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THE URBAN GEOGRAPHY OF SACINAW, MICHICAN

A Thesis

SUBMITTED TO THE GRADUATE COUNCIL OF THE COLLEGES OF THE CITY OF DETROIT IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS.

BY

Dennis Glen Cooper

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Detroit, Michigan

1933

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THE URBAN GEOGRAPHY OF SAGINAW, MICHIGAN

A study of the urban geography of Saginaw involves a careful investigation and analysis of the city's general situation, site, historical development, landscape pattern, and land utilization, to the end that the various factors that have contributed to the making of Saginaw, as well as their many interrelationships, may be discovered and properly integrated. The City of Saginaw grew up on the best site for the dispensation of materials and services in the resourceful Saginaw Basin. Early speculation in real estate produced two rival settlements in diagonal positions on opposite banks of the Saginaw River, between which there sprang up a strong competition which increased with the rise of forest extraction and the development of transportation routes, and which resulted not only in an intense feeling of rivalry that has existed in mild form even to the present, but also in an urban landscape pattern with off-center semicircles of growth such as are found in but few cities in the United States. Consolidation of the two cities was finally found to be economically necessary in order to meet the pressing problems of a declining lumber business, to foster commercial and industrial readjustment, and to stay the tide of decreasing population. Within recent years, diversified industries have replaced lumber mills, but the factories and transportation facilities of the present reflect the influence of the past forest activities and the more recent agricultural and mineral developments in the valley.

Saginaw is located about 100 miles north of Detroit. twenty miles upstream from Saginaw Bay, at a focal point in the Saginaw Basin -- a broad lowland with a gently undulating surface dipping imperceptibly toward Saginaw Bay. Since the basin was formerly covered by glacial lake waters, its soil is composed chiefly of lake bed clays and clay loams, which when well drained, are of high fertility. Although the region is close to the northern limit of profitable agriculture, the rainfall and temperature conditions of the basin permit the growth of a wide variety of crops. This combination of favorable climate and fertile soils has made the Saginaw region one of high agricultural productivity. Underlying the valley are rich deposits of salt, and considerable coal and oil. whole area was originally almost completely covered with immense forests of both hard and soft woods, and especially with the magnificent white pine, which grew mainly in the higher, sandier parts of the basin. Such a wealth of natural resources furnished a desirable hinterland for a good sized city somewhere in the region. 7

The Saginaw Basin is drained by an irregular system of streams and rivers, characteristic of glacial drainage. (Figure 1). The upper tributaries of this vast system unite to form four major waterways: The Cass, Flint, Shiawassee, and Tittabawassee Rivers. These streams in turn converge forming the Saginaw River, which flows for 22 miles northward to Saginaw Bay. The actual location of Saginaw was greatly influenced by this focus of major streams from the interior hinterland

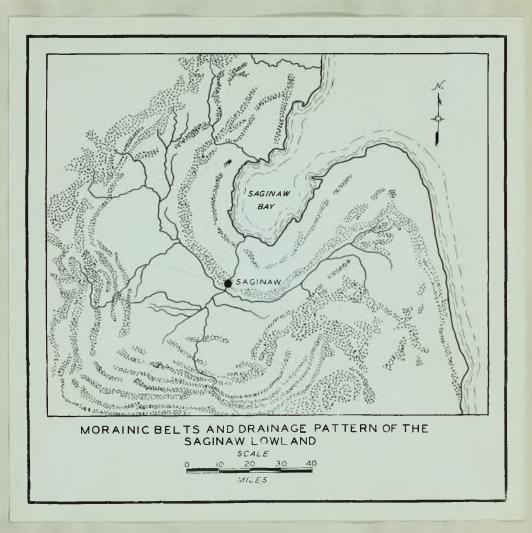


Figure 1. Saginaw City grew up on a moraine at a focal point just below the confluence of four major streams which with their tributaries drained a basin covered with immense stands of virgin timber.

which united to form a useful waterway to the Great Lakes, for it was the custom in the early days for the Indians to establish camps at the mouths of the larger rivers, at the confluence of several streams or at the point of convergence of land trails following such streams. The land surrounding the confluence of these major streams was low and marshy, unsuitable for permanent human habitation, or for all-year-round trails. However, not far below this point a low, but fairly wide water-laid moraine crossed the basin in a northwestsoutheast direction, along the top of which ran one of the principal Indian trails of the region. (Figures 1 and 2). The Saginaw River, flowing through a gap in this formation, swung to the west at this point, cutting into the moraine, and forming a bluff along the river for some distance. from this bluff, between the Saginaw and Tittabawassee River to the west, the land was high and level and well above the reach of flood waters. Due to the height of this land and its location at the point of convergence of several important trails, this site was used, from time immemorial, as a camping ground by the Indians. The southwest trend of Saginaw Bay and the low, wet lands of the lower Saginaw Valley further influ-

^{1.} The camping ground was known as "Bo-sho-a-ning", meaning "camping ground". Michigan Pioneer Collections, Volume VII, 277, (1884). Since the Sacs were the original lords and cwners of the whole region in which Saginaw is located, the area was called "Sac-haw-ning", meaning "Land of the Sacs", from which the name "Saginaw" is derived. T.B. Fox, History of Saginaw County, 34, (1858).

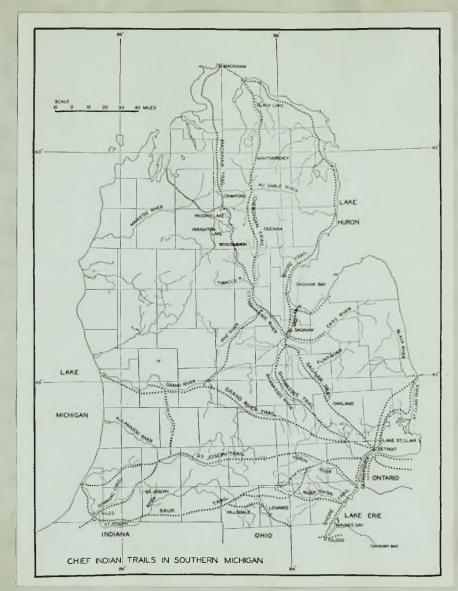


Figure 2. Some of the most important Indian trails of southern Michigan met at the place where West Saginaw is now located, due to the high land bordering the river at that point. This site was used from earliest times as an important Indian camp ground. -Arthur Field, "Road Patterns in the Southern Peninsula of Michigan", p.312.

enced the extension of trails toward this more favorable crossing point just below the confluence of streams. It was because of the natural advantages of the location, therefore, that an important Indian village grew up on the west bank of the Saginaw River, at the focal point just below the confluence of the four major streams which with their tributaries penetrated far into the interior of a basin rich in natural resources.

