City Plan for Akron

Prepared for
Chamber of Commerce

By
John Nolen, City Planner
1919
AKRON CHAMBER OF COMMERCE

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AKRON CHAMBER OF COMMERCE
Akron Chamber of Commerce City Improvement Committee

To the Members of the Akron Chamber of Commerce:

Your City Improvement Committee, through the courtesy of its chairman and largely at his personal expense, is pleased to submit herewith a report, City Plan for Akron, prepared by John Nolen of Cambridge, Massachusetts, one of the best-known city planning experts in this country.

Akron, since its establishment as a village in 1836 and its incorporation as a city in 1865, has grown to a population of about 175,000 without any thought as to its proper development. It therefore lacks the proper thoroughfares for adequately handling the traffic of such a city; it lacks adequate parks and boulevards; it is without a civic center, and no thought has been given to the laying out of its industrial and business districts nor the protection of its residential sections.

The plan herewith submitted, if adopted by the city and supported by the cooperation of our citizens, will provide remedies for these conditions and for a proper future development of our city.

The report at first glance may seem somewhat too difficult of attainment, but the Committee believes a careful reading will prove that, notwithstanding it may call for the expenditure of considerable sums of money, such expenditures will be wisely made if spread over a period of years. The Committee recommends the adoption of the plan with the thought that it can be modified from time to time as may be necessary through changing conditions in this city.

This report is prepared with the purpose of submitting it to the general membership of the Chamber of Commerce, and when approved by it, presenting it to the City of Akron through its City Planning Commission for final adoption by the City Council, to be put into effect as rapidly as conditions will allow.

With such a plan adopted the city can grow along lines of well-ordered development during the coming years if our citizens take an active interest in carrying forward these improvements, and Akron will then become a city of which all our people may be proud.

The City Planner takes this opportunity to express his thanks to the numerous city officials and others for their cordial response to his requests for information and assistance. The period occupied in the preparation of the local survey and the planning studies has been lengthened by the inevitable delays due to the war. He was of the opinion that nothing would be gained by presenting the report to the public until more normal conditions were restored. The present, however, is a most favorable time for action, and Akron has the satisfaction of being the first city in the country ready with a completely worked out city-planning reconstruction program.

Respectfully submitted,

Frank H. Adams, Chairman,
H. E. Andress, George W. Crouse,
C. I. Bruner, Frank H. Mason,
City Improvement Committee.

Akron, Ohio
April 25, 1919
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Main Street, 130 feet in width, is one of Akron's greatest assets. The growth of the city demands the adequate widening of other major streets.
Civic Survey
Topographic Map

The contour map serves to bring out in a clear, diagrammatic way, as nothing else does, the chief features in the Akron district. In appearance Akron has been likened to an eagle with wings outspread. The head is represented by North Hill, a residential section, the body by the downtown business section. East Akron, one of the wings, is a residential and factory section, and West Hill, the other wing, the best residential section. South Akron, representing the tail, is the great industrial district.

An examination of the Topographic Map will disclose the main physical features of the city. To the north is the Cuyahoga River, with its gorge, while the city proper is divided into three hill units by the valleys of the Little Cuyahoga and the Ohio Canal. North Hill rises to an elevation of about 230 feet, which is approximately 190 feet above the river and 100 feet below West Hill and East Akron, whose elevations are close to 330 feet. The uplands extend back indefinitely to the east and west, but to the north we have the narrow valley of the Cuyahoga with its rough and broken sides, and to the south the open country of the Portage Lakes.

The river valleys are deep and steep-sided, forming natural walls that prevent the easy extension or merging of the developed areas. This is particularly true of the business district of Akron, which is unfortunately shut in by steep slopes on the north, west, and east. This wall-like effect is reflected in the steep grades that occur on many of the streets leading from the center of the business district, North Howard and Quarry Streets furnishing good examples. The city already has under definite consideration the construction of two viaducts whose purpose is to provide an easy outlet from the business center to the residential hills across the valleys.
The railroads and, because of the facilities they afford, the industries also have followed the valley lines through the city and in addition have crossed the city on the higher level, rounding East Akron hill and crossing to North Hill above the deep part of the river bottom.

The result is that the entire central section of the city is bound in by railroad and industrial properties, a situation still further complicated on the east by the Akron, Barberton Belt Line with its adjacent manufacturing plants. This area between the main lines and the Belt Line is at present of a mixed character with practically every class of occupancy represented. The permanency of the railroads will in all probability draw in here, as the city grows, other factories and industrial concerns, so that this area will undergo a continuous change tending toward an industrial and low-cost housing use, with retail business property along the main streets.

The other new possibility for industrial expansion, besides the use of blocks now adjacent to existing factory properties, is in the Little Cuyahoga Valley along the Baltimore & Ohio right of way.

A glance at the wind charts shown on this same plan will demonstrate the unfortunate relation of the industrial areas to the city center. For the greater part of the year the wind is from the south and southwest and carries a continuous draft of smoke and dirt over the business section of Akron, causing the city to appear dingy and bringing great loss to storekeepers and merchants.

Incidentally the wind charts explain one of the reasons why West Hill has become a high-class residential section with the best houses in Akron located on the higher land there free from smoke.
Industrial Properties—Key Map

While Akron manufacturing plants turn out a great variety of articles ranging from ice-cream cones to automobiles, the three largest groups of industries are those engaged in the manufacture of rubber goods, clay products, and cereals.

The biggest capitalization is in the rubber industries. They have approximately 58,000 employees, mostly skilled and semi-skilled workers whose pay is such as to permit them to afford comfortable homes. Some of the larger plants are badly cramped for room in which to expand. This is due partly to the sites selected when these industries were small, partly to their own expansion, and partly to the rapid growth of the city itself, which has closed in upon them from every direction. The clay-products concerns, on the other hand, own large acreages, which will be worked out eventually and will then revert to other uses. This fact should be kept in mind in the establishment of proposed zones and in other future developments. A full list of the Industrial Plants in Akron is printed in the Appendix.
The United States government census showed that in 1850 Akron had a population of 3266. After the Civil War the westward flow of immigration from eastern cities was reflected in the census returns for Ohio’s cities. Akron shows a steadily increasing growth until 1910, when, due to the rapid development of the rubber industries, which in turn was the result of the extraordinary expansion of the automobile business, the population took a much sharper rise, as indicated in the diagram showing the curve of population. The variation in the rate of increase in population is brought out sharply by comparing the two periods from 1880 to 1910 and from 1910 to date, 1919. In the first, a period of thirty years, the increase was from 16,512 to 69,067, an annual gain of 1751, or a total increase of 318 per cent. In the second period, the increase has been extremely rapid, and the population has risen from 69,067 in 1910 to 175,000 in 1919, an annual gain of about 10,000, or to put it another way, the population has more than doubled in the short period of nine years. Predictions as to the future are based on the average of the years included in these two periods which will probably more nearly approximate the normal conditions.

Akron is still growing in population very rapidly, yet it is safe to say that unless new industries of large size locate at Akron the present rate of increase of population may not keep pace with that of the last few years. The return of peace conditions with the inevitable readjustments will be one of the factors operating to upset predictions as to the probable growth of Akron. However, by taking the average yearly increase for the last two decades as the index of probabilities, it seems reasonable to assume that Akron will at least have passed the 200,000 mark by 1921 or 1922.

Although the future cannot of course be absolutely predicted, still the figures given in the diagram are a good basis for planning future city improvements, especially those of a more permanent character, such as sewer and water mains, thoroughfares, parks, and car lines — improvements that not only have to meet the requirements of today, but also those of the future.
The relative density of the population is shown for those areas only which lie within the city boundary.

**NOTE**

One dot is used to represent every twenty-five persons of the population.

- Park Areas
- Railroad Properties
- Industrial Properties

**SCALE**

- Inches
- Feet
- Miles
Distribution of Population

The diagram of the Distribution of Population shows the relative density of population as indicated by the city directory and school census. One dot is used to represent every twenty-five persons of the population. The relative density is shown for those areas only which lie within the 1916 city boundary. Figures covering the important outlying areas are unfortunately not obtainable.

This diagram is of value in connection with street planning, the best distribution of schools, playgrounds, parks, etc., also in fixing the locations of the proposed building zones.

Largely because of the type of industries in Akron the class of labor employed has been such as to produce relatively good housing conditions so far as a density of building goes, and it is only in a few scattered localities that unhealthful, crowded, slum conditions prevail. This absence of bad houses on any considerable scale is indicated by the even distribution of population, which is in marked contrast to the ordinary industrial city. The fact that this condition exists today in Akron is not, however, a guarantee that it will continue, and if the experience of other cities is a guide, the crowded areas of the present cannot be too carefully guarded and improved.

The organized housing operations in Akron already completed or under way in connection with large industrial concerns are doing much to prevent the usual bad conditions, not only by actually relieving the great demand for homes, but also by setting a good example for others to follow, and by raising the standard that other builders must to some extent meet. Akron’s greatest need perhaps is more houses of desirable types for rent. These are not likely to be obtained except through the organization of a housing company representing the business interests of the city generally. A special report on this subject has already been presented by the City Planner to the committee in charge.

Akron is practically free from the three-decker and tenement-row type of building, which produces the congested, overpopulated city district, and by positive legislative oversight can keep under control all such developments.
City of Akron
Summit County
State of Ohio

Present Building Distribution Diagram
Showing location and extent of different building types according to use.

NOTE
1. Business
2. Large Lot Residences
3. Normal Lot Residences
4. Small Lot Residences

Scale
200 ft = 1 in.
THE diagram of Present Building Distribution shows by different legends: (1) the business districts, also scattered stores; (2) large-lot residences; (3) normal-lot residences; (4) small-lot residences. This diagram is one of the most important foundations for the plan showing proposed building zones, with which it should be later compared.

The present central business area of Akron is badly handicapped as to possibilities of expansion by the bluffs to the north, the railroads and steep grades to the east, the canal and valley to the west, and the railroads and factories to the south. The result has been a cramped business district of high values, as illustrated on the accompanying plans, with relatively long lines of business properties following out the principal streets, notably Main Street itself and Wooster Avenue. This scattered business district is supplemented by store groups at important intersections such as the Five Points at Maple Street and West Exchange Street, Chalker’s Landing at Howard Street and Cuyahoga Falls Avenue, with a larger area along East Market Street in East Akron.

An opportunity quite unique in its way for an expansion of the business district exists across the canal at Exchange Street. Here are level land, broad streets, and relatively low-cost present development, good car service, and easy access to the central business district. By bridging the canal and special treatment of the area between Main Street and Water Street, which could be done at reasonable cost, these two sections could be made a single unit.

There are at present a few residential sections of the city which will shortly become slums, if not carefully restricted or definitely rebuilt. In practically all cases these settlements are on more or less undesirable building property which is topographically unfavorable or adjacent to railroads or industrial properties. By careful planning and building these areas can be successfully redeemed.

Aside from two or three scattered localities of limited extent, the main and first-class residential district is in the West Hill section, and with proper regulation there is fortunately ample room for its expansion out from the city westward.

To the northeast there is a large area almost entirely unoccupied at present, notwithstanding the fact that it is only a short distance from the heart of the city as compared with other residential districts. This is due mainly to the lack of direct radial street connections, owing to the steep bluffs along the valley to the northeast of the city’s center and to the location of the steam railroads. Forge Street, the one straight lead in that direction, is closed to vehicular traffic by the railroad. Consideration should be given at once on ways of opening up this territory for residential use, thus making it a part of the desirable residential area of the city. Car-line extensions as suggested at either East Tallmadge or Case Avenue would do much to accomplish the desired result.
Plan prepared for
Akron
Chamber of Commerce
City Improvement Committee
Frank H. Adams, Chairman
by
John Nolan City Planner

City of Akron
Summit County
State of Ohio

Land Values
Diagram
Showing approximate locations of price zones figured on front foot basis

Note
Per front foot
1. Over $7000
2. $5000 - $7000
3. $3000 - $5000
4. $1000 - $3000
5. $500 - $2000
6. $200 - $500

Scale
1 inch = 500 feet

Plan No. 10

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Land Values

The diagram of Land Values shows approximate locations of various zones figured on the front-foot basis as follows:

1. Over $1000
2. $500 to $1000
3. $100 to $500
4. $60 to $100
5. $30 to $60
6. $10 to $30

These values are based on figures supplied by the Board of Assessors, supplemented by the best local real estate authorities. This chart is of direct use in connection with practically every feature of city planning. It applies directly to the selection of parks and other public properties, to the establishment of proposed building zones, and to the distribution of various types of homes.

Due in part to the congested area of the business district, the land values in Akron have reached extremely high levels, running well over $1000 per front foot and in some cases over $5000 per front foot. The highest-priced land is $7000 per front foot. The high-priced real estate then radiates from the center, following the business properties along the main streets and including the adjacent residential property soon to be converted to business use. Land for this purpose ranges from $1000 per front foot down to $100.

