	11.0% (84.07)	3972	2,160.47
1975	9,155,400	9.4 (93.5)	4037	2,267.37

* re assessment took place
All Towns

Year	Total Taxable Assessment	Percentage Change (Cumulative)	Population	Assessment/ Capita
1966	109,728,690	-	89,459	1226.5
1967	125,644,627	17.24% (17.24)	94,127	1334.8
1968	130,826,745	4.12% (24.32)	94,127	1390.0
1969	140,091,050	7.08% (28.44)	94,127	1488.3
1970	121,114,124	-13.54% (14.9)	75,604	1602.0
1971	126,558,280	6.3% (21.2)	78,022	1622.1
1972	134,516,720	7.4% (28.6)	78,022	1724.1
1973	144,489,770	7.4% (36.0)	78,022	1851.9
1974	152,868,600	5.7% (41.7)	78,148	1956.97
1975	160,187,940	4.8 (46.5)	78,148	2049.8

Source: Dept. of Municipal Affairs Statistical Information Pertaining to Manitoba Municipalities.

Table: 2 Increase in Industrial Assessment as Proportion of Total Assessment Winkler 1966-1976

ASSESSMENTS	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
FIRMS											
1. Triple E Real Property - Business	11,270 1,620	17,190 1,620	17,190 2,910	20,750 6,160	50,290 7,870	64,990 11,190	64,990 11,190	190,820 51,120	336,550 58,120	359,140 59,820	365,440 60,180
2. Kroeckers Real Property - Business Person Prop.	60,470 1,920 870	60,060 2,280 870	68,010 2,280 870	68,810 4,080 870	70,410 4,080 870	84,180 7,050 1,840	87,210 7,500 1,840	87,210 7,500 1,840	87,210 7,500 1,840	87,210 7,500 1,840	88,610 7,500 1,840
3. Monarch Real Property - Business	Nil Nil	Nil Nil	Nil Nil	Nil Nil	Nil Nil	Nil Nil	Nil Nil	- -	- -	1,400 Nil	279,320 51,060
Total Three Study Firms	76,150	82,020	91,270	100,670	133,520	169,250	172,730	338,490	492,050	516,910	853,950
Percent of total assessment	1.9	2.1	2.0	2.1	2.6	2.9	2.9	5.7	7.8	7.6	10.7
Real Property											
Assessments of All Industry											
Only in N.E. 4-3-4w -	11,720	17,620	17,590	63,940	147,300	270,120	288,240	451,280	476,170	510,040	511,060
Only in S.E. 4-3-4w -	307,050	323,490	355,370	357,780	432,280	466,050	532,740	514,920	465,830	406,360	402,140
Only in N.W. 34-2-4w -	-	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	5,730 (Land Only)	483,700 (Incl. W-Steel)
Total Industry	318,770	341,110	372,960	421,720	579,580	736,170	820,980	966,200	942,000	922,130	1,396,900
% total assessment	8.2	8.6	8.3	8.7	11.4	12.7	13.7	16.3	14.9	13.7	17.5
% Change by Year	-	7.0	9.3	13.1	37.4%	27.0%	11.5%	17.7%	-2.6	-2.2%	51.5%
Assessments of the whole town - taxable - L.I.D.	3,852,680 4,700,630	3,963,500 4,888,430	4,491,770 5,838,550	4,822,810 6,263,800	5,067,980 6,390,300	5,809,220 7,101,120	5,978,080 7,301,410	5,922,530 7,378,820	6,320,550 8,134,040	6,747,840 8,664,610	7,955,170 10,010,020

Source: Town of Winkler

TABLE 3 RESIDENTIAL/COMMERCIAL INDUSTRIAL ASSESSMENT RATIO

WINKLER

YEAR	A FARM/RESIDENTIAL (%) ASSESSMENT	B INDUST/COMMERCIAL (%) ASSESSMENT	TOTAL ASSESSMENT	RATIO A/B
1973	3,634,000 (62.6%)	2,169,440 (37.4%)	5,803,440	1.67
1974	3,810,100 (59.6%)	2,387,360 (38.5%)	6,197,460	1.54
1975	4,102,580 (62.1%)	2,501,210 (37.8%)	6,603,790	1.64
1976	4,676,080 (59.8%)	3,134,440 (40.13%)	7,810,520	1.49
	(average 61.0%)	(average 38.5%)		

MORDEN

YEAR	A FARM/RESIDENTIAL (%) ASSESSMENT	B INDUST/COMMERCIAL (%) ASSESSMENT	TOTAL ASSESSMENT	A/B RATIO
1973	5,214,830 (71.8)	2,048,790 (28.2)	7,263,620	2.54
1974	5,880,800 (72.6)	2,213,610 (27.3)	8,094,410	2.66
1975	6,378,060 (72.0)	2,485,240 (28.0)	8,863,300	2.57
1976	6,791,450 (72.2)	2,616,600 (27.8)	9,408,050	2.60
	(average 72.4)	(average 27.8%)		

TABLE: 4.

WINKLER REVENUE BY SOURCE 1970 AND 1975

<u>Internal Sources</u>	1975 (Percentage)		1976 (Percentage)	
Property tax	894,755	(80.2)	477,021	(85.8)
Taxes added	82,293	(7.3)	15,164	(2.7)
Licenses/permits	6,756	(0.6)	1,819	(0.3)
Fines	10,139	(0.9)	4,874	(0.9)
Sales services	28,281	(2.5)	6,965	(1.3)
Rentals	1,200	(0.1)	165	(0.02)
Tax penalties	11,568	(1.0)	7,964	(1.4)
Misc. revenue	<u>9,890</u>	(0.9)	<u>14,723</u>	(2.6)
Total internal Sources	1,044,882	(93.6)	528,695	(95.1)
<u>External Sources</u>				
Grants in lieu (Fed.)	3,803	(0.3)	3,667	(0.7) ¹
Grants in lieu (Prov.)	15,848	(1.4)	-	-
Provincial unconditional transfers	40,912	(3.6)	20,560	(3.7)
Provincial conditional transfers	7,060	(0.6)	2,865	(0.5)
Other local governments	<u>3,750</u>	(0.3)	<u>-</u>	-
Total external	71,373	(6.4)	27,092	(4.9)
Total revenue	1,116,255	(100%)	555,787	(100)

Source: Municipal Finance Branch

1. Includes both Federal and Provincial grants in lieu of taxes.

Table: 5 Total and Per Capita Taxes Imposed

Winkler						
Year	Total Taxes Imposed	% Change	Business Tax Imposed	Business Tax As % Of Taxes	Population	Tax/Imposed Capita
1966	275,575	-	13,308	4.8	2570	\$107.23
1967	300,002	8.8	18,899	6.3	2570	116.73
1968	401,015	33.7	20,972	5.2	2570	150.04
1969	436,989	9.0	20,665	4.7	2570	170.03
1970	477,021	9.2	24,097	5.1	2570	185.61
1971	559,188	17.2	34,599	6.2	2983	187.46
1972	603,222	7.9	35,740	5.9	3316	168.97
1973	536,678	-11.0	37,276	6.0	3444	155.83
1974	636,161	18.5	43,051	6.8	3665	173.57
1975	894,635	40.6	43,900	4.9	4086	\$218.95
1976	1,163,030	30.0	48,554	4.1	4431	262.48
Morden						
Year	Total Taxes Imposed	% Change	Business Tax Imposed	Business Tax As % Of Taxes	Population	Tax/Imposed Capita
1966	305,096	-	13,308	4.4	3097	\$ 98.51
1967	347,896	14.0	24,405	7.0	3097	112.33
1968	380,025	9.2	24,975	6.6	3097	122.71
1969	400,829	5.5	2,448	0.6	3097	129.42
1970	451,701	12.7	12,635	2.3	3097	143.85
1971	476,612	5.5	12,556	2.6	3294	144.69
1972	546,721	14.7	13,197	2.4	3430	159.39
1973	576,142	5.4	12,792	2.2	3555	162.06
1974	711,557	23.5	15,174	2.1	3872	183.76
1975	1,077,722	51.46	17,313	1.6	4037	\$266.96
All Towns						
Year	Total Taxes Imposed	% Change	Business Tax Imposed	Business Tax As % Of Taxes	Population	Tax/Imposed Capita
1966	8,579,293	-	468,213	5.4	82,549	95.90
1967	9,204,941	10.7	485,422	5.3	94,127	97.79
1968	10,101,770	9.7	477,410	4.7	94,127	107.32
1969	10,948,632	8.4	467,996	4.3	94,127	116.32
1970	10,084,303	-7.9	438,467	4.3	75,604	133.38
1971	10,852,153	10.8	467,628	4.3	78,022	139.09
1972	11,895,113	9.6	523,960	4.4	78,022	152.46
1973	12,628,479	6.2	571,993	4.5	78,022	167.86
1974	15,072,667	19.4	616,319	4.5	78,148	192.87
1975	19,506,591	29.4	660,442	3.4	78,148	249.61

Source: Dept. of Municipal Affairs Statistical Information Respecting the Municipalities of the Province of Manitoba.

TABLE 6 TOTAL

Revenue From The Three Firms

YEAR	FIRM T	FIRM K	FIRM M	THREE FIRMS TOTAL	TOWN TOTAL
1966	560.81 ¹	2,456.18 ²	-	3,016.99	275,574.61
1967	1,305.33	4,499.13	-	5,804.46	300,002.35
1968	1,800.22	5,726.50	-	7,526.72	401,015.16
1969	2,718.87	5,990.61	-	8,709.48	445,838.00
1970	5,447.92	6,556.92	-	12,004.84	492,185.00
1971	7,269.17	8,424.36	-	15,693.53	570,265.00
1972	3,265.95 ³	8,944.90	-	12,210.85	618,263.00
1973	29,467.44	9,846.63	-	39,314.07	562,447.00
1974	39,740.54	10,215.96	-	49,956.50	665,634.00
1975	55,699.63	13,270.62	176.96	69,147.21	977,048.00
1976	66,886.95	13,577.71	44,598.40	125,063.06	1,271,603.48
TOTAL	214,162.73	143,509.52	44,775.36	402,447.6	6,304,300.90
%	34	2.3%	0.7%	6.4%	100.00%

Source: Town of Winkler

1. Cancelled as a tax incentive for new industry.
2. Portion cancelled due to fire.
3. Cancelled due to fire.

Table:7 TOTAL BUSINESS TAX REVENUES

Firm	1976 Assessment	Tax Rate (% rentable floor area)	Total Taxes	% Total Business Tax
Firm T	60,180	15%	\$ 9,107.00	18.6%
Firm M	51,060	15%	\$ 7,659.00	15.8%
Firm K	<u>7,500</u>	15%	<u>\$ 1,125.00</u>	2.3%
Total three firms	43,900		\$17,811.00	36.7%
Total Business	317,830	15%	\$48,554.00	100.0%

Source: Town of Winkler

Table:8 TOTAL TAXABLE ASSESSMENT OF THE STUDY FIRMS

Firm	Taxable Assessment		% of Total Taxable Assessment	
	1976	1966	1976	1966
Firm T	\$425,620	\$12,890	5.3	0.3
Firm K	97.500	63.260	1.2	1.6
Firm M	<u>330,380</u>	<u>-</u>	<u>4.1</u>	<u>-</u>
Total	\$853,950	\$76,150	10.7	1.9

Source: Town of Winkler

Leaf blank to correct
numbering

Table:10

COMPARATIVE ANALYSIS OF MUNICIPAL GENERAL EXPENDITURES 1974
BUDGET ALLOCATIONS BY PERCENTAGE

Budget Category	Fiscal				General Gov't	Protective	Transp.	Environ.	Public	Social Welfare	Planning	Ec. Devel.	Recreation	Total
	Educ.	Other	Own Funds	Debt Charges										
Community														
Winkler	28.7	-	16.7	11.8	9.8	8.0	13.0	1.8	1.9	0.3	.04	0.9	6.4	100.0
Morden	33.4	-	21.0	5.4	8.0	7.2	9.1	1.6	1.8	0.1	.03	0.8	5.2	100.0
Manitoba All Towns	34.0	-	16.2	6.0	8.7	9.6	12.0	2.6	1.8	0.4	0.6	0.6	5.4	100.0

Source: Dept. of Municipal Affairs, Statistical Information Respecting the Municipalities of the Province of Manitoba, 1974

TABLE 11: Change in General Expenditures Winkler 1970 - 1975

Expenditure Item	1970	% Total Expenditures	1975	% Total Expenditures	Percent Change
1.0 <u>FISCAL</u>					(1970-1975)
1.1 Education	206,183	(39.8)	304,344	(27.6)	47.6%
1.2 Own Funds	75,158	(14.5)	198,526	(18.0)	164.1%
1.3 Debt Charge	18,538	(3.6)	87,834	(8.0)	373.8%
1.4 Total Fiscal	299,879	(57.9)	590,735	(53.6)	97.0%
1.5 Surplus	-	(0.0)	27,942	(2.5)	-
2.0 <u>GENERAL GOVERNMENT</u>					
Total	58,020	(11.2)	80,489	(7.3)	38.7%
3.0 <u>PROTECTIVE</u>					
3.1 Police	26,139	(5.0)	67,225	(6.1)	157.2%
3.2 Fire	6,026	(1.2)	19,943	(1.8)	230.9%
3.3 Other	167	(0.0)	9,341	(0.8)	5,593.4%
3.4 Total	32,332	(6.2)	96,509	(8.8)	298.5%
4.0 <u>PROGRAM AREAS</u>					
4.1 Transportation	64,624	(12.5)	134,932	(12.2)	108.8%
4.2 Environ. Health	9,617	(1.2)	16,786	(1.5)	74.5%
4.3 Public Health	16,437	(3.2)	44,362	(4.2)	169.9%
4.4 Social Welfare	4,297	(0.8)	1,744	(0.2)	-60.5%
4.3 Env. Plan	2,489	(0.5)	34,606	(3.1)	1290.3%
4.6 Ec. Devpt.	6,580	(1.3)	28,981	(2.6)	4304.4%
4.7 Recreational Cult.	23,719	(4.6)	67,464	(6.1)	184.4%
Total Expenditures	517,994	(100.0)	1,101,497	(100.0)	112.6%

TABLE 12

CAPITAL DEBT/CAPITA: Winkler
1966-1976

Year	Capital Debt	% Change	Population	Debt/Capita	% Change
1966	464,010	-	2570	\$ 180.56	-
1967	436,641	-6.1%	2570	169.89	-6.0%
1968	806,254	184.6%	2570	213.72	+184.66
1969	768,385	-5.6%	2570	298.98	-4.60
1970	764,931	-1.5%	2889	264.77	-12.92%
1971	856,481	+11.96	2983	287.12	+8.44%
1972	796,772	-6.97%	3316	240.28	-16.31%
1973	1,106,140	+38.8%	3444	321.18	+33.69%
1974	1,029,994	-6.8%	3665	281.04	-12.50%
1975	1,390,556	+ 35.01%	4086	\$ 340.32	+ 21.09%

Morden

Year	Capital Debt	% Change	Population	Debt/Capita	% Change
1966	688,741	-	3097	\$ 222.39	-
1967	684,399	-0.7	3097	220.99	-0.7%
1968	636,752	-6.7	3097	205.60	-7.0%
1969	575,274	-9.7	3097	185.75	-9.7%
1970	642,813	11.7	3097	207.56	+11.7
1971	685,831	6.7	3294	208.21	+0.3
1972	654,708	4.6	3430	190.88	-8.4
1973	849,540	29.8	3555	238.97	+25.2
1974	777,474	-8.5	3872	200.79	-19.0
1975	686,729	-11.7	4037	\$ 170.11	-15.3%

All Manitoba Towns

Year	Capital Debt	% Change	Population	Debt/Capita	% Change
1966	13,910,995	-	89,459	\$ 155.50	-
1967	13,646,858	-1.9	94,127	144.98	-6.8
1968	13,895,889	1.8	94,127	147.63	+1.8
1969	13,118,424	-5.6	94,127	139.37	-5.6
1970	12,627,798	-3.8	75,604	167.03	+19.8
1971	13,856,244	9.7%	78,022	177.59	\$ 6.3
1972	13,961,458	0.76%	78,022	178.94	+ 0.76
1973	14,745,908	5.6%	78,022	189.00	+ 5.6
1974	14,283,894	-3.14%	78,148	\$ 189.00	+ 0.0
1975	15,044,303	5.3%	78,148	192.51	+ 1.9

Source: Dept. of Municipal Affairs Statistical Information Respecting the
Municipalities of the Province of Manitoba.

Table: 13 CHANGE IN THE COMPOSITION OF
CAPITAL DEBT: 1966 - 1975
WINKLERS'

Year	Expenditure Item by dollars (Percentage)				Annual Totals(Rank)
	Sewers	Paving Sidewalks	Public Protection	Recreation	
1975		423,000			423,000 (1)
1974	30,452				30,452 (7)
1973		245,000			245,000
1972	53,500	72,000			148,547 (4)
1971	23,047(force main)	57,000 (street lights)	65,000 (fire hall & fire truck)		130,000 (5)
1970	36,000				36,000 (6)
1969					-
1968	200,000			150,000	407,764 (2)
1967	57,764				-
1966					
Total	400,763 (28.20%)	\$ 805,000 (56.7)	\$ 65,000 (4.57%)	\$ 150,000(10.6)	\$ 1,420,763

Source: Municipal Finance Branch.

Table: 14

CHANGE IN THE ASSESSMENT/DEBT RATIO 1966-1976

Winkler

Year	Equalized Assessment	Percentage Change	Capital Debt	Equalized Assessment Debt Ratio	Percentage Change in Ratio
1966	3,708,000	-	464,010	12.5	-
1967	3,913,000	5.5	436,641	11.16	-10.8
1968	3,924,000	.028	806,254	20.55	+84.14
1969	4,452,000	13.4	768,385	17.26	-16.01
1970	4,773,000	7.2	764,931	16.03	-7.13
1971	5,497,250	15.2	856,481	15.58	-2.8
1972	5,738,840	4.4	796,772	13.88	-9.1
1973	5,961,590	3.88	1,106,140	18.55	+33.64
1974	5,971,220	0.16	1,029,994	17.25	-7.0
1975	6,371,630	6.7%	1,390,556	21.82	+26.49

Morden

Year	Equalized Assessment	Percentage Change	Capital Debt	Equalized Assessment Debt Ratio	Percentage Change in Ratio
1966	4,255,000	-	688,741	16.19	-
1967	4,964,000	16.66	684,399	13.79	-14.9
1968	6,183,000	24.56	636,752	10.30	-25.3
1969	6,288,000	1.7	575,274	9.15	-10.2
1970	6,612,000	5.2	642,813	9.72	+6.2
1971	7,014,550	6.1	685,831	9.78	+0.6
1972	7,293,920	4.0	654,708	8.98	-8.2
1973	7,385,400	1.25	849,540	11.50	+28.0
1974	7,742,110	4.8	777,474	10.04	-9.6
1975	8,796,900	13.6	686,729	7.8	-12.7

All Towns

Year	Equalized Assessment	Percentage Change	Capital Debt	Equalized Assessment Debt Ratio	Percentage Change in Ratio
1966	110,884,000	-	13,910,995	12.5	-
1967	124,291,000	12.1	13,646,858	9.1	-17.2
1968	132,075,000	6.3	13,895,889	10.29	+13.1
1969	139,649,000	5.7	13,118,424	9.39	-13.9
1970	122,060,000	-12.6	12,627,798	10.3	+ 9.7
1971	129,410,080	6.0	13,856,244	10.8	+4.9
1972	134,516,720	3.9	13,961,458	10.4	-3.8
1973	147,115,890	9.4	14,745,897	10.2	-2.03
1974	155,409,660	4.7	14,283,894	9.2	-9.9
1975	165,486,990	6.5	15,044,303	9.0	+5.3

Source: Dept. of Municipal Affairs Statistical Information Respecting Municipalities of the Province of Manitoba.

TABLE 15 ANALYSIS OF CAPITAL EXPENDITURES WINKLER 1966-1976

Category	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	TOTAL	%
Non-Industrial	-	150,000	-	-	-	(firehall & truck 65,000	-	Streets (302,000) water/Sewer (76,547.19)	16,000	465,451.83	310,316.54	1,384,315.50	63.6%
Industrial	-		Lift Station 57,639.91 Water Sewer 200,000	-	Water & Sewer Exten- sion 36,000	Main 51,000 Lighting 8000	-	-	-	50,000.00	332,369.22	735,133.13	36.4%
Total	-	150,000	257,763.91	-	36,000	124,000	-	376,547.19	15,000	515,451.83	642,685.76	2,119,448.60	100.00

Source: Town of Winkler

TABLE 16. COST-REVENUE ANALYSIS OF THE
GARDEN VALLEY INDUSTRIAL PARK
(N.E. ¼ Sec. 4-3-4W)

A <u>ASSESSMENT:</u>		<u>1966</u>	<u>1975</u>
1. Taxable Real Property		59,400.	\$1,506,890.
2. Exempt Real Property (GVCI Curling, MWSB)		<u>61,210</u>	<u>530,760</u>
3. Total Assessment		\$120,610	2,037,650.
4. Business Rental Value Assessment		4,166	129,070.
B <u>TAX MILL RATE:</u>			
1. Farm & Residential		56.9 Mills	98.0 Mills
2. Commercial/Industrial		56.9 Mills	127.6 Mills
C <u>TAX REVENUE:</u>			
1. Farm & Residential		724.	40,278.
2. Commercial/Industrial		2,396.	123,772.
3. Frontage levy (LID)		19.	10,900.
4. Exempt Property LID levy		Nil	14,148.
5. Business Tax (15%)		<u>624.</u>	<u>19,350.</u>
		\$3,764.	\$ 208,448.
D <u>CAPITAL COSTS:</u>			
Debenture Debt (Water, Sewer, Streets)		\$ 200,000.	\$ 481,000.
E <u>OPERATING COSTS:</u>			
1. Annual Debenture Payments		20,000.	60,000.
2. Annual servicing costs		-	<u>57,389</u>
			\$117,389
F <u>NET ANNUAL BENEFITS</u>			

\$ 208.449 - \$ 117,389 = \$91,059/year.

1. Note includes some residential development.

TABLE 17
COST - REVENUE ANALYSIS OF THE
PEMBINA VALLEY INDUSTRIAL PARK (N.W. ¼ Sec. 34-2-4W, etc.)

<u>A ASSESSMENTS:</u>		<u>1974</u>	<u>1976 (Estimated)</u>
1. Real Property in L.I.D. #2		NIL	606,180.
2. Exempt Property		4,210	82,240.
3. Outside L.I.D. #2		<u>10,750</u>	<u>5,660.</u>
		\$14,960	\$ 694,080.
4. Business Rental Value Assessment		NIL	83,060.
<u>B TAX MILL RATES</u>			
1. Farm & Residential		68.8 Mills	100 Mills
2. Commercial		98.8 Mills	130 Mills
<u>C TAX REVENUE:</u>			
1. Real Property in L.I.D. #2		739.61	\$ 78,780.
2. Frontage Levy (W & S @ 60¢)		NIL	8,838.
3. Exempt in L.I.D. #2		NIL	2,632.
4. Exempt Outside L.I.D. #2		47.59	385.
5. Business Tax		<u>NIL</u>	<u>12,459.</u>
		\$787.20	\$103,094.
<u>D CAPITAL COSTS ACCOUNT:</u>			
1. Land Purchase, Survey, Streets, Etc.	\$108,000.	<u>LESS</u>	<u>NET COST</u>
2. Land Sales		30,000	\$ 78,000.
3. Railway Spur	108,000.		
4. Prov. Engineering Grant		5,000	103,000.
5. Sewer & Water Services	380,000.		
Fed./Prov. Grant (DREE)		<u>190,000</u>	<u>190,000.</u>
	\$ 596,000.	\$225,000	\$ 371,000.
<u>E OPERATING COSTS:</u>			
1. Annual payments on debentures \$ 266,000			\$ 30,000.
2. Annual operating costs			\$ 54,253
3. Capital costs not covered by debenture \$105,000 @ 10%/yr. =			<u>\$ 1,000</u>
<u>NET BENEFIT</u>		- 172 -	
	103,094	- 85,253	\$17,841/ 85,253 YEAR.

TABLE: 18

TOWN OF WINKLER										
CAPITAL EXPENDITURE PROGRAM										
(Name of Municipality)										
PURPOSE	CAPITAL EXPENDITURE (Mark Priority 1, 2, 3, etc.)					Total	SOURCE OF FUNDS			
	1977	1978	1979	1980	1981		Operating	Reserves	Debt Sales	Other
Administrative Services										
- Furniture & Equip.	5,000	1,000	1,000	1,000	1,000	9,000	(0.7)	9,000		
Protective Services										
- Police Equipment	5,000	5,000	5,000	5,000	5,000	25,000	(1.8)	25,000		
- Fire Equipment	5,000	5,000	5,000	5,000	5,000	25,000	(1.8)	25,000		
Transportation Services										
- Machinery & Equip.	10,000	10,000	10,000	10,000	10,000	50,000	(3.6)	50,000		
- Street paving	100,000	100,000	100,000	100,000	100,000	500,000	(36.1)	250,000		250,000
Recreation Services										
- Facilities & Equip.	10,000	10,000	10,000	10,000	10,000	50,000	(3.6)	50,000		
Utilities Services										
- Water & Sewer Ext.	25,000	50,000	25,000	50,000	25,000	175,000	(12.6)	175,000		175,000
- Leach	50,000	250,000	250,000			550,000				550,000
						(39.7)				
	210,000	431,000	406,000	181,000	156,000	1,384,000	409,000			975,000
TOTAL										
SOURCE OF FUNDS -- ANNUAL										
OPERATING	85,000	81,000	81,000	81,000	81,000	409,000	(29.6)			
RESERVES										
DEBT SALES	125,000	350,000	325,000	100,000	75,000	975,000				
OTHER										
	210,000	431,000	406,000	181,000	156,000	1,384,000	(100)			

TABLE 19 CHANGE IN MUNICIPAL MILL RATE WINKLER 1966 - 1976

<u>Year</u>	<u>Rate</u>	<u>Percentage</u> <u>Change</u>
1966	56.9	-
1967	61.8	+ 8.6
1968	75.9	+22.8
1969	75.8	-0.9
1970	79.0	+ 1.04
1971	81.5	+3.1
1972	87.0	+6.7
1973	^r 61.8 ^c 93.8	r(-28.7) c(7.8)
1974	68.8 97.8	r(10.1) c(4.3)
1975	97.0 126.4	r(40.99) c(29.2)
1976	105.0 129.7	r(8.25) c (2.6)

Note: Municipal mill rate seperated into seperate commercial and residential rates in 1973.

Source: Town of Winkler

TABLE 20

WINKLER:Approximate Share of Total Taxes by Commercial and Residential Sectors 1976¹

Tax Item	Levy on Ind./Comm. Assessment (Rate)	Levy On Residential Assessment (Rate)	Total Levy
1. School			
a) Foundation	88,704.65 (28.3)	16,833.88 (3.6)	105,538.53
b) Other	105,285.81 (33.7)	157,928.72 (33.7)	263,214.53
2. Debt Charges	68,331.90 (17.8)	102,497.85 (17.8)	170,830.04
3. Municipal Affairs	4,772.80 (1.5)	7,159.20 (1.5)	11,932.75
4. General Municipal Levy	104,690.04 (32.9)	157,035.06 (32.9)	261,725.10
5. Special Levy	60,522.85 (15.5)	90,784.29 (15.5)	151,307.12
6. Sub Total	432,308.05	532,238.99	964,547.04
7. Business tax	48,554.50	-	48,554.50
8. Total Taxes	480,862.55	532,238.99	1,103,101.5

Source: Municipal Finance Branch

1. Note levies do not include frontage levies on individual properties.

Table: 21

Change in Total Tax Contributions by the Commercial and Industrial Sectors 1970-1975

Tax Item	Year		Change Percent
	1970	1975	
1. Total Town Tax Levy (exc. frontages)	443,749	820,169	84.8%
2. Total Comm./Indust. Property Taxes	116,272	324,350	179.0%
3. Total Business Taxes @ 15%	24,096	43,900	82.2%
4. Percent of Total Tax Levies of Town	31.6%	44.9%	-
5. Comm./Indust. Real Property Assessment	1,471,800	2,566,140	74.4
6. Total Town Taxable Assessment	5,067,980	6,747,840	33.1
7. Percent of Town Assessment	29%	38%	

Source: Town of Winkler

Table : 22

Average Tax Bill on Typical Winkler Residence

Year	Residential Mill Rate	Average Assessed Value	Total Tax Bill	% Increase
1966	56.9	5000	284.50	
1967	61.8	5000	309.00	8.6
1968	75.9	5000	379.50	22.8
1969	75.8	5000	379.00	-0.2
1970	79.0	5000	395.00	4.2
1971	81.5	5475	446.00	12.9
1972	87.0	5475	476.00	6.7
1973	61.8	5475	338.00	-29.0
1974	68.8	5475	377.00	11.5
1975	97.0	5475	531.00	40.8
1976	105.0	5475	575.00	8.3

Source: Town of Winkler

Table: 23 Change in Average and Net Taxes 1966 - 1976.

YEAR	AVERAGE TAX TOTAL	PERCENTAGE CHANGE ABSOLUTE (CUMULATIVE)	PROVINCIAL HOME OWNER GRANT	NET TAXES	PERCENTAGE CHANGE ABSOLUTE (CUMULATIVE)
1966	284.50	-	-	284.50	-
1967	309.00	8.6 (8.6)	-	309.00	8.6 (8.6)
1968	379.50	22.8 (31.4)	-	379.50	22.8 (31.4)
1969	379.00	-0.2 (31.2)	-	379.00	-0.2 (31.2)
1970	395.00	4.2 (35.4)	-	395.00	4.2 (35.4)
1971	446.00	12.9 (48.3)	-	446.00	12.9 (48.3)
1972	476.00	6.7 (55.0)	50	426.00	-5.5 (42.8)
1973	338.00	-29.0 (26.0)	100	238.00	-44.2 (-1.4)
1974	377.00	11.5 (37.5)	150	227.00	-4.7 (-6.1)
1975	531.00	40.8 (78.3)	175	356.00	+56.8(+50.7)
1976	575.00	8.3 (86.6)	200	375.00	+5.3 (56.0)

Sources Income: National Revenue

Taxes: Town of Winkler

TABLE : 24: The Impact of the Three Firms on the Local Tax Rate:

$$r^1 = \frac{T - E^1 (Lr) (D)}{B - B_1 + W (Lr)}$$

r^1 = hypothetical tax rate when firms are excluded from the Town.

T = total property taxes levied by Town

E^1 = per capita expenditures for school and local services.

L^r = number of resident employees

D = average ratio of dependents to employees for the firms.

B = total assessed value after entry of the firms.

W = average assessed value of resident workers homes

B^1 = assessed value of the three firms.

/ls

TABLE 25

The Calculations for Winkler are as Follows:

$$r^1 = \frac{894,635 - [269.56 (272) 2,69]}{6,747,840 - [516,910 + 5000 (272)]}$$

$$r^1 = \frac{894,635 - 197,231.66}{6,747,840 - (516,910 + 1,360,000)}$$

$$r^1 = \frac{697,403.34}{6,747,840 - 1,876,910}$$

$$r^1 = \frac{697,403.34}{4,870,930.00}$$

$$r^1 = 0.1432 \quad (\text{tax rate without industry}).$$

$$r = 0.1326 \quad (\text{tax rate with industry})$$

$$r^1 - r = 0.1432 - 0.1326$$

$$= .0106 \quad \text{or approximately} \\ 11 \text{ mills}$$

on an average house assessed at \$5000 this equals.

$$\$ 5000 \times .0106 \text{ mills} = \$53.00$$

DATA FILE

1	Winkler Workers	\$	172
2	Average Number Dependent	\$	2.69
3	Total Taxable Assessment	\$	6,747,840
4	Assessment of the 3 Firms	\$	516,910
5	Average Assessed Value Home	\$	5,000
6	Total Taxes Levied	\$	894,635
7	Per Capita Expenditures	\$	269.56

/ls

APPENDIX III

MANITOBA BUREAU
OF
STATISTICS

CONFIDENTIAL

INFORMATION TAKEN IN CONFORMITY
WITH THE STATISTICS ACT, CHAPTER 29
STATUTES OF MANITOBA, 1971

PLEASE NOTE: NO ONE WILL SEE YOUR ANSWERS EXCEPT THE MANITOBA BUREAU
OF STATISTICS. BY LAW THEY MUST KEEP ALL INFORMATION
CONFIDENTIAL. THERE WILL BE NO INFORMATION RETURNED TO
THE COUNCIL OR TO THE EMPLOYERS WHICH CAN IDENTIFY ANYONE.

INSTRUCTIONS

1. PLEASE DO NOT WRITE YOUR NAME ON THE QUESTIONNAIRE.
2. PLEASE TRY TO ANSWER ALL THE QUESTIONS ON THE QUESTIONNAIRE.
3. IF A QUESTION HAS CIRCLES ○ , PLEASE CHECK ✓ ONLY ONE CIRCLE.

SECTION THREE:

23. HOW FAR IS YOUR HOME FROM YOUR PLACE OF WORK BY ROAD?

- 1 ○ LESS THAN 1 MILE
- 2 ○ 1 - 2 MILES
- 3 ○ 2 - 10 MILES
- 4 ○ 10 - 30 MILES
- 5 ○ 30 - 50 MILES
- 6 ○ 50 OR MORE MILES

APPENDIX IV - CHAPTER IV

HOUSING TYPES

	BUILT	SIZE RANGE	SQUARE FOOTAGE	NUMBER OF STOREYS	TYPE OF FRAME CONSTRUCTION	NUMBER OF ROOMS
01	Prior to 1920	20' x 16' to 20' x 32'	320 - 640 s.f.	1	Shack type-cheap frame	3 - 4
07	All periods	16' x 18' to 24' x 32'	320 - 768 s.f.	1	Cheap frame	4
08	1940 to pres.	20' x 22' to 20' x 38'	440 - 760 s.f.	1	Cheap frame	3 - 4
11	1938 to pres.	18' x 24' to 32' x 26'	432 - 832 s.f.	1	Minimum standard frame	4 - 5
15	1950 to pres.	30' x 24' to 36' x 30'	756 - 1170 s.f.	1	Standard frame	4 - 6
16	1950 to pres.	37' x 27' to 41' x 31'	1113 - 1518 s.f.	1	Good type frame	6 - 7
20	All periods	16' x 20' to 24' x 32'	320 - 768 s.f.	Missing Description		
21	Prior to 1920	20' x 24' to 20' x 36'	480 - 720 s.f.	1 1/2	Standard frame	5 - 7

	BUILT	SIZE RANGE	SQUARE FOOTAGE	NUMBERS OF STOREYS	TYPE OF FRAME CONSTRUCTION	NUMBER OF ROOMS
40	Prior to 1920	18' x 20' to 26' x 28'	360 - 728 s.f.	1 3/4	Cheap frame	5 - 6
49	Missing Page	MISSING PAGE				
50	Prior to 1920	18' x 20' to 20' x 36'	360 - 720 s.f.	2	Standard frame	5 - 6
60	1950 to pres.	26' x 24' to 32' x 30'	624 - 933 s.f.	2	Good type frame	6 - 7

Source: all data provided by Land Assessment Branch, Department of Municipal Affairs,
Morden, Manitoba