The first white settlers to come to the Saginaw Region were Coureurs de Bois, who, interested in pioneering and the fur trade, penetrated this part of Michigan in the late seventeen hundreds. For traffic with the Indians, the traders naturally chose locations near camping grounds or at points of vantage along principal trails. Thus it was that on the west bank of the river, close to the Indian camp grounds, a trading post was established in 1816, around which a little colony of white settlers soon gathered. Not long after, the United States government acquired a large portion of the lower peninsula of Michigan by the Cass Treaty of 1819, at which time the Saginaw Country passed from the hands of the Indians forever. In 1821, after a period of more or less unrest, the Indians became ill-tempered and troublesome, causing considerable alarm to the little colony of white settlers that had

^{1.} G. N. Fuller, Economic and Social Beginnings in Michigan, p. 375 (1916).

grown up aroung the trading post. The United States War Department immediately sent a detachment of soldiers to the Saginaw River, not only for the purpose of protecting the fur trade and traders, but also for encouraging agriculture. Tents were pitched on the Indian camp ground, and a strong stockade was erected. (Figure 3). A road was then cut through the woods following an ancient Indian Trail (since known as the Saginaw Trail) and supplies were hauled to the soldiers from Detroit over this road, which was the first to be built leading out of the Saginaw Valley. (Figure 4). In the early days, towns often sprang up close to forts or other establishments which might offer them protection against wild animals or Indians. Thus it was that in 1822 and 1823 lands just to the north of the military reservation on the Saginaw River were platted and offered for sale. One of these plats was called the "Town of Sagana". (Figure 5).

Movement of Easterners into the Saginaw region was early stimulated by the first public land sale in the United States, and the beginning of navigation on the Great Lakes in 1818, and further encouraged by the opening of the Erie Canal in 1825. Immigration increased with the opening of the all-water route from New England, and by the end of the decade a great land speculation had begun. In 1835 Norman Little, a

^{1.} Michigan Pioneer Collections, Vol. 7, p. 25.

^{2.} G. N. Fuller, Economic and Social Beginnings in Michigan pp. 489-492.



Figure 3. The fortress erected by the United States soldiers at Saginaw in 1821.-J.C.Mills' History of Saginaw County, Michigan, Vol. I, p.60.



Figure 4. The road made by the soldiers stationed at Saginaw was cut through virgin forests of hard and soft woods.-J.C.Mills' History of Saginaw County, Michigan, Vol. I, p. 73.

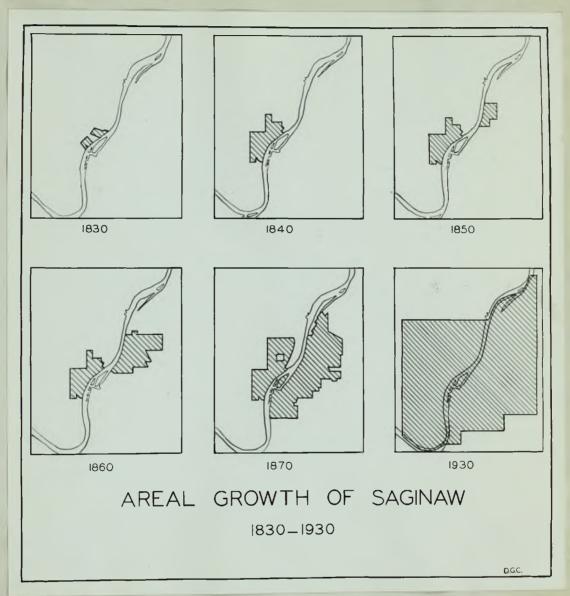


Figure 5. The original plats of Saginaw City were located close to the United States fort, which is indicated by a dot in the more southerly of the two early plats. In these maps it may be easily seen how much more rapidly Wast Saginaw grew than did its rival of the west side of the river. Growth on both towns took place along the river first, because of the lumbering activities, with population spreading out along the main highways later.

a representative of a New York firm of financiers, arrived in Saginaw for the purpose of investing in real estate. He had recognized the importance of Saginaw's focal position in a rich valley, and he believed that a city built on this site would develop into a thriving metropolis. His company first purchased the land comprising the old fort and adjacent property, which they proceeded to improve. Soon after his arrival, Little established a regular steamboat line from Detroit and Buffalo to Saginaw, and by extensive advertising among eastern cities he started a tide of immigration moving to the then remote points of the western frontier. In 1837 Little made a new plat of Saginaw City, which included all previous plats and a great deal more, even including some land on the opposite side of the river. (Figure 6). An elaborate plan of improvements was initiated, and by the following year the population increased to approximately 900 inhabitants.

With the importance of the focal position of the settle-

^{1.} That Mr. Little fully understood and appreciated the importance of Saginaw's geographic location is evidenced by the following: A friend expressed some doubt as to the possible future of Saginaw, whereupon Little drew out a map, and pointing to it, said:

[&]quot;Those rivers are all tributary to Saginaw. When the great wealth of valuable timber growing adjacent to the rivers shall be brought to Saginaw, when the salt and coal underlying the valley, and when agriculture shall be developed and become important factors in the business of the valley, then you will know that my confidence in the ultimate growth of the valley is not misplaced. These rivers, like the ancient roads, all lead to Rome, and if you live the ordinary life of man, you will see this valley occupied by a hundred thousand people" J. C. Mill's History of the Saginaw County, Michigan, Vol. 1, p. 150

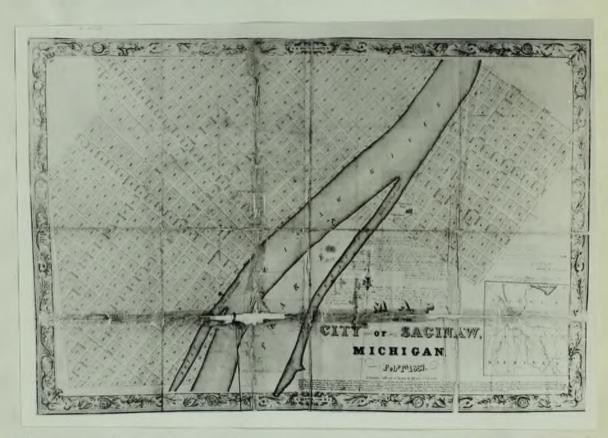


Figure 6. The 1837 plat of West Saginaw embraced a great deal of land, even including some property on the east side of the river. The original of which this is a photograph, is in the possession of the Saginaw Abstract Company, and was loaned to the author for purposes of study by Mr. Charles F. Peckover.

ment in a basin of rich virgin timber fully realized, most of the enterprising men in Saginaw bought and sold land freely, and an era of speculation set in with land values mounting to fabulous sums. So it was that when Little and his associates, who were prepared to invest heavily in building up the city. attempted to buy property at a fair price, the residents of Saginaw had become so independent that they demanded exorbitant prices, and Little was unable to come to any agreement with them. He became disgusted, lost all interest in the settlement and decided to turn his attention to building up an entirely now town on the east side of the river. Some pioneers had already become established there, the first attempt to form a permanent settlement having been made in 1836, when a tract of land was purchased directly across the river from Saginaw City, and a saw mill, stable, and several dwellings erected. (Figure 7). This land was not chosen as the site for the new city, as a marshy island extended for a considerable distance along the bank of the river across from Saginaw City. (Figures 8 and 9). A low marshy island and shallow water afforded very poor river frontage for a town on the east bank. Nor could the land immediately north of this site be used for a new city, as it had already been platted, and offered for sale in 1837. Little of it was purchased, however, as the bubble of speculation had burst in 1838, and in the years of depression that followed, real estate activities were at a low ebb. So it was that at a spot considerably north of Saginaw City on the east side of the river, a

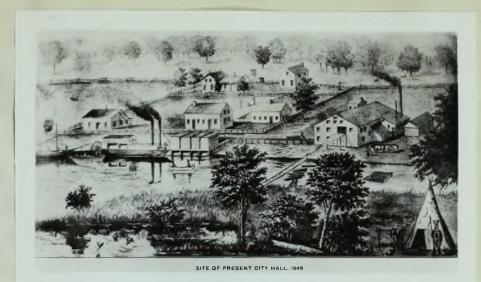


Figure 7. The first permanent settlement on the east side of the river centered about a sawmill.-J. C. Mills' History of Saginaw County, Michigan, Vol. I. p. 141.



Figure 8. In this view of West Saginaw in 1850 can be seen the low marshy island on the east side of the river that prevented a village from springing up opposite West Saginaw. Note the many docks and saw mills. (From a print owned by Mrs. John Spencer, Saginaw, Michigan).

East Saginaw. This was not a promising location, for although the land along the river was high and quite suitable for settlement, the interior immediately back of the levee was low, swampy, and unsightly. However, in 1850, Little induced James and Jesse Hoyt, capitalists from New York, to become interested with himself in promoting the development of East Saginaw, and it was not long before this new town, born on a levee that was flanked by a marshy flood plain, but backed by an abundance of brains, capital, and perseverance, had become a thriving community.

For many years the only connection which existed between Saginaw and the outside world was the improvised road made in 1821 by the soldiers stationed at Saginaw. However, in 1841 a National Military Turnpike following the old Saginaw trail was completed between Detroit and Saginaw. (Figure 10). Seven years later Little prevailed upon the state to construct a plank road from Flint to East Saginaw, a distance of 32 miles. The opening of this highway, and the resulting connection with the outside world, helped greatly to increase immigration to Saginaw.

The superior quality of the white pine which grew in many parts of the Saginaw Basin had been early recognized, and soon logging crews were cutting into this immense stand of virgin timber. (Figure 11). Mills for converting the logs into lumber were built along the river in or close to Saginaw. The lumber was at first consumed locally, but by 1847 its shipment



Figure 9. Waterfront conditions such as those shown in this photograph formed an obstacle to the building of a town across from West Seginaw.

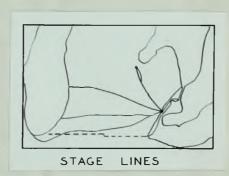


Figure 10. This map of the stage lines in Southern Michigan in 1855 shows the route followed by the National Military Turnpike (completed in 1841) connecting Detroit and Saginaw. (From .M.Parkin's Historical Geography of Detroit, p. 261.)

Saginaw quickly attracted attention in the Lower Lakes Region and in the East, and an immediate demend for it was made upon the Saginaw mills. Saginaw was ideally located for becoming the center of these lumbering activities springing up in all parts of the valley, for the rivers and tributaries affluent to the Saginaw River gave access to an area of 3200 square miles of some of the finest timber in the country. Down these waterways the logs were floated to Saginaw, which occupied the rocal position just below the point where the waters from all these rivers flowed together. By 1864 there were 41 steam mills along both sides of the river, most of them running day and night, while immense piles of lumber lined the wharves. (Figure 12).

As a result of the rapid increase in lumbering activities at Saginaw and the i proved road following the old Sagi aw

Trail, a coach line between Saginaw and Detroit was established and warehouses, docks, and more lumber mills were built. (Figure 13). Steamboats and sailing vessels, lader with immigrants and supplies, began to visit the town and to carry lumber eastward. In the meantime, agriculture was not being neglected.

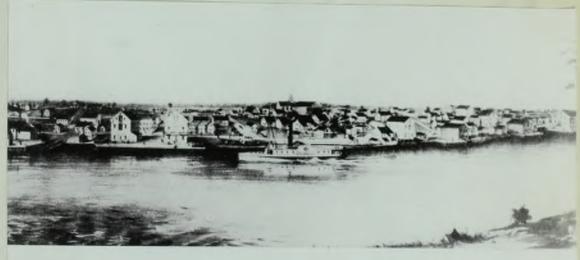
Much of the land in the vicinity of Saginaw was originally covered with dense hardwood and mixed forests. When the lands surrounding the early settlements were cleared of timber, the soil was found to be very fertile, and it was not long before substantial dwellings and well-tilled fields gave evidence of rural industry.



Figure 11. Magaificent stands of white pine like those shown in this picture formerly grew abundantly in the higher, sandier parts of the Saginaw Basin.



Figure 12. Great piles of lumber lined the wharves along the Saginaw River in the eighteen-eighties.-J.C.Mills' History of Saginaw County, Michigan, Vol.I, p.78.



SAGINAW CITY IN 1850

Figure 13. This early view of West Saginaw shows the abrupt rise of ground and high level land upon which much of the city was built. Docks and saw mills like those in the picture lined both sides of the river at Saginaw.-J.C.Mills' History of Saginaw County, Michigan, Vol. I, p.175.

West Saginaw did not share equally in this development with her sister across the way. The residents of the older city committed an immense blunder when they permitted Norman Little to turn from them and locate the site for a new city across the river. They first realized their folly when the Plank Road to Flint was projected and built with the capital and through the enterprise of the promoters of East Saginaw. This new road was laid out so that it did not pass West Saginaw, as the Saginaw Trail had done, but entered East Saginaw from the southeast, carrying traffic from Flint directly to the new city. Thus East Saginaw, located on the Detroit-Flint side of the river, grew rapidly, while West Saginaw, being off the main line of travel, and on the opposite side of the river, was in a disadvantageous position, and it suffered accordingly. (Figure 14 and table 2).

It was some time before any additions were made to West Saginaw, but the growth of the lumber industry and the position of East Saginaw finally brought about the addition to the original city of a large area along the river to the north of West Saginaw. Mary subsequent additions were made, all of them falling in line with the earlier plans. Following the plan of the 1837 plat, the streets were regularly laid out, making travel about West Saginaw relatively easy. Growth of the city was decidedly axial, population extending first north and south along the river, and then out the main highways. (Figure 15). Central growth was rapid for a time, but it slowed down decidedly in the late eighteen hundreds.

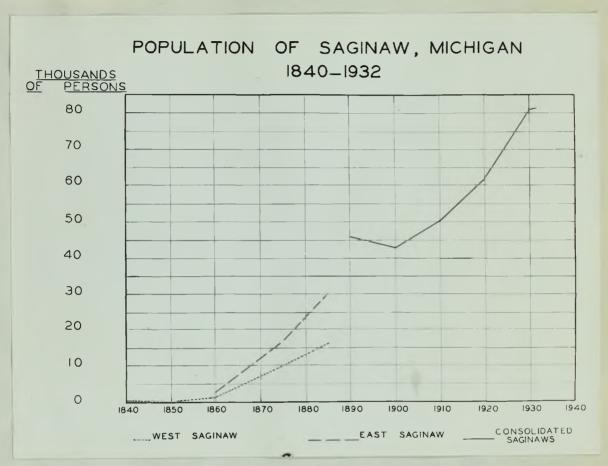


Figure 14. Although East Saginaw was founded 30 years after
West Saginaw, the younger city's growth was more
rapid at all times then was that of the other city.
In 1889 the rival cities joined to form the City
of Saginaw. The decrease in population of the city
during the eighteen-mineties was caused by the
decline of the lumber industry. With the establishment of diversified industries the population
began a steady increase which has continued to
the present.



Figure 15. View of the Saginaws in the eighteen-nineties, looking toward the southeast. Hast and West Saginaw can be easily distinguished, and Salina can be seen in the distance. The star-shaped form of the city is clearly evident, this having been brought about mainly because of the influence of Genesse Street in East Saginav, and Court Street in West Seginew. The i regular layout of the streets in the Glasby, Gallagher, and Little Plat in East Saginaw is visible. The railroad line from Flint and Detroit can be distinguished. with its terminus in the northern part of Mast Saginaw. Note the new settlement at the west end of the Genessoe Street bridge. Many of the bayous and boom ponds along the river have been filled in, and the land is now largely used for industrial purposes. (From History and Institutions of Saginaw, p.62. (1896.)

The 1850 plat of East Saginaw was laid out with the main streets parallel to the river, except for the Plank Road, which approached from the southeast, joing Lapeer Street in the center of the city and continuing westward to the bank of the river. (Figure 16). Since this highway carried the main stream of immigrants it became the most important avenue in East Saginaw. The first bridge to cross the river was built at the foot of the Plank Road (later known as Genessee Street) in 1864.

Additions to East Saginaw were made rapidly. Influenced by the lumber industry, growth took place first along the river. Axial growth extended settlement southeast along Genessee Street, the result being, as with West Saginaw, a roughly ster-shaped city. Central growth shortly filled in the areas between Genessee Street and the river. The streets were laid out quite regularly, the principal exceptions being those in the triangular Glasby, Gallagher and Little Plat which included the land bordering the juncture of Genessee and Lapeer Streets. The streets in this plat do not meet those of surrounding areas at right angles, which makes this one of the most confusing sections in Saginaw through which to travel because of the difficulty of determining directions. Complex real estate problems have been created by this unusual layout, particularly with regard to the sizes and shapes of lots, and the determination of values for such real estate, (Figures 15 and 22).

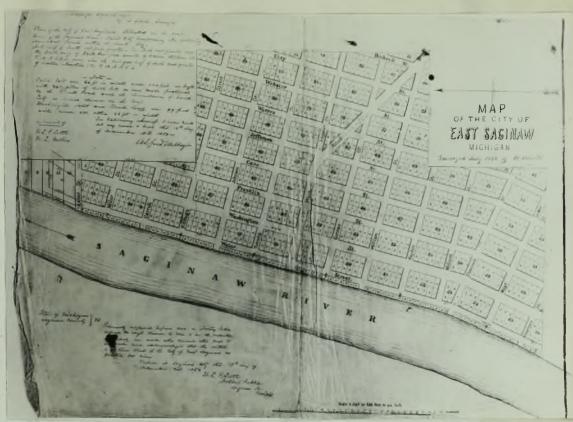


Figure 16. The first plat of East Saginaw was laid out in 1850 along simple lines. The Plank Road, entering from the southeast, constituted the only irregularity. Photograph of original in the possession of the Laginaw Abstract Company.

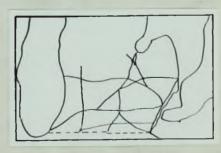


Figure 17. Map of the railways in Michigan in 1839. The line completed between Saginaw and Detroit in 1864 put Saginaw on a direct connection with the East, South, and West. -A.E.Parkins, Historical Geography of Detroit, p.269. (1918).

In the meantime, a town had sprung up to the south of East Saginaw, following the discovery of salt on a farm in that vicinity. This settlement, known as the town of Salina. soon after became a part of East Saginaw as a result of the wide expansion of the larger city. At the same time, salt was attracting attention in other parts of the valley. The presence of brine under the Saginaw region had been known for some time, but it was not until 1860 that the first successful salt well was completed, and the manufacture of salt begun. The industry did not make much headway at first, as the cost of fuel necessary for the evaporation of salt was so high as to be prohibitive to the manufacture of the commodity. Then it was found that the exhaust steam from the engines in the saw miles could be used to evaporate salt from vats and pans, which resulted in such a saving that the manufacture of salt was undertaken on a wide scale. In this way, the lumber and salt industries were definitely combined.

that railroads were essential to the proper development of the region. Accordingly, in 1857 the Pere Marquette Railway was organized, and plans were made to lay a line from Saginaw to Flint. As a result of the rivalry between East and West Saginaw, the line was located to enter East Saginaw to the north of the business section, in this way cutting off West Saginaw completely. (Figure 15). In 1864 this line was completed all the way to Detroit, the connection putting Saginaw in a direct line with the East, South, and West. (Figure 17). From this

time on, the valley forged ahead, with East Saginaw as its industrial center. The lumber industry provided so much tonnage for the early railroads that the Grank Trunk and Michigan Central Railways laid lines to Saginaw, and soon a network of railroad tracks reached into many parts of the city. (Figure 24).

Lumber production increased steadily, dominating the life and personality of the whole city. In 1882 over a billion board feet of lumber were logged on the Saginaw River. (Figure 18 and table 4). But the great pine forests could not last forever, and by the next year, lumber production started to decrease. With the slowing down of the saw mills, salt production could not be carried on economically; consequently it fell off also. The decline in the lumber and salt industries was seriously felt late in the eighteen eighties, and with the resulting rapid decrease in population the people of Saginaw realized how badly they needed other industries if they were to remain a prosperous city. Finally, in spite of the strong rivalry existing between the two places, the progressive leaders of both sides decided that consolidation would not only be economical, but that it was quite essential to their progress, and accordingly in 1889 the two cities united to form the City of Saginaw. In spite of this union a feeling of petty jealousy has endured even to the present, but it is generally treated with a feeling of mild humor or indifference.

The valuable tracts of hardwood timber tributary to the valley had as yet hardly been touched, and factories for the

utilization of this timber finally began to appear. Included in the new enterprise were:

furniture factories, carriage and wagon works, washboard, curtain rollers, box and barrel factories, a match factory and other manufactories of which the chief component was wood.

Then, realizing the need for industries of a diversified and more permanent nature, the Saginaw Improvement Association in 1890 purchased a large amount of low, inexpensive land on both sides of the river in the southern part of Saginaw where they offered free factory sites for prospective industries. (Figure 19). Many large factories, such as the Lufkin Rule Company and the Heinz Pickle Company responded to the offer, and located in Saginaw. A survey in 1892 showed that:

the labor employed in the lumber industry was only 28% of the total labor employed in all the industries of the city, and wages were 22% of all wages. The value of products of lumber, shingles, and selt industries was 58% of the total valuation of Saginaw's industries, which indicates clearly that already other industries were taking the place of lumbering.

This evolution from the cutting of pine trees and the making of lumber and salt to varied industries of a more permanent character is still going on. In the slow evolution, the natural resources of the valley have been developed, and a large number of diversified industries established by manufacturers

^{1.} J. C. Mills', History of Saginaw County, Michigan, Vol. I, p. 489.

^{2.} Ibid, 494.

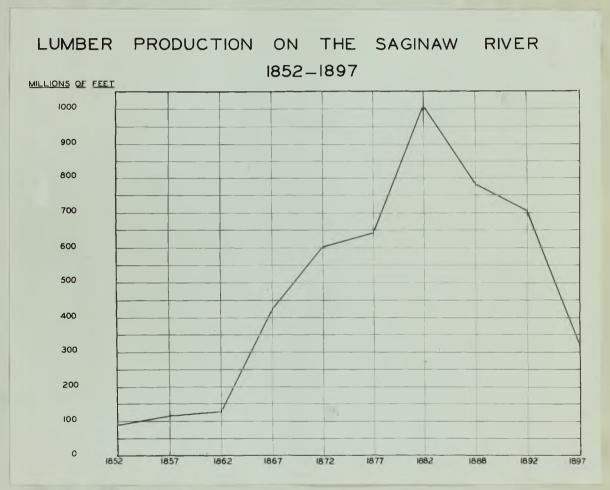


Figure 18. Lumber production on the Saginaw River reached its peak in 1882, when 1,011,274,605 board feet of lumber were produced. Since that time, lumbering activities have constantly decreased until at present there is but little lumber cut in the Saginaw Basin.

MANAGE STATES

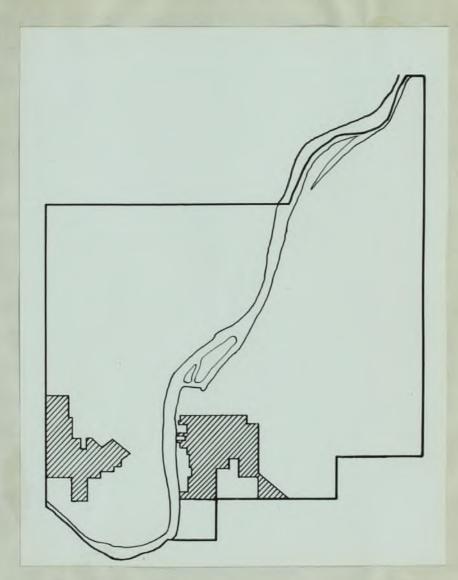


Figure 19. In 1880 the Saginaw Improvement Association, in order to increase the number of diversified industries in Saginaw, bought up a large amount of cheap land in the southern part of the city (shaded area) where they offered free factory sites to prospective industries, as well as cheap lots to laboring classes. This attractive offer brought a number of large concerns to the city.

from outside, aided and encouraged by the capital which once found employment in the lumber and salt business. (Tables 5 and 6.).

Saginaw is now essentially a manufacturing city, and it will probably remain so. Due to the flatness of the land on both sides of the river, railroads are not confined to the valley, but come in from all directions. Railroad transportation is therefore excellent, as are facilities for navigation. one factor that was a drawback to Saginaw's industrial growth for a long time was its inadequate water supply. The water pumped by the city was not always pure, was often unpleasant to taste, and was not maintained at a pressure high enough to be satisfactory to large industries. In order to overcome this difficulty most residents and industrial concerns were forced to draw their supply from deep wells sunk at many points throughout the city. Large plants hesitated about coming to Saginaw because of this unfavorable condition. However, in 1930 Saginaw completed a fine modern pure water system having a filter capacity of 25 million gallons daily, thus giving a fine supply of water to residents and manufacturers alike. (Figure 20). An abundance of cheap sites, good labor conditions, low tax rates, good water, cheap food, and an ample supply of fuel mined in the vicinity have all attracted a large number of diversified industries to Saginaw, which not only leads all the other cities of the valley in variety and number of manufacturing industries, but is also one of the principal industrial centers of southern Michigan. (Table 7).



Figure 20. The new water filtration plant completed at Saginaw in 1930 supplies an abundance of pure water to all parts of the city.



Figure 21. The largest beam elevator in the world is located at Saginaw.

Here is found the largest tape and rule factory in the world, a large division of the General Motors Corporation, the only graphite refining plant in the state, one of the state's largest match factories, several woodenware plants, factories for art furniture, pianos, machinery and boilers. Several companies are concerned with coal and its products and with the refining of petroleum. Other commodities produced are office and household furniture, boats, airplanes, watches, sashes, doors, blinds, building material, flooring, trunks, wagons, cooperage, boxes, portable houses, ladders and wheel-barrows.

The diversification of Saginaw's industries is indicated by the following figures:

No. of plants	Products	No.	Employees
6	Automobile parts		7,500
14	Machinery and tools		2,500
15	Furniture and woodworking		1,500
8	Foundry and machine shops		1,500
16	Food products		1,200
76	Diversified		1,800
135			16,000

Saginaw has retained its position as an industrial and commercial center largely because of the many railways and highways connecting it with central Michigan. The lumber industry of early Saginaw attracted the railroads, which have in turn contributed greatly to the industrial development of later Saginaw. These railroads come from a hinterland which contains not only a number of thriving towns and cities such as Mt. Pleasant, Alma, Midland, Owosso, and Flint, but which

^{1.} Statistics from the Secretary of the Board of Commerce, Saginaw, Michigan.

is also for the most part a highly productive agricultural district. Saginaw is the center of the Michigan bean and sugar industry, having the largest bean elevator in the world, which annually handles 80,000,000 pounds of beans. (Figure 21). Saginaw is a good distributing center, there being in the city at present more than 40 wholesale houses, covering a radial territory of over 125 miles.

The present city of Saginaw has an area of 17 square miles, approximately 9 of which are developed. (Figure 22). The Saginaw River, which flows for seven miles through the heart of the city and its suburbs has been a major influence in determining the present form of the city, outward growth of which was quite regular, there being few irregularities in topography which would prevent an even expansion in all directions. Axial growth, carrying the population out the main highways, and central growth, filling in the property between the lead streets, have produced a typical star-shaped city.

The densest population of Saginaw is found on the east side of the river just north and east of the central commercial area. (Figure 23). This core is surrounded by a slightly less densely populated area, made up of the downtown section, and residences of the poorer to middle class. The east side is quite thickly populated across from the commercial core of West Saginaw, being influenced not only by West Saginaw, but also by light industries located in this part of the city which employ hundreds of people. These regions are

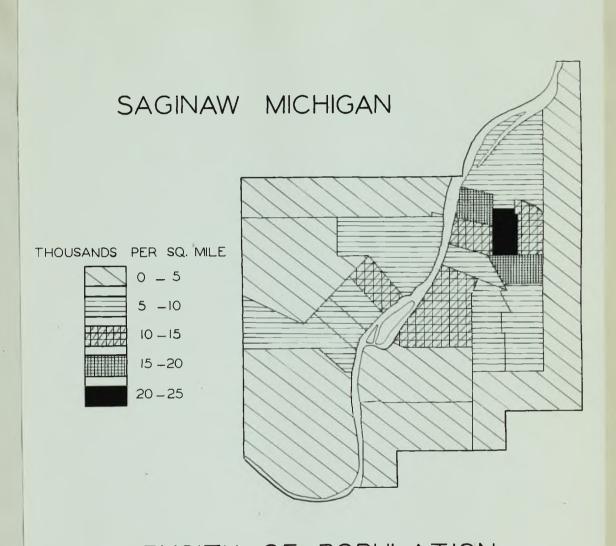
surrounded by land even less thickly populated, where manufacturing plants and their workers are found. Around the whole area is a margin of sparse settlement, the suburban area. In West Saginaw, population is thickest just to the north of the central business area. A population nucleus of considerable size is found at the West Saginaw end of the Genessee Street bridge. This area, known as North Saginaw, has developed because of its proximity to the business district of Mast Saginaw and the crossing of two main highways, Michigan Avenue and Genessee Street. The rest of the population on this side of the river is quite evenly distributed along the main highways running parallel with the river and also along Cratiot Court and State Streets. Outside of these areas the population is sparse.

The landscape pattern of Saginaw is a complicated one due to the fact that the present city is really made up of two earlier cities located on opposite sides of a river, but not directly across from one another, each of which grew separately along its own lines of development. In a typical development, "the city is the point of convergence of all the main avenues of transportation and communication, both local and intercommunal."

^{1.} Burgess, E. W., The Urban Community, p. 178 (1926).



Figure 22. The star-shaped form of the city is brought out in this map of modern Saginaw in which the three original nuclei can be distinguished, as well as the newer nucleus at the west end of the Genessee Street bridge.



DENSITY OF POPULATION
1930

Figure 23. Map of the distribution of population in Saginaw, by wards.

From the center to the outer margin of the city there is a series of concentric circles lying in the following order:

(1) a central business district; (2) a zone of transition between business and residence (an invasion by business and light manufacturing involving physical deterioration and social disorganization; (3) a zone of working man's homes, cut through by rooming house districts along the focal lines of transportation; (4) a zone of apartments and restricted residences; and farther out (5) a zone of suburban areas. Railways with their (6) belts of industry cut through this generalized scheme, and along the more travelled local lines of transportation grow up (7) retail business sections which further modify the structure of the city.

About the beauty spots of the city are generally found (8) the exclusive homes, as well as the (9)

parks and recreational spots. "

with East and West Saginaw located at diagonal positions on a river, this normal circular growth was modified to the extent of an apparent bisection. Instead of finding circles of growth which characterize cities of normal development, we find semi-circular patterns set apart, which, if placed opposite each other, would approximate the normal city. (Figure 24). The land in Saginaw is used approximately as follows:

US	SE OF LAND	PERCENTAGE POLITIC	
1.	Vacant		40
2.	Residential		24
	a. Small cottages	15.00	
	b. Middle class to superior	7.00	
	c. Slums	1.5	
	d. Exclusive	.5	
3.	Streets		20
4.	Industrial and Railway		8
	Public property		4
6.	Commercial		3

^{1.} E. W. Burgess, The Urban Community, adapted from page 221.

^{2.} A. G. Dorau and H. B. Hinman, The Economic Basis of Urban Economy, p. 75, (1928).

The main commercial areas of Saginaw are situated at and about the major foci of local and regional transportation routes, the precise locations being due to a combination of land forms, water bodies, and historic events. The small business center of South Saginaw, formerly the town of Salina, is a stagmant, uninteresting place supplying the needs of the generally poor population living in the vicinity. (Figure 25). In West Saginaw, the original nucleus of the whole city, there is a fairly active but rather small business section composed for the most part of old buildings not more than two or three stories in height. (Figure 26). The commercial core of East Saginaw is by far the largest business center in Saginaw. (Figures 27, 28, and 29). East and West Saginaw are both easily accessible from all sections of the city. In these localities, where many people are accustomed to carry on their business affairs, concerns which engage in city-wide or regional business have established themselves in order to promote their activities. Land values and rents are high in these areas, where are found wide, paved avenues, large shops and stores, professional offices, hotels, government and public buildings, banks, large theaters etc. The buildings, most of which are two or three story brick structures, crowd close upon the streets in compact, monotonous rows. Their style is predominantly that of the late eighteen hundreds -- the characteristic cornices and wooden trimmings popular at that time being everywhere much in evidence. As the demand for space in these busy areas has in-

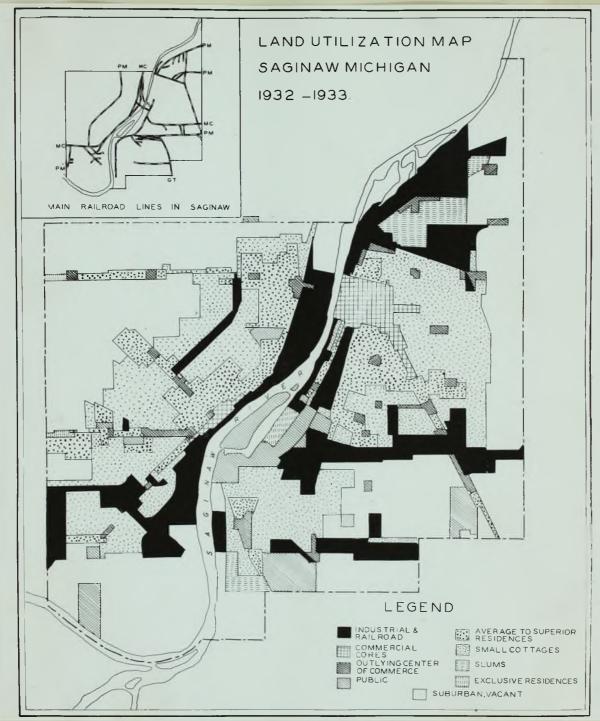


Figure 24. The off-center semi-circles of growth characteristic of Saginaw's landscape pattern are found in but few other cities in the United States. A careful comparison of the land utilization map with the railroad map (inset) will demonstrate the close relationship existing in Saginaw between the railroads and the industrial areas.



Figure 25. The small size of the commercial core of South Saginaw, (Salina) indicates the retrogression of that part of the city.



Figure 26. The downtown area of West Saginaw. The hotel at the top of the hill is built on the site of the early fort.



Figure 27. Corner of Genessee and Lapeer Streets, looking west, in the downtown area of East Saginaw.

Compare the old style buildings in the right foreground with the new "skyscraper" bank building in the distance.



Figure 28. East Saginaw, as seen from the west side of the river. The "skyscraper" bank building in the center, and the beautiful new telephone exchange building at the right, give a distinctly modern, progressive touch to the city's skyline.

creases, the price of land has risen correspondingly, with the result that a more intensive use of the land has been brought about by the erection of taller buildings. Several new "skyscrapers" in East Saginaw add a distinctly modern touch to the skyline, and attest not only to the growth and prosperity of the city generally, but also to the development of East Saginaw as the commercial nucleus of the whole metropolitan area. (Figure 28).

Small local business sections have sprung up rapidly as Saginaw has grown, and now are generally distributed over the whole city. These are usually in the form of "four corners," where one can buy the ordinary essentials of daily life. As a rule they are located on main highways, and particularly at the crossing of two main thoroughfares. (Figure 30). There are about twice as many of these centers on the east side of the river as there are on the west side.

Industrial activities are carried on in many parts of Saginaw. The lighter industries are for the most part located along railroads in closely built parts of the city: decadent areas with poor or old residences (many of which have been transformed into rooming houses,), wholesale houses, garages, stores, freight depots, etc. (Figures 28, 30, 31). Most of the factories are two or three stories in height, occupy relatively small sites, and are served by railway sidings. Although land values and taxes are high in these areas, this disadvantage is offset by proximity to freight stations and the express office, the post office, a central labor supply, and the city market.



Figure 29. Airplane view showing the commercial core of East
Saginaw (the white, treeless area in the center),
and the light industrial area along the river.
Note the abundance of trees in the residential
areas. (Photo by Berka, Photographer, aginaw, Mich)

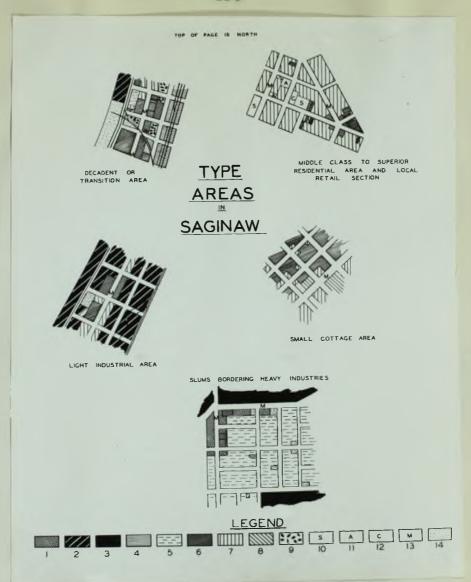


Figure 30. Detail maps of portions of the sections discussed in the paper. The key to the legend is as follo's:

- 4. Railroad proporty, freight stations, depots, etc.
- 5. Slums
- 6. Small cottages
- 1. Local business 7. Middle class to 2. Light industries superior resider 8. Exclusive resider
 - superior residences
 - 9. Wholesale, storage
 - 10. School
 - 11. Apartment
 - 12. Church
 - 13. Main highway
 - 14. Vacant property



Figure 31. View along South Franklin Street, in the light industrial area. The homes along the avenue are mainly rooming houses, backed by small factories and warehouses. The large buildings in the commercial core can be seen in the distance.



Figure 32. Low, swampy land such as that shown in this picture, is found in the northern part of Saginaw.

The buildings seen in the distance are plants of the Chevrolet Motor Car Company.

The heavy manufacturing plents are located (1) elong the river, on land that has been largely filled in; (2) in the northern part of Saginaw, where the land is low and poorly drained; (Figure 32); (3) in the south, where low land is again found; and (4) on the outskirts of the city along main railroad lines. In these localities, plenty of cheap level land is available in large continuous blocks, transportation facilities are good, a dependable source of water supply is available at low cost, and there is easy access from populous districts from which a labor supply may be drawn. Large low buildings with high smokestacks are characteristic of the heavy manufacturing areas. (Figure 33). Because of the large amount of poor land and the many railroads there is a superaboundance of industrial property in Saginaw. (Figures 34 and 35).

The poorest residential sections of the city, the slums, are characterized by old, deteriorated houses, dirty, unpaved streets, poor people, often negroes or foreigners, and unskilled laborers. (Figures 36, 37, and 38). These sections either fringe the river or railways, adjoin manufacturing areas, or occupy land which because of poor drainage, occasional overflows, or heavy snoke, is unsuitable for better homes. The largest section of slums is located in the northern part of East Saginaw near the Pere Marquette Railway Shops and the Chevrolet Motor Car Plant, which have attracted large numbers of negroes and Mexicans, making this the poorest residential area in the city. A peculiar group of people of low mentality and

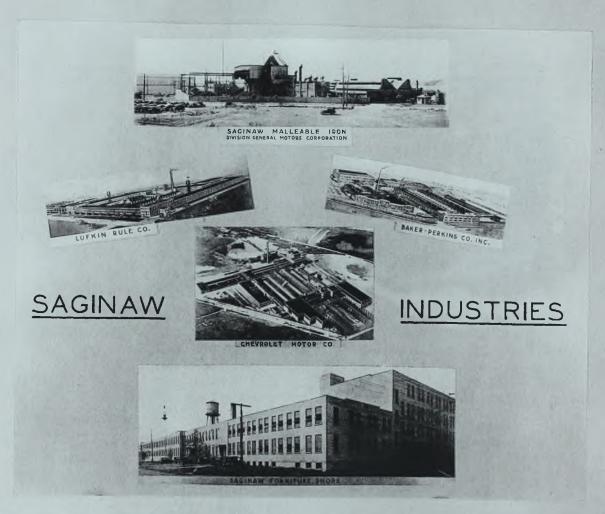


Figure 33. Views of some of the largest manufacturing plants in Saginaw.



Figures 34. Hailroad tracks, most of which were laid during and 35. the lumber days, are encountered in many parts of the city. It is because of these many reilroads and the large amount of poor land that there is so much industrial property in Saginaw.





Figures 36. Views in the negro slum area of Ward One, in the and 37 northern pert of East Taginaw.





Figure 38. Slums area along the river in the light industrial area.



Figure 39. View in one of the cottage areas. This type of home dominates the residential landscape of Saginaw.

little ambition lives along the river in the southern part of the city. These people, known as squatters, inhabit make-shift shacks built either out over the weter, or higher up along and back from the river, and they live mainly by fishing or doing any odd jobs that may be found within the metropolitan area.

Most of the homes in Saginaw sprang up during the years of the lumber boom, and consequently reflect the style of the period during which they were built. (Figure 39). The majority of them are of the small cottage type, having one or two gables, small porches, and more or less ornamentation. These generally closely spaced houses vary from neat little homes to neglected, deteriorated shacks, with an occasional rather large, attractive middle class home standing out prominently against its mediocre surroundings. This is particularly true if the area is near a main highway or a middle class residential district. Cottage areas are more extensive in Saginaw than any other sort of residential district, occupying about 15 of the 24% of land used for residential purposes. They have grown up mainly (1) on lower land undesireble for high class residences; (2) near factory sites; (3) in an irregular zone which extends around the city at such a distance from the business centers that the land included in it is relatively low in price and not highly restricted. Due to the small size of so many homes, built during a prosperous lumbering period, over sixty five per cent of the families in Saginaw own their own homes.

^{1.} Fifteenth Census of the United States, 1930: Population Fulletin, "Families", p. 31

In the higher, more desirable localities, houses ranging from middle class to superior are found. (Figures 40, 41). In this group are the more pretentious single homes, and multiple-family dwellings, such as flats, duplexes, and apartment houses, with an occasional smaller home of the cottage type appearing among its finer neighbors. The shady moraine area south of the business district of East Saginaw is one of the best residential sections of the city. Many fine homes were built along the main thoroughfares north of the commercial core, but their value has been greatly reduced by the growth of the colored and foreign settlement in Ward One, to the north, to such an extent that well-to-do people no longer favor that locality as a place of residence. In West Saginaw many of the better homes cluster about the nucleus of the early city. Here are found the handsome old edifices built by the wealthy lumbermen in by-gone days. The area of better homes reaches to the north, following the main highways and there joins a large section of newer homes built up directly across from the commercial center of East Saginaw. The other areas of well-to-do homes in West Saginaw are found along the leading avenues of transportation: Gratiot, Court, and State Streets. Proximity to the business district is no longer an essential to good residential property; rather, rapid transportation has made the land along or just off the main highways at a considerable distance from the center of town, a highly desirable location for good residences. Here fine homes are springing up, some



Figure 40. Middle class residences in West Saginaw.



Figure 41. Superior residence in East Saginaw.

of the most modern high class homes being located not far inside the city limits. (Figures 42, and 43). It is probable that considerable growth will take place in these sections in the future.

known as "The Greve" is situated in one of the most beautiful sections of the city--a high, thickly shaded spot, backed by Lake Linton and Rust Park, and overlooking the magnificent Hoyt Park. (Pigure 44). There are only two other small areas that can be called exclusive, these consisting of sub-divisions of newly built homeo just inside the city limits on Gratiot and State Streets. In and about the areas that have been described are a number of pleasant parks and play-grounds located with hardly an exception near well-to-de-residential districts and in spots of unusual scenic beauty, the most outstanding being Rust Park, a complete island, and the huge natural amphitheater known as Hoyt Park. (Figure 45).

Out beyond the sections already described is the suburban area, made up in some places of subdivisions of single lots, and in others of farms of various sizes. In the suburban areas of East Saginaw there are a great many small homes located on dirt roads, and with just a lot or two on which to grow enough to satisfy the family needs, (Figure 46), while on the west side large farms predominate.

Saginaw is still in the process of adjustment to the changes brought about by the exhaustion of the lumber resources



Figure 42. Fine residences on State Street, near the city limits of West Saginaw.



Figure 43. Attractive modern homes are appearing in the suburban area of West Saginaw, near main highways.



Figure 44. A home in the exclusive "Grove" section of East Saginaw.



Figure 45. The beautiful natural ampitheater known as Hoyt Park.



Figure 46. Small homes and gardens predominate in the suburban area of East Saginaw.

of the valley, and is now in a transition stage between the period of extractive activities end one of diversified industry. The position of modern Saginaw alone would not stimulate the development of an important industrial center in that locality. The lumber industry was entirely responsible for the early growth of the city, but those activities are now almost a thing of the past. However, the capital formerly invested in lumbering has been directed into new channels with the result that many diversified industries have sprung up to take the place of the earlier extractive activities. The future of the city is mainly dependent upon the stabilization of these new industries. Saginaw is hoping that more manufacturing concerns will become established there that will afford regular work throughout the year, and although a few of the industries have failed that were established after the decline of lumbering activities, yet the increasing number of smaller industries seems to indicate that conditions are becoming more settled.

The effect of the St. Lawrence waterway project upon Saginaw's future is problematical. There are a number of industries that export products to foreign countries and there can
be no doubt that a deep waterway will be beneficial to these
and other companies. The Saginaw River has alredy been dredged to allow large lake boats to come to Saginaw and further
deepening will make it possible for ocean steamers to come to
the city. It might be suggested that since Bay City is closer

to Saginaw Bay than is Saginaw, the first city would have a decided advantage over the second and would become the main port of the Saginaw Bay region. However, Saginaw has already become firmly established as a trading center of the valley while Bay City is on the periphery of the area. It is, therefore, entirely probable that this condition will offset much of the disadvantage which Saginaw's upstream location might offer. Thus while railways and motor cars will care for local and regional transportation very much as they do at present, the new waterway will enable Saginaw to enter into commercial relations with other parts of the world. That this is expected to be the case is indicated by the fact that water front property in Saginaw has risen in price within the last few years. However, it is doubtful if there is enough in Saginaw's hinterland to warrant the belief that the proposed waterway will establish Saginaw as an important ocean port or will afford any unusual impetus to industrial activity.

There is every indication that Saginaw will continue to be a city of diversified industries, and it may enter to a limited extent into world relations. There is no reason to believe, however, that Saginaw will increase much either in size or importance in the future, although it will probably always remain the key city of the Saginaw Valley.

APPENDIX

(All figures in the appendix are from the Board of Commerce unless otherwise noted).

Table I.

Population (1930)

Total population Male Female	on	80,715 40,894 39,821
Native White		64,644
Foreign Born	White	11,099
Negro		2,853
Mexican		2,066
Chinese		25
Indian		23
Others		5

Table II.

Growth of Population in Saginaw

Year	West Saginaw	East Saginaw	Consolidated Saginaw
1838	9001	0	
1839	4001	0	
1847	2002	0	
1850		251 ³	
1856	536 ⁴		
1860	17125	3237 ³	
1875	10064	17084	
1885	16000	30329	
1890			46322
1900			42345
1910			50510
1920			61908
1930	34560	46155	80715
1932			81728

- 1. T. B. Fox, History of Saginaw County: p. 35, (1858).
- 2. W. R. Bates, History of the Saginaws: p. 1, (1874).
- 3. T. B. Fox, op. cit., p. 11
- 4. J. M. Thomas, and A. B. Galatian, Indian and Pioneer History of the Saginaw Valley: p. 7, (1866).
- 5. Ibid. p. 9.

Table III.

Distribution of Population in Saginaw by Wards (1930)1

Ward No.	Population 4930	Negro Population 2853
2		
2	2341	1884
3	1690	128
4	2953	48
5	2539	34
4 5 6	2905	83
7	2210	15
8	4046	51
9	3736	43
10	4211	21
11	4629	67
12	4045	24
13	4965	119
14	6468	17
15	2261	26
16	2219	
17	1795	24
18	3165	
19	7671	(Heavy foreign
20	6016	2 population)
21	5920	267

Note: Ward numbers are given on the map of modern Saginaw, Figure 22

Total population of West Saginaw, 34,560
"East Saginaw, 46,155
80,715

Table IV.

Lumber Production on the Saginaw River (1852-1897)2

Year	Board feet
1852	90,000,000
1857	113,700,000
1862	128,000,000
1867	423,963,190
1872	602,118,980
1877	640,166,231
1882	1,011,274,605
1887	783,661,265
1892	708,465,027
1897	339,991,000

^{1.} Fifteenth Census of the United States, Vol. III., Part 1:
Population: U. S. Government Printing Office, Washington
D. C., 1932, p. 1184

D. C., 1932, p. 1184
2. J. C. Mills, <u>History of Saginaw County</u>, Vol. 1, p.403

Table V.

Manufactures in Saginaw, (1892-1929)

Year	Value of Products	No. Employees	Wages
18921	4,253,018	4097	2,221,537
19142	24,279,000	8466	5,580,000
1929	68,904,330	14698	21,449,922

Table VI.

Census of Manufactures

Year	Av. Wage Earners	Wages	Value of Projects
1925	9582	13,107,893	53,168,795
1927	11638	15,900,691	59,960,758
1929	14698	21,449,922	68,904,330
1931	13350		

Table VII.

Industrial Centers in Michigan

Of	Number Establishments	Average Wage Earner	Wages
Battle Creek	101	7062	10,439,565
Bay City	104	6937	8,020,730
Grand Rapids	516	27744	40,476,011
Jackson	111	9401	13,021,514
Kalamazoo	175	8982	12,489,611
Lansing	130	18877	28,464,424
Saginaw	135	14698	21,449,922
Saginaw County	7 171	15441	

Table VIII.

River Tonnage, 1931

Saginaw City 657,387 Tons Bay City 309,138 "

^{1.} J. C. Mills, History of Saginaw County, Michigan: Vol 1 p. 493

^{2.} Ibid, p. 508

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