

THE PROBLEM OF TEACHING
MUNICIPAL GOVERNMENT
in
HIGH SCHOOLS

by

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Introduction

The Problem of Teaching Municipal Government in High Schools

The text-book treatment of city functions must be general to meet the country-wide use of the books. The limited space which the books can devote to city government permits only the briefest treatment of this phase of the subject of civics. The attempts which have been made by the writer to have the students get the materials themselves have been far from satisfactory. The first hand study can only be made by a fortunate few of the pupils who have the time and ability to make their own investigations. Even these are limited in two respects. First, much of the material is scattered and buried in reports. Second, the observation of the machinery of government can only show a small section of the entire process of municipal government. It has seemed to the writer that much valuable material was at hand. The students show a keen interest, when the facts have been presented to them. The lecture method of presentation does not seem best, because but few teachers can prepare the material and the students do not get the details fully.

In the preparation of the material for a course in local city government the high school student and his needs have controlled the selection and scope of treatment. The aim has been to gather material which will show quite fully what the modern city of Portland does for its citizens. In addition to what is now being done, some of the future problems are pointed out.

Many of the functions treated have a local history of growth that is interesting and helpful.

Because of the daily contacts with many of the functions, the material has an interest which is not found in the study of state and nation.

The idea of co-operation should govern in the study of all civics. This objective should be clear and always present with the teacher. It has a closer contact in this connection than in the broader fields.

"Civics is primarily to train the lay citizen for the performance of his lay duties. It is not primarily to tell him what senators or governors should be or do, or what should be done by the police or street departments; but rather what he himself should do." (1)

Coupled with this definite objective should go the broader attitude as to the place of the city in our civic life. If the teacher has the idea that cities are a necessary evil, that should be cleared away. The best treatment is found in the first chapter of "The Modern City and Its Problems" by Frederic C. Howe. (2)

Cities have been the center of the best in every age. Civilization reaches its highest stages in the city. With the coming of the city, are culture, a love of the fine arts. Education and the fine arts come with leisure and accumulated wealth, which in turn are city-born.

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(1) Bobbitt, Franklin F. How to Make a Curriculum. New York: Houghton Mifflin Company, 1923, 121 ff.

(2) Howe, Frederic C. The Modern City and Its Problems. New York: Charles Scribner's Sons, 1915.

City life for the poorest in the city is socialized to a very marked degree.

"As society changes from country to town and from town to city the element of co-operation becomes more and more important. It involves a change from doing all sorts of things by each individual to the doing of many of these things by the community and the consequent freeing of the individual to follow his own calling and the enjoyment of his own leisure. Co-operation is the law of progress." (3)

As the industries continue to grow, the cities will also continue to grow. The problems of co-operation and public service must multiply. The next generation must meet more intricate problems.

The social sciences are presumed to have a place in the course of study because they can become an effective tool in making better citizens.

It is hoped that the material presented here may be used to contribute towards the making of our future citizens. This material gives the facts of how some of the more important city functions are carried out. Many of these also have a history of growth from small and crude beginnings. The present treatment shows how these services have become a part of the city government. The grouping and the order of the study of the various functions can be changed to fit the needs of the various classes.

The following order is suggested as one that may be used. First should come the material side; second, the human or social activities. In the beginning the natural features of river, hills and level land,

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(3) Howe, Frederic C. Ibid. p.3

which make up the physical basis for the city as well as its location should be studied. This should be followed by the story of how the city has grown in area. The various units that at different times have been combined into the present city form the next logical step. This is best accompanied with a map showing the various additions. The County Assessor has such a map from which copies may be made. One map in each school will answer very well. The history of the growth will help to explain some of the rather odd street and block arrangements.

The City Planning Commission may well come next. If time can be found the whole newer movement of city replanning can be used. The report of the Planning Commission will lead to the problem of traffic, with the widening and improvement of bridges and streets. (4)

The removal of waste dealing with street cleaning, collection and disposal of garbage, and construction of sewers has a place. The larger aspect of the problem and how these are met in other cities will depend on time and local interest.

The water supply, with some of its problems, can follow. The need of water conservation offers a fine opportunity to teach co-operation. How other cities are meeting the same problem has much value in this connection.

Fire risk and methods of fire prevention offer fine socializing material. Methods of modern fire fighting will be of great interest.

Parks and playgrounds can stand as the last of the material side

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(4) Report issued January 1921, in pamphlet form.

of the study as it is so closely related to the human element.

On the human side, dealing with people rather than material things, the police system may come first. The point of view taken here should be to show the service as a helpful rather than a regulatory one.

The health bureau has a fine history of guarding against contagion and preserving purity of foods. The connection with state and national departments should not be omitted.

The care of the dependent is not a function of the city as much as of the county and the various charities outside of government management. However it makes a story that should not be lost. The Library is another service that is just outside the strict lines but again has too much to offer to be left out. Education has been omitted because first, it is not a function of the city, and secondly, it is more familiar to the students than the departments included. The details of the organization of the city government, that is, how we have the present form, must be included.

How to present this material as well as what to include is vital. Here again the method can not be dictated in advance to anyone. The nature of the material lends itself readily to use as a project, composed of a number of problems.

This is a good opportunity to socialize the class by organizing a city council before whom many matters may be presented. The city functions may be used at intervals through the term, rather than intensively for a short time. A study of the method of voting first, second, and third choices,

will offer a good problem for a small committee to present to the class as the basis for an election of the city officers. The election and assignments of the bureaus will give a good grip on the various departments. Each member of the class can be assigned some matter of routine business to present to the council at the meetings. Some of the larger problems involving changes, such as an addition to the city, a new bridge, the renumbering of the houses, make good problems. The change of the building zones, or removal of some unsanitary building, can give an opportunity for a spirited argument before the council. Plans for some change in the organization of the fire or police systems open up many questions.

When the above method of organization is not deemed wise (and it is not recommended for all classes) the following plan can be used. Have each member of the class take some phase of the city government as the subject for a term report. Where this is done more time and study should bring some detailed reports.

Regarding the detail facts of the various functions of the city, much of the sources are cited in the discussion. The territorial growth was in the published reports for 1921. The Map is a copy from a map in the county assessor's office. The facts for the disposal of refuse are to be found in the annual reports. The Sewage problem is as noted in a report to the City Club. The files of the publications of the City Club are a rich source of information on such matters. The facts regarding the public docks are from the last published report to the Mayor for the year 1925. The material on the Planning Commission came from the Secretary and the printed material

which he furnished. The water front project is to be found in the annual report of 1923. The sources of facts in respect to transportation are noted in the matter and from personal observation of the author on the ground. The history of the water system is adapted from the paper, Civil Service, which paper is now suspended. The specific facts on the fire department may be found in the current reports of the department. For the program for city Parks and Playgrounds the report of the Olmsted survey as written by Marshall Dana was used. Copies are on file among the Oregon documents in the public library. The 1921 report of the City Planning Commission outlines the recommendations. The annual reports show how far these have been completed.

The facts regarding the police system are based on an interview with several officers at the central office and the annual reports. The facts dealing with the Public Welfare Work are to be found in the biennial reports, also interviews with the members of the staff. The Community Chest supplied facts as to its work. The story of the Library was compiled from the annual reports and a display prepared by the library to show its work and growth. The story of the change of the form of government is to be found in newspaper files compiled in the Municipal Library. Earlier charters and reports show the organization of the city government through the years. The two charts showing the two forms of organization came first from an enlarged copy found in the Oregon Journal. The present form was obtained from the city engineer's office.

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Our Life Together

You have all read Robinson Crusoe. Was he dependent on others? What materials did he have to work with? Why did he tame a parrot? Was Friday useful to him? You may have read "Alone in the Wilderness" by Knowles. Why did he not stay in the woods? Robinson Crusoe left his island at the first opportunity and Knowles seems to be satisfied with one such experience.

As far back as history can go it shows men living in groups. The primitive man was vitally interested in the welfare of his tribe. With them he hunted, fished, and raided other tribes. With his own group he defended himself and them. To be expelled from his tribe would mean either death or slavery at the hands of his enemies.

With the advance of civilization, people have become free to move about, select their friends, and adopt new manners of living. The modern man, as well as his savage ancestor, finds his greatest interest still bound up with the welfare of others. Notwithstanding such liberty of action, man is still limited by group life. The boy who, by some fancy, might wish to have a vivid scarlet suit would have difficulty in finding such a suit, and possibly would have more difficulty should he succeed in securing one.

Not only boys and girls, but older people depend on others for a host of things. How many of you usually prepare your own breakfast? And, if you do, who made the bread, or furnished the milk or butter? Do you not depend on others for your fun? Can you play football, baseball, or tennis alone? Whatever your favorite amusement may be, can you enjoy it

without the help of others?

We are each of us members of a number of groups. The first is the family, the next in order of our growth may be a play group, which is a looser and changing one. The church and school each give a number of different groupings to do different things. Clubs, fraternal societies and lodges also are formed for various purposes. Cities, counties, states and the national governments are but larger groupings to secure co-operative action. Each of these are spoken of as communities. A community is defined as a group of people who are working together under an organization for the common good. The success of any community must depend on the co-operation of its members. When any fail to do their part, the efficiency is lowered. One man cannot win a football game; it takes eleven men to win. The failure of one man can lose the game. In a schoolroom the pupil who fails in a recitation, who speaks so he cannot be heard, who disturbs others or who is tardy and irregular in attendance not only harms himself and his family, but hurts the class. Is it not the same with society in general? It is, for when anyone fails to do his work the community as a whole always suffers.

The particular problem of this study is to be the City of Portland. Can you answer these questions? When was Portland organized as a city? How has it grown to the present size? How have the natural features of river and hills been a factor in its history? What form of government has the city? How has the city met the many problems of a modern city, as water supply, disposal of waste materials, street paving, fire and police protection? What is being done to improve the appearance of the

city? How do the poor and needy fare? What provision is being made for the young and old to live a better life? If you had a stranger as a guest where would you take him? Are there parts of the city you would not want him to see? What would you be glad to tell him and show him?

Not only will the answers be found here, but larger fields will be suggested, in order that each one may read further.

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How the Territory in Portland was Secured

The original city of Portland was incorporated in 1851. It covered an irregular area of 1.7 square miles, bounded on the north by Thurman Street. On the west the line was irregular as it followed the line of the Couch Donation Land Claim from near Thurman and Twenty-third streets to Lincoln and Eleventh streets. In 1853 the western boundary was straightened so as to run direct from Lincoln and Eleventh to Thurman and Twenty-third. In 1854 the northwest corner was moved 561 feet west. This added a long triangular strip and made the city area 2.23 square miles.

The southern boundary was extended to Grover Street and the southwest corner was moved to Eleventh and Grover streets. This added a triangular strip on the west and a rectangular piece on the south side in 1864, making a total area of 2.99 square miles.

The next accession came in 1883, when the limits were extended about a mile south, west and north. A part of this new territory (that occupied later by the Lewis and Clark fairgrounds) was disannexed in 1885 and re-annexed in 1893. Another small strip about a quarter of a mile wide, extending along the southern boundary, was annexed in 1885. The limits were further extended in 1891 on the south about a mile and a half, within a mile of the present boundary.

In the meantime two other cities had sprung up on the east side of the Willamette River. The city of East Portland, extending from Holgate to Hancock and from the river to East Twenty-fourth Street, was incorporated in 1870. Two strips, one between Hawthorne and East Stark streets, extending as far east as East Thirty-sixth Street, and one between East

Stark Street and Hancock, extending to East Twenty-eighth Street, were annexed in 1891.

The city of Albina was incorporated in 1887. It extended from Hancock to Morris streets and from the river east to East Seventh Street. It was extended to Killingsworth and East Twenty-fourth streets in 1889, and further to include the upper peninsula in 1891.

Later, in 1891, the three cities, Portland, East Portland, and Albina, were consolidated into one city, and have so remained to this day.

In 1893 the limits of the consolidated city were extended, making the boundary about as follows:

East of the river, the north boundary followed the Columbia Slough Road and corresponds to the present boundary as far west as the Spokane, Portland and Seattle Railroad cut through the peninsula. The east line followed East Forty-first south to Sixty-fifth Avenue and East Twenty-fourth Street to the Multnomah County line.

West of the river the boundary followed the present limits except for the recent annexation to Linnton and a small strip near Council Crest, which was annexed in 1906.

In 1905 one square mile was added between East Stark and Division streets, and extending to East Sixty-second Street.

In 1906, besides Council Crest, there was annexed about four square miles on the east side between Hawthorne Avenue and Fremont Street and between East Forty-second and East Eighty-second streets.

In 1907 about one square mile was annexed in the vicinity of East Sixty-second Street and Fremont, and the next year another small tract

was annexed in the same vicinity. These two additions completed the growth of the city in that vicinity to the north and east.

In 1909 about six square miles were added in two tracts. One took in the territory from East Eighty-second Street to East Ninety-second Street between Hawthorne Avenue and Fremont Street.

In 1911 the remaining territory west of Forty-fifth Street and south to the county line was annexed.

The town of Lents was annexed in 1913. This territory lies between Eighty-second Street and One Hundred and Second Street and extends from Fortieth Avenue to Seventy-fifth Avenue. It is the farthest east of any Portland territory.

Linnton and St. Johns were annexed in 1915. A part of the latter had been annexed to the old city of Albina, but had been taken away again when St. Johns was incorporated in 1903. The northern boundary of St. Johns Addition is Columbia Slough, but it also includes a strip along the right of the Spokane, Portland and Seattle Railroad as far north as the Oregon Slough.

A small piece of the river-front below Swan Island on the east side had been omitted. The city had grown around it but it was not legally in the city until annexed in 1920.

The last addition is the small tract on which the Shrine Hospital is located at Eighty-second and Sandy, which was added in 1924.

The present area of the city is about 68 square miles. The land area has grown at the average rate of one square mile per year.

In the earlier part of the history the annexation was by an act of the state legislature, since the adoption of the initiative method is by a vote of the people living within the territory to be annexed. Before the City Planning Commission was organized in 1919, there was no authority to supervise the making of plats for the new additions to the city. The owner of the tract was free to arrange the streets as he wished. The results can be found today in streets of varying width and irregular connections.

There are some sections nearer the center of the city than much of the city where the people do not wish to come into the city. They have the most essential of the city services, as schools, water, lights, and even fire protection, without the city tax levy.

The map which is used to illustrate the growth, indicates the location, shape and also the date of annexation. A careful study will make clear the various additions.

What is the Planning Commission?

From the facts of how Portland grew and the results as seen in the city, it must have been clear that some way should be found to prevent similar mistakes in the future, and in some degree correct the most annoying errors of the past.

The Planning Commission is appointed under the authority of state law. To prevent the repetition of some at least of past mistakes, this commission is given the authority to pass on all plats for the subdividing of land six miles outside of the city limits. This insures a fitting of the new tracts into the city plans when the time comes to combine these outside tracts with the city. It also assures proper connections and trunk routes.

Mr. C. A. McClure, secretary of the Planning Commission, in the Civil Service paper, has the following to say:

"City or town planning is the guidance of the physical development of communities in the attainment of unity in their construction. Wherever in any locality a sufficient concentration of population has occurred to create complexity, here will be found a network of interests, each seeking its expression in the physical life of that locality; it is the task of city planning to advise and instruct these interests so that each may attain the maximum development possible, that no one interest may by its growth cast a shade that stunts some other phase of community life.

"City planning is not a movement to make the city beautiful in a superficial sense. Its problems are fundamental. It seeks to provide

facilities that concern everybody and for everybody's common good. It seeks to save waste, the waste due to unskillful, haphazard, and planless procedure. City planning saves far more than its cost by developing a plan so that the right thing may be done at the right time in the right way. The cost of one mistake on the construction of a building or the development of a highway will pay for very many hours' work in the drafting room. In other words it is cheaper to correct mistakes on paper than it is on the ground.

"In this country the planning of localities is usually referred to as "city" planning. This is no doubt due to the fact that until recently all our planning legislation applied only to cities, and interest in planning was confined almost exclusively to large cities. In several of our states planning laws for towns and villages have recently been passed, of which, however, little use has as yet been made. The Oregon law gives the Planning Commission jurisdiction six miles outside the city limits of the city in which it is organized.

"It is essential that every locality in which any degree of concentration has occurred or may be expected should be regulated in its growth; the smaller the place the greater being the opportunity of planning. For good or for ill, as soon as two roads of a given width cross at a given place and a building starts at the intersection, important features of the future community, its life and growth, have been carelessly, perhaps, but in all probability irrevocably fixed.

"Most European cities and some South American cities have developed municipal regulation so as to control the development of their cities

to conform to a predetermined plan. The result of this regulation is now apparent to every visitor and student of city development. The larger municipal problems such as transportation and highway systems, water works, water front development, including harbors and docks, parks and playgrounds, have all been given a careful study and have been developed to a very high degree by the support of law and public authority.

"Since the purpose of city planning is the attainment of unity in city construction, it includes not only the planning of the community as a whole but of any portion or detail of it, viewed as a part of the entirety. Thus the location of a park and its transverse walks and drives, in their relation to the thoroughfare system of the city, and the determination of the general character of the park as a part of the entire recreation system of the city, are functions of city planning no less than of landscape architecture, the determination of details of the scheme of planning, of scenic drives and walks, are matters of landscape architecture into which the city plan cannot afford to go without risk of dissipating energy and failing to accomplish its larger object of general co-ordination.

"A scheme of main trunk sewers, their controlling grades, capacities and points of outfall as relating to street locations, is a matter of city planning no less than of sanitary engineering; the detailed design of these sewers and the design of local laterals, is an important matter of sanitary engineering but of minor concern to city planning.

"City planning is sometimes thought of as the planning only of the public features of a city, such as its streets, parks and public buildings.

Most of the land within a city is however, privately owned and used; and the entire city needs to be planned so the development of this land can be guided. For the most part city land in private use is destined for the site of buildings. Almost invariably the construction of buildings in cities is governed by a large and detailed building code, most of which consists of rules with regard to stress and strains, the choice of materials for fire proof buildings, the minimum width of the stairs, plumbing and etc. This is a science into which the planning cannot go. It can deal, however, with those aspects of buildings which more directly affect the use of other properties, such as the height and area and their general use, especially when these rules vary in different parts of the city, thus establishing districts each to some extent with a character of its own.

"Of the buildings of the modern city, residences are by far the most numerous. In the construction of these, city planning may regulate the more general aspects, but cannot go into detail.

"There are two main divisions to city planning. First, cities and towns planned in advance of settlement; as an example of this we have Longview, Washington. Many days or even months were spent in developing this city on paper before actual work began on the ground. The outcome of this careful planning is shown in the final result. A city laid out with wide highways leading into it from the surrounding country, the residential district laid out to a plan which will develop each parcel of land to its best advantage. The business streets wide and so located as to best handle the business for many years to come.

"The second division consists of replanning or remodeling existing cities. Under this division comes Portland. It is much more expensive to replan a city and develop it to twentieth century needs than it would be to start out developing from a clear field. It is seldom possible to foresee with accuracy the future of a town or city and to plan for its continual growth from the beginning. When, however, a small population has been attracted to a town by natural causes and indications are that because of its location, climate, center of trade and commerce, and other forces, it is evident that the site will eventually develop into an important city then it's time action should be taken to plan and replan the town so as to provide satisfactorily for its future.

"Portland now has a population of three-hundred thousand, by its present rate of growth in a generation or less it will reach the one-half million point. Now is the time to get busy and have our city in shape to take care of the needs of the one-half million population. This will cost money but not near the amount that it will cost in the future, because as the population increases the value of property in the part affected will increase accordingly. The men who laid out the old cities as Boston or London provided for the needs of the times, but did not foresee the development these cities would make, but their successors of years later who vetoed the plan for the improvement of Boston after the fire of 1872, or Christopher Wren's plans for the improvement of London, displayed a lack of judgment and foresight in providing for the growth of these cities. Even in those days it was apparent that London and Boston were destined to become great cities. It is not too late to begin on the replanning of

Portland and it surely is not a bit too soon to begin. The first step has recently been taken in the development of the west side water front, but we should not stop there. The east side water front also should be developed, additional arterial highways should be planned, bridge approach streets should be widened, study should be made for location of future bridges over the Willamette River, and industrial sites should be laid out and developed. Portland has the ideal locations for this development. One is the vast area of level land lying between Portland and the Columbia River, the other is the Sauview Island district. These two districts alone with proper development would open up an area suitable for manufacturing projects, that when completely utilized, would make Portland one of the leading manufacturing cities of the country.

"Portland has not as yet made many of those public improvements that are so essential to its modern life. Its streets are still obstructed by poles and wires. Many of its streets are narrow. Its blocks are short, and in general the plan does not fit the needs for modern automobile transportation. Many of its school grounds are small, playgrounds are inadequate in number and size, water front unattractive and at the present time being in private hands it can only be developed as individual units which will of necessity cause a larger expenditure for administration and maintenance than would be necessary if it were developed under a comprehensive plan by one organization.

"Portland still suffers from the haphazard, piecemeal, short-sighted development program of the early days when a mile back from the river was the wilderness and many of the people were saying the very thing that some say today, "Portland has reached its limit. It cannot get much larger. Why worry about wide streets, improved waterfront or new bridges?"

"It is true that if this were true there would be no cause for planning for the future, but it is also true that Portland cannot stand still (no city can), it must go ahead or drop back. With natural advantages Portland has it cannot stand still, it will go ahead in spite of those who think otherwise, therefore it is imperative that as you plan for the future development of your factory, your business, your home or what ever it may be, you should also plan for the future development of your city."

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What are the Transportation Problems?

In order to understand fully the problems of Portland's transportation we must take note of the natural features of river, hills, and level land. The river is the fundamental fact and accounts for the location of the city. It also presents one of the major problems as it divides the city. The bridging of the river is one of the chief problems of transportation.

The hills on the west account for the growth of the east side. It is easier to cross the river than to climb over the mountain. The building of roads over, around, or under the west side mountain is a major problem in itself.

As already remarked, Portland was not planned; it just grew. The two real radial streets are the result of this growth rather than any foresight. The Sandy, once a country road, is lost at East Sixteenth and Davis streets. The Foster Road has just been given an entrance into the city that is adequate. The Macadam road on the west side from the south is lost in confusion of railroad tracks and sharp turns. Milwaukee Street, the only opening from the southeast, is narrow. Relief is needed here. The highway down the river (the St. Helens Road) has created a need for an outlet in that direction. No road was needed to serve that section down the river until the advent of the automobile. There was no productive area near the city, due to the hills reaching to the river side. The river furnished a means of transportation from that section below. From this hasty view we have the foundation of the overland traffic entering the city.

The City Planning Commission came in 1919 as the result of a legislative act. One of the first problems to engage the commission was the matter of major traffic streets. To understand properly the commission's plans, the map prepared by the commission must be used. Each classroom should have one of these maps. The title is: Major Traffic Streets and Boulevard System of Portland, Oregon, Adopted by the City Planning Commission December, 1920 and by the Advisory Park Board January, 1921. Copies may be secured from the Secretary of the City Planning Commission.

It should not be a matter of surprise that the needs of modern transportation were not foreseen when Portland was started. If someone fifty years ago had foretold accurately what is now the everyday common practice, he would have been laughed at for his trouble.

The three new bridges are steps in the program which the commission outlined in 1921. The completion of the Burnside Bridge has demonstrated what the City Planning Commission foresaw. But the fine wide bridge cannot serve its purpose fully unless the approaches are also wide. Traffic cannot be forced through a small bottle neck.

The east approach has been cut back to Grand Avenue, and the widening to East Twelfth Street to be extended through to Sandy at Sixteenth has been approved and will come soon. On the west side the approach stops at Third Street. The only relief is for some of the traffic to be diverted to Couch Street. On the south side of Burnside, Ankeny is of almost no use; it is only an alley at best. The widening of Burnside west of Third Street is a future problem.

The new Ross Island bridge where the streets have been changed to afford an approach is now serving the southeast section of the city. The

Foster and Powell Valley roads are now of much greater use because of the new bridge. The Ross Island and Sellwood bridges have relieved the congestion once so heavy on the Hawthorne Bridge.

The Broadway Bridge has the most serious congestion of any of the bridges. This is the result of the large number who must use it and also because the Steel Bridge does not get its share of the traffic. This is due to the poor approach on the east side which will be improved if the recommendation of the commission can be adopted. The recommendation is to cut a diagonal street to connect with both East Seventh and Vancouver Avenue, which would lead much of what now goes to the Broadway over the Steel Bridge.

The improvement of the Broadway Bridge has been definitely outlined and will in the near future be completed. The better approach to the east side, with the ramp to lead from the turn at the west end, to pass over the railroad tracks to meet the grade at Park and Hoyt, will greatly increase the usefulness of this bridge.

Below the Broadway Bridge the Planning Commission suggests two new bridges. One of these is to replace the St. Johns ferry. This project failed to pass at the election in the fall of 1926, so must wait until it can have the approval of the voters. The other lower bridge is to cross from near the foot of Russell Street on the east side to the corner of Fourteenth and Raleigh streets on the west side. This is a future problem which some of you may have an opportunity to vote on. When that bridge is built, Fourteenth Street South will become a heavily used street. To give a better outlet to the lower river points, it is proposed to extend Front Street along the riverfront to at least the point where the St. Helens Road meets the Northern Pacific north of the Guild Lake flats.

The problem of the connection with the rich country west of the city is to get over, around, or under the mountain which is between. The Terwilliger Boulevard passes around the shoulder of the high land. This is not a heavy traffic road so does not meet all needs. The project of a tunnel under the mountain has failed, due to an adverse court decision.

The Canyon Road finds a way over by using some hard grades. Since the failure of the tunnel plan, it has been determined to relocate and improve the grades of the Canyon Road. This is now under construction. The new road will be the best solution for some time for a heavy trunk route to the country on the west.

To bring relief to Milwaukee Street on the east side from the south a new street is proposed. This is to use East Seventeenth Street from the Powell Valley Road along the lower land parallel to the Southern Pacific railroad to the city limits on the south. This would be a direct service to the industries near the railroad, as well as a relief to the congestion on Milwaukee Street.

To care better for the traffic on the west side south of the Hawthorne Bridge it is proposed to have a heavy traffic road on the river bank to the Sellwood bridge. This would serve the industries on the river as well as afford relief to the Macadam Road. These are all a long look ahead, which is the real function of the Planning Commission.

The West Side Water-front Project has a direct bearing on the traffic problems and can well be studied in this connection. This project has been under consideration since 1919 and is now under way. Briefly this involves the building of a water tight sea wall from Glisan to Madison

streets, high enough to prevent the water from reaching the basements during the flood season. This wall is to run direct from Pine Street to Madison, which will widen the land there east of Front Street.

Also all the sewers which now empty into the river along this section are to be connected to an intercepting sewer and passed over the sea wall at one point. Front Street is to be widened to 100 feet and Madison Bridge approaches on the west side will be raised to pass over Front Street, as now is done by the three lower bridges.

The plans also provide for a union electric depot, to which all electric trains will go. This will give relief from the delays now caused by these trains on Tenth Street, Fourth, Salmon, Jefferson, as well as First and Second streets. The public market is to be moved from its present location on Yamhill Street to this water front area, where much better facilities can be had.

The benefits and advantages of this project as outlined by the city engineer are: (1)

"(1) The automobile congestion in the downtown district will be helped by the removal of tracks from Jefferson, Yamhill and Flanders streets."

"(2) The removal of the tracks from Front Street and the widening of Front Street, and elimination of the tracks from Fourth and Tenth streets would give these as wide north and south arteries."

"(3) The elevation of the bridge approaches above Front Street would separate the grades of the interurban railways from the heavy traffic over the bridges, thus eliminate many delays."

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(1) City Engineer's Annual Report 1923.

"(4) The rebuilding of the present wooden docks by the sea wall and the fill behind it will eliminate the offensive sewer endings and do much to exterminate the rats that now infest the waterfront."

"(5) The sea wall and sewer will prevent the flooding of the downtown basements. An actual survey of the annual loss from this alone would pay 7% on \$1,000,000."

"(6) The replacement of the dilapidated wooden waterfront buildings, would in the opinion of the Fire Insurance Rating Bureau, reduce the premium rate on the blocks between Front and First Streets 12½%."

The construction of the sea wall and the intercepting sewer is now under way by the city. The other changes will follow. The expense of the wall and sewer will be borne by the city, the other items will be paid for by the property owners benefited by the changes.

The streams of traffic can well be called the arteries of our civilization and as the flow of these arteries is being constantly accelerated there is an ever increasing demand for improvements, for the better physical condition as expressed in easier grades, more direct routes, fewer curves.

The typical American city is an expression of our national ambition to grow faster than any other place with the same opportunity. This growth is becoming each year more dependent upon automobile traffic. This means in most cities an extensive program of street widening and extensions. The automobile is the greatest factor in modern life. But few realize that as a vital transportation factor we have only begun to feel its effects. The business district of our city is more beautiful than a generation ago, yet

it is perfectly adapted to the transportation of that date. The only noticeable change is the lack of any provision for hitching horses to the curb. The corner that formerly commanded the business of a two mile radius can now draw from a district sixty miles wide. This means that the corner, in order to derive this benefit, must expand. A city must go out, or up, or down or all three ways. Men are even yet building million dollar stores on the same line and grades that they used in the days of the horse and buggy.

The future business establishments must provide for the automobile. This may be done in several ways. The most obvious is to set back the property line and widen the streets, thus allowing more cars and people in the same street. This solution, like many obvious solutions, is perhaps not the best. There is a limit to the relief that can come in this way. The pedestrian will always be the spender of money. As long as a man is in his car he cannot spend anything. The wider the street the harder it is for the pedestrian to stem the tide of traffic, therefore the plan of widening the streets will not do for long.

The solution which seems most advisable, that takes the greatest account of the new methods of transportation, is the one that separates the wheel traffic from the foot traffic in a vertical plane. This will bring the car right into the place of business. This however means second-story side walks for our downtown business districts. Set aside the ground or main floor for parking and stairs. Bridge the streets so the purchaser may go from store to store and when his business is done descend to his car and speed away. Is this picture only a dream?

The latest idea in our own city is to have underground crossings at the congested corners, much like those under the west approach of the Burnside Bridge. The traffic officers are now urging this as a solution of the dangers, especially where many children must cross busy streets on the way to schools. These are in use in other cities now, as for instance Los Angeles. The Parent-Teachers Association has been investigating the underground crossings, which means that the matter will soon be urged for general consideration.

Transportation has been the chief factor in promoting progress and in the creating of wealth. It is the chief agency in the growth of cities and it will be the determining factor which will decide whether the city of the future shall mark the zenith of man's constructive art or his inability to administer the huge organization his own energy has created.

How to Prevent Traffic Accidents

Captain Fred M. West, in Civil Service, April, 1924, says the underlying cause of most accidents attributed to vehicles is recklessness, undue haste, carelessness and thoughtlessness. (1)

"In most instances the injured persons are victims of accidents which could have been avoided, had ordinary care been exercised, either by themselves or the driver of the vehicle involved. Some drivers consider the public highway as an individual grant and look upon the pedestrian as a

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(1) Civil Service, April 1924.

sort of nuisance that deprives them of their privileges. On the other hand there are many pedestrians who do not recognize the rights of vehicles, and who think that vehicles should at all times subordinate their rights to those of a person crossing, whether in the middle of a block or elsewhere, and no matter in how careless a manner.

"There is no doubt that could drivers and pedestrians be educated to respect the rights of one another in their movements on the streets, highway accidents would be reduced to a minimum. It is difficult to suggest a best way in which it might be done. It behooves the entire public to govern their movements on the streets with regard to their own safety as well as that of others.

"While drivers can not be too strongly impressed with the necessity of operating their vehicles at all times in a careful and prudent manner, and using the greatest caution in approaching street corners, pedestrians should be impressed with the fact that they confine themselves to cross walks.

"The prevention of highway accidents rests largely with the people themselves. Too often persons have met with accidents on the streets through placing too much dependence on others without taking any precautions to safeguard themselves. When people can be made to realize that through the proper exercise of diligence and no matter how trivial, and to have regard for their own safety and the rights of others then, and only then, can definite progress be assured any program that has for its objective the prevention of street accidents."

Readings for the Teacher

1. Beard, Charles Austin. American City Government. New York: Century Company, 1912.
Chapter IX, The Streets.
2. The American City. General Reference.
(The problem of auto traffic in cities, is under earnest consideration, which is reflected in magazines rather than books.)

What and Where are the Public Docks?

The Commission of Public Docks was created a separate department of the City of Portland by an amendment of the City Charter, adopted November 10, 1910. The more important duties and powers delegated to the Commission by Charter Amendment are:

1. To prepare for publicly owned docks and other shipping facilities of such number and in such places as it may deem feasible and proper.

2. To purchase or acquire by condemnation such lands as may be necessary for the use in construction of any publicly owned docks or any other structure.

3. To have exclusive charge and control of all of the Port's property belonging to the City and waters adjoining thereto, together with the operation of said property.

4. To have exclusive government and control of the entire water front of the City not owned by it.

5. To regulate the building, repairing, etc. of all structures on the water front, within the limits of the City of Portland.

6. To establish, regulate and later wharfage, dockage, storage and all other rates and charges on all publicly owned and operated water front facilities.

The total authorized bond issues for the provision of municipal, commercial port facilities have been \$10,500,000.00. Out of this amount the Commission has constructed and has in operation the following terminal facilities:

Terminal No. 1: Quay dock 995 feet long, with transit shed 935 feet long and 147 feet wide.

Pier A—484 feet long, with transit shed 176 feet wide.

Pier B—500 feet long, with transit shed 187 feet wide.

Warehouse No. 1: One-story structure about 190 x 200 feet, having covered area of 37,600 square feet.

It is situated in the west side central railroad terminal and warehouse district.

Terminal No. 2: Situated in the east side industrial and jobbing center; it is used both by Intercoastal and coastwise shipping.

Terminal No. 3: Used mostly for storage of slow moving commodities, for which space is not available at the other municipal terminals.

Terminal No. 4: This is the largest and most important of the municipal terminals. The site contains 165 acres, with a harbor frontage of 3035 feet. The location, as you all know, is in the lower harbor, opposite Limton. On it have been constructed the following facilities:

Pier No. 1: This pier is 1500 feet long and 221 feet wide, which gives a total berthing space of 2105 feet.

Pier No. 2: This pier, which is also 1500 feet long, and has a width of 214 feet, and is covered with a transit shed on its outer half.

Pier No. 5: This pier has a total berthing space of 1565 feet. In the rear of the quay dock is constructed a large bulk storage plant for handling of coal and phosphate rock.

Grain Elevator: This elevator, which is of fireproof construction throughout, was completed in 1920. It was designed especially with the idea of successfully handling and cleaning wheat of the many grades and varieties produced in the Pacific Northwest.

Oil Bulk Handling and Storage Plant: For the handling and storage of vegetable oils and molasses, fourteen steel tanks on concrete foundations were constructed and have a combined capacity of 1,486,800 gallons.

Bulk Handling and Storage Plant: This installation consists of covered concrete bunkers, together with necessary car unloading devices and conveyors for handling materials. It was constructed primarily for the purpose of handling bulk phosphate rock, of which immense high-grade quantities are available in the Port's tributary territory, but is capable also of handling other bulk material, such as coal, ore concentrates, manganese ore, etc.

Cold Storage Plant: This plant was constructed in 1923 to provide refrigerated space for transit shipments of apples received for export. The refrigerated space is 120 feet by 200 feet, divided into four rooms, with a capacity of 106,000 boxes.

Ventilated Apple Storage Warehouse: This adjoins the cold storage plant and is 410 feet by 200 feet, with a maximum capacity for about 350,000 boxes of apples.

Fumigating Plant: This plant was put in operation in April, 1923, and has since been used in fumigating all of the oriental cotton arriving in this port, in addition to other commodities received

requiring reconditioning. The plant has a capacity of 250 tons per day and is also equipped for reconditioning of rice, peanuts, beans and other food-stuffs.

Track Scale: To avoid the necessity of having to transport cars to railroad yards, which are some distance from this terminal, to be weighed before being loaded, a 150 ton standard railroad track scale has been installed, and is being operated under the supervision of the Weighing and Inspection Department of the Trans-Continental Freight Bureau.

Administration and Other Buildings: For the accommodation of the terminal forces, Government grain research work, and branch office of the State Grain Inspection Bureau, a large, two-story office building was constructed, and for the purpose of enabling employes and others to obtain meals while working at this terminal, the Commission has for several years had a restaurant in operation seating 200 people, where meals are served at reasonable prices at all hours, when work of loading or discharging vessels is being done. There is also a welfare building, with hot and cold shower baths, lounging rooms, etc.

General: At all of the municipal terminals vessels are supplied with city water at ship's side. The charge for supplying water to vessels is at the rate of \$1.00 for five thousand gallons or less, and for amounts in excess of five thousand gallons, 20 cents for each one thousand gallons.

For the accommodation of vessels berthed at Terminals Nos. 1, 2, and 4, facilities have been provided for connecting such

vessels to the terminal light circuits, the charge for such service being based on meter consumption, and for the convenience of vessels berthed at Terminals Nos. 1 and 4, a number of telephones have been installed along the face of the transit sheds, where they are available for the use of the ship's crew at any time.

Dry Docks: There are two floating dry docks in the port, both owned and operated by the Port of Portland. These dry docks are a publicly owned utility. All vessels and ship repairers use the docks on equal terms. The Port of Portland Commission does no work on vessels, but local contractors are equipped to perform all kinds of ship repairs. Competitive bids for repair work can readily be obtained at this port.

**Private Water Front Facilities under Control of
Commission**

General Cargo Docks:

Oregon-Washington Dock (Union Pacific)
McCormick Terminal (Union Pacific Dock)
Albers Dock No. 1
Albers Dock No. 2
Albers Dock No. 3
Supple's Dock
Admiral Line Terminal (Pacific Steamship Company---
Spokane, Portland and Seattle Railway)
Lackebach Terminal

Grain Docks (also flour):

Portland Flouring Mills Dock
Pacific Coast Elevator Dock
Albina Dock
Crown Mills Dock
Mersey Dock
Albers Dock No. 2
Columbia Dock No. 1
Irving Dock
Globe Milling and Elevator Dock
Northwestern Dock (Union Pacific)

Lumber Docks:

West Oregon Lumber Company Dock
Beaver-Limton Mills Co. Dock
St. Johns Lumber Company Dock
Clark & Wilson Lumber Company Dock
Peninsula Lumber Company Dock
Duluth Oregon Lumber Company Dock
Eastern & Western Lumber Company Dock
Dollar Portland Lumber Company Dock
Inman-Poulsen Lumber Company Dock
Harvey Dock
The Shanghai Building Company Dock

Private Grain Elevators:

Kerr-Gifford Company (operators)
Strauss & Company (operators)
Balfour, Guthrie & Co. (owners)

Oil Docks:

Associated Oil Company
Standard Oil Company
Union Oil Company of California
The Shell Company
General Petroleum Corporation

Harbor Protection: The harbor is under the protection of an efficient day and night patrol, acting under the direction of the harbor-master. Two powerful fire boats, maintained by the City, are always available for immediate use.

An important export business of the port is shipment of apples, in which Portland leads all other United States ports, with the single exception of New York. During the 1925 season, several countries received apples from Portland which heretofore had received none from this port. The largest buyers of apples, exclusive of Great Britain, the best market of them all, were Belgium, Holland, Germany, France, Norway, Denmark and Finland. Portland is the export center for the canned goods and dried fruit produced in the great Willamette Valley and throughout Oregon and parts of Washington.

Another commodity which showed a considerable increase was that of news print and wrapping paper. The Commission has continued to handle at Terminal No. 4 the wool clip for the Idaho Pool, the greatest amount stored at one time being about 2,500,000 pounds. The export of automobiles and auto supplies is becoming an important item in the port's business. Exports during 1925 were double those of 1924. The destinations of the automobiles were China, the Philippines, Japan, Java and India.

Harbor and Port

Portland is the same steaming distance from oriental ports as Puget Sound ports, and, like Philadelphia and New Orleans, approximately 96 nautical miles from the sea. The harbor of Portland is on the Willamette River, which flows into the Columbia River about ten miles below the shipping center of the harbor, which has a width of 900 to 1600 feet between the established harbor lines. Within the City of Portland there is a harbor frontage of nearly 29 miles, and if extended to the confluence of the Willamette and Columbia Rivers, 37 miles. Of this, 1.80 miles is under municipal control; 3.22 miles for private general cargo, grain, lumber and fuel docks, etc. used for ocean commerce; and 1.85 miles for coastwise and river steamers, ship repair plants and industries. A minimum channel depth of 30 feet at low water exists throughout the harbor and this depth is to be found at nearly all of the terminal docks and piers used for ocean-going commerce. A project for a 35 foot low water depth in the Willamette River has been adopted,

and this depth is gradually being established throughout the harbor and along the principal shipping terminals. This work is being done by the Port of Portland Commission.

Channel Conditions: The June, 1924 survey of the entrance to the Columbia River by the United States Engineers showed a channel depth of 45 feet at low water for a width of about 1200 feet, and a 40 foot low water depth for a width of about 7000 feet. During the year there was a further improvement in the channel depth, due to the scouring effect produced by the jetty construction, completed in 1917. The survey of June, 1925, showed this increase to be 46 feet at low water for a width of about 2000 feet, and 40 feet for a width of about 7000 feet and there is every indication that in a very few years the low water depth at the Columbia's entrance will be 50 feet, a depth much greater than that of the Panama Canal. The mean rise of tide is 7.5 at the entrance, which is well supplied with aids to navigation, consisting of light ship, gas, bell and other buoys, and permanently lighted ranges, permitting safe and uninterrupted navigation by vessels of the deepest draft at all times.

The Federal project for the improvement of the ship channel in the Columbia River from the mouth of the Willamette to the Pacific Ocean was adopted more than ten years ago, and provided for a low water depth of 30 feet, for a width of not less than 300 feet in straight courses, and 500 to 600 feet in bends, and has been fully completed for several years. Channel dredging, which has been carried on since the project completion, was for the purpose

of maintaining the project depth and for the gradual widening of the dredged channel, particularly in bends. The Columbia River ship channel is yearly becoming more stabilized by the construction permanent contraction dikes located at points where annual dredging was required in previous years, with resultant greatly decreased dredging operations to maintain the project channel depth.

The mean tidal range of the mouth of the Columbia River is 7.5 feet, and at low water stages in the Columbia and Willamette Rivers there is a tidal effect of about two feet at Portland.

The revenues accruing from the operation of the municipal terminals have been very satisfying, as shown by the attached financial statement.

The municipal terminals of the port are directly operated by the Commission of Public Docks and not leased, being thus available to all users on equal terms. The offering of an equal opportunity to all shippers is the reason for the city entering the field of commerce. Portland owes its location, as well as its growth, to its commercial advantages. To permit shipping to be controlled by private interests would endanger the usefulness of the port. The city, by its ownership and control of harbor facilities, has insured itself against the danger of a monopoly of shipping. In addition to the general benefit of an increase in business for the Port of Portland, the charges paid by shippers and vessels using the public docks shows a fair return on the investment in revenue paid for use of its harbor facilities.

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How is the City Kept Clean?

The greatest need of a modern city is an adequate supply of pure water. The next most vital necessity is the proper disposal of its waste materials. The Portland water supply is treated in another section and will be passed, to consider the next problem, i.e. waste and refuse. For convenience in this discussion, we may make use of the same distinction which is used in the handling of the materials.

The first to be considered is garbage, which may be street sweepings, ashes, and the discarded materials common to the household garbage can. The other is sewage, the discharge of sewers.

Portland's care for its streets is a city function. The Bureau of Street Cleaning is under the Commissioner of Public Affairs. The cleaning applies to the paved streets. The report of the Street Cleaning Department shows a total of 515 miles of hard surfaced streets at the beginning of 1926. New paving is being laid at the rate of about 50 miles per year. This is making an increasing demand on the service.

The cost of this service is one of the many items for which the tax money is spent. The cost for the year of 1925 was \$279,186.00. The cleaning covered a total mileage in the year of 40,745 miles and removed 32,502 cubic yards of material. The cost on the basis of miles was nearly \$6.00 per mile. Fortunately, Portland does not have to remove much snow. However, included in the amount above is an item of \$2257.76 for the removal of snow. New

York City has spent over one million dollars to clean the streets after one storm. A snow storm in a modern city is a joy only to the immature and the unemployed.

The unit cost per mile has been reduced, first by the use of motor equipment. During 1925, the change from horse drawn cleaners was fully made. The horses and equipment was turned over to the Bureau of Parks. The second reason for the reduction of unit cost is because of the increase of paved streets to be cleaned, which were covered by the same equipment, however, with some reduction in frequency of cleaning. The disposal of this material from the streets will be discussed later.

The collection of garbage from homes, hotels, restaurants and stores is done by men who are licensed by the city. They secure their own customers, who pay them for the collection and removal of the garbage. The city bears the cost of the disposal of all garbage, whether from the street cleaning or from private sources. Two methods of disposal are used. The sanitary dumps and incineration. The 1925 report states that 87 $\frac{1}{2}$ % was disposed of in the dumps and fills, leaving but 12 $\frac{1}{2}$ % for the incinerator. At the fills, as the garbage is dumped, dirt and sand is spread over the garbage to prevent the odors from escaping and to make a more firm body to the material.

The incinerator is located in the north-west part of the city on Guild Lake. The city owns a tract of ten acres adjoining the incinerator, where the refuse from the incinerator may be dumped.

This dump is also the graveyard for discarded auto frames and fenders. It is also the only safe place during the dry season for burning the refuse from wrecked buildings. The total amount burned in this incinerator during 1925 was 10,818 tons. Included in this was 9312 dead animals; of these, 9193 were cats and dogs. Not just a nice place, but very useful? The cost of the disposal at the incinerator was 65¢ per ton, while at the dumps it was only 35¢ per ton. The total expense of the garbage disposal of the city in 1925 was \$39,478.54.

Portland began sewer construction in 1875. At the close of 1925, a total mileage of sewers had reached 825.65 miles, of all sizes, for which the city had paid \$11,475,236.00. Up to the present time the disposal of the sewage from this system had been very simple. Each trunk sewer emptied into the Willamette River.

The Pacific Engineer of May, 1927, has the report on stream pollution in Oregon, which was for the Public Health Section of the City Club of Portland. This report shows that more than one-fourth of the urban population outside of Portland is exposed to danger from polluted water. (1)

"Portland has a water supply of ideal purity and safety. Why then should we concern ourselves about the pollution of water supply in other parts of the state? Partly because we do not stay at home, and because the residents of other cities do not stay at home. Approximately three-fourths of the typhoid cases admitted to the Portland hospitals during 1926 came from outside of the

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(1) Pacific Engineer, May, 1927.

city. Swimming in polluted water is about as dangerous as drinking it.

"Because of its larger size, Portland is by far the worst offender among the cities of the state in the matter of stream pollution. We are very critical of foreign cities which carry their sewage in open gutters through the principal streets, but we are doing practically the same thing when we use the Willamette River as a trunk sewer through the heart of the city. There are over 50 sewers which discharge into the river. During high water, this does not make a gross nuisance, but in the summer with low water and a rising tide, there is little current. The sewage gathers at the outlets with results which must be left to the imagination. During the construction of the Burnside Bridge, the contractors were forced to divert a 24 inch sewer which discharged at that point because the conditions near the outlet were so disgusting that the workmen very properly refused to go on with the job until this was done." The report states that there is evidence that a number of cases of typhoid have been due directly to sewage pollution in the Willamette River.

Portland's use of the Willamette River as its main trunk sewer has already seriously lessened its recreational value. The completion of the intercepting sewer along the West Side water front threatens to create an intolerable nuisance at the point of discharge. It is undoubtedly true that Portland must ultimately provide for the treatment of its sewage. Here is a problem which must in time be solved. This can only be done by some method of

treatment which will make the sewage harmless and inoffensive.

The methods are now well known; the only objection is the expense.

It is expensive to keep clean, but vastly more costly both in money and life not to do so.

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How is the Water Supplied?

"The first public water supply for the City of Portland was established in 1857 by Stephen Coffin and Finice Caruthers. The plant was a very primitive affair. The supply main as well as the distribution mains were round fir logs with $2\frac{1}{2}$ inch holes bored through them. The water was brought from Caruthers Creek in the southwest portion of the city. In 1859 Coffin and Caruthers sold the plant to Robert Pentland. Mr. Pentland operated the plant until 1862 when, having met with financial reverses, he sold the plant to H. D. Green and H. C. Leonard for the sum of \$5400. In September, 1862, The Portland Water Company was incorporated by H. D. Green, John Green and H. C. Leonard, with a capital stock of \$50,000.

"In addition to the supply from Caruthers Creek, a well was dug and a pump installed at the foot of Market Street. This pump had a capacity of 300,000 gallons in 24 hours. The water from both the pump and Caruthers Creek was discharged into a reservoir at Fourth and Market Streets. Shortly after installing the pump, an additional supply was brought in from Balch Creek. A timber dam was built across the creek at a point which is now in Macleay Park and a six inch cast iron main was laid to the city. This main supplied the "high service," and the pump and Caruthers Creek supplied the "low service" districts of the city.

"In 1868, the city having outgrown the water plant, a new pumping station was built on the river bank at the foot of Lincoln Street and a pump of 800,000 gallons a day capacity in-

stalled. This station was again enlarged in 1871 and another pump of one million gallons a day was installed. In 1876, a new building was erected at the foot of Lincoln Street and another pump installed. This pump had a capacity of three million gallons per day.

"These pumps with Caruthers Creek and Balch Creek constituted the city's supply until 1883 when the company built the Palatine Hill pumping station, installed two pumps of a combined capacity of 16,000,000 gallons per day, and laid a 30 inch main to the 2,000,000 gallon reservoir at 6th and Lincoln Streets. When this work was completed the pumps at the foot of Lincoln Street were shut down and the Caruthers pipe was abandoned. The Balch Creek pipe was continued in service until several years later.

"In 1885 the State Legislature passed an act creating 'The Water Committee' of the City of Portland. After organization the Committee proceeded to select an engineer to examine sources of supply and make estimates of costs for a gravity supply system for the city. After corresponding with several parties, Mr. Isaac W. Smith was chosen as engineer.

"Investigations were made of Oswego Lake, Crystal Springs, Clackamas River, Eagle Creek and Bull Run River. The latter was decided to be an ideal source of supply. Early in 1886, Col. Smith, the engineer, was authorized to make surveys and estimates for the gravity supply from Bull Run River. Several preliminary lines were run and finally a suitable route was found, location made, plans, profiles and estimates made, rights of way and riparian rights

bought and contracts even let for building an intake canal at the headworks; also for a road from the present town of Bull Run to the headworks. Early in 1887 the water committee purchased the plant from the Portland Water Co., paying therefor \$464,551.00, the appraised valuation.

"In January, 1887, the legislature was asked to pass an act authorizing the committee to issue bonds so as to prosecute the work on the Bull Run project as it was desired to eliminate the expensive pumping system as well as to secure for the city a better quality of water. The act was passed all right but the governor vetoed it and it failed to pass over the veto. This held the Bull Run project in abeyance until a change in administration.

"In the meantime the population of the city was increasing so rapidly that a serious shortage of water was threatened, and in 1889, the engineer was ordered to proceed immediately to construct another pipe line to Palatine Hill and to install additional pumps. The contracts were let for this work late in 1889 and the work was completed early the following year. The legislature at its session in 1891 authorized a bond issue of \$2,500,000 for the purpose of bringing in a gravity supply from Bull Run river. Preliminary work was at once begun, rights of way bought, roads and bridges built, rights of way cleared, plans and estimates made and contracts let for the pipe line. Four reservoirs were built by day labor, by the city. The pipe line and reservoirs were completed in the latter part of December, 1894, and Bull Run water was turned into the city mains on January 1, 1895.

"Those who have investigated concede that Portland has as good, if not better, water than any city of equal size in the world, and it will continue good so long as the source of supply is protected as it is at present. The Bull Run River and all of its tributaries above the present intake at the headworks is within the boundaries of the Bull Run reserve.

"The Bull Run reserve was set aside as a reserve to protect Portland's water supply in 1892 by President Harrison. It is further protected by an act of congress passed in 1913. This act prohibits all persons other than government and city employes in discharge of their duties to enter the reserve. The act also prohibits the grazing of stock, building of roads, cutting of timber and settlements of any kind within the reserve. The reserve is well guarded during the dry season and all persons without a special permit are warned to keep out. All persons found trespassing are arrested and prosecuted by the federal authorities.

"The Bull Run reserve contains 222 square miles and the land, with the exception of a few small parcels, is owned by the City of Portland and the U. S. Government. The larger portion of the reserve is covered by a dense growth of timber and brush, and it is to protect this growth that such rigid rules are enforced. The timber and brush retards the melting of the winter snow and allows the water to run off gradually. Should the land be denuded of its covering of brush, timber and moss, the source of supply would soon dry up and our splendid water supply would be a thing of the past.

"The maximum flow of Bull Run river is Bear Creek, Cougar Creek, North Fork of Bull Run, Falls Creek and Log Creek, coming in from the north side and South Fork, Trout Creek, Camp Creek and Blazed Alder Creek coming in from the south side.. The source of the main stream is Bull Run Lake, a beautiful body of water situated near the summit of the Cascade mountains and about five miles northwest from the foot of Mount Hood. The water surface of the lake is 3174 feet above sea level. The lake is oblong in shape and is $1\frac{3}{4}$ miles in length and $\frac{3}{4}$ miles wide and is very deep. The bottom of the lake is composed of broken stone and boulders.

"There is no swampy or marshy ground in or around the margin of the lake and there is in many places not enough sediment in the bottom of the lake to seal the interstices between the broken stone. This condition caused many leaks through the bottom of the lake, especially at the western end.

"During high water in the lake, in the early summer there was some overflow at the southwest end of the lake, but the excessive leakage through the bottom of the lake reduced this overflow to a minimum. The largest and most numerous leaks were found to exist in the bottom of two arms in the northwesterly portion of the lake. The area covered by the leaks was found to be so extensive that it was considered to be impracticable to attempt to stop them by covering them with earth. After a thorough survey of the situation, it was decided to build a dyke across both arms of the lake, leaving the major portion of the leak on the outside of the dyke. This dyke, several hundred feet in

length, has been completed and has fully accomplished the result desired. In addition to the dyke, several thousand yards of earth and small stone have been dumped in the bottom of the lake at various points where leaks were known to exist. In this way, the most of the leaks inside the dyke have been stopped.

"A dam with gates for the control of the flow of water has been constructed across the old overflow channel. This dam raises the water ten feet above the bottom of the old channel and about thirty feet above the old low water level in the lake.

"The water available for city use, impounded in the Bull Run Lake storage basin, is in excess of ten thousand acre feet, or more than three billion gallons.

"When the gate in the dam at the lake is opened, the escaping water flows down the canyon about 600 feet to a basin entirely surrounded by hills. Here it disappears and does not show on the surface again for a distance of over one mile and at a point 104 feet lower than the basin where it starts on its subterranean trip. From here it runs in open channel for about one half mile and gradually disappears through the gravel. It comes out again at a point about $\frac{3}{4}$ mile farther along and at an elevation of 425 feet lower than the water surface in the lake. From here the water runs in open channel to the headworks twenty miles further down.

"Contrary to the belief of the majority, there is no glacial or snow water from Mount Hood flowing into the lake. The configuration of the intervening territory is such as to render this impossible. The origin of Bull Run Lake is very succinctly described

by Mr. Ira A. Williams, geologist, Oregon Bureau of Mines and Geology, as follows:

"Bull Run Lake is located in the bottom of a depression that was formerly occupied and largely formed by a glacier during the glacial period. The ice came through the V-shaped gap at the head of the lake and extended an unknown distance down the canyon of Bull Run River.

Bull Run Lake is to be classified as a glacial lake. Its formation resulted from the deposition of impervious glacial materials against the uphill front of a body of volcanic lava that came out of a series of flows in the bottom of the Bull Run canyon in glacial times. This glacial apron sealed the openings into the broken lava to an extent sufficient to cause the drainage waters to accumulate as a lake, with this barrier as its lower shore.

The water stored in Bull Run Lake will only be drawn upon during low water period in Bull Run River. This period, during dry seasons, usually begins about August 15 and ends about October 1. From ten to fifteen million gallons per day from the lake are usually sufficient to augment the flow of water in the stream to a point sufficient to fill the conduits to their full capacity.

The first conduit from the headworks on Bull Run River to the city consists of ten miles of 42 inch riveted conduit, is of lock bar steel pipe, and consists of ten miles of 52 inch pipe and fourteen miles of 44 inch pipe and has a capacity of 50,000,000

gallons in 24 hours. Coincident with the laying of the first conduit, four reservoirs were constructed in the city for storage of water, one on the south slope of Mt. Tabor at an elevation of 411 feet with a capacity of 12,000,000 gallons; one at Sixtieth and Division Streets at an elevation of 229 feet with a capacity of 20,500,000 gallons; one at Washington Park at the head of Madison Street, with an elevation of 300 feet and a capacity of 16,000,000 gallons; and one at the head of Jefferson Street at an elevation of 229 feet with a capacity of 17,600,000 gallons; and capacity of the four reservoirs, 66,500,000 gallons. At the time of letting the contract for the second pipe line, contracts were also awarded for two additional reservoirs at Mount Tabor--one at an elevation of 411 feet with a capacity of 50,000,000 gallons, and one at an elevation of 305 feet with a capacity of 75,000,000 gallons. This gives the city storage facilities in the six large reservoirs for 190,500,000 gallons.

In addition to the above large storage reservoirs, there are several small reservoirs, tanks and stand pipes in various portions of the city. The total storage capacity of all reservoirs, tanks and standpipes in the city is 193,896,800 gallons.

There are several pumps in different portions of the city used for forcing water from reservoirs and tanks to higher levels. At the City Park, there are two hydraulic pumps, with a combined capacity of 1,500,000 gallons in 24 hours; also three electric pumps with a combined capacity of 2,500,000 gallons in 24 hours. At Council Crest there are two automatic electric pumps with a combined capacity of 750,000 gallons in 24 hours. At Fulton, there are

two automatic electric pumps with a combined capacity of 1,150,000 gallons in 24 hours. At Sixtieth and Division Streets, there is one hydraulic pump with a capacity of 216,000 gallons in 24 hours. At Limton, there is one automatic electric pump with a capacity of 108,000 gallons in 24 hours, and at Whitwood, there is one automatic electric pump with a capacity of 108,000 gallons in 24 hours.

Since the purchase of the water system by the city, the consumers' rates have been reduced several times and the people now pay only about one sixth as much for water as they did under private ownership.

During the first year after the city took over the water system, the total receipts were \$97,000 and during the fiscal year ending November 30, 1922, the receipts were in excess of \$1,000,000.

In 1887 the Water Committee, before making a final decision on the water supply from the Bull Run River, employed Falkman and Reese, state chemists of California, to make an analysis of the water and they reported in conclusion that: "To sum up, the water ranks among the best on record and is excellently adapted for domestic use."

Later they had Mr. Williams Huntly Hampton of Portland make an analysis of water taken from the stream after a sudden rise, and he corroborated the statement of Falkman and Reese that he found the water to be very pure and in every way suitable for domestic purposes.

On July 6, 1891, East Portland was annexed to the City of Portland but the East Side Water Works was operated by the common

council of the City of Portland entirely independent of the Water Committee, until March 1, 1895, when it was transferred to the Water Committee in accordance with an act of the legislature directing the same.

At the time of the transfer, water was being pumped from wells near East 11th and Powell Streets, but shortly after the system was connected with the city mains, Bull Run water turned on and the pumps discontinued.

The city now owns all of the water systems within the corporate limits. There are many consumers outside the city who are supplied with Bull Run water by companies operating private plants, the water being supplied to them by the city through meters.

During 1921 and 1922 new head works were constructed on Bull Run River. A monolithic concrete dam 30 feet in height was constructed across the stream, sluice gates put in, and a diversion canal, several hundred feet in length, built, also a concrete screen house and power house fitted with link-belt rotary screens operated by electricity. The power house is fitted with two generators, one of 4 kilowatt capacity, and one of $17\frac{1}{2}$ kilowatt capacity. This furnishes light for all the dwellings, garages and buildings at headworks, as well as the roads and walks in the immediate vicinity, and operates the screens. The power plant is operated by water power, and the cost of operation is nominal.

"During 1924, a new pipe line was laid from the headworks to the city. This pipe has a capacity of 65,000,000 gallons per

day, making a total capacity of approximately 140,000,000 gallons per day which can be brought to the city by the three pipe lines.

Preliminary surveys have been made and plans are now being prepared for an additional storage reservoir in the reserve on the main Bull Run River at a point about six miles above the headworks. This storage reservoir, if constructed, will impound about eight billion gallons of water. This with the three billion gallons now available from Bull Run Lake will be ample to replenish the low water flow of the Bull Run River for several years."⁽¹⁾

The storage reservoir referred to above will be in use in the summer of 1928, which will prevent any shortage such as was felt in 1926. A tract of 550 acres on the Powell Valley road has been purchased to be used as the site for additional reservoirs. This has been urged for additional fire protection. The water held in the present storage could be used up in fighting a bad fire, or should the flow in the pipes be stopped for even a short time. Another means of preventing a shortage is in the wider use of meters. The amount which is necessary seems to be less when it all must be paid for.

Some of the problems which other cities have to meet to secure water will be of interest. The sources of water for cities may be classed under three heads, upland water sheds, rivers, and wells. The first is always to be preferred when available. Such a supply can be free from harmful bacteria. The mineral content of the water will depend on the nature of the rock formation of the

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(1) Civil Service, Chas. E. Oliver, Asst. Engineer, Bureau of Water Works

soil of the watershed. Shallow wells, when free from contamination, are satisfactory. Deep wells when they pass through a water tight strata give a supply free from harmful germs; these often carry more mineral matter in solution, making the so-called hard waters.

The use of rivers in their lower courses when carrying both sediment and bacteria is in many cases imperative, it being the only supply. However, the use of such water is not as dangerous as is commonly supposed. The experiences of London, England and St. Louis, Missouri, have shown this to be true. The treatment at St. Louis is typical of the methods of treating a supply which has sediment and harmful bacteria. The source is the Mississippi river after receiving the Missouri. The water is pumped by four pumps, each of which has a capacity of 30,000,000 gallons per 24 hours. Milk of lime and sulphate of iron are added. The water stands for 34 hours for the sediment to settle. The action of the iron and lime is to aid the finer particles to settle, also to remove some of the hardness. In the next basin the water is treated with ammonia sulfate alumina, from where it goes to the sand filters. It is then further sterilized with chlorine before it goes into the mains.

The cost of this purification is found to be \$11.80 per one million gallons. This on the basis of 135 gallons per day for a city of half a million people is about \$800.00 a day.

Portland is very fortunate in the source, quality and quantity of the water. We may say with no danger of contradiction that no city has a better water supply and very few have as good.

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How is Property Protected from Fire?

The peculiar feature of the firemen's life is the periods of comparative idleness, with the most violent and dangerous work when fighting a fire. The men in the Portland Fire Department are appointed under civil service regulations as are all city employees. The total number of men is close to five hundred. The department must be increased as the city grows. This expansion is dependent on the funds, which are subject to the will of the voters.

The work of the firemen makes a strong appeal to the popular mind, therefore the department can usually depend on the good will and support of the public. This also is due to the nature of the service which they give and the absence of that annoyance which is so often a part of the action of the policemen. The fighting of fires is a branch of civic activity in which the American cities have come to excel. Has this come as the result of the greater need than is found in Europe?

The Portland Fire Department was completely motorized in 1920. The few horses then on hand were given to the street cleaning and park bureaus. Fire boats for use along the waterfront were first used in 1893. The two boats now in use are soon to be replaced by improved models, using gasoline engines in place of steam, which will save much in cost of operation.

The most vital fact in regard to fire loss, which each of us must understand and remember, is the fact of the absolute wastage. It is not a shift of values, but a total loss of valuable material, which can never be returned or replaced. Insurance is not a saving of the loss, it is only a spread of the loss over a large number. The next important fact is that a large number, (some authorities say 75%) of fires are preventable.

"The fire loss of the United States and Canada is ten times that of Europe, based on population. The cost in the United States averages three dollars per head, while in Europe it is only thirty cents per head. If all the buildings which burned in 1925 in the United States were placed side by side on both sides of a street, these would reach from Chicago to New York. One seriously injured person would be found every one thousand feet. Each three-fourths of a mile a man, woman or child would be found burned to death. (1)

The right way to fight fires is before they start. If 75% of the fires are preventable then the right thing to do is to prevent as many as possible. An important help here is the better methods of construction. This is only made possible by a better building code and a rigid inspection to insure the code being enforced.

The most important and far reaching result will come from education, and the regular inspection of houses and basements by the firemen, who give good advice as to the best way to reduce the hazards. The appeals to the schools is another means of educating the people. The tabulation which follows, of the record in Portland of the number of alarms and the amount of the loss from fires, shows the reduction from 1915 to 1916. The program of education started in 1916. The sharp increase in 1922 can be accounted for by the activity of the insane fireman. This man would start a fire, then join his company and work as hard as any to put it out. He was under suspicion by the other firemen and watched by them for months before they finally caught him in the act of starting a fire.

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(1) Annual Report of President, National Board of Fire Underwriters, 1925.

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In a study of these figures, we must remember that during the period of thirteen years the city has been growing. The burnable values also have been increasing, so it would not be unreasonable to have a steady increase in the number of fires and amount of losses.

The following figures are from the reports of the National Underwriters. This is the record of Portland.

Year	Number of Alarms	Loss
1914	1854	\$1,762,492.00
1915	1225	1,289,372.00
1916	816	554,205.00
1917	824	275,744.00
1918	1230	403,943.00
1919	1121	417,774.00
1920	1156	562,851.00
1921	1313	723,111.00
1922	1341	1,456,618.00
1923	1447	1,235,918.00
1924	1943	975,950.00
1925	2922	1,109,567.00
1926	2185	1,027,003.00

The sharp reduction of both the number of fires and the property loss between 1915 and 1916 came at the time of the active campaign of educational prevention. It is only reasonable to credit the improvement to that work. The education in fire prevention is a national movement which has shown some good results. The president of the National Board of Fire Underwriters in May 1924 says, "During the past ten years burnable values in the United States have increased 120%, while fire losses have increased 70%, and population has increased 16%. During the same time premium rates have decreased 12.6% and the ratio of loss to premium has decreased 5.4%. This shows a gain in saving from destruction by fire and a corresponding saving of fire insurance."

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What is the City Doing for Recreation?

A review of the history of Portland will show that a strong sentiment for parks was present in the early days. The city was incorporated in 1851, and in 1852 the first park was given by Mr. W. Chapman. Other parks were established by gift as the city grew. In 1871 a park area of 40 acres was purchased by the city; this was the starting of the City Park at the head of Washington Street. The tract cost \$32,624.00, which was really an ambitious achievement for a frontier town of less than nine thousand people. This early enthusiasm for parks is the more remarkable, when we reflect that the people had the woods, rivers, and mountains at their very doors. This was due to the discrimination and foresight of the citizens. Out of this influence has grown our recreation system, as an integral part of city planning and of community life.

The history of the Portland parks falls into three periods. The first from the beginning to 1901, during which time the parks had no special body to guard or care for them. This does not mean that nothing was done with them, only that the care was in the hands of the city council. The second period was from 1901 to 1913, and during this time a Board of Park Commissioners had charge of the city park system. The third period is from 1913 to the present. During this time the parks have been a bureau under one of the city commissioners. At the time of this writing (1927) the park bureau is in charge of the commissioner of finance.

In 1903 a survey of the park problem was prepared for the city by the Olmsted Brothers, nationally known experts in parks and park systems. The report of this survey outlined a complete system of city wide parks and connecting boulevards. In order to make a start in putting the Olmsted plan into operation, a bond issue of one

million dollars was voted in 1907. From that bond issue the Mt. Tabor, Laurelhurst, Sellwood and Peninsular parks were secured, along with some smaller tracts.

In 1917 an annual levy of .4 of a mill was voted to be used in the care of parks and playgrounds. In 1919 five hundred thousand dollars was voted to buy land, and five hundred twenty-seven thousand for park improvement. This money came at a time when land values were low. The city has done well in securing land for parks and playgrounds with these funds. A definite program of establishing twenty-four playgrounds is now being carried out. This is in response to the new demand to give the smaller children play spaces. This is being worked out in connection with school grounds.

The City Planning Commission reported to the city in 1920, suggesting the location of land for playgrounds. In response to this report thirteen tracts amounting to four hundred sixty acres have been purchased. The playground program has been carried out essentially as suggested. The amount of use of the playgrounds can not easily be comprehended, as it is growing each season. In 1925 the attendance exceeded one half a million.

Two phases of the growth of the playgrounds that are of especial interest is the use of the tennis courts, which has reached a point where a fee for use has been suggested to control the attendance. The other is the golf courses, which are growing in favor each year. The park bureau is operating three golf courses, East Moorland, Rose City and West Hills. The attendance at the three for a year, now exceeds three hundred thousand. The fees for use of the grounds not only cover the care of the course but show a profit to the city, while the investment is not being used up but rather is increasing in value.

The building of the Columbia River and other scenic highways, with the universal use of the automobile, has tended to provide for the needs to which boulevards once were the best answer.

A comparison of the parks of Seattle, Denver, and Portland will show how we compare with cities of our class.

	No. of parks	Acres in city	outside	total
Seattle	36	1680	20	1700
Denver	78	1674	77380	9054
Portland	45	1326	850	2176

The outside parks are the Benson park on the Columbia River, which includes Multnomah and Waukena Creeks, and Dodge Park on the Bull Run River.

There are four important reasons to justify the early selection of park lands, and the development of a park system. In the first place the property is steadily increasing in value. And the erection of buildings on a tract will add to the cost. Secondly, park lands increase in value while other forms of public work depreciate in value. Thirdly, parks pay for themselves, by the increase of values of adjacent property. Which indirectly increases the city income. Lastly, a sound park policy will often bring rich gifts from private individuals. As for example the McClay and Benson parks.

Some of the methods of paying for park lands will now be noted. The annual assessment is a proper method, when the amount is small, for the operating expenses. The issuing of long term bonds is often used and defended because the improvement is permanent and will be used by the future citizens. Thus, it is contended that the future users should help pay for them. It must not be overlooked that the interest paid on the deferred payments is to be regarded as a part of the cost. Another plan is the benefit

assessment. To put this in operation a benefit district is created and the cost assessed to the property. This is much as the payment of sewers is handled now. The increase in the value of the property will meet or exceed the cost of the park.

Kansas City, Missouri, has used this plan to pay for a very complete park and boulevard system. Over thirteen million dollars have been invested in this way, without increasing the general tax levy. In all cases the property has been benefited more than the cost of the improvement. It is very evident that this could only be used for parks and boulevards within the city. Any outside parks would be provided by either the annual tax or the issuing of bonds.

A method much used in Europe and in a few states in this country is called excess condemnation. In such cases the city buys by condemnation more land than will be used in the improvement. The unused part will then be sold at the advanced value because of the improvement. It is often possible to pay for an improvement and make a profit on such a project.

Recreation may well be defined by inserting a hyphen after the first syllable: re-create, to make again, renewing, restoring, the upbuilding after down pulling. The work of every man or woman brings a depletion of vital forces, beyond the upbuilding of food and sleep, which must be restored to bring the powers up to full capacity. It has now come to be recognized as a duty of the city to furnish opportunities for the people to rest and play.

The extent of the growth of the interest in public playgrounds is best shown by the reports of 662 cities. In 1907 these cities spent one million dollars in public playgrounds. There was a slow

and irregular increase to 1919 when the amount had reached six million. Then in the next five years the amount increased to twenty millions in 1924.

The public has taken a negative attitude toward moral supervision, the thou shall not, attitude. In the above we have something that is positive, at least an opportunity to do something worth while.

Readings for the Pupils

1. Adams, Jane. Twenty Years in Hull House. New York: Mcmillan, 1911. Chapter V.
2. Coale, Anna Worthington. Summer in Girls' Camps. New York: Century Company, 1919. Chapters II, IV, V, XI.
3. Dum, Arthur William. Community Civics for Rural Life. Boston: Ginn & Company, 1921. Chapter XXI.
4. Heilman, Van Campen and Stick, Frank. The Call of The Surf. New York: Doubleday Page & Company, 1920.
5. Hill, Howard Copeland. Community Life and Civic Problems. Boston: Ginn & Company, 1921. Chapter X.
6. Hughes, R. O. Elementary Community Civics. New York: Mcmillan, 1922. Chapter V.
7. Paine, Albert Biglow. The Tent Dwellers. New York: Harpers, 1921.
8. Roosevelt, Theodore. A Book-Lover's Holidays in the Open. New York: Scribners, 1916.

Reading for the Teacher

1. Becht, J. George. Training Children to a Wise Use of Leisure. American Academy of Political and Social Sciences. Volume 67-page 115.
2. Bobbitt, John Franklin. The Curriculum. Boston: Houghton Mifflin Company, 1918. Chapters I, II, III.
3. Curtis, Henry Stoddard. The Play Movement and Its Significance. New York: Mcmillan, 1917. Chapters III, IV, V, VIII.
4. Johnson, George E. Play and Recreation. American Academy of Political and Social Sciences. Volume 67-page 107.
5. Zueblin, Charles. American Municipal Progress. New York: Mcmillan, 1902.

How the Police Give Protection

The police department is regarded in a variety of lights, depending on the point of view of the observer. Any person who is guilty of a crime and fears the police will also dislike and hate them. One who is delayed by traffic is annoyed and thinks the officer stupid.

We seldom give a thought to the men who are out at night, that we may be safe. The danger of bodily harm is recognized when a desperate criminal is to be caught, although such cases are not frequent.

The men are exposed to other dangers more subtle and much more destructive. The police officer from the nature of his work comes to see the worst side of our city life! He is in danger of developing a perverted view of people. So many whom he meets are trying to evade the law or the results of wrong doing, that the officer must be a strong character not to be warped by it. The tendency is to become hard and cynical. Then there are men and women who are conducting a line of affairs that the police must watch or prevent. Such persons are ever ready to pay for protection so they may remain undisturbed. Here is where many officers are snared.

The policeman has a very important duty which he must perform with little commendation from the general public and often he is unjustly abused. The best he can hope for is that his work will be so well done that he will not be criticized, depending chiefly on his own idea of duty and the commendation of the few who know him. We should not lose sight of the moral hazard to which an officer is exposed. The chance to slight duty and permit, if not protect, lawless acts is a constant menace. The man who can work on the police force and maintain his character is a real man, who deserves

the highest respect. We should not be surprised that some fall, but that so many do stand and do their work well. The Portland police is a department included in the department of Public Safety, directly under the mayor. The department, as organized in February 1927, includes:

Executive and clerical	17
Records and Identification	23
Patrol	46
Traffic	53
Bus Inspectors	2
Street Painters	2
Harbor Patrol	11
Detective and morals	73
Womens protective	10
Drivers, mechanics, clerical	60
Reserve and emergency	12
Vag and prowl detail	5
1st Precinct	50
2nd Precinct	46
St. Johns Sub.	18
	426

The city is organized into four patrol precincts. The west side, with the center at Second and Oak Streets. The first with headquarters at the water office at East 6 and Alder. This includes all of the city south of Gleason Street and east of the river. The second with headquarters at the water office at Rodney and Killingsworth. This covers the city east of the river between Gleason and Killingsworth. The third in St. Johns which has charge of all above the second and also of Linnton on the west side of the river. Each of these four larger districts are divided into booth patrols, which are in fact small stations. These are usually found at the fire stations.

The men work in eight hour shifts, or a total of 48 hours per week. When they work overtime they get time off in place of pay for overtime. The day shift is from 9 a.m. to 5 p.m. The first night shift is from 5 p.m. to 1 a.m.; the second night shift from

1 a.m. to 9 a.m. The result of the time off in place of extra pay often leaves the shifts short of men, so the patrolling can not be adequately done. On the other hand it keeps down cost. As the amount of money is limited this seems to be the better plan.

You may be surprised to know that much police work is done by men who are not known as policemen. These come under two different forms of organization. One is the Police Reserves, the other is the Special Officer. The Reserve was organized in 1922 and was at first called the Vigilantes. The number is limited to 108. They are under the direct charge of Leut. C.H. Tichenor of the regular force. These men receive no pay, furnish their own equipment and are under bonds of \$1000.00 as are the regular officers. They are selected and governed by an advisory board of ten. E.E. Ratelle is the secretary who keeps the records. These men may be called to aid the regular force in an especial need or when the whole force is on parade. These men handle unusual cases which come to their attention. They are often useful in case of fires to direct traffic. Most of the men are doing this as a public service to make the city a better place in which to live.

The reserves operate the Sunshine Division, which was organized to give relief to the needy and is especially active at Christmas time. They have a store room which is well stocked with foods on which they draw in cases of need. The spirit and ideals back of this Sunshine Division are very fine. They are not always as careful as the Public Welfare Bureau in investigating the conditions of the cases reported to them. The result will at times be a duplication of giving or giving when not advisable. Regardless

of some mistakes the Reserves are on the whole a fine group of men. who, as they become accustomed to the work, will be an increasing help in bettering the city.

The Special Officers number some 263 men distributed as follows:

40 special patrolmen
64 watchmen
57 park employees
14 dock commissioners' employees
13 doctors
7 reporters
48 unclassified

The park workmen often find the power of an officer useful in preventing roughness at playgrounds and community houses. The men on the public docks have a need of authority to protect the property in their charge. The watchmen are usually the night guards in stores and factories. The doctors are attached to the emergency hospital work. The reporters are allowed privileges permitting them to get at facts which they could not do without this authority.

The Special Patrol are the men who patrol a small section of the city and are payed by the people who subscribe a monthly amount for this extra protection. To secure an appointment the men must obtain recommendations from five persons, and secure enough patrons to pay at least \$100.00 per month. The commission gives them the full power of a police officer. These 40 men are able to support themselves in a service which many think should be given by the

regular force, but in which because of the lack of men can not be given. A few of these men have done this for a long time and have pleased their patrons. Others have a record which is not so good. There is no system of supervision over these men; they may cooperate with the regular force, but they need not do so unless they wish. The Executive Division administers and directs the activities of the entire department, looking after the finances, keeping records of the members, historical data and the purchase of supplies.

The Bertillion Division makes the personal examinations, pictures, and finger print records, and also photographs all needed locations and scenes of crime. They also do this work for the state and national officials in their region.

We are all familiar with the men who direct the street traffic, a very important part of the work of this department is the recovery of stolen cars. A record of every car in the state is on hand indexed, according to name, license and motor number. This record is kept up to date by the aid of the dealers and the state auditor's reports.

The report of the Pacific Coast Automobile Underwriters Conference for 1925 shows how well the department functioned.

City	No. Stolen	No. Recovered	% of Loss
Los Angeles	7454	6583	11.7
Oakland	1750	1641	6.2
Seattle	2216	2043	7.8
Tacoma	460	425	7.8
Spokane	428	382	8.2
Portland	1243	1194	5.9

One division of the police department which does not receive much publicity is the Womens Protective Division. This was started in 1905. At that time with the open saloon and its associated evils came this division to salvage the wreckage of woman. The work is organized in five divisions, Office, General investigation and field work, Court work, Health and dance hall inspection. The character of the work is that of assisting and protecting, rather than punishment. There is a close co-operation between the office and the men at headquarters. The detective department including the "Missing Person" officer work in harmony with the women. They are in the police court every day and not a week passes without cases in the circuit or Federal courts. They file complaints, secure evidence, attend trials, care for witnesses. The womans division is dreaded by the evil doers in courts as they usually get convictions. The unemployed girl and the stranger are of special interest. An add is carried in the Help Wanted column of the daily papers directing such girls to this division.

Readings for the Pupil

1. Chandler, George Fletcher. The Policeman's Art.
New York: Funk & Wagnalls Company, 1922.
Chapter VI. Riots and Riot Duty.
2. Guitteau, William B. Preparing for Citizenship.
Boston: Houghton, Mifflin Company, 1913.
Chapter V. Protecting the Public.
3. Hill, Howard Copeland. Community Life and Civic Problems.
Boston: Ginn & Company, 1922. Chapter XIII.
4. The American City, general reference.

What Use is the Bureau of Health?

One of the important services which a city performs for its citizens is the care of conditions which affect the health of the people. When the nearest neighbor was miles away, the violation of sanitary and health rules was of little concern. When, however, the crowded and complex conditions of the modern city are at hand, any variation from good sanitation endangers not only the wrong-doer but every one near and far. Each individual can not know of these things and avoid them for himself. It then becomes the duty of the government to protect all the people. The health department of the city is the agency which has the most to do with this work. The national and state governments also have a part in the broader fields of the health service. The nature and scope of the work will be shown as each branch is treated.

The figures used here are from the report for the month of May 1927. It must be borne in mind that these are on a monthly basis. The numerical facts must vary month by month and year by year. The general scope runs much the same. The department keeps a record of the vital statistics, the number of deaths and the causes, which is useful information on progress in prevention.

A division of bacteriology aids the work in detecting contagious diseases. During the month 717 cultures for diphtheria were tested, 125 of which were found to be positive. What would have been the result of ignorance of this condition can best be left to the imagination. 480 counts of milk samples were made to determine its condition. The fact that 1069 cases of communicable disease was reported indicates the need for this work. The isolation hospital cared for 36 patients during the month.

The emergency hospital is operated in close connection with

the police department. It is located in the Central Station. It handled 867 cases for the month.

An important means of keeping in good health is the use of clean, healthful foods. In modern methods of marketing and distribution, care must be taken during the preparation and handling of food before it reaches the consumer, for he now has no means of ascertaining the conditions under which they were prepared. The consumer must rely on the government to protect him in the foods offered to him. Because of their nature, meats and milk most often become unfit and in a shorter time than other foods. The Inspectors of the National Department of Agriculture inspect at the slaughter houses. The city meat division takes the matter where the national workers stop. The meat division also look after the condition of poultry. Out of 8077 inspections 12 were rejected. The care of foods offered for sale is a part of this work. 2196 places were inspected, health cards issued to 1534 persons to handle foods, and 2601 pounds of food stuff condemned.

Milk is the most important of foods and the most easily spoiled. