RESEARCH PAPER

URBAN GROWTH IN HALDIMAND COUNTY

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CHAPTER ONE: INTRODUCTION

The evolution of different transportation methods in the 19th century can be used to help account for the location and growth of different settlements in many areas of Ontario and Canada. This research paper will focus this area of study on Haldimand County (see fig. 1). This paper will be focusing on a county that is characterized by no large urban concentrations, but by many small settlements that are found in a rural setting.

This chapter will make a statement of the objectives and problems that this research paper will focus on, and secondly examine early explorations and the beginnings of settlement in Haldimand County by Europeans.

This research paper will exam the reasons for the development of certain settlements within Haldimand County from 1785 to 1920. Development, in the context of this paper, is measured in terms of population growth that is found in the settlements studied in the county. The settlements that will be examined are Caledonia, Cayuga, Dunnville, Hagersville, Indiana, Jarvis, and York (see fig. 1). Specifically this paper will attempt to show that the evolution of different transportation methods, water, road, and rail, is the major factor in the development of these settlements in Haldimand County.

This paper will also try to illustrate the possible link between the evolution of these transportation methods and the
growth or decline, in terms of population figures, of these settlements. Settlements that had the ability to attract or be the location of these different transportation methods were the ones that experienced population growth. Settlements that were not able to attract, or be on the route of, the different transportation methods either stagnated or declined in terms of population figures.

Haldimand County was occupied by Neutral Indians until 1660, when invading Iroquois wiped them out (Park, p. 5). This area remained a virtual no man's land until after the American War of Independence. The Iroquois Indians of New York State were given grants of land, six miles on each side of the Grand River in Haldimand County, by the British (Arrell, p. 3). This grant, in effect, covered all of the county, except Rainham and Walpole townships (see fig. 1), and was given as payment for services performed by the Iroquois during the war (Brueton, p. 7).

The Iroquois then leased parts of the grant to members of the Butlers Rangers, soldiers the Indians fought side by side with (Park, p. 6). A few Butlers Rangers accepted leases on the Indian land, and began to arrive with their families in 1785 (Park, p. 6). Only Rainham and Walpole townships were open for general settlement in 1785 since settlement was not open to everyone on the Iroquois land (Brueton, p. 7).

This was the scene in the late 18th century and would influence development in the county in the early 19th century. Development in the county could only occur after the Indian held lands were sold. This did not happen until 1830, and therefore delayed settlement of the county unlike the surrounding areas (Brueton, p. 6). Development of settlements would begin only as transportation methods were developed in the county.
CHAPTER TWO: WATER TRANSPORTATION 1800-1870

This chapter will examine water transportation in Haldimand county from 1800 to 1870. It will focus on the Grand River as a means of transportation and an area of settlement. The development of specific settlements on the river will be examined in reference to the role that water transportation played in determining their location and influencing their development.

Running through the middle of Haldimand County is a meandering river known as the Grand River (see fig.1). The river itself was relatively shallow until the building of a dam near its mouth which raised its level considerably. There is a wide flood plain surrounding the river in most areas, which was an impassable swamp from Dunnville to an area three miles below Cayuga (Nelles, p.11). The rest of the river was relatively free of swamps, and small islands dotted many areas of the river. The river itself provides a routeway to the interior of the county for goods and people that came in from Lake Erie or the southern portion of the Niagara Peninsula. The Grand River then assumes a large importance in the development of the county and its various settlements.

The Iroquois Indians began to sell off parts of the county, between 1800 and 1830, for various supplies they needed (Nelles, p.13). This action opened up various parts of the county for settlement, beginning with the areas closest to Lake Erie, and continuing northward over the thirty year period (Nelles, p.14). In the center of these new potential areas of settlement was the Grand River. The river became an immediate focal point as it served as the only major transportation route in and out of the
county for the early settlers (Mowat, p. 12). This meant that all early settlements were located near the river in order to facilitate easy travel and the movement of goods (Park, p.11).

While small numbers of settlers moved up the Grand River and settled, in the period from 1800 to 1820, other settlers moved into Rainham and Walpole townships, in the areas close to the lake for transportation purposes (Brueton, p.7). However, few settlements occurred in these townships since they were not surveyed yet, and travelling on the lake was not always convenient or desirable because of rough conditions that occurred on Lake Erie (Brueton, p.9).

The Grand River was fairly easy to navigate by canoe, and gained early prominence as a transportation route since no other efficient transportation methods existed in the county yet (Mowat, p.12). As more and more settlers moved into the county via the river, use of the river was being considered for other purposes.

The Welland Canal Company was interested in putting in a feeder from the Grand River to supply water for its canal system (Mowat, p.13). Since Haldimand was still part of Niagara County, and would remain so until 1850, the project went ahead unopposed (Murphy, p.14). A dam would have to be built on the river to supply water for the canal (Cowell, p.40). Since the commander of the Port Maitland naval base would not allow it to be built there, a site was chosen five miles further upstream, where Dunnville now is (see fig. 1&2) (Cowell, p.40). The dam was erected in 1829, and in order to get settlers to move in here who would use the feeder and the river, free water power was offered to whoever built the first mill at this location (Mowat, p.15). This offer of free power and the subsequent erection of several mills
brought settlers to this site as produce could now be milled locally and goods shipped in and out much easier.

The Welland Canal Company had rights from the lake up as far as Cayuga (see fig.1), and in 1832 the Grand River Navigation Company was formed to exploit the development of the rest of the river. from Cayuga north (Harper, p.36). No settlements existed along the river, other than Dunnville at this time, which meant the Navigation Company was beginning before a real demand for it existed (Hill, p.24).

The Grand River Navigation Company had to make the river navigable for boat traffic, up to Brantford, in five years or lose its charter (Harper, p.37). Contracts were tendered out by the Navigation Company, but there was not enough time allowed by the charter which resulted in poorly constructed dams and locks, that needed repair every year (Harper, p.38). These repairs were a drain on the Company's limited revenues, and contributed to the debts the Company experienced throughout most of its operating years (Harper, p.38).

In order to pay for its dams and locks, and turn a profit, the Company needed mills to be set up and lumber shipped on the river (Mowat, p.22). Tolls were charged on the lumber shipped on the river and on mills which used water power (Mowat, p.22). These sources provided the revenue on which the survival of the Company depended.

The location of these dams and locks became important as settlements developed here, through the encouragement of the Navigation Company, and its development of the river into a major transportation route. Dunnville became the most important and largest settlement on the river (see graph 1) because it was
here that the first mills in the county were set up (Paisley, p.18). This attracted settlers who needed the use of a mill, and therefore made this town the center for most early river traffic.

In 1835 Dunnville had a population of 100 and a total of three grist and four saw mills (see fig. 2) (Paisley, p.6). Lumbering was beginning in the county and most logs were shipped by the river, where they ended up at Dunnville for processing and shipment elsewhere (Mowat, p.36). At this time the Grand River Navigation Company decided to use Dunnville as its main shipping centre (Murphy, p.20). This fact, when coupled with Dunnville's use as a transhipment point, meant that most shipping in the county, that used the river, went through Dunnville. This town was used as a transhipment point because it was close to the lake and did have an access to the Welland Canal, until the 1840's (Mowat, p.38). Goods or produce could then be transferred at Dunnville, to smaller vessels, for the trip up the river (Mowat, p.38). Smaller vessels were used on the upper river because the canals that were built were not very wide or deep (Mowat, p.38).

Besides being a milling area and transhipment point, Dunnville also developed several small industries such as tanneries, distilleries, and small implement manufacturing (Paisley, p.19). Boat building also occurred here and was an early important industry which supplied boats for the upper river runs (Paisley, p.19). All these industries brought settlers to Dunnville either to work or give easy access to these facilities.

Like other towns on the river, Dunnville needed horses to pull the barges along the canal and the river, and this function required more support industries (Murphy, p.25). Since Dunnville was the river's major port, it required more of these support
industries than other towns to maintain movement along the canal. This contributed to settlement as workers were needed to perform these functions in the town (Murphy, p. 25).

As navigation on the river increased, businesses in Dunnville increased in direct and indirect response to the river traffic. Population of the town increased too, it rose from 100 in 1835 to 400 in 1849, 600 in 1851 and 1000 in 1854 (see graph 1). The role of water transportation was important in developing these figures, since it provided the location for the town, and the many industries on which the town was based.

Cayuga (see fig. 1) was also located on the Grand River and was the dividing point between the Welland Canal Company water rights and the Grand River Navigation Company water rights (Mowat, p. 12). The first sign of settlement in Cayuga was in 1833 and by 1842 its population had not increased at all, it still stood at 25 (Hill, p. 108). By 1849 navigation on the river was at its peak, in terms of goods shipped, but Cayuga had only a few businesses, and a population of 70 (see graph 1) (Mowat, p. 46).

Between Dunnville and to the north of Cayuga the river was easily navigable, with no major drops in the water level (Hill, p. 108). This meant that no dams or locks were needed at Cayuga, and subsequently the support facilities that would accompany such development, were not required. With no dam located here, there was no water power available for industry and mills, and therefore no attraction for settlers.

The Navigation Company did build some warehouses in Cayuga, but these required little labour after construction, and therefore did not add to the development of the town (Nelles, p. 94). Cayuga was a minor centre for its areas lumbering trade, but only as a shipping point, not a milling site (Advocate, p. 29).
generated little employment or development in the town (Advocate, p. 29). As the lumbering trade died out in the 1850's this function left Cayuga (Advocate, p. 29).

The only other effect navigation had on Cayuga was in the 1880's when small scows, loaded with gypsum, ran to the town from a mining area a few miles south on the river (Advocate, p. 30).

However, Cayuga was only a shipping area and this died out by the early 1890's with the depletion of the mining areas (Advocate, p. 30).

Of all the towns on the river that this paper will discuss, Indianna (see fig. 1) was the one town that relied the most on the fortunes of the river, and the Grand River Navigation Company. Indianna was founded in 1837 by David Thompson, a major stockholder in the Navigation Company (Mowat, p. 48).

Indianna was the site of both a dam and a lock and needed people to maintain these facilities (Mowat, p. 49). It also had water power then for mills and industry, which were set up (see fig. 5), and attracted settlers and development to the town (Mowat, p. 49). As navigation hit its peak in terms of business, Indianna prospered. This town was home to over 200 inhabitants in the early 1850's, and was the site of 7 mills, 2 distilleries, and some small pail manufacturing, which all used the river for power and shipping (Mowat, p. 51). So much water powered industry was located here, that there was little water available for navigation through the lock (see fig. 2) (Harper, p. 39).

Thompson owned most of the the town, since he controlled all of the mills and most of the other businesses found here (Mowat, p. 50). By 1855 the lumbering trade was almost was almost exhausted in this area, and this resulted in decreased revenues for the Navigation Company (Mowat, p. 51). This lack of revenue led to the gradual disrepair of the dam and lock, and resulted in fewer boats
being able to use the river to ship products (Mowat, p. 51). This fate was felt by all river towns through the 1850's.

While Indiana managed to maintain a fairly stable population into the 1870's, it soon began to decline as navigation and industry ceased on the river with the bankruptcy of the Navigation Company in 1871 (Hill, p. 142).

The first sign of settlement in York (see fig. 1) occurred in 1830, when a dam and lock were built (Nelles, p. 20). Workers settled here to maintain these structures, and help move boats through the canal (Mowat, p. 5). The drop in water was very large here and this made the town attractive to water powered industries.

Small industry located in York (see fig. 7), which took advantage of the available water power and used the river to ship products and materials (Nelles, p. 20). A lumbering trade was also centered here and various mills were set up to process it (see fig. 7) (Page, p. 11). York's development increased in both industry and population as navigation increased on the river (Page, p. 11).

The same problems found in other towns on the river arrived in York in 1857, and the decline in population began (see graph 1) (page, p. 12). York found the demand for its local products decreasing as fewer and fewer products could be shipped safely on the river, since its locks and dams were poorly maintained.

Caledonia (see fig. 1 & 3) was also the site of a dam and locks built on tender from the Navigation Company (Mowat, p. 4). Caledonia was founded in 1834 by a contractor for the Navigation Company, and like other river towns, was the centre of a lumbering trade (Nelles, p. 99). A dam built in this area meant power for mills, and the first mill built here was used for lumbering (Mowat, p. 66). This mill was quickly expanded to include a grist and woolen mill as people began to settle here (see fig. 2).
Like in other river towns, the Navigation Company sold water power to various mills in order to produce revenues (Corliss, p. 6). Since the erection of mills, and settlers to use them, were the only means by which the Navigation Company could receive revenues, settlement was encouraged (Corliss, p. 6). By 1849 Caledonia had increased its number of mills located on the river (Corliss, p. 8). This attracted settlers and Caledonia's population was approximately 300 (see graph 1) (Corliss, p. 8). Settlement in the town was being encouraged by the Navigation Company, who gave land deeds to people who built mills or other industries on the company land, near the river (Gillespie, p. 5).

By 1851 Caledonia had a population of 800 (see graph 1) and was an important transhipment point on the river. Caledonia was the site of the only dam and lock between itself and Brantford, and therefore, handled shipments from Brantford that was bound for the lower river (Arrell, p. 12). If there shipments for other areas down the river, they were often transferred to smaller boats in Caledonia (Arrell, p. 12). This meant more people were needed in the town to handle this type of river trade.

As the lumber trade began to decline in this area in 1843, agriculture took on an increased importance to the Navigation Company as a source of revenue, since tolls could be charged on agricultural products shipped on the river (Arrell, p. 28). Since the river was usually navigable here, for most of the shipping year, it was often the best route to use for shipping by those farmers close to the river (Arrell, p. 28). However, the Navigation Company suffered greatly here with the arrival of the railway, and navigation ceased here in 1860 because of a lack of revenue, which meant no repairs on navigation facilities (Arrell, p. 50).
As can be seen, water transportation did play a fairly large role in settlement location and development on the Grand River. The river brought the first settlers into this area of the county. As the river was developed for larger boat travel, settlements began in areas that were the location of a dam, lock, or both.

The survival of the Navigation Company depended on tolls for water power, and on goods shipped on the river. In order to acquire the tolls, settlement was needed and the Navigation Company had to encourage it, since little existed yet. As can be seen from the town population figures, the development of the county only started after the river was developed for larger vessel traffic. Control of this area by the Indians prevented any settlement prior to 1830, unlike surrounding counties.

The Navigation Company had the problem of trying to finance these works, as well as creating a demand for this type of transportation. The Company had to provide settlers too. This meant revenue's for this project were not guaranteed, unlike many other water projects in the province that were financially backed by government (Hill, p.145). As it turned out the Navigation Company built its work too quickly, and before a real demand for them existed.

Constant repairs to river facilities and a lack of revenue to pay for these repairs, resulted in increasing financial difficulties for the Company. A cyclical cause and effect mechanism was in place. As dams and locks were not repaired, because of insufficient revenue, the Company lost business and its revenue declined further. This resulted in many towns losing population as their river based functions were no longer required, or could not be taken advantage of by a large area
since it was too difficult to get to them by water.

The use of water transportation did begin development for many river towns, as they were a site of shipping and manufacturing. Other factors influenced the development of these towns on the river, and other towns within Haldimand County. These factors were road and rail transportation, which were developing in the county at the same time water transportation was still being heavily used. The next chapter will examine the development of road transportation within Haldimand County, and its effect on the development and/or location of Caledonia, Cayuga, Dunnville, Hagersville, Indianna, Jarvis, and York.
CHAPTER THREE: ROAD TRANSPORTATION 1800-1920

This chapter will examine road transportation in Haldimand County from 1800 to 1920. It will focus on the role road transportation played in the early development of the settlements examined by this paper.

Few roads existed in Haldimand County during the late 18th and early 19th centuries. The lack of settlers in this area at this time meant that roads were not a major necessity yet (Paisley, p.13). The only roads that did exist were Indian trails through the vast expanse of forest in the county (Paisley, p.13).

Though Rainham and Walpole Townships were not part of Haldimand County, and settlement was possible here, few large villages existed here as yet, to warrant any type of road development (Brueton, p.11). The roads that did exist in these townships were winding trails that connected the few small villages near Lake Erie, such as Rainham Centre, Selkirk and Nanticoke (see fig.1) (Brueton, p.11). A few other trails did exist here, which gave access to these villages and their mills for the small number of farmers in the area (Harper, p.43). Few roads existed into the interior of these townships because of the large swamps found there (Brueton, p.11).

In the rest of the county, the first European roads followed the Indian trails (Paisley, p.13). All these roads, in the early years of the 19th century, followed easily travelled routes only (Harper, p.44). All swamps and areas that were difficult to travel through were avoided since most travel was done by foot. Since these early roads did follow these easily travelled areas, they often converged in large numbers in one area. One such area was
Canboro (see fig.1). By 1818, six roads converged at this point and they extended towards Niagara on the Lake, the western end of Lake Ontario and the Grand River towards Lake Erie (Paisley, p.13).

The biggest barrier to road construction in the county, at this time, was the control of this area by the Iroquois (Nelles, p.13). With the sale of most of the county, by the Iroquois in 1830, to the government, settlement was possible and road construction was able to begin (Harper, p.44). Some roads were privately built and owned, with toll stations set up on them, while others were owned by the government of Ontario (Harper, p.45).

One road that was built and owned by the government was the Talbot Road (see fig.1) (Harper, p.45). This road was constructed, parallel to Lake Erie, in 1834 in order to move troops in case of another war with the United States (Harper, p.45). Settlers were given 50 acre lots if they cleared frontage on them for the road (Brueton, p.14). However, the government had to have the road chopped out better in 1840 since it was unfit for wagon traffic (Park, p.11).

A lot of land was held along this road, like many other roads in the county, by speculators, who had no intention of clearing lots, or bringing in settlers to do it (Paisley, p.15). The government discouraged this speculation and encouraged settlement by levying heavy taxes on speculators whose land was not cleared (Paisley, p.15). This tax would only be lifted when lots were cleared along the road (Paisley, p.16). Settlement along the Talbot Road was completed by 1845 as speculators encouraged settlers to come in, and get land if they cleared a certain portion of this land along the road (Park, p.12).

The Talbot Road soon grew in importance as a stage line and main thoroughfare in Southern Ontario (Park, p.13). Because of this roads' increased use, accommodations for travellers sprang up at
various intervals along its route (Brueton, p. 14). These accommoda-
tions served as the main points of communication on the stage line
and various services were set up to help make each area of accomo-
dation more attractive to travellers (Park, p. 20). This road,
like others, also served as a means of transportation for lumberers
and farmers in the interior of the county. These roads gave
settlements access to local towns, which sprang up as convenient points
of trade for selling, buying, or shipping (Brueton, p. 15).

One town that the Talbot Road travelled through was Cayuga
(see fig. 1&4). It was here, in Cayuga, that a bridge was built to
cross the river, in 1842, and the road continued into the western
portion of the county (Harper, p. 45). When Haldimand became a
county, and Cayuga its capital, in 1850, roads served an increased
importance for the town since government business in the county
was centred here (Harper, p. 45). Many businesses that were govern-
ment related moved into the town and this brought settlers with,
and to, them (Harper, p. 45). From a population of only 70 in 1849,
Cayuga's population rose to 400 in 1851 and 700 in 1857 (see graph 1).
This rapid population and business expansion resulted in the survey-
ing and laying out of town roads for future settlement (see fig. 4).

While it is likely that Cayuga's rapid growth occurred because
of its government functions, road transportation also played a role.
Accommodations, such as hotels, were set up for travellers (see fig. 4)
and the building of a bridge meant people had to come here to cross
the river (Harper, p. 46). This all helped bring business and people
to Cayuga. Also, roads were needed in order that people from all over
the county could come here to use the government services and
facilities, such as land titles and registration (Harper, p. 45).

One very important road built by a private firm was the
Hamilton-Port Dover Plank Road (see fig. 1). This road, which entered
Caledonia in 1840, eventually opened up the northern part of the county to settlement (Brueton, p.13). This road was built by nailing planks onto logs and covering them with dirt (Brueton, p.14). This type of road was built because ordinary dirt roads became impassable most times of the year, except summer, because rains turned them into quagmires (Brueton, p.13).

Toll stations were set up every six miles on the Plank Road, and one toll station was built in Caledonia by the bridge over the river (Brueton, p.13). With the building of this road, new land was opened up and settlement occurred rapidly along it (Brueton, p.13). By 1845, both sides of the road were settled in the county, as far west as Caledonia (Brueton, p.14). Though Caledonia was an important transhipment point on the Grand River, this road helped increase Caledonia's economic hinterland and development as goods could be brought in and out of the town, from greater distances, by other means than water.

Caledonia was expanding rapidly in terms of population growth, and streets were surveyed and a town street plan drawn up (see graph 1 & fig.3). One addition that helped this expansion was the building of a bridge across the river in 1842 (Corliss, p.6). Like Cayuga, Caledonia was able to expand its economic hinterland into the western end of the county as the Plank Road was built through here, and settlers had to come here to cross the river (Corliss, p.7). In 1849 Caledonia had a population of 300, by 1851 this figure reached 800 and was 1300 in 1857 (see graph l). Caledonia's population also increased as its economic hinterland population grew. Caledonia was the point of trade for its area and its businesses increased in number and diversity to meet this demand (see table l). Industries were set up to serve the needs of the people and wagon manufacturing also occurred here (Arrell, p.25).
These two factors helped the town population increase.

Another boost to road construction, in the county, occurred when various municipalities were set up after 1850 (Brueton, p. 33). The first priority of the municipalities was to chop out side roads and concession roads (Brueton, p. 33). This resulted in more areas being open for settlement and given access to towns like Caledonia, which expanded in terms of their number of businesses to meet the needs of an increasing rural population (Brueton, p. 33).

Stage runs were also implemented on the Plank Road and this led to accommodations being built in the northern part of the county also (Brueton, p. 32). This led to the development of small villages. One stopping place for the stages resulted in the development of Hagersville (see fig. 1) (Nelles, p. 96). The Plank Road arrived here in 1842 and with it some settlers who erected accommodations for travellers (see fig. 6) (Page, p. 10). As more roads were chopped out, lumbering gave way to farming in this area (Brueton, p. 15). With the development of a lumber and then farming industry, Hagersville became a small village that served the local area (Brueton, p. 45).

The Indian reserve extended into Hagersville at this time (see fig. 6) and therefore roads could only extend in three directions from here. This factor prevented the expansion of Hagersville's hinterland northward, and limited the town's role as a point of trade for southern Brant County (Page, p. 10).

The Plank Road, which was the only direct route for travel and trade between Norfolk County, Hamilton and Toronto, crossed the Talbot Road in the western, central end of the county (Page, p. 7). Here the town of Jarvis developed.

Like Hagersville, Jarvis developed as a stage stop, but for two different stage routes (see fig. 1). This led to the need for more hotels and stores in the town to serve travellers, and there-
fore needed more settlers to operate them (Brueton, p.29). Also like in Hagersville, the Plank Road gave Jarvis accessibility to the Grand River for shipment of goods by water, and road connections to settlements near Lake Erie (see fig.1). (Harper, p.46). This meant settlers could settle here and be able to ship goods, or receive goods, from distant areas.

Small blacksmith shops developed in Jarvis as its population grew, and became the focal point for local needs since they were conveniently located and therefore accessible (Brueton, p.32).

Both Jarvis and Hagersville grew slowly, however, since the roads at this time, while they did promote initial growth, were often in poor condition because the rains made them impassable. These roads were also not always maintained, either by the local people who were supposed to do it, according to the law, or the companies that owned them (Harper, p.55). This resulted in even poorer road conditions and hindered travel on them.

Roads built to these towns were expensive in that they had to cross the Grand River, and bridges were constantly washed out until the 1870's (Harper, p.55). This fact resulted in most of the road maintenance money going to bridge repairs, and little money was left to repair the roads (Brueton, p.43). This helped to limit the number of travellers on the roads and kept these town populations small.

The Plank Road itself was a special problem. The underlying layer of timbers, that were supposed to make travelling easier, soon rotted away(Brueton, p.44). Tolls collected on this road were not large enough to pay for repairs, and make an adequate return on the company's $1.36 million investment (Brueton, p.35). Because of this, travelling on the road was still difficult and this helped to keep settlers from using the road, and therefore coming to Hagersville and Jarvis and increasing their development (Brueton,p.43).
The Plank Road was sold to another private company who raised tolls and made no repairs to the road (Brueton, p.45). This continued for eight years and Hagersville and Jarvis remained as small villages, serving only a small population (Brueton, p.45). By the 1870s this road was taken over by the county, but no real improvements were made to it (Harper, p.46). This did not change with time.

Dunnville had roads built to it, as early as 1833, which led to other areas of the Niagara Peninsula (Page, p.14). However, these roads, like many others in the county, were impassable most of the year (Page, p.14). With the building of the Talbot Road, a connect-route was chopped out to Dunnville (see fig.1) (Page, p.15).

Since Dunnville was the main transhipment point for the Grand River Navigation Company, a town plan was laid out here in anticipation of future settlement (see fig.2) (Paisley, p.18). Various roads were chopped out in the town, as settlement did increase, in order to give settlers access to all parts of the town (Paisley, p.18).

Dunnville now had roads to the Niagara Peninsula, other towns on the river, and connections eastward towards Lake Ontario (Page, p.15). This, when coupled with Dunnville's position as the major port on the river, helped to maintain and support local industry and business, and therefore population growth (Paisley, p.19). By 1861, Dunnville had a population of 1270 as it now served a much larger area (Paisley, p.19).

Another road that was of minor importance was the one that ran along the eastern bank of the Grand River. This road, which was an Indian trail, connected Caledonia, York, Indiana, Cayuga and Dunnville (see fig.1). However, this road, because of its location next to the river, was only passable during the summer when there were no floods or heavy rains (Arrell, p.30).

Indiana and York were both progressive towns on this road and
they had town streets laid out in the 1840's to accommodate population expansion (see fig. 5&7) (Nelles, p.93-94). Both towns also had small roads chopped out into the county side to give farmers and lumberers access to their industries, goods and shipping (Nelles, p.95). Both towns relied heavily on the lumbering industry for employment and use of the mills, and therefore actively encouraged the cutting of the forest (Nelles, p.99). The building of roads during this time also brought settlers here to farm after the lumber was gone, and helped maintain population growth (Nelles, p.99).

Stage traffic on the Plank and Talbot Roads tended to concentrate growth in towns, on these routes, as travel by road was very difficult, especially on roads that were not the main transportation routes (Page, p.11). This meant these two towns, Indiana and York, had to rely on water transportation rather than road transportation to serve their local populations, since the roads were in poor shape.

In summary then, as more settlers moved into Haldimand County, roads were needed to move people to areas that did not have water transportation. These early roads were nothing more than Indian trails through the bush, or narrow alleys between buildings in the towns (Brueton, p.34). Two major roads were developed in the county: the Hamilton-Port Dover Plank Road and the Talbot Road. Both of these roads ran into problems when they reached the Grand River.

The river, while an outlet for boats and people, now became an obstacle as bridges were needed so the roads could cross into the western end of the county (Corliss, p.32). These bridges constantly washed out, which interrupted road travel and used up money, meant for road repairs, to fix them (Corliss, p.32). This resulted in poorly maintained roads which made travel even more difficult and hindered the extension of a town's hinterland (Corliss, p.32).
The construction of roads did extend the potential for a town's growth as settlers in the immediate outlying area had access to the town's facilities (Brueton, p.34). Tolls on roads and bridges did not seem to restrict settlers use of them, since many settlers preferred to use roads, to ship products, than the Grand River (Hill, p.145).

Towns, at least until the mid 1850's, were still self-sufficient areas, with industries and businesses that served most of the needs of their local population. Larger towns served larger populations and a larger area. The area of trade between a settler and a merchant was the town itself, and roads only helped this interaction occur more readily.

Roads that had stage runs on them set up accommodations for travellers (Park, p.11). This led to the start of small villages, such as Hagersville and Jarvis, to provide this function (Brueton, p.46). With no water transportation in these towns, travel could occur only by road, which was often restricted by poor road conditions (Brueton, p.47). This problem hindered development in these towns as they could not attract settlers to come here and settle, or even do business, since road conditions prevented long distance travel.

By the end of the stage era in the 1880's, roads were still poorly maintained and a hindrance to travel and therefore development. Ownership of roads was transferred to the county or province in the late 1880's from private companies, but this did not improve road maintenance and therefore travel (Brueton, p.85).

The biggest improvement to roads, and therefore a town's trade area, occurred in the 1890-1920 period. Water transportation on the Grand River no longer existed and roads, therefore, took on an increased importance as a method of transportation.
With the use of automobiles in the county in 1910, roads had to be improved, and travel within and between towns was made the easiest it had ever been. This meant towns were more closely linked to each other, and the populations in these towns could move farther in less time. This helped reduce the duplication of functions from town to town, and helped specialization in the these towns. Increased competition meant certain businesses could only exist in certain towns which resulted in different population sizes for each town depending on its functions.

Starting in the mid 1850's a new transportation method was used in Haldimand County that was much faster than road travel, and did not depend on weather conditions to be used. The next chapter will examine the development of rail transportation in the county and its effect on Caledonia, Cayuga, Dunnville, Hagersville, Indianna, Jarvis and York.
CHAPTER FOUR: RAIL TRANSPORTATION 1854-1914

The arrival of the first railway in 1854 and the subsequent building of other railways, in the 19th century, had great effects on transportation in Haldimand County. This new, faster and more reliable method of transportation also affected the growth of the towns dealt with in this paper. This chapter will examine the development of rail transportation in the county, and its effects on the development of specific towns.

Before the arrival of the first railway in the county, towns were basically self-sufficient areas of trade (Brueton, p. 34). Towns took care of their local populations' needs, by having industries and trade located in them that supplied this population with what they needed (Brueton, p. 34). The town was the area of trade between a merchant and a settler, and the frequency of this trade depended on the conditions of road and water transportation (Park, p. 9). Roads were often quagmires and the Grand River was difficult to travel on as the poor condition of the dams and locks slowed travel (Park, p. 9). These factors combined to keep settlers' mobility restricted to their local area only. The local village played a large role in economics in the county, as many small villages sprang up, only a few miles apart, to serve as areas of trade in response to the settlers' lack of mobility (Park, p. 18).

The arrival of the railway changed this function of many villages. Railways were a safer, and more reliable form of transportation than roads or the water ways (Hill, p. 142). The railways were not restricted by rains, or the weather, and could travel faster than water or road transport. This meant goods, in large quantities and diversity, and people could be moved over longer distances, and in less time than what was possible with road or water transport (Hill, p. 122).
More towns were within travelling distance of each other, with the use of the railway, both within Haldimand County and between Haldimand and other counties (Corliss, p. 10). Rail transportation meant that these towns were no longer self-sufficient units that had sole access to the demands of their local population. Local town industries often had to compete with industries in other towns for their local market (Corliss, p. 10). This resulted in the decline of some town industries since they could not compete with the larger, more efficient industries in other towns (Corliss, p. 11). The railways then, affected the growth rates of many towns in the county.

The faster rail transportation also meant that settlers could settled quicker, in greater numbers and over greater distances, to the towns or areas that had rail stations (Hill, p. 124). This resulted greater populations for certain towns with railway stops, and the decline of those that did not.

The early railways, that entered Haldimand County, were often private railways in that they were built by large towns or cities, such as Hamilton, that were trying to increase their economic hinterland and bring trade to their area (Brueton, p. 14). This fact helps to account for the large number of railways that cross the county, often close by each other (see fig. 1), as these railways competed for the same economic areas.

Though Haldimand County had a population over 15,000 in 1852, no single town examined by this paper had a population of 1000 (see graph) (Harper, p. 32). Settlement was dispersed throughout the county, and centred on the small villages which provided local settlers with services, and served as immediate points of trade (Brueton, p. 23). Roads, as stated in the last chapter, were often in poor condition and unfit for travel over great distances (Harper, p. 46). The Grand River Navigation Company was, at this time, starting to experience
financial difficulties as it was losing business because of its poorly maintained locks and dams, which made shipping unreliable (Mowat, p.88). This fact, when coupled with the depletion of lumber, upon which the Company relied for most of its revenue's, meant the river was declining in importance as a major transportation method (Mowat, p.90). Railways arrived at the right moment and provided a very desirable alternative for transportation, and influenced many towns growth rates as it became a major method for shipping.

The first railway in Haldimand County was the Brantford, Buffalo and Goderich which arrived in 1854 and had stations in both Dunnville and Caledonia (see fig.1-3) (Bloomfield, p.63&64). This railway, which was amalgamated into the Grand Trunk system in 1864, ran on the east side of the Grand River (see fig.1).

In Dunnville, the railway was located a few blocks away from the river and the industries found there (see fig.2). The railway brought new industry, an iron foundry, and more people to Dunnville as well as opened up larger county markets to Dunnville products (Park, p.28). Iron foundaries and an agricultural implement factory were set up near the railway (see fig.2) to take advantage of this transportation method so their products and raw materials could be shipped in and out quicker, and over greater distances (Park, p.28).

The population of Dunnville reached 1500 by 1857 as these new industries and businesses that arrived (see fig.8) with the railway needed labourers (Park, p.28).

The major innovation at this time was steam power, for industry, which freed industries from having to locate near the river for power (Brueton, p.47). Towns like Dunnville could accommodate more industry then, and these industries were more efficient and produced cheaper goods, because rail transportation was cheaper for moving large quantities of goods than water or road transport.
With the arrival of the railway, Dunnville's position in the county improved greatly. It had a major road like Caledonia and Cayuga, and was still the major transhipment point for the Grand River Navigation Company (Park, p.35). The railway brought new industry, people and markets to the town. As can be seen from the graph, Dunnville's population increased rapidly as compared to the other towns in the county.

The Buffalo, Brantford and Goderich Railway was the only railway in the county until 1872 (Bloomfield, p.64-66). This factor gave Dunnville a large advantage over other towns, in terms of a diverse transportation network, as the railway ran here twice a day (Page, p.14). This meant that new settlers, up to 1872, would often use this easier method of transportation to travel here, since it did run twice a day, where more industries and services were offered (see fig.8) (Page, p.14). Since Dunnville offered more opportunities than other towns, its population increased rapidly through the rest of the 19th and 20th centuries (see graph).

The Buffalo, Brantford and Goderich Railway also arrived in Caledonia in 1854 (Bloomfield, p.63). Like Dunnville, Caledonia had a relatively small population, at this time, and most industry and business was oriented towards water and road transportation (Corliss, p.6). The railways arrival and the use of steam power, that was now available, allowed industry to locate away from water power sites (Corliss, p.6).

Caledonia also tried to attract the Hamilton-Port Dover Railway, at this time, to further stimulate growth (Arrell, p.25). To get this railway to stop here, Caledonia had to buy debentures in the railway, which resulted in a lack of funds for other public projects (Arrell, p.25). The town was unable to offer the same amenities as Dunnville, to incoming settlers, and it had to wait twenty years for
the Hamilton-Port Dover Railway to arrive (Arrell, p. 25). This tying up of public funds no doubt hindered local public development, and possibly deterred settlers from coming here.

Caledonia's population began to increase with the arrival of the railway, and Caledonia attempted to meet the demands of this population which stood at 1300 in 1857 (see graph). More industry, such as two foundaries and machine shops (see fig. 8), arrived in Caledonia that was oriented towards the farming trade, and Caledonia began to develop as a marketing and industrial area for its increasing farming population (Mowat, p. 70). The population of the town increased slowly until about 1869 and then it began to stagnate until 1881, when it declined dramatically (see graph).

The railway was expected to help increase business on the river and for its related industries (Corliss, p. 7). However the opposite happened. The Grand River Navigation Company went out of business in Caledonia as farmers and industry started to ship their products out by rail since it was a fast and dependable means of transportation (Arrell, p. 30). This put an end to all river transportation, and the industries located on the river went out of business slowly, as they could not compete with the steam powered industries or ship their products as efficiently (Arrell, p. 31).

The arrival of the Hamilton-Lake Erie Railway in 1873 (see fig. 1) meant local industry now had to compete with the more efficient industries in Hamilton, which they could not (Arrell, p. 31). By 1880 only small industries were left in Caledonia and the town population began to decline (see fig. 1) (Arrell, p. 32). Caledonia had become only a farm distribution point for its area, with little else to offer prospective settlers.

These two railways, while they did make it easier for settlers to travel to Caledonia and move goods in and out of the town, con-
tributed significantly to Caledonia's reduction in population. The first railway became an economic rival to the Navigation Company for business and this resulted in the Company going broke. The Hamilton-Port Dover Railway exposed Caledonia industry to direct competition with Hamilton industry, and Caledonia industry declined as a result. These factors all contributed to Caledonia's stagnation and decline in population from 1857 to 1901. This population decline halted with the discovery and subsequent mining of large plaster beds found here in the late 19th century (Arrell, p.34).

The railways that were being built in the county in the 1870's were linking different areas of the province, and therefore were not built primarily to serve Haldimand County (Arrell, p.34). This resulted in the railways locating away from the Grand River and the towns that existed there (Mowat, p.104). Both Indianna and York were by-passed by the railway, and at this time their populations were beginning to decline (see fig.1&graph). River based industries were not efficient, compared to industries in larger centres such as Hamilton, and they had trouble moving their products since the Grand River Navigation Company went bankrupt in 1871 (Mowat, p.104). This meant river transportation was only possible between the locks and dams on the river, which restricted the size of markets these two towns could serve.

Indianna began to lose its population as more and more of its industries went broke because of poor transportation methods in the area (Page, p.11). York did not fair any better. It managed to maintain a more stable population as it began to serve local farmers. (see fig.3). However, its river based industries also began to close down (Page, p.11). By 1900 Indianna no longer existed and York's population was steadily decreasing (see graph). The emphasis on rail transport for large quantities of goods meant these two towns were
able to compete with other towns as their industries were not large
eough to be able to afford to pay for rail transport, and the rail-
way did not locate here anyway.

In 1871 the Canada Southern Railway, which was amalgamated into
the Michigan Central in 1878, arrived in Cayuga (Bloomfield, p. 63).
At this time, Cayuga had a population of 800 (see graph) and it
became the site of a switching yard for the railway (Nelles, p. 93).
The town's population increased only slowly until 1881 and then
began to stagnate (see graph). Unlike other towns, Cayuga did not
experience any large measurable effects with the arrival of the
railway. Very little water-based industry existed here which could
have switched to steam power and used the railway for shipping.
Some new industry did arrive in Cayuga (see fig. 8) but there are
no records if these industries located near or used the railway.
This then limits the railway's impact on the growth of Cayuga.
The population of this town fluctuated between 700 and 800 for the
rest of the 19th century and the first two decades of the 20th century.

The Canada Southern Railway arrived in Hagersville in 1872,
followed by the Hamilton-Lake Erie Railway in 1873 (Bloomfield, p. 65).
The Hamilton-Lake Erie Railway paralleled the Plank Road and therefore
offered some competition to this road for traffic (see fig. 1). With
the arrival of these railways Hagersville became an important mark-
et town for area farmers since these two railways travelled to dif-
ferent areas of the province and therefore offered larger markets
for products from this area (Brueton, p. 77).

Steam-based mills and industry were started in the town at this
time and they located near the railway for fast and easy shipment
of large bulky products and materials (Brueton, p. 45). These develop-
ments brought settlers to Hagersville and population increased to
800 by 1877 (see graph). Prior to the railways arrival, Hagersville
MAP
OF
HAGERSVILLE
Scale 1 inch = 200 ft
(1879)
(FROM: ILLUSTRATED HISTORICAL ATLAS
OF HALI本来就 COUNTY)

INdIAN
RESERVE

Fig 6.
was only a village and town lots were only surveyed after the arrival of the railway when the town began to grow (see fig. 6).

By 1891 Hagersville had a population over 1000 which increased slowly through to 1921 (see graph) as the town maintained its position as a major marketing and business area for the northern end of the county (Brueton, p. 87).

In 1873 the Hamilton-Lake Erie Railway and the Great Western Railway, which was amalgamated into the Grand Trunk system in 1882, arrived in Jarvis (Bloomfield, p. 66). While Jarvis was one of three stops in the county for the Hamilton-Lake Erie Railway, it was only the second major stop for the Great Western Railway (see fig. 1). Therefore this railway could draw on the western half of the county for business and made Jarvis the major town to ship products from if one wanted to use this railway.

This factor helped to boost Jarvis' growth as it attracted farmers to its immediate area who, like in other towns, would sell their grain and whoever bought it could ship the large quantities out by rail (Brueton, p. 45). The railway also meant that settlers could come here, by another means than road, which brought settlers from a wider area and faster than what was previously possible.

Industry began to arrive in Jarvis in the form of buggy and door manufacturing and a cheese factory (Brueton, p. 46). Some of these industries located near the railway to use their shipping facilities (see fig. 5). The development of steam power for manufacturing meant industry could now locate in areas that it previously could not.

Jarvis also became the grain shipping location for its area of the county, as farming increased in importance in this region (Brueton, p. 46). The population of this town stood at 800 in 1877, and increased to 1000 in 1905 (see graph). The railways brought efficient transportation and helped its manufacturing industry prosper as
it supplied a fast and reliable way to ship bulk products. This growth in turn helped increase population growth and led to the survey of town lots in 1873 (see fig.5).

The arrival of the railways then, added a third transportation method to some towns in Haldimand County. Dunnville used the railway to complement its road and water transportation systems. This resulted in more industry and businesses in the town (see fig.3) and helped attract settlers here, which is shown by the population figures for the town (see graph).

Caledonia found the railway taking business away from its river based industries and as these went bankrupt the town population decreased. Direct competition with products from Hamilton industry, that arrived twice a day by rail, meant Caledonia could not compete and its industry and businesses declined in number and importance.

The railway only ran about once a day to Cayuga, and seemed to have little effect on the towns growth as no industry located near this rail line (see fig.4) (Nelles,p.94).

Both Indiana and York declined in terms of population as the Navigation Company went out of business. Local industries could not use the river for shipping and had no access to rail transport. This resulted in a decline of industry and businesses and therefore population here, as they could not compete other than locally.

Hagersville and Jarvis found their population growth rates increasing with the arrival of the railways. Industrial products and grain could be shipped out from these two towns everyday, which helped to attract settlers and large industry, since they could only afford to use rail transport, to this area. Both towns population increased as they became the major shipping and trade centres for their areas of the county.
CHAPTER FIVE: CONCLUSION

The evolution of water, road and rail transportation methods produced different effects on the towns in Haldimand County that were examined by this paper.

The alienation of the county to the government by the Iroquois was the necessary catalyst for settlement. The development of the Grand River, by the Grand River Navigation Company, into a major transportation route influenced both the location and development of settlements on the river.

Areas that were the site of a dam and, or, a lock grew into settlements as they had the power for industry, and were on the best transportation route in the county. This led to the development of industry and population growth in Dunnville, Indiana, York, and Caledonia (see. fig.3 and graph). Water transportation served as the major means for shipping goods and people in the county during the 1830's, 1840's and early 1850's, especially for these towns.

Road transportation often complemented water transportation in the Grand River area. Roads allowed goods to be shipped into river towns for milling or shipping elsewhere. Roads also took advantage of where they went to and took development away from the river towns, since some settlers did not want to use river transportation as its reliability was often in doubt.

Road transportation did increase development in all the towns discussed in this paper, in that it brought settlers from different areas of the province, where water transport to the county was not possible. Road transportation then was often the only method of transportation in many areas of the county.

The running of stages on the major roads increased development in Caledonia, Cayuga, and Dunnville and started it in Jarvis and
Hagersville. Accomodations were set up in these towns for travellers, and in the case of Jarvis and Hagersville these accomodations expanded and the population of these towns increased.

Water and road transportation served as the initial catalyst to the development of these towns. They made it possible for settlers to move in, manufacturing to occur and shipping possible.

Rail transportation played a different role in settlement development. This transportation method produced development in Dunnville, Jarvis and Hagersville, but caused a decline in Indianna, York and Caledonia. Rail transportation offered a faster and more reliable way to move large quantities of goods as well as people. The development of this transportation method opened up the Jarvis and Hagersville areas to growth as they had no efficient transportation system before the arrival of the railway.

Rail transportation opened up areas like Caledonia, York and Indianna to cheaper goods from different areas of the county as well as the province. This took away business from their river based industries and caused their populations to decline. In Dunnville, rail transportation was used to complement their other transportation methods, and caused the town population to increase.

One can only say that these transportation methods helped development occur in different towns in different time periods (see fig. 8). Water and road transportation was the major factor in the location and development of Dunnville, Indianna, York, and Caledonia. Road transportation also had this initial effect on Jarvis and Hagersville. Rail transportation was the major factor in the development of Jarvis and Hagersville only.

The evolution of these transportation methods produced mixed effects depending on which town one discusses. It boosted growth in Jarvis, Hagersville and Dunnville, while hindering it in Indianna,
York and Caledonia (see fig. 8). Transportation methods and their evolution played a supporting role only in Cayuga as it was the decision to put the county capital here that started development. More study is needed.
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**Notice:** Service refers to men, women, boys, girls, clerks, drivers, and all other types of businesses that are not listed as industries.

- **CALIFORNIA Business Type (and Maker)**
- **CAYUGA Business Type (and Maker)**
- **DUNNVILLE Business Type (and Maker)**
- **INDIANA Business Type**
- **YORK Business Type**

**See List of References:**
LIST OF REFERENCES


Bloomfield, E. and Bloomfield, G. 1983. *Urban Growth and Local Services* Department of Geography, University of Guelph.