Adjacent to these areas are others occupied by a high grade of residential property whose value in some cases is due to the intrinsic value of its present use as on West Hill, and in others to the future possibilities of the location for other uses. Such a condition, for example, is shown on either side of the store groups at Chalker’s Landing.

The great bulk of the residential area falls within the fifth class, ranging in value from $30 to $60 per front foot. By comparing the Land Value map with the Public Utilities diagram it will be observed that this residential area coincides very closely with the area supplied with water and sewer service. Outside of the public-service zone the values drop sharply to the sixth class, namely, from $10 to $30 per front foot. A considerable part of this land is still to be had at relatively low cost, within only a short distance of the heart of the city, and, if given public utilities, it could be developed for relatively low-cost homes before a rapid rise in land values.

Along the Little Cuyahoga River is an area whose value has not yet been assigned. This land is not suitable for housing, and without control is likely to develop in a way detrimental to the best welfare of the city. Here is an opportunity for Akron to obtain low-priced land centrally located and peculiarly suitable for public park and recreation purposes. There is also along this valley land with railroad facilities that could be easily adapted to industrial uses. For table showing range in Land Values, see Appendix.
PUBLIC UTILITIES DIAGRAM

Showing street car lines and areas supplied with water and sewer service.

LEGEND

Car lines

single track

double track

proposed extensions

Area supplied with water service only.

Area supplied with both water and sewer service.

Note

Streets and Alleys, Existing
Street Car Tracks
Railroad Properties
Industrial Properties
Parks and Playgrounds
Amusement Parks, Privately Owned
School Grounds
Other Public Properties
Public and Some Public Buildings
Cemeteries

Scale

1/16 mile = 1 foot
The Public Utilities diagram shows street-car lines and areas supplied with water and sewer service.

The public utilities in Akron have kept pace fairly well with the development and expansion of the city, the chief need being the extension of water and sewers into the North Hill and to the northeast and southeast sections. To the west much new building is going on, and extensions will have to be made there shortly, although a large part of the new area is outside the present city limits.

The water system has a length of mains of 235 miles, the sewer system 187 miles. There are 160 miles of paved streets. As is usual in American cities, sewer and water systems are publicly owned. The proposed plans for the extension of the water service will make it one of the best in the state. The supply of gas and electricity is in private hands, the former being provided by the Eastern Ohio Gas Company, and the latter by the Northern Ohio Traction and Light Company.

No single feature in a city's development is more important than that of transportation. Therefore great interest attaches to the location and extension of the car lines. The existing lines have been shown on the survey, both single and double track, and also proposed extensions. The existing lines covering 40 miles in length provide very well for the older parts of the city. Extensions are greatly needed, and a special report on this subject was submitted with a special diagram to illustrate. By taking the initiative in the matter of installing public utilities the city could accomplish much for backward districts and exercise a salutary control over the development of the city as a whole.

Interurban trolley lines connect Akron with all the important neighboring cities, through cars being maintained with Cleveland, Massillon, Canton, Kent, and Ravenna.
LIKE all progressive modern cities Akron has outgrown a number of its public buildings and very shortly will be faced with the problem of providing new ones. In most cases it is a question of providing a new site also, the old property being large enough only for present purposes. In selecting new sites ample land should be acquired to care for the future, and the location should be such if possible to allow for a well-planned grouping of buildings, thus obtaining those benefits which come from a permanently established center.

The present railroad station in Akron is entirely inadequate and poorly located for the present traffic and express business which it is called upon to handle. It is to be replaced within the next few years by a modern Union Station whose location will do much to influence the future business growth of Akron and will be an important factor in determining the location of future public buildings.

The existing post-office building is already too small for the present city, and as the lot on which it stands is inadequate for the proposed building, a new site has been purchased further out on East Market Street. This new location in our judgment is not convenient to the business area, and the probable removal of the railroad station will make it still more inconvenient. Another objection is its lack of relation to other public buildings and the resultant loss.

The library, city hall, and market are all old buildings, and should be rebuilt within a few years. The present sites are neither desirable nor adequate. Here is an opportunity to start a grouping of public buildings in Akron that would be the beginning of a creditable civic center. The city hospital is soon to be enlarged, and when this is done, it would be advisable to acquire more property and carry out at the same time some much-needed street extensions, which depend upon the replatting of this land to be acquired.

The Sumner Home for the Aged is now too close within the built-up sections of the city to serve its purposes as well as formerly. This property, however, is well located and suitable in character for local park and recreation purposes, and this use of it should be considered just as soon as the removal of the Home takes place.

Another privately owned property now used for recreation which should be kept in mind for possible public acquisition is the Portage Country Club. The history of many other country clubs has been that as soon as the city grows beyond the club, new and more suitable lands are purchased for the purpose, and the old site is sold and subdivided. There is no large park in this part of West Hill, and the Country Club property offers one of the best opportunities for future use.
Existing Parks

Thanks to the location of such private or semi-public parks as those in Goodyear Heights and Firestone Park, Akron has some form of recreation in nearly all parts of the city. The list of public parks follows:

Christy Park, West Market Street and Rose Avenue, .12 acre.
Elizabeth Park, East North Street, 23.50 acres.
Glendale Park, Cherry Street and Glendale Avenue, 6.40 acres.
Grace Park, Prospect, Park, and Perkins Streets, 7.07 acres.
High Bridge Park, Cuyahoga River at High Bridge, 46.67 acres (approximately).
Highland Park, Highland Avenue and Edgerton Road, .20 acre.
Hill Park, Market and Broad Streets, .24 acre.
Mclain Park, Howard Street and Cuyahoga Falls Avenue, 2.08 acres.
Margaret Park, South Street and Manchester Road, 43.88 acres.
Marion Park, Howard and Cuyahoga Streets, .21 acre.
Mount Union Park, Mill, College, and Forge Streets, 1.35 acres.
Neptune Park, Market and Valley Streets, .43 acre.
Oasis Park, Market Street and Glendale Avenue, .06 acre.
Perkins Park, Edgewood Avenue, 76.44 acres.
Perkins Square, Exchange and Bowery Streets, 2.50 acres.
Portage Park, Exchange Street and Rose Avenue, 3.38 acres.
Watershed Park, Marvin Avenue, 0.08 acre.

Total — 219 acres.

The area of existing parks for Akron is inadequate for the present, to say nothing for the future, and there is no recognized system for local parks, playgrounds, or large outlying reservations; nor are the existing parks and recreation areas developed to the standard that should be the aim of a city of the size and prosperity of Akron.

As a city grows in population, park lands should be acquired in advance for every new residential section that is opened up for settlement. A recognized minimum ratio between population and park area is one acre of park for every two hundred of the population; or another safe ratio is approximately ten per cent of the total city area. Thus assuming that Akron will be a city of at least 200,000 in 1922, as shown by the curve of population, the park system should at that time be approximately a thousand acres. As a basis for such a park system, the diagram submitted shows that the existing public parks comprise in all only about 219 acres. Parks still in private ownership cannot be credited to the city until dedicated, and should not be relied upon unless it is definitely determined that they will always be available for public use.

By acquiring park land in advance the city effects a decided saving in first costs, obtaining the land at acreage prices. It also is able by such action to preserve beautiful, naturalistic features in their entirety. Furthermore, this method of early selection furnishes a wider choice as to character and location, which is largely lost if purchase is delayed until the residential development has taken place. The land left is often simply that which cannot be used to advantage for building purposes, and is taken by the city as a last resort, usually at house-lot prices.

High Bridge and Perkins Park are the only naturalistic reservations, although the river valleys, canal, and other waterways of Akron, as well as the high hills and steep, wooded bluffs offer most unusually attractive possibilities. Fountain Park is used only as a fair grounds. Elizabeth Park is primarily a playground, and Summit Lake Park, while a good step in the right direction, should be promptly enlarged to enclose the lake and control its shore lines; otherwise the private developments are apt to be such as to spoil the entire body of water for park purposes.

What Akron needs is an inner series of small parks and playgrounds of from ten to fifteen acres each, that will coordinate with the existing areas, and in addition a system of large naturalistic and country parks connected by parked drives and streets and made readily available by trolley for the people not only from all parts of the city, but also from the surrounding country. Small recreation areas will do much to make a city attractive and livable, and their acquisition should be encouraged, but they count for very little in providing the broader recreational facilities which a city population imperatively needs.
THE public-school system is one of the organizations that feels first the
effects of a rapid increase of population, and it requires careful planning
and foresight to meet the insistent and endless demand for more space and
new schools. Just as it is desirable to purchase land in advance for parks,
so the school districts should be mapped out in advance and future building
sites selected and purchased not only for more schools, but also for additional
high schools and other special schools. A city scarcely ever shows too great
foresight in this matter.

In providing school sites three considerations should be kept in mind —
the distance between school sites, the size of the grounds, and the topo-
graphical character of the property. The diagrams showing the distribution
of population in Akron and the distribution of buildings will be of assistance
in gauging the trend of growth and the demand for schools. Unfortunately
the figures giving the distribution of population outside the old city limits
are not yet available.

By showing the efficiency circle on the diagram on a quarter-mile basis
from each school, it is possible to tell at once those areas not now properly
served with school facilities.
See inside back cover for folded insert of large copy of City Map
THE base map for the civic survey is the City Map of Akron, with information compiled to form a basis for the proposed city plan. As the legend or note on the diagram indicates, the information shown graphically on the map is as follows:

- Streets and Alleys, Existing
- Street-car Tracks
- Railroad Properties
- Industrial Properties
- Parks and Playgrounds
- Amusement Parks, Privately Owned
- School Grounds
- Other Public Properties
- Public and Semi-public Buildings
- Cemeteries

As a definite basis for future planning, one of the first steps is the collection, and so far as possible, the graphic presentation of the existing facts as regards the topography of the city, the location and distribution of streets, railroads, factories, parks, playgrounds, schools, public buildings and other governing features.
Planning Studies
See inside front cover for folded insert of large copy of General Plan
General Plan

The general plan, which is based upon the existing conditions as shown on the city map, presents the city plan proposals for street and park systems, public building sites and other city planning features.

The discussions, recommendations and plans in regard to the various subjects follow on the succeeding pages under the headings:—

Main Thoroughfares
Planning for the Down Town District
Proposed Parks
Zone Plan

City planning, even if limited to its physical aspects, covers many topics. In some respects these topics are quite different from each other — thoroughfares differ from parks, parks from public buildings, public buildings from housing, housing from zones, etc. The best solution for each topic must be sought, but that best solution must always take into consideration the effect on the other topics, and at the same time the result as a whole. In other words, the planning must always remain both points of view — on one hand the requirements of each separate subject, and on the other, the final requirements of a comprehensive, well-balanced city plan. Therefore it is of the utmost importance in examining the planning studies of thoroughfares, parks, public buildings, etc., that it should always be with regard to their effect upon related plans, and especially upon the unity of the city considered as a whole.

Akron, like other cities, grows by expansion and contraction. Outlying neighborhoods are constantly building up, especially along the main radial thoroughfares. As a contrasting movement there is steadily increasing congestion at the center. Modern city railway systems, even under private ownership and control, must be relied upon to take care of the growth at the periphery. The center, however, gets relief mainly through discriminating street widenings and the opening up and development, as proposed in the plans for the Akron downtown district, of a section of the city that is now altogether inadequately utilized.

Akron's most serious city-planning problems are, after all, in connection with its main thoroughfares, and the planning studies here presented have therefore given most attention to that subject.
When we speak of main thoroughfares we mean all those streets that are practically in continuous use as direct ways of getting from one definite locality to another. In the city center this would include all or nearly all the business streets; but as we go out from the central area, the points of importance become fewer and the main streets further apart until we reach in the outlying districts the minimum half-mile standard, which should be maintained in planning out any road system where the country is at all built up as a city area or through which connections of importance must be permanently established.

The radial roads of Akron have been in use for many years as ways of communication with the surrounding country and the towns and villages beyond, and Akron, being a natural center for a large section, is fortunate in having a good system of radial thoroughfares. With two exceptions this system is unusually complete. Satisfactory connections are lacking, however, to the northeast and the southeast, the old lines in both cases having worked around the hills located in the sections mentioned.

Howard Street, which is in part a comparatively new lead to the north, has a very heavy grade; but this situation is to be improved in the near future by the proposed North Hill viaduct, which will carry out the logical extension of Main Street to High Bridge. It is hoped that this improvement can be worked out in first-class manner on good lines of street extension and a permanently satisfactory treatment of street intersections.

Forge Street originally led directly to the northeast, connecting with Evans Avenue, but in recent years this connection has been closed by the railroad. It is recommended that this break in an important thoroughfare should be connected up at the earliest possible date and the road again opened to traffic.

The extension of Upson Street into East Market, and the proposed new street from the junction of Upson and Arlington Streets to Hazel and then to Tallmadge Road offers another means of bringing the northeast section into direct connection with the center of the city.

At present East Exchange Street turns just beyond Brown Avenue and breaks back to East Market Street, and, because of the interruption of the street system, due to the Belt Line Railroad location, there is a large area southeast of Johnston Street that has only an indirect and roundabout connection with the business center of the city. To overcome this condition East Exchange Street is shown continuing in a straight line to Johnston Street and then on to the junction of Fifth and Arlington Streets. Arlington Street then continues the line south to Massillon.
Between Brown Avenue and South Main Street there is unfortunately no continuous parallel street. It is proposed to meet this difficulty by developing Grant Street to Steiner Avenue and then Bellows Street, with connection through Firestone Park to Looker Road.

To the southwest two diagonal connections from Main Street, one from Bartges Street crossing to Boulevard, and the other from West Crosier junction to Kenmore Boulevard form good through lines for traffic, which now contributes to the congestion and overcrowding of South Main Street.

The extensions at both ends of Diagonal Road to Maple Street in one case and Wooster Avenue in the other would add a new and important radial thoroughfare from the Market Street center of the city.

In addition to the long through streets named above the many short connections have been shown on the Main Thoroughfares Diagram which would decidedly improve and complete the local system of main traffic streets within the city proper.

Due to the irregularities of the topography of Akron—the deep valleys, steep banks, and sharply rising hills—the city has no regular system of circumferential streets, nor is it practicable to establish one now. An attempt has been made, however, to facilitate circulation to some extent about the center of the city and to obtain direct connection between adjacent important points in the outskirts. The extension of Hawkins Avenue on the west and its connections with West South Street; the connecting up of Ira Avenue, Steiner Avenue, and Lovers’ Lane to the south; and the new connection proposed between the Country Club district and High Bridge, by way of West Tallmadge Avenue and the diagonal road, along the top of the slope to North Howard Street, shows what can be accomplished along this line.

Next in importance to the location of the main thoroughfares and the establishment of their connections and continuation into outlying districts is their width. Few cities have main streets adequate in width to meet the modern requirements of the automobile, motor truck, and trolley car. Akron on the whole is fortunate in having its broad Main Street from Furnace Street to Chestnut Street through the heart of the business dis-

High Bridge, a portion of a main thoroughfare, to the north, over the Cuyahoga River gorge
strict of the city, but steps should be taken at once to permit of the future widening of all main thoroughfares through the establishment of building lines.

Residential Streets

As an auxiliary to the wide-street system proposed above it is recommended that the following streets be widened to 100 feet:

West South Street, and its new connection with Hawkins Avenue
East South Street, and its new connection with Fifth Avenue
Fifth Avenue, and its new connection with East Market Street
Foust Street
Thomastown Road
South Brittain Road
North Brittain Road
East Tallmadge Avenue
Camden Street
Hawkins Avenue, West Market Street to Garman Road
Cuyahoga Street

All other streets shown on the Main Thoroughfare diagram as part of the main system of communication should be 60 feet

Proposed Sections

It is recommended that the following streets be widened so that they will have an overall dimension, where possible, of 110 feet in the business and closely built-up sections of the city, and a width of 120 feet in the more open and outlying areas.*

Market Street
Main Street
Exchange Street
Cuyahoga Falls Avenue, from Camden Street, North
Wooster Avenue
Kenmore Boulevard, and its extension into South Main Street
Arlington Street, from East Market Street, south
Case Avenue
Hawkins Avenue, from West Market Street via its extension to Kenmore Boulevard

* Since this recommendation was made the Akron City Council has established, by ordinance, set-back or building lines on ten important streets. The list is given in the Appendix.
North Hill, an isolated district soon to be connected with Main Street, Akron, by the construction of the proposed viaduct.
in width; and such streets as now have car lines, or where there is any probability that car lines will later be built, should be widened to 84 feet.

Other important considerations are those of grading and alignment. The use of motor vehicles has virtually revolutionized these two requirements. Grades may be heavier and no serious difficulty encountered where they are no steeper than, say ten per cent, but excessive irregularity or curvature, on the other hand, should be reduced.

A very simple yet dignified and pleasing treatment of an overhead railroad crossing a street.
CITY OF AKRON
SUMMIT COUNTY OHIO

GENERAL PLAN
OF THE
DOWN TOWN DISTRICT

Showing street changes and proposed location
for the Union Station and Civic Center

John Nolan  City Planner
Planning for the Down Town District

A. NEW UNION RAILROAD STATION

It is of the utmost importance that the railroad changes contemplated for Akron, especially the elimination of grade crossings and the location and general plan for the proposed new Union Station, should be worked out in connection with the city-planning studies for the Down Town District. The sketch plan submitted has been given careful consideration and general approval by the various parties concerned in the best solution of the various related problems involved.

The railroads have been aptly called the “frame-work of the city plan,” and their importance to the city’s life and prosperity is now fully appreciated. It has also come to be expected that the solution of important railroad problems should, whenever possible, be based upon a study and analysis of all the systems of transportation concerned, including not only the steam railroad properties, but also the street transit lines and the city’s system of main arteries of communication. These component parts of the problem cannot be properly considered apart, because of the importance of the separation of grades and the effect upon the main streets. It is also very desirable that the location and character of a railroad station should have due attention as an important public building, often in relation to other public buildings, and that orderly, convenient, and ample approaches should be provided. Furthermore, the solution of these problems should include a reasonable anticipation of future needs and be studied with regard to the future city plan.

The main points governing the selection of the site proposed for the new Union Station at Akron, on Broadway between State Street and Exchange Street, and directly on the axis of Buchtel Avenue, are as follows:

1. The growth of business in Akron is toward the south along Main Street. Illustrations of this can be had in such new buildings as the First-Second National Bank, the Delaware and Ohio Buildings, the Peoples Savings & Trust Company, and other new buildings. The location of the railroad in the neighborhood of Market Street also results in a greater distance from Main Street than a site farther south.

2. The location proposed is not only nearer the center of the present business district, and especially the future business district, but is also nearer the center of present and future population of the city.
as a whole. While the city is growing in all directions, the greater growth is toward the south.

3. The new Station would have direct access from Main Street by Buchtel Avenue, a street of good width (66 feet) and easy grade (about 5 per cent).

4. Broadway, on which the new Station would be located, is a street with a width of 99 feet, and would give a good frontage with ample approaches from the north and south.

5. The site itself and its surroundings, considering their proximity to the center of the city, represent low land values and insignificant cost of improvement. This low cost would permit of an adequate scheme providing not merely trackage space and an ample site for the Station, but a Plaza in front of the building, with the necessary traffic area for approaches and parking for vehicles.

6. One of the principal merits of the proposal is unquestionably the accessibility of the site to two of the main thoroughfares of the city, namely, Main Street and Exchange Street. It is but two short blocks from Main Street, the great business and traffic thoroughfare of the city running north and south, and has direct frontage on Exchange Street, the central east and west artery. Exchange Street is 99 feet wide now from Locust Street to the railroad in the center of the city, and steps have been taken already toward making it at least the same width throughout its entire length.

7. The linking up of various forms of city transportation would be secured by the proposed location. Practically every street car line would give direct service, and there would be no difficulty at all in providing a loop line, so that the passengers on the street cars could be landed at the door of the Station.

8. The new building, being directly on the axis of Buchtel Avenue, would have a commanding and beautiful situation, with just the right elevation as viewed from Main Street. Such sites are desirable for nearly all public buildings, but it is particularly fortunate when one is secured for a railroad station. There would also be opportunity for good architectural effects from the north or south from Broadway.

9. In the proposed location, the Station would be part of the group of buildings now occupying the ridge in the immediate neighborhood.

10. At the present time the retail business of Akron is concentrated too much for a city of its size on a single street. From many points of view it is desirable that a business district should be formed spreading east and west from Main Street. The location of the Station as proposed would contribute materially toward this desirable effect.
It is seldom, it seems to me, when a solution of an important city problem can be found which unites so harmoniously the best and most permanent interests of the railroads, private property owners, and the people of the city as a whole, as is the case with the proposed site for the new Union Station at Akron.

B. CIVIC CENTER

JUST as the trend of business development and the natural leads of the city streets determine the location chosen for the Union Station, so the same factors govern the choice of location for the proposed Civic Center. The section determined upon is not only accessible from Main and Exchange Streets, and all the car lines of the city, but is at the intersection of diagonal streets leading in all directions: Park Street and proposed viaduct to West Market Street; Main Street and the new viaduct to North Hill; North Forge and Carroll Streets to the east; East Exchange and its extension to the southeast; Grant, Hill, and South Main Streets to the south; Bowery Street and Wooster Avenue to the southwest; and West Exchange Street with Maple Street to the west and northwest.

The site itself is a broad, level tract suitable for building purposes, and already laid out with wide streets and well-shaped blocks. The city now owns considerable land here in Perkins Park and Perkins School site. The remainder of the property is not developed with expensive buildings, and would therefore be relatively cheap to purchase, which, coupled with the low cost of improvements necessary to open the district, would make the project a very practical one from the financial point of view. Especially is this true when one considers the present assessed value of the surrounding neighborhood, and contemplates the favorable changes that would occur in a few years with such a scheme as that proposed.

The present business district of Akron is woefully cramped and congested, being.
practically confined to one street, with no chance of extension at either end, being blocked by topographical conditions to the north, and factory developments to the south. One of the chief needs in the downtown section is a big, comprehensive scheme that will cause the business area to expand and spread out into a true district. The proposed center would definitely bring about just such a change by turning business across the canal on Exchange and State Streets. By treating the canal as a pond and building solidly on the outside of the two bridges, the open park space with the water would become a central feature around which business would concentrate. Treated as at present, with the canal in the center of the valley open in both directions, this area will always serve as a barrier to expansion, and seem to cut the district in halves. Traffic would for the most part pass by the square itself on Exchange Street, Locust Street, and Bowery Street, and not cut across it, thus keeping the open area free of vehicles and at the same time preventing interruption in the continuity of the streets.

At present the canal valley is one of the most unsightly spots in Akron, although it offers unlimited possibilities for beautiful scenic effects. Due to existing developments, it is perhaps unwise to try to redeem its character throughout its entire length, but a short section between State and Exchange Streets could be developed as shown, and become one of the most unique and effective centers of any city in America. Such a treatment would offer an exceptionally good site for a public building, with the open square to the west and the park and pond to the east, while both this public building, whatever it might be, and the Union Station would gain by being linked together on a common axis. As seen across the water from Main Street, the building would present an imposing appearance, worthy of a prosperous and energetic community such as Akron.
A canal scene in an American city

A canal scene in a Belgian city

St. Mary's Church from South Main Street. Beautiful buildings are often unappreciated because of poor surroundings
THE park system can be summarized conveniently under four heads, namely: (1) large parks, (2) small local parks, (3) squares and triangles, and (4) parked streets and parkways.

The first, the large parks, because of their extent, the cost of the land, and the desirability of getting a natural, beautiful location, must necessarily in a city like Akron be placed on the outskirts, and should be so distributed as to serve as large an area as possible. These park reservations should be at least one hundred acres in extent, but the size will be determined largely by the topography.

The second group, the smaller parks, should be scattered throughout the built-up residential area and at such a distance from one another that each would serve an area approximately one mile in diameter. These parks constitute the local recreation centers and, though park-like in treatment, should contain playground facilities. The area of such grounds will vary in size and shape, depending upon the local conditions of the district served and the density of the population, but a good standard would be from ten to fifteen acres.

The squares and triangles add much to the attractiveness of the city and contribute to the health and happiness of the people. They should be located wherever important intersections occur or where there is land which, because of its size, shape, or character, is unsuitable for building. Intersections dangerous for traffic can often be made safe by using the corner property for a small local park, thus preventing the cross view from being blanketed or obscured by buildings.

Parked streets and parkways serve as
pleasant connecting ways to drive or walk from one park unit to another. They also add to the beauty and attractiveness of the districts they traverse and are decidedly serviceable as fire breaks.

The most pronounced natural feature in the vicinity of Akron is the Gorge and deep valley of the Cuyahoga River. The Park Diagram submitted shows an extension of the present holdings at High Bridge to insure the control of this whole area along both bluffs of the river with the adjacent low land near Peck Avenue. The sewerage disposal plant could be tied into this low park land and the whole made an attractive addition to the park properties of the city.

Leading to the north a park reservation should be acquired on either side of the Cuyahoga River as part of a county park system which would preserve the beautiful scenery of a fine river valley and its rugged slopes.

Between the Baltimore and Ohio and the Northern Ohio railroads from West Tallmadge Avenue to Hickory Street is a steep, rough bank cut by ravines and still heavily wooded. This land is not suitable for building, but would make a beautiful park reservation, and, added to the low land across the river, which is well adapted for recreation purposes, it would make a complete park unit for this part of the city. Extending in toward the center from this area is a deep valley along the Ohio Canal now given over to a dumping ground. Without question this valley should be publicly owned to prevent it from becoming, as it seems bound to become if uncontrolled, a slum and disease-breeding spot.

In the northeast section a large park is shown on the hilltop land at East Tallmadge Avenue and North Brittain Road. This land could be purchased now at a relatively low figure and would be a tremendous future asset. Another similar park should be acquired at an early date before the property is cut up into building lots at the junction of South Arlington Street and Thomastown Road.

To the southwest Summit Lake offers an excellent opportunity for a park and recreation center. The entire shore line should be brought under city control and enough additional land to preserve the beauty of the lake and also make ample provision for play areas. As much land as possible along the banks of the Ohio Canal to the south should
be controlled to insure a good parkway connection with the Portage Lakes, which are now a state reservation.

The high land between Wooster and East Avenues is being rapidly built up and there is a good opportunity at present to purchase a sufficient area for an overlook park on the high part of the hill above Indiana Avenue. Another district rapidly building up is about Maple Street and Hawkins Avenue. This section should be provided with a large park before the land rises in value to such a price as to make it prohibitive. The best location for such a park would be at the intersection of Maple Street and Hawkins Avenue, which would be central to the large triangular district between West Exchange Street and Diagonal Road.

The Country Club property, as mentioned before, is a very good future possibility as a park for the upper part of West Hill.

Within the city and in addition to the large parks, a number of smaller local parks and recreation grounds have been shown on the park diagram, which serve the more densely built-up areas. For example, the North Hill district is served by the extension of McLain Park and the large addition to the school ground at Dayton Street and East Tallmadge Avenue. The population of the low land along the river is provided for by the extension of Elizabeth Park. This extension is proposed not only to give more space, but to wipe out the possibility of using the land for housing purposes. Due to the location, danger from floods, and the
character of existing buildings, this section is destined to become one of the worst parts of the city unless preventive measures are taken.

Directly east of Akron along the canal and river a reservation is shown which would serve a large territory on both sides of the river and which is now entirely without park facilities.

Goodyear Heights is well taken care of by its own recreation field, and across the river the property of the Summer Home for the Aged offers an exceptional opportunity for the East Akron district. This area would be supplemented by the enlarged school grounds on Inman Street, south of Lovers' Lane.

South Akron should have additional recreation space, and an area is suggested south of Baird Street between Brown and Grant Streets. A similar area is proposed on Wooster Avenue to provide for the Sherbondy Hill district.

High-school athletic fields should be provided, and these should be taken care of in some of the larger local parks and also by enlarging Buchtel Field, which is at present cramped.

Proposed local squares are shown only in some special cases. The location of such areas requires detailed study, and is, after all, of local and not general importance. They should, however, be kept constantly in mind and incorporated into the city plans whenever possible.

In many cases the main thoroughfares would become the parked streets and would be developed to provide the facilities that parked streets should have, but in other places special streets should be designated for special park treatment. A complete system of inter-park streets has been studied and is shown as a part of the park system on the diagram of the Proposed Parks.
“In scarcely anything to be determined by local public opinion, acting influ-
entially upon local legislation and administration, is a city as likely to be so made
or marred for all its future as in proceedings in prosecution of a park project.”

“It must be kept in mind that the public grounds of most cities have come to
be what they are, and where they are, by various detached and desultory proceed-
ings, of which the result, as a whole, illustrates penny-wise, pound-foolish wisdom.”

“That those in charge of a park work may proceed economically and with
profit they must be able to proceed with confidence, method and system, steadily,
step after step, to carry to completion a well-matured design.”

“For every thousand dollars judiciously invested in a park, the dividends to
the second generation of the citizens possessing it will be much larger than to the
first; the dividends to the third generation much larger than to the second.”

“For several years I have given this subject considerable thought and study,
and my conclusion is that when parks are properly located as to the city’s area
and population, and are so constructed and maintained as to meet the needs of
the people they are to serve, also made beautiful, attractive, and suitable for the
work they are to do, they will bring more money into the city treasury than they
take out, the amount depending upon how well they are balanced with the needs
of the people.”
City of Akron
Summit County
State of Ohio

Zone Plan
Diagram
Showing Building Districts
Designated According to Use

Plan prepared for
Akron
Chamber of Commerce
City Improvement Committee
Frank H. Adams, Chairman

John Nolen City Planner
Harvard School of Architecture

Scale

Plan No. 63

56
Zone Plan

“I suppose that before men will discipline themselves to learn and plan, they must first see in a hundred convincing forms the folly and muddle that come from headlong, aimless, and haphazard methods.

“The whole of Bromstead as I remember it, and as I saw it last — it is a year ago now — is a dull, useless boiling-up of human activities, an immense clustering of futilities. It is as unfinished as ever; the builders’ roads still run out and end in mid-field in their old fashion; the various enterprises jumble in the same hopeless contradiction — if anything, intensified. Pretentious villas jostle slums, and public-house and tin tabernacle glower at one another across the cat-haunted lot that intervenes. Roper’s meadows are now quite frankly a slum; back doors and sculleries gape towards the railway, their yards are hung with tattered washing unashamed; and there seem to be more boards by the railway every time I pass, advertising pills and pickles, tonics and condiments, and suchlike solicitudes of a people with no natural health nor appetite left in them....

“Well, we have to do better. Failure is not failure nor waste wasted if it sweeps away illusion and lights the road to a plan.”

USE DISTRICTS

THE five zones as designated for use shall be governed by the following restrictions:

Zone 1. Business Districts.

Land and buildings are to be used for wholesale and retail business, offices, and public buildings.

Light manufacturing and storage incidental or essential to the business use of a building will be permitted to the extent of 50 per cent of the floor space of the building and five employees.

Telephone exchanges, car barns, garages, etc., to be allowed by special permit from city authorities.

All uses allowed in residential districts are permitted in business districts.

Zone 2. Industrial Districts.

Land and buildings to be used for all trades and purposes of storage, industry, commerce, and residence, except for a specified list of industries known to be objectionable. Such objectionable industries may be permitted in special areas for a limited time by act of the proper city authorities.

Zone 3. Group House Districts.

Land to be used for single-family, detached houses, semi-detached houses, two-family houses, and group houses in single-family units, not over ten units in any one group.

Churches, clubs, hospitals, public or semi-public institutions of an educational, philanthropic, or eleemosynary nature, with accessories are to be permitted. Private offices such as that of a physician or dentist, and private garages for not over four automobiles may be erected.


All buildings allowed in Zone 3 are allowed in Zone 4 except the group houses. Farming, truck gardening, nurseries, or greenhouses may be erected and maintained.

Zone 5. Restricted Neighborhood Districts.

All land to be used for single-family, detached, or semi-detached dwellings.

Churches, clubs, and educational institutions may be erected and maintained, also private offices of physicians or for other similar use, and private garages for not over four automobiles.

Farming, truck gardening, nurseries, or greenhouses may also be erected and maintained.

This zone may be subdivided into neighborhood groups, and regulated by its own restrictions as agreed upon by 80 per cent of the property owners with approval of city
council. These neighborhood restrictions must conform with the minimum for the district and not annul other covering ordinances.

Looking northeast from Sherboady Hill. View shows how industries of Akron have congested the center of the city

HEIGHT DISTRICTS

The five zones as designated for use shall be governed as to height by the following restrictions:

Zone 1. *Business Districts.*

Height of building not to exceed one and one half times width of the street on which it faces.

In no case are buildings to exceed 125 feet, except as provided for towers and spires.

Zone 2. *Industrial Districts.*

No building to exceed 60 feet in height except as provided for gas tanks, grain elevators, and other such industrial structures, towers, and spires.

Zone 3. *Group House Districts.*

No residence to exceed 45 feet in height. Other buildings allowed in this zone not to exceed 60 feet in height except in case of towers or spires.


Height restrictions the same as specified for Zone 3.

Zone 5. *Restricted Neighborhood Districts.*

Height restrictions the same as specified for Zone 3.

AREA DISTRICTS

The five zones as designated for use shall be governed as to area by the following restrictions:

Zone 1. *Business Districts.*

Buildings may cover entire lot. Courts and light and air regulated by city building code.

Zone 2. *Industrial Districts.*

No building or group of buildings to cover more than 75 per cent of lot or plot.

An example of a store poorly located in a residential district

A good example of store property well located in a residential district
Separate building to be at least 10 feet apart.

Zone 3. **Group House Districts.**

Residences not to occupy more than 50 per cent of the entire lot area.
Set back from street line to be at least 15 feet, from side lines 10 feet, and from rear line 25 feet.
Outbuildings not to cover more than 12½ per cent of the entire lot area, nor be erected within 5 feet of rear or side line, and are to be at least 40 feet from street lines.

Zone 4. **Single-family House Districts.**

Same restrictions as to area covered and set back as for Zone 3.

Zone 5. **Restricted Neighborhood Districts.**

Residences not to occupy more than 30 per cent of the area of entire lot.
Set back from street line to be at least 20 feet, from side lines 10 feet, and from rear line 30 feet.
Outbuildings not to cover more than 10 per cent of the entire lot area, nor be erected within 5 feet of rear or side lines, and are to be at least 40 feet from street line.

Bell Tower, Glendale Cemetery
Housing
This chapter on housing in relation to city planning is part of the civic survey and city plan for Akron. It is one of the first times that a thoroughgoing investigation and report upon housing have been included in an American city-planning study. A full report on housing, with photographic and other illustrations, was made to the Akron Chamber of Commerce during the progress of these city-planning studies. It comprised a review of local conditions, a questionnaire to all manufacturers, the results of which were summarized, detailed recommendations for the organization of a local housing company, examples of low-cost houses, and other information and data bearing upon the housing problem in Akron.

These housing studies and their accompanying recommendations are confined to an effort to provide more houses for Akron. No space is taken for general argument as to the evils of bad nor the advantages of good housing, because the movement resulting in the present action began with a conviction that more houses in Akron are not only desirable, but indispensable. Nevertheless, the fact that much of the existing housing is bad has not been overlooked. These conditions should be improved, both in the interest of existing housing and of the new buildings to be constructed which must compete with them. But it should be kept steadily in mind that the demand for houses, apartments, and rooms in Akron is now far beyond the supply, and that the first step toward an effective relief of the present unfavorable conditions is the increase of the supply of better houses and apartments.

The results of the local survey and questionnaire show that a large number of employees in the factories of Akron are now seeking housing accommodations — some to rent, some to buy, and some to build on lots which they already own. Home ownership affords one of the most durable satisfactions for family life, and it is to the interest of all that it should be realized what difficulties stand in the way of home ownership. While there is no desire or intention of recommending any step that would even appear to interfere with individual action
House types of moderate price being built at the present time in Akron
and full liberty on the part of workingmen, there is a need for cooperation with them in overcoming many of the difficulties that low-cost home ownership now involves.

The essentials of this better-housing method recommended are cheap land, broad planning of the neighborhood, regulated density of houses per acre, wholesale modern building operations, and an adequate but limited dividend on the necessary investment of capital.

What, then, is the first step toward a solution of the housing problem in Akron? I believe it is to recognize that the subject is primarily one for the right application of broad, economic principles through community action. In some thoroughgoing way we must convert the great forces, working through regular business channels, which now produce bad housing to produce good housing, and we must do it by bringing into control and cooperation with them the forces that believe in good housing and will gain from it. These are mainly the manufacturing and business interests that depend upon the efficient and happy workman. A great change in housing methods will come, if it does come, from the substitution of the reasonable profits of business for exploitation and excessive return; from the transfer of housing from the field of speculation to that corresponding to legitimate manufacturing. We shall then proceed in very much the same way that the manufacturer proceeds. We shall want to know the facts as to the nature and extent of the demand for houses. We shall have definite aims as to the product. We shall use skill and experience and factory methods. We shall back the housing enterprise with adequate capital, and count upon a fair rate of interest.

Who is responsible for action in this housing matter? That, after all, is the first step in the solution of the problem. How can we get the building of homes on a large scale started? I do not think we can prove by logic that the employers are responsible, although there is no doubt in my own mind that it is to the employers' interests to act promptly and in a large and far-sighted way. Such action has already been taken in Akron, for no better housing examples exist in the United States than the developments for their own employees of Goodyear Heights by the Goodyear Tire and Rubber Company, and Firestone Park by the Firestone Tire and Rubber Company. The action of these two companies, however, will not solve the whole workingmen's housing problem for Akron. It seems to me reasonable to hold that the investment in housing should be looked upon by all the manufacturers and the community at large as a part of the total investment necessary for carrying on business. In the case of Akron the capitalization of manufacturing amounts in round figures to over $150,000,000. The total additional investment necessary for
the proper housing of all wage earners would probably not amount to more than $10,000,000.*

Housing in Akron, as in other industrial cities, should be a joint community matter. Prompt action is desirable, especially in providing a more adequate supply of houses and suitable apartments for rent. Civic advance will come in this matter as it has come in others. Experiment points the way, and vision creates responsibility. Manufacturers and others will see the controlling importance of this subject, and how to promote it. They will apply themselves energetically to the task, and gradually we shall solve — mainly on economic lines, I believe, based on broad community action — the local problems of industrial housing. In so doing we shall make one of the greatest contributions not only to the welfare of the wage earner, but also to industrial efficiency.

The housing program proposed for Akron is not essentially new or radical. In fact, it follows conservative, well-tried-out proposals of other housing companies in other places. Everything recommended has been successfully executed elsewhere in this country for the same classes of workingmen with the same income, or even less. No one type of house or method is endorsed as the only one, although the emphasis is put upon the single-family, self-contained, detached house or cottage as on the whole most desirable for the normal family. In addition to the single-family house, either detached or semi-detached, the report includes an endorsement of the single-family house in carefully designed groups, the four-family flat, semi-detached, and the two-family house in groups for more than four families. The choice of the house type depends mainly upon land values, wages, and local demand. For example, we must ask, what can be done with land of high value, costing, say $3000 an acre or more? What can be done for men earning only $20 a week? What can be done to meet promptly the demand for small houses or apartments for rent in a central and somewhat costly city situation? It is believed that all the types recommended have some advantages, either of house construction or of reduction in cost of land and public utilities. They also take into account the fact that different people have different tastes and preferences, as well as different needs, in housing, as in other matters. What is best in any particular instance depends partly, at least, upon conditions and circumstances and cost.

The schedule given below shows the relation of the cost of lots and houses to wages and rent. The workingmen under consideration in this report receive approximately from $20 to $40 a week or more. If they receive, say $20 a week, and we assume that they can afford to pay $20 a month rent, the total investment in house and lot should not exceed $2500. This allows about $500 for an improved lot (public utilities, etc.), and $2000 for the building. If regular savings are to be made toward the purchase of the property, the wages should average higher than the figure quoted. On this basis the investment would yield annually the usual real estate return of 10 per cent gross, or from 5 per cent to 6 per cent net, according to local conditions.

*The Akron Home Owners Investment Company, organized in May, 1919, with a capitalization of $5,000,000 to relieve the housing congestion in Akron, plans to loan money on first and second mortgages to lot owners desiring to erect their own homes, and also to erect a number of houses of the semi-detached or terrace type for renting.
The General Schedule below Shows the Relation of the Cost of Lots and Houses to Wages, Rent, and Savings

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**WAGES:**

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**RENT:**

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**SAVINGS:**

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**MINIMUM LOT AND HOUSE FOR NORMAL FAMILY**

**Minimum Lot.**

- Terrace row . . . 16’-18’ wide 80’-100’ deep
- Semi-detached (each) 30’-40’ wide 80’-100’ deep
- Detached . . . . 40’-50’ wide 80’-100’ deep

**Minimum House.**

- Four rooms — living-room, kitchen, two bedrooms and bath.
- Five rooms preferred — living-room, kitchen, three bedrooms and bath; allows for separate bedrooms for older children of different sexes.

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The Village Green, Tallmadge Center, near Akron. A sense of openness and peace which the city lacks. The parks and open spaces proposed for Akron will provide some of the beauty and refreshment of which this Village Green is characteristic.
A BRIEF SURVEY of the LAW
RELATING TO THE
CITY PLAN for AKRON

BY
FRANK BACKUS WILLIAMS
OF THE NEW YORK BAR

Note: The "Brief Survey" is a summary of such portions of a more complete survey as are thought to be of general interest. The entire survey, with notes, references to legal and other authorities, and extracts from legislation in other states is published in full as a separate report.
I. ESTABLISHMENT OF CITY PLAN

In order that city construction may be intelligently carried out there must be a plan of the city as a whole, by which the construction of any part or detail of it from time to time as it occurs may be guided. To that end it is necessary that the plan should be made binding upon the city authorities, except as from time to time it may be deliberately and formally amended.

Akron, in its home-rule charter, authorizes its commission to make plans, and submit recommendations with regard to them to the City Council, which by a majority vote may authorize the commission to enforce them. There is no legal reason why under these provisions a comprehensive plan of the city as a whole should not be drawn up by the planning commission, adopted by the Council, and made binding upon the city.

The adoption of the plan of the city makes it certain that the city authorities will not transgress it, but does not guard it against violations by private property owners. In order that present construction may conform to and aid right future development, prudent planning must anticipate present needs by many years. In order that the city may be planned as an efficient unit, prudent planning must, in outline at least, cover the entire city. Only, however, such parts of the entire plan as immediate need demands and financial ability warrants, are ever at once constructed. It even seems to be impossible to any considerable extent to purchase the land needed for future development. Meanwhile the land affected by the plan remains for the most part in private ownership; and unless some method is adopted at the outset of preventing the land owners from making such uses of their land as will infringe upon the plan, it will certainly in many important particulars become impossible to carry it out. This the history of many American cities only too clearly proves. It is, therefore, essential that the city discover and adopt some method of making adherence to the plan binding upon the land which it affects.

In the countries most advanced in city-planning legislation and administration — in the countries of continental Europe, with the notable exception of France, in England, and in many parts of the British Empire — certain features of the city plan are made binding upon private land owners by the provision that after the plan is adopted no compensation shall be allowed for structures erected, or other improvements made, which do not conform to it. Thus if a land owner builds a house within the lines of a street as it appears on the plan, the city, when it condemns and takes the land for the street, pays the land owner only for the land, giving him nothing for the house. In this country, however, such a provision is held to be unconstitutional as a taking of a property right without compensation.

Various methods of preventing some of the more flagrant violations of the city plan by land owners have been adopted in this country with some success; and although none of them have been thoroughly tested in the courts, yet many of them seem to have a sound legal basis. Perhaps the most frequent and most serious infringement of the plan is the private street. All too often it is laid out by the land owner for the immediate sale of his land at the greatest immediate profit, without regard to the real interests of the purchaser or the city as a whole. The city may, of course, refuse to accept or improve it; but even if it has the courage to persist in its refusal after the street is constructed, the lots sold, and houses built on them by innocent if ignorant and careless purchasers, the damage is done, and the fact that the street is not public does not improve the situation. In fact, there is no remedy for the private-street evil but prevention.

As a method of prevention, Akron’s new charter refuses record to maps or plans of real estate subdivisions unless accompanied by a certificate of approval from a proper city official. In an extensive real estate development it is customary to make and record a map of the streets with the house lots on them, and deeds to purchasers are made with reference to this map or plan. The purpose of this legislation is to preclude unauthorized developments by forbidding the record of such a plan, without which it is difficult to sell lands. But this law does not attempt to prevent the giving of deeds with the description by metes and bounds. A much more complete remedy would be to forbid the record of any deed in fact transferring land on an unauthorized street. Such a law would be effective; for no one in this country will buy land without a record title. In all probability, also, it would be legal.
The law just suggested would not keep a man from making such use as he chose of his own land. In such ways serious violations of the city plan occur. Often the owners of land on a future street intended, perhaps, as an important artery, and planned to be of sufficient width for this purpose, themselves build within the lines of the street, so that it becomes impossible for the city without disproportionate expense to construct it of sufficient width; or build entirely across it, so that, practically, it must be given up. Many times, too, land put down on the city map as a park, or the site of a public building, is used by its private owner in any one of many ways which render it practically impossible for the city, if it takes the land, to make the intended use of it. Any law which by the establishment of a city plan or in any other way absolutely forbids the owner to use his land in these ways is, as we have seen, unconstitutional in this country, and some measure which will to some extent at least accomplish the desired result with a less invasion of property rights, must be devised.

It has been suggested that the owner of land intending to build on it or improve it in any way contrary to the provisions of the city plan, should be required, before the building permit or other license should issue, to give a notice of perhaps six months, within which time the city could purchase the land if it so desired. Such a provision necessarily assumes that a city plan has already been made and adopted, to which any land owner can at all times refer. In law it would be regarded as a police regulation, and sustained as such; for although it does undoubtedly interfere with the owner's use of this land as he pleases, it does so only temporarily and to a much less extent than regulations such as the limitation without compensation of the height of buildings, upheld by the courts. The effect of this provision would probably be to stop ignorant violations of the plan, and minor infractions of it not worth the delay they entail, without expense to the city or hardship to the land owner. More serious infractions the city could prevent by taking the necessary interest in the property and paying for it, as in such cases no doubt, in justice to the land owner, it should.

II. RELOCATION OF PUBLIC AND
SEMI-PUBLIC BUILDINGS

In his civic survey Mr. Nolen has pointed out the need of relocating a number of Akron's impor-
when the land is acquired with the intention of reselling it that the doubts arise.

Excess condemnation may be used with advantage in connection with municipal improvements for the elimination of remnants, for the preservation of light, air, and view, or for preserving or heightening esthetic effects.

In laying out or widening streets, especially in connection with the forming of an unusual building site such as a civic group or important public building may require, remnants of lots are often left which are too small for independent development. These remnants, if shallow, cut off much land in their rear from the new street, and if of irregular shape, interfere with the use of neighboring land. In any event, until used, these small vacant lots give the street a bad appearance, and when used for unsuitable buildings, permanently disfigure it. Even if the remnants are finally united by private initiative with the neighboring land, in lots of a size and shape for suitable development, the delay is invariably a long one, each owner feeling that, although his lot is of little value, his neighbor can do nothing without it and will therefore pay more than it is intrinsically worth. This delay also occasions a serious loss of income to the land owners and of taxes to the city; and, by giving the street at first a bad appearance, often permanently lowers its character and land values on it.

The only adequate remedy for the remnant seems to be its condemnation with enough neighboring land to form suitable building lots, and the resale of the lots so formed. It may be assumed that this land is not needed permanently for public occupancy or presumably it would have been taken for the purpose by regular condemnation proceedings. Its resale, therefore, puts it to its best use, and saves the city needless expense.

Unquestionably light and air, and open space to allow of their access, are essential to any structure intended for human habitation. View, too, is an adjunct to such a structure for which every landlord collects an added rent. It would seem clear, therefore, that the taking of land and the resale of it subject to such covenants as will safeguard or increase the supply of light, and air, or breadth of view, would add to the usefulness of public buildings and make streets more serviceable. There are many ways in which restrictions in deeds given to purchasers from the city might bring about this result, as, for instance, by preventing the erection opposite the city's property of high structures in rows, or by requiring that the structures built should leave open a certain liberal fraction of the lots on which they are to stand, or in design correspond with and thus heighten the effect of the public buildings. This control, if wisely exercised, will usually add to the value of the neighboring property, raise the price which the city can obtain for it, and thus cost the city nothing. Even, however, if the city is compelled to sell this land at some loss, the expense of wise restrictions may without question be justified on sound business principles. Cities universally, and rightly, take pride in the appearance of their public buildings. They spend money in their adornment, and no one questions the wisdom, or the legal right, of the city to follow this course. Experience shows that nothing so mars the effect of a building as a neighboring development out of keeping with it, nothing so enhances that effect as a proper setting. A wise control of neighboring land, restricting its use only so far as is necessary, and selling the privilege of using it for every other purpose and in every other way, would therefore clearly seem to be in accord with sound and economical business principles.

Excess condemnation in this country was first introduced in New York in 1812, but in 1834, was held to be unconstitutional. It was reintroduced in Ohio and Massachusetts by statutes passed in 1904, and later, in the same way, in several other states. If legal, these statutes must be found to be in accordance with both their state and the United States constitutions. From the first the validity of the statutes was regarded as doubtful by many, and little use was made of them.

The progress of city planning in this country has rendered the decision in 1834 somewhat obsolete. The only modern cases directly in point on excess condemnation are in Massachusetts and Pennsylvania, which are adverse; but there are decisions in state and national courts more or less relevant, which are favorable, and what may broadly be called the trend of decision in the courts of this country, especially in the Supreme Court of the United States, seems to be in the same direction.

In order to eliminate the question of validity in so far as the state constitution was concerned, a number of states, among which is Ohio, have recently passed amendments to their constitutions granting the power. The only question which concerns us in this inquiry is, therefore, the validity of
the Ohio constitutional provision under the constitution of the United States; but in order to determine that question it will be necessary for us briefly to consider the entire question in all its phases.

The modern judicial authorities on excess condemnation in Massachusetts are in form opinions of the justices, two in number, but so closely related as to be virtually one. They hold that where the cutting of a new street leaves remnants of land, the taking of these remnants, being a relatively minor incident to the main undertaking, is legal; but that the appropriation of additional lands for the purpose of forming suitable lots to sell for private use is clearly unconstitutional. They base their opinion on the position that property taken for the purpose of transfer to private parties for their own use could not under any circumstances be a taking for a public use. The Pennsylvania court, basing its opinion upon the same principle, holds that the taking of additional land to preserve view, appearance, light, air, etc., is also unconstitutional.

The position taken by the Massachusetts and Pennsylvania courts has been much weakened by recent decisions of the Supreme Court of the United States, holding that private advantage, such as the development of a mine, the drainage of a swamp, or the irrigation of arid land, privately owned, may be so conducive to public prosperity and well-being as to be a public use for which resort may be had to the power of eminent domain. This doctrine has much to be said in its favor, and in comparison the doctrine announced by the Massachusetts and Pennsylvania judges seems highly technical. The commonwealth is composed of private people, and it is still the theory of our law that the wealth and property of the state should be in their hands for development with such aids and limitations as the state may impose. It would seem clear to the layman that it would often be extremely desirable to pass regulative measures aiding these private citizens in this development, and that it might be done in such a way as, far from injuring the other members of the community, would be of benefit to them; the question whether the particular use was sufficiently widespread and of sufficient general importance to be regarded in law as public being one, of course, to be settled on its merits in each specific case.

There is another more technical criticism of the Pennsylvania case, which in its successive steps is supported by good judicial authority. That case refuses to allow Philadelphia to take land adjacent to a public improvement for the purpose of securing light, air, view, etc. In so far as land may be appropriated by ordinary condemnation proceedings it may be taken for the purpose of securing access of light and air to neighboring property. It has also been held that the power of eminent domain may be exercised for the sake of thus affording a view, and if this be considered an esthetic purpose, it seems now to be the better opinion that land may be taken for such a purpose. In law also it is not necessary to condemn the fee or absolute and entire title for any recognized public purpose, but the legislature may, in its discretion, authorize the appropriation of an easement or other fraction of the title for that purpose. Now the result on the one hand of the taking of an easement to secure light and air or view over a given piece of land, or of taking the right or easement to limit the height of buildings or prescribe the architecture of structures to be erected on it, and on the other hand of taking the entire title, selling off all the other rights, and retaining nothing but the right to light, air, view, or to limit the height or prescribe the architecture, is in the end precisely the same. The difference is only in the method of obtaining the same result; and it is universally held that to accomplish a legitimate purpose, the legislature has free choice of methods.

In our examination of excess condemnation in this country we have been considering its expediency and legal validity on principle and in the light of legal authority. It is in this form that the question arises in the consideration of a statute of excess condemnation. In Ohio the power of excess condemnation is conferred upon municipalities by a provision of the state constitution. It remains to consider the effect of this fact upon the general question.

Nowhere in the Constitution of the United States or of any of the states at the time of the adoption of the national constitution, was the right expressly given our courts to invalidate legislative acts. This unprecedented authority the courts assumed by virtue of their own decisions interpreting these constitutions. Our courts, however, did not take upon themselves this great power of overruling the action of a coordinate branch of the government without grave deliberation, and they refuse to exercise it except in the clearest of cases.
They declare an act unconstitutional only when it is so, in their opinion, beyond a reasonable doubt.

For the most part the attitude of state and national courts toward constitutional questions is the same. When, however, a state statute declared valid by the courts of that state, and especially a constitutional provision like the provision in Ohio conferring the power of excess condemnation upon Ohio cities, comes before the Supreme Court of the United States, it is there with all the weight of authority of the state in its favor. When in addition it is a question which, like condemnation in all its phases, involves a determination of what in a given locality constitutes a public use or advantage, it is only for the very clearest of reasons that the Supreme Court of the United States will declare the state action to be unwarranted. It is a noticeable fact that, as this court in a well-known decision points out:

"No case is recalled where this court has condemned as a violation of the Fourteenth Amendment a taking upheld by the state court, as a taking for a public use in conformity with its laws."

There need, therefore, be no fear that the Supreme Court of the United States will, contrary to its invariable practice of long standing, invalidate a state constitutional provision, like Ohio's, establishing a practice for which there is so much to be said as for excess condemnation.

III. DISTRICTING

In her home-rule charter just adopted, Akron has been given the power of districting or zoning. A consideration of this power is for that reason especially important at this time.

1. The Principle.

The building restrictions known as districting or zoning regulations are limitations which, unlike ordinances that are the same for the entire city, vary in different parts of it. This variety of regulation is desirable on account of the varied uses to which city land is put.

Districting regulations are of two sorts: regulations of the bulk of buildings to be erected in the various parts of the city, and regulations of the uses for which, in the various sections, future buildings shall be constructed and present buildings reconstructed—non-conforming uses in existing buildings being allowed, almost invariably, to continue. With the growing employment of the bulk regulation of buildings not only to prevent the overcrowding of streets and other public features of the city, but also to secure for as large a proportion of the city's population as possible, at work and at home, an adequate supply of light and air, has come the recognition of the fact that it is practically impossible to enact adequate regulations of this sort which shall be the same for all parts of the city.

In all cities there are districts where there is great concentration, as for instance in Akron's business section. Usually, as in Akron, values have adapted themselves to these conditions. To pass regulations securing for land that is or may in future become vacant in such a district, adequate light and air, would be to discriminate sharply between occupied and unoccupied lots in such districts, and practically to confiscate not a small part of the present value of those which are unoccupied. On the other hand, any regulation that would be fair to these congested districts would be practically inoperative in large sections of the city where present structures and values neither demand nor warrant such intensity, and allow in them a gradual approach to the conditions in the most concentrated parts of the city. Districting by bulk is therefore the only practical method of preventing the spread of congestion throughout a city and checking its increase in the city as a whole.

The prevention of the increase and spread of congestion is not the sole object of districting. Districting is also the only method by which there can be obtained that specialization in the use of city land essential to its most economical and efficient employment and its highest value. To attain such specialization is the purpose of districting by use, which will now be taken up.

By natural location and by location with relation to public utilities and development generally, much of the land within a city is specially fitted for certain uses. Thus in Akron heavy industry naturally seeks the railway, the better class of housing is for the most part located on high ground, and workingmen's houses, near their work, or near transit lines that will bring them cheaply and quickly to it.

But location is not the only essential in the fitness of land for its best use. A section of the city suitable for residence, for instance, is often injured for that purpose by the intrusion of a certain class
of factory, with its attendant smoke, noise, and odors; and, if a high-class residence section, by the coming of business or even of the tenement house. When industry or business is best suited to a district, and land will sell higher for such purposes than any other, the locality is bound to be transformed, and nothing can be done or should be attempted to prevent it. But intrusion often occurs where this is not the fact. Cases are common in all cities where a single factory has invaded a residence street for some more or less accidental reason, and no others have seen any advantage in following. A slump in land values has been the result, because the locality was no longer so pleasant or healthful to live in; and houses have been put to uses to which they were ill adapted, or changed over, or left vacant, to the loss of the owners and the community. This is one of the commonest causes of slums.

2. The Legality.

Building regulations of necessity limit the land owner more or less in the use of his land. Since they affect most if not all the land in the city, they must be issued as police regulations, for which the land owner receives no compensation; for if they were established by eminent domain, with compensation, the expense and burden of the proceedings to determine the amounts due would be prohibitive. The validity of these regulations, therefore, whether they are the same for the entire city or vary by districts, is dependent upon the question whether they can be validly issued under the police power.

For many years cities have passed regulations of the height, area, and use of buildings which are the same throughout the city; and the courts have accepted proper regulations of this sort as valid. It is only when these regulations vary in different parts of the city that their legality is still in any doubt.

Evidently a districting regulation, to be authorized under the police power, like any measure claimed to be an exercise of any power, must first tend in a sufficient degree to accomplish a purpose justifiable under that power, and secondly be free from excess, unreasonableness, or similar adventitious element. Thus a given height regulation to be upheld as a police regulation by the courts must materially promote the public health, safety, order, or general welfare by conserving light or air, or preventing congestion, etc., and must not be so drastic as to lower land values unduly or be otherwise un-

reasonable. Districting regulations, however, are challenged for the additional reason, not applicable to the others, that they do not afford to all the equal protection of the laws guaranteed by our constitutions.

It is well settled in our jurisprudence that the provision for equal protection of the laws does not prevent reasonable classification. In accordance with this principle, the courts have sustained laws for tenement houses subjecting these structures, in which the danger of disease and fire is greater, to more stringent limitations than one- and two-family houses; and height regulations varying with the width of the street on which the buildings were to be erected, thereby tending to secure in each an equal supply of light and air; and fire limits in which buildings of fire-resisting material must be constructed at greater expense than in the other parts of the city where the fire risk was less.

The same considerations demand the same support for districting measures. Thus the central business parts of the city, to facilitate the quick transfers of business, require higher buildings, covering more of the lot, than the outlying sections; and conversely the outlying residential districts need lower buildings, with more space around them for the comfort and health of adults, and especially for the growing children. Modern science has established the fact beyond question that human beings need abundance of sun and air, and freedom from nerve-racking noise, to a degree that it is impossible to obtain in the manufacturing and business parts of modern cities; and experience, especially perhaps that of the English Garden Cities, tends strongly to confirm these scientific facts; which, indeed, are in accordance with common observation and common sense. If, therefore, these conditions cannot be obtained in the business and industrial parts of cities, it is all the more necessary that they be furnished in greater abundance and completeness in other sections. Moreover, the types of building prevailing in the two sections and the land prices in each of them make the varying regulations more equal in burden and effect than identical limitations would be.

In the same way use regulations varied to suit the various uses prevailing and suitable in the various parts of the city, properly conceived and applied, are measures of equality and not of discrimination. Thus, if it were required that land accessible to the railroads and land on the remoter hills
of Akron should in both cases be used either for business or for residence, there would be a glaring inequality of treatment; for in each case one could be so used with advantage and profit, and the other only at a loss. It may be claimed in any such case that the specific regulations are inappropriate or unwarrantably severe; but in districting, as in all legislation, skill and knowledge must be used, or defects are likely to make it legally invalid.

In the judicial decisions so far rendered with regard to the validity of districting, the courts have passed upon specific districting provisions and not on districting as a whole. Thus the Massachusetts courts, sustained by the Supreme Court of the United States, have upheld a height districting provision. There seems to be no difference in principle between districting by height and districting by area. It may, therefore, be regarded as reasonably certain that proper bulk districting is constitutional. State courts, sustained by the Supreme Court of the United States, have also held that manufacturing which on any reasonable ground may be deemed objectionable in a residential or business neighborhood, even if not an actual nuisance, may be excluded. The legality of reasonable use districting as a protection against manufacturing may, therefore, be regarded as established. Regulations excluding business from residential neighborhoods have also been passed upon by state courts, but not as yet by the Supreme Court of the United States, and so far the decisions have been almost uniformly adverse. The question may, however, still be regarded as an open one. The reason given, in most of the decisions, for holding the exclusion of business from residential districts to be invalid as a police regulation is that it is based upon esthetic considerations. Certainly, as a general statement of the case for such districting, this is most inadequate and, therefore, unfair. The intrusion of business into residential districts often interferes with comfort and convenience in these districts, as is shown by a drop in land values. As an isolated provision, a measure excluding business from such districts might well be considered as a taking of property rights from one land owner for the advantage of others. If, however, business is excluded as a part of a complete and well-considered plan, which includes all the land in the city in its various provisions, and assigns to business its proper place, for its own good as well as the advantage of others, residential land is benefited certainly without loss to business property, and as a rule, to its gain. None of the cases which have as yet arisen have been with regard to such a comprehensive plan. When such a case does arise, there is reason to hope, with the increasing appreciation of the great advantage of districting and city planning generally and the need of protecting business as a part of it, that the courts will sustain such provisions.
Appendix
List of Planning Studies Presented Earlier

BY

JOHN NOLEN, City Planner


JUNE, 1917 . . Report accompanying Sketch showing the Proposed Scheme for the North Hill Viaduct.

JUNE, 1917 . . Report accompanying Study for Better Crossing at South High Street and Miller Avenue.

AUGUST, 1917. . . Reports relative to Street Railway Extensions proposed by the Northern Ohio Traction and Light Company.

List of Maps

Diagrams and plans collected or prepared to date as a basis for study of city planning problems in Akron.

Where numbers are omitted from the list, they refer to records and studies used in the office of the City Planner, which have been superseded by later drawings.

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<td>Atlas of Summit County</td>
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<td>City Map</td>
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<td>4</td>
<td>City Directory Map</td>
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<td>Map showing Ward Boundaries, 1915</td>
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<td>6</td>
<td>Map showing Contours according to Recorded Street Grades</td>
<td>400' to 1&quot;</td>
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<td>Map of Ohio</td>
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<td>U. S. Geological Survey Ohio; Akron and Kent Quadrangles</td>
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<td>Map showing New City Extension</td>
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<td>Contour Map of City; contour interval 20'</td>
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<td>12</td>
<td>Diagram of Car Lines</td>
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<td>Diagram of Sewer System</td>
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<td>Diagram of Water System</td>
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<td>Diagram of Public Utilities</td>
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<td>Diagram of Main Traffic Thoroughfares</td>
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<td>Railroad Map of Ohio</td>
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<td>Summit County Road Map, 1916</td>
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<td>Official Interurban Map, 1915</td>
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<td>Study for Union Station and Civic Center; existing conditions</td>
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<td>Study for Proposed Location of Union Station and Civic Center</td>
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<td>23</td>
<td>Photographic Print, Akron and Vicinity</td>
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<td>24</td>
<td>Real Estate Map showing Locations of Subdivisions</td>
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<td>City Map, Lithograph</td>
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<td>Grade Separation from south of Market Street to south of Main Street</td>
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<td>27</td>
<td>Map of Distribution System of Akron Water Works Company</td>
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<td>28</td>
<td>City Map</td>
<td>400' to 1&quot;</td>
</tr>
<tr>
<td>29</td>
<td>Diagram of Existing Parks</td>
<td>800' to 1&quot;</td>
</tr>
<tr>
<td>30</td>
<td>Study of Proposed Street Railway Extensions</td>
<td>1100' to 1&quot;</td>
</tr>
<tr>
<td>31</td>
<td>Diagram of Public and Semi-Public Properties</td>
<td>800' to 1&quot;</td>
</tr>
<tr>
<td>32</td>
<td>Diagram of Railroad and Industrial Properties</td>
<td>800' to 1&quot;</td>
</tr>
<tr>
<td>33</td>
<td>Key Map Industrial Properties</td>
<td>800' to 1&quot;</td>
</tr>
<tr>
<td>34</td>
<td>Diagram of School Properties</td>
<td>800' to 1&quot;</td>
</tr>
<tr>
<td>35</td>
<td>City Map, Basis for City Plan</td>
<td>800' to 1&quot;</td>
</tr>
<tr>
<td>36</td>
<td>Curve of Population, 1916</td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>Residential Street Sections</td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>Study for Approaches and Extension of North Hill Viaduct</td>
<td>200' to 1&quot;</td>
</tr>
<tr>
<td>39</td>
<td>Contour Map of City; contour interval 10'</td>
<td>800' to 1&quot;</td>
</tr>
<tr>
<td>40</td>
<td>Diagram Present Building Distribution</td>
<td>800' to 1&quot;</td>
</tr>
<tr>
<td>41</td>
<td>Diagram Land Values</td>
<td>800' to 1&quot;</td>
</tr>
<tr>
<td>42</td>
<td>Plan for Extension of High Street and its connection with South Main</td>
<td>200' to 1&quot;</td>
</tr>
<tr>
<td>43</td>
<td>Street</td>
<td></td>
</tr>
<tr>
<td>Plan No.</td>
<td>Title</td>
<td>Scale</td>
</tr>
<tr>
<td>---------</td>
<td>-----------------------------------------------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>49b.</td>
<td>Plan for Extension of High Street and its connection with South Main Street</td>
<td>200' to 1&quot;</td>
</tr>
<tr>
<td>50.</td>
<td>Public Utilities</td>
<td>800' to 1&quot;</td>
</tr>
<tr>
<td>51.</td>
<td>Preliminary City Plan</td>
<td>800' to 1&quot;</td>
</tr>
<tr>
<td>52.</td>
<td>Diagram of Distribution of Population, 1916</td>
<td>1100' to 1&quot;</td>
</tr>
<tr>
<td>53.</td>
<td>Study for Extension of Car Lines</td>
<td>50' to 1&quot;</td>
</tr>
<tr>
<td>54.</td>
<td>Glendale Viaduct</td>
<td>300' to 1&quot;</td>
</tr>
<tr>
<td>55.</td>
<td>Glendale Viaduct</td>
<td>200' to 1&quot;</td>
</tr>
<tr>
<td>56.</td>
<td>Main, Howard, and Quarry Streets; Intersection</td>
<td>100' to 1&quot;</td>
</tr>
<tr>
<td>57.</td>
<td>Proposed Vista Walk from Main Street to Court House</td>
<td>100' to 1&quot;</td>
</tr>
<tr>
<td>58.</td>
<td>Study for Civic Center and Railroad Station</td>
<td>20' to 1&quot;</td>
</tr>
<tr>
<td>60.</td>
<td>Business Streets; Sections of 60', 80', and 99' Streets</td>
<td>800' to 1&quot;</td>
</tr>
<tr>
<td>61.</td>
<td>General Plan; showing Street and Park Systems, Public Building Sites and Other City Planning Features</td>
<td>800' to 1&quot;</td>
</tr>
<tr>
<td>62.</td>
<td>Proposed Parks; Diagram showing Areas to be used for Park Purposes and the connecting Parked Streets</td>
<td>800' to 1&quot;</td>
</tr>
<tr>
<td>63.</td>
<td>Zone Plan; Diagram showing Building Districts Designated according to Use</td>
<td>800' to 1&quot;</td>
</tr>
<tr>
<td>64.</td>
<td>Main Thoroughfares; Diagram showing the Radial and Circumferential System of Traffic Streets</td>
<td>800' to 1&quot;</td>
</tr>
<tr>
<td>65.</td>
<td>North Hill — East Akron Drive</td>
<td>800' to 1&quot;</td>
</tr>
</tbody>
</table>
SECTION 100. CITY PLANNING COMMISSION. There is hereby created a City Planning Commission composed of seven members, of whom five shall be appointed by the mayor, by and with the advice and consent of the council, for terms of five years, respectively; provided, however, that when the first city planning commission shall be appointed under the provisions herein, the members thereof shall be appointed for one, two, three, four and five years respectively. The chief administrator and the mayor shall be ex-officio members of such commission. The city engineer shall be ex-officio chief engineer and secretary of such commission.

SECTION 101. PLATTING COMMISSION. The planning commission shall exercise the duties and functions of a platting commission, and shall be empowered to make plans and maps of the whole or of any portion of the city, and also of any land outside the city within a distance of three miles beyond the limits of the city. No plat or plan subdividing the land within the city limits or within three miles beyond the city limits shall be entitled to be recorded in the office of the recorder of Summit county without the approval of the planning commission.

SECTION 102. POWERS AND DUTIES. In addition to the powers and duties mentioned in the preceding section, and such other powers and duties as the council may confer upon the planning commission, it shall have the following powers and duties: (1) It shall have the power to determine whether property shall be acquired or condemned for park, boulevard or recreation purposes or for the enlarging of any park or the widening or extension of any boulevard, and no property shall be so acquired or condemned without the approval of the commission. No vacation or sale of property shall be made by council without first obtaining the approval of the commission.

(2) It shall provide the plans for all original landscape work to be done by the city in parks or boulevards hereafter acquired.

(3) It shall study and investigate the general plan of the city; it shall formulate plans for the development and improvement of parks and parkways, for the extension and opening of streets and other public ways, for the preservation of natural and historic features; and shall keep in constant touch with all the needs of the city that have relation to the plan and to the beautification thereof.

(4) It shall formulate plans to empower the inhabitants of any section or district of the city to accept, acquire or maintain parks, parkways, recreation places, or other public grounds; to open, construct, clean, extend and maintain public streets, alleys, boulevards and other public ways; to construct, maintain and extend sewers, waterways, aqueducts or underground conduits of any kind, and to make the necessary excavations for the same; to build, construct and maintain bridges, viaducts, tunnels, docks, wharves or other public improvements which the said planning commission or the council may deem essential to the safety, beautification or welfare of said section or district, or necessary to the comfort, convenience, health, safety or well-being of the inhabitants thereof; and in the event that the said inhabitants of any such section or district shall be authorized by ordinance to exercise any of the powers above mentioned, the said planning commission shall formulate plans to determine in what manner such inhabitants may incur indebtedness incident to the exercise of such powers, and to tax or otherwise assess themselves to pay such indebtedness; provided, however, that any such indebtedness shall not be a liability upon the city as a whole.

(5) It shall formulate plans to empower the residents or freeholders of any street, alley, boulevard or other public way to extend or otherwise improve such street, alley, boule-
yard or other public way, or to construct sewers or conduits, or provide other necessary or desirable improvements; provided, that in the event that any such extension, improvement or construction shall be authorized by ordinance, the said planning commission shall formulate the plans to determine in what manner such residents or freeholders may incur indebtedness incident to such extension, improvement or construction, and to tax or otherwise assess property to pay such indebtedness; provided, also, that the said commission may formulate plans to authorize the residents or freeholders of adjacent, contiguous or nearby territory to share in the payment of such indebtedness. No such indebtedness shall be a liability upon the city as a whole, but shall be limited to the territory especially benefited by such extension, improvement or construction, as said commission may determine.

(6) It shall formulate plans to regulate the height, design, location upon lot, elevation above street grade, and bulk, of buildings and structures hereafter erected; to control, regulate or restrict the distribution of dwellings or other structures or property for the purpose of residence, manufacturing, trade and transaction, and to divide the city into districts for the purposes aforesaid; to eliminate fire hazards; to abolish unsanitary, unhealthy, or unwholesome housing conditions; and to investigate all matters pertaining to the living conditions of the people.

(7) It shall investigate the need of and suggest plans for the extension of water supply and sewerage disposal; the co-ordination of transportation; the relief of traffic conditions; and the adequate extension and distribution of equipment and service of public utilities.

(8) It shall act in an advisory capacity to the council and other city departments in relation to plans for the location of public buildings, bridges, approaches or other structures, and in relation to all other matters pertaining to the convenience, safety and well-being of the people.

(9) Subsequent to its investigations and formulation of plans, the planning commission shall transmit its recommendations to the council, and the council may, if it approves of such recommendations, grant to the said commission the power and authority to enforce such recommendations.

(10) The council shall provide the planning commission with necessary funds for the carrying on of its work, and shall provide for the employment by the commission of adequate clerical, engineering and other expert assistance.
Requirements for Plats of New Allotments

Adopted by the Akron Planning Commission

1. All side lines of lots to be laid out at right angles to streets, radial lines on curved streets.
2. Minimum building line to be fifteen (15) feet. Greater distances will be prescribed where depth of lots and neighborhood conditions warrant.
   A. Building lines to be shown in red and so marked.
3. Sidewise building restriction to be minimum of six and one-half (6½) feet on each side of a 40-foot lot or less; seven and one-half feet or more on each side of a lot in excess of 40 feet. This notation to appear on Plat.
4. Corner lots to be wide enough to permit a side street building restriction, to conform with proposed building restriction on side streets, minimum 15 feet.
5. No barn, garage, or other separate outbuilding permitted on corner lots. Garage may be built as part of residence. This notation to appear on Plat.
6. Location of barn, garage, or other outbuildings to be on rear of lots, distance from front to be prescribed by the Planning Commission.
   A. On lots adjoining corner lots on front streets, barn, garage, or other outbuilding prohibited unless corner and adjoining lots together are wide enough to permit of such an outbuilding to be built at far end of inside lot, at a distance sufficiently far from side street line to bring said outbuilding in line with outbuildings in rear of side street lots.
7. Street corner to be rounded at radius of three (3) feet or more.
8. All Plats to show monuments at block corners, same must be set to the final sidewalk grade. If the streets are not graded when the Plat is accepted a certified check, the amount to be determined by the Engineer of the Planning Commission, is to be made out payable to the City of Akron for the setting of the monuments, which is returned after the monuments are set. The Plat must show the proposed location of all monuments.
9. Plats must bear the following notation: viz., The plan, design, location, and grade lines of any structure to be erected on this allotment shall be first submitted to and approved by the Planning Commission of the City of Akron, Ohio.
10. All plats to be drawn to a scale of 50 feet to one inch upon sheets 26 inches wide by 84 inches high or multiples thereof. Where size is over 26 x 24 inches, engineer will rule off the sections in 96 x 24 inch parallelograms in green ink, making divisions on lot or street lines as nearly as possible.
11. Street signs of design approved by the Service Director to be erected at intersecting streets by Allotment Owners.
12. A bond in amount to be determined by Service Director with sureties satisfactory to him, to be given by allotment owners to guarantee grading of new streets and public places, laying of 6-foot cinder walks and erecting street signs satisfactory to the Service Director.
13. An Abstract showing good title in Allotment Owners to new streets and public places to be examined by City Solicitor, and his approval of such title to be filed in writing with the Secretary of the City Planning Commission before Plat will be finally approved.
14. Where needed for future public use, reservations will be made for Parks and open spaces. Not less than five (5) per cent of all allotted lands shall be dedicated by Allotter for Park and Playground purposes.
15. All streets to be coterminous with existing streets at same or greater widths.
16. Gross streets to be located at intervals of not more than six hundred (600) feet.
17. Profile: Scale \[
\begin{align*}
\text{Vertical} & : 1" \text{ to } 20' \\
\text{Horizontal} & : 1" \text{ to } 100'
\end{align*}
\]
drawn on profile tracing cloth ten (10) inches wide must be turned over to the City Engineer for his files before the approval of the Plat and before the grading of the streets is started. The City Engineer will O.K. or change the suggested grade on same.
18. The grade of streets as established by Council, or if a property is located outside the city limits, grades are to be designated by the Director of Public Service, which grades, whether provided by ordinance
or prescribed by the Director, shall be designated at all street intersections and at the outer property lines of allotments.

19. The maximum depth of corner lots is 125 feet.
20. Plats to show names of all adjoining allotments with book and page number in record.
21. Give lengths of tangents, chords, and angle for all center line curves on streets.
22. Give tangents, chords, radius, and angle at all corners.
23. Give chord lengths, arcs, tangents, and angles for frontage on every lot on curves.
24. Give all interior angles for every lot.
25. The profiles must have names of all streets, with plusses to same. They shall also show the name of the Engineer, the Bench Mark used, elevation of same, and date when levels were run.
26. The original plat is the property of the Planning Commission.
27. The City Engineer will take all levels for street profiles and establish all grades, charging actual cost to allotment owners.

Set-Back or Building Lines Established by the Akron City Council


1. South Main Street, from Chestnut Street to South Corporation Line: Set back 12 feet on each side, increasing the width to 84 feet.
2. East Market Street, from High to College: 5 feet on each side, increasing the width to 70 feet. Also from College to the East Corporation Line: 7 feet on each side, increasing the width to 74 feet.


3. West Exchange Street, from Locust to West Corporation Line: 12 feet on east side, increasing the width to 84 feet.
4. East Exchange, from Washington to East Market Street: 12 feet on each side, increasing the width to 84 feet.
5. Goodyear Ave., from Market to Martha: 10 feet on each side, increasing the width to 70 feet.
6. Grant Street, from Exchange to South: 12½ feet on each side. From South to Archwood 5 feet on each side; increasing the width to 70 feet.
7. South High Street, from Broadway to South: 26 feet on the west side; from South to Long: 6 feet on west side; and from Long to Miller 16 feet on west side, increasing the width to 66 feet.
8. South Howard Street, from the angle south of Mill to Quarry Street: 4 feet on each side, increasing the width to 68 feet.
9. West Market Street, from Howard to Walnut: 8 feet on the south side, and from Walnut to West Corporation Line: 7 feet on each side, increasing the width to 74 feet.
10. Ash Street, from Mill to Bowery: 6 feet on the south side, increasing the width to 51 feet.

The following set-back lines have also been recommended.

1. South Arlington Street, from Market to South Corporation Line: 10 feet on each side, increasing the width to 80 feet.
2. Wooster Avenue, from Pine Street to East Avenue: 10 feet on each side, increasing the width to 80 feet.
3. Bowery Street, from Wooster to South: 10 feet on each side, increasing the width to 80 feet.
4. South Street, from Main to Spicer: 10 feet on each side, increasing the width to 80 feet.
5. Johnston Street, from Spicer to Arlington: 10 feet on each side, increasing the width to 80 feet.
6. West South Street, from Main to Manchester Road: 10 feet on each side, increasing the width to 80 feet.
Industrial Plants in Akron
1918

Akron Soap Company
Duro Brick Company
McCausland Brothers
Akron Gravel & Sand Company
J. A. Brandon & Son
Borst Cement Block Company
Swinehart Tire & Rubber Company
American Rubber & Tire Company
Quaker Oats Company
Pfahl Gauge Company
G. A. Collins & Son Company
B. & M. Machine Company
Akron Hardwood Floor Company
Schueneman Printing Company
Kittelberger Electric Company
Geo. C. Jackson Printing Company
Nitz & Darkow
Premium Candy, Cone & Corn Company
Ben Franklin Printing Company
May-Fiebeger Company
Akron Tent & Awning Company
Klages Coal & Ice Company
Enterprise Manufacturing Company
Akron Metallic Casket Company
Gregory Rubber Company
Akron Cultivator Company
Robinson Clay Product Company
Renner Brewing Company
Superior Printing Company
Excelsior Stamp Works
E. L. Geib Machine Company
Roath Manufacturing Company
Star Planing Mill Company
Williams Foundry & Machine Company
Bridgewater Machine Company
Akron Belting Company
J. P. Brennan
Akron Brush Works
Geo. L. Curtice Printing Company
United Hat Manufacturing Company
S. Plotkin Bedding Company
Akron Store Fixture Company
Sackman Mfg. Company
Taplin-Rice-Clerkin Company
Akron File Company
Wise Furnace Company
Akron Polishing & Plating Company
Lyon Rubber Company
Taylor Printing Company
O'Neil Tire & Protector Company
Summit Lumber & Building Company
Egg Baking Powder Company
Akron Baking Company
U. S. Stoneware Company
B. F. Goodrich Company
Adamson Machine Company
Buckeye Sewer Pipe Company
Lapp Cooperage Company
Biggs Boiler Works
Summit China Company
American Sewer Pipe Company
Ohio Wire Goods Company
Portage Lumber & Building Company
A. J. Weeks
Hill Sewer Pipe Company
Atlantic Foundry Company
Burger Iron Company
Diamond Foundry Company
Caruthers-Terry Preserving Company
Ohio Stoneware Company
M. P. Christensen & Company
International Harvester Company
Whitman & Barnes Manufacturing Company
S. & O. Engraving Company
Wadsworth Core Machine & Equipment Company
Thomas Phillips Company
Jones & Kuhlke
Lyman-Hawkins Lumber Company
American Hard Rubber Company
The A. Petersen Company
Tanner-Hower Manufacturing Company
Akron-Selle Company
Star Drilling Machine Company
Akron Lumber Company
Philadelphia Rubber Works Company
Akron Gas Lamp Company
Die Sinking & Machine Company
Akron Extract & Chemical Company
Weeks Lumber Company
Akron Foundry Company
Prudential Heating Company
Burkhart Brewing Company
Mohawk Rubber Company
Goodyear Tire & Rubber Company
Kelly-Springfield Company
Summit Foundry Company

88
M. A. Knight
Akron Brick & Tile Company
Cooper Brick Company
Crouse Clay Product Company
Akron Mattress Manufacturing Company
Akron Roofing Tile Company
Akron Brewing Company
Portage Pretzel Company
O. C. Pike Rubber Company
Majestic Rubber Company
H. F. M. Block Company
Akron Rubber Mold & Machine Company
Akron Mirror & Glass Works
Ornamental Iron Works Company
Akron Gear & Engineering Company
Burt Manufacturing Company
Fisher Brothers
Akron Welding Company
Twentieth Century Heating & Ventilating Company
Mechanical Mold & Machine Company
Akron Truss Company

Union Printing Ink Company
Star Rubber Company
Colonial Sign & Insulator Company
L. W. Camp Company
Standard Oilcloth Company
Firestone Tire & Rubber Company
McNeil Boiler Company
Brown-Graves-Vincent Company
Punctureless Tire Company
Imperial Electric Company
Saalfield Publishing Company
South End Machine Company
Baker-McMillen Company
Akron Window Weight Company
Jahant Heating Company
Windsor Brick Company
Knapp & Sons
Miller Rubber Company
Akron Varnish Company
Wellman-Seaver-Morgan Company
Colonial Salt Company
Range in Land Values
Akron, Ohio

<table>
<thead>
<tr>
<th>Range per Front Foot</th>
<th>Cost of Lot Based on 40' Width</th>
<th>Character of Occupancy</th>
<th>Average Cost of House</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $10</td>
<td>$400</td>
<td>Farm land, and lots for detached houses in subdivisions without public utilities</td>
<td>$2,000</td>
</tr>
<tr>
<td>$10–$30</td>
<td>$400–$1,200</td>
<td>Lost-cost houses and multiple dwellings</td>
<td>$2,000–$4,800</td>
</tr>
<tr>
<td>$30–$60</td>
<td>$1,200–$2,400</td>
<td>Medium-cost houses</td>
<td>$4,800–$9,600</td>
</tr>
<tr>
<td>$60–$100</td>
<td>$2,400–$4,000</td>
<td>Best residences</td>
<td>$9,600–$16,000</td>
</tr>
<tr>
<td>$100–$500</td>
<td>$4,000–$20,000</td>
<td>Small stores and apartments</td>
<td></td>
</tr>
<tr>
<td>$500–$1,000</td>
<td>$20,000–$40,000</td>
<td>Good retail business</td>
<td></td>
</tr>
<tr>
<td>Over $1,000</td>
<td>$40,000</td>
<td>Best retail and financial district</td>
<td></td>
</tr>
</tbody>
</table>

NOTE:
The break in values between business and residential properties is bridged by exceptionally high residential values and the more isolated lower-cost store locations.

In the "Principles of City Land Values," by Richard M. Hurd, the following average values are given:

<table>
<thead>
<tr>
<th>City Population</th>
<th>Best Business per Front Foot</th>
<th>Best Residences per Front Foot</th>
</tr>
</thead>
<tbody>
<tr>
<td>100,000</td>
<td>$1,200–$2,000</td>
<td>$75–$150</td>
</tr>
<tr>
<td>150,000</td>
<td>$1,500–$2,500</td>
<td>$100–$200</td>
</tr>
</tbody>
</table>
## Financial Statistics*

### COMPARISON OF AKRON WITH OTHER CITIES

<table>
<thead>
<tr>
<th>CITYS</th>
<th>Population Estimated for 1915</th>
<th>Population per Acre</th>
<th>Per Capita Assessed Valuation</th>
<th>Tax Rate Based on True Val. Estimated</th>
<th>Per Capita Net Indebtedness</th>
<th>Per Capita Assets</th>
<th>EXPENDITURES PER CAPITA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Police</td>
</tr>
<tr>
<td>COLUMBUS OH</td>
<td>204,567</td>
<td>14.4</td>
<td>1,348.31</td>
<td>10.93</td>
<td>49.10</td>
<td>105.43</td>
<td>13.76</td>
</tr>
<tr>
<td>BIRMINGHAM AL</td>
<td>104,165</td>
<td>5.1</td>
<td>582.06</td>
<td>6.00</td>
<td>35.37</td>
<td>29.96</td>
<td>8.92</td>
</tr>
<tr>
<td>CHICAGO IL</td>
<td>143,331</td>
<td>11.5</td>
<td>866.28</td>
<td>9.48</td>
<td>85.80</td>
<td>132.74</td>
<td>14.29</td>
</tr>
<tr>
<td>St. Paul MN</td>
<td>123,960</td>
<td>11.3</td>
<td>918.71</td>
<td>16.58</td>
<td>30.56</td>
<td>71.91</td>
<td>14.05</td>
</tr>
<tr>
<td>CHICAGO IL</td>
<td>116,075</td>
<td>12.4</td>
<td>1,013.09</td>
<td>17.69</td>
<td>22.58</td>
<td>61.91</td>
<td>14.58</td>
</tr>
<tr>
<td>DETROIT MI</td>
<td>107,521</td>
<td>10.3</td>
<td>1,608.54</td>
<td>15.78</td>
<td>81.90</td>
<td>172.47</td>
<td>20.92</td>
</tr>
<tr>
<td>CINCINNATI OH</td>
<td>103,418</td>
<td>4.1</td>
<td>607.50</td>
<td>11.37</td>
<td>96.08</td>
<td>165.27</td>
<td>14.19</td>
</tr>
<tr>
<td>CLEVELAND OH</td>
<td>100,503</td>
<td>6.3</td>
<td>1,627.40</td>
<td>9.05</td>
<td>39.27</td>
<td>74.82</td>
<td>10.84</td>
</tr>
<tr>
<td>PITTSBURGH PA</td>
<td>91,012</td>
<td>17.7</td>
<td>672.39</td>
<td>27.62</td>
<td>51.46</td>
<td>81.22</td>
<td>13.81</td>
</tr>
<tr>
<td>NEW YORK NY</td>
<td>80,291</td>
<td>11.0</td>
<td>1,478.09</td>
<td>12.30</td>
<td>85.43</td>
<td>116.59</td>
<td>13.42</td>
</tr>
<tr>
<td>CHICAGO IL</td>
<td>72,401</td>
<td>15.2</td>
<td>679.77</td>
<td>13.40</td>
<td>14.29</td>
<td>92.12</td>
<td>10.92</td>
</tr>
<tr>
<td>ROCHESTER NY</td>
<td>70,006</td>
<td>11.6</td>
<td>336.63</td>
<td>14.87</td>
<td>13.90</td>
<td>64.02</td>
<td>14.74</td>
</tr>
</tbody>
</table>


In comparison with cities listed above, Akron occupies the following place with regard to each subheading:

- Population estimated for 1915
- Population, per acre
- Per capita assessed valuation
- Tax Rate based on true valuation estimated
- Per capita net indebtedness
- Per capita assets
- Total for General Departments

| 10 | Police | 12 |
| 8  | Fire   | 11 |
| 3  | Health | 4  |
| 7  | Charities, Hospitals, Correction | 10 |
| 3  | Schools | 2  |
| 4  | Recreation | 11 |
| 9  | Total for General Departments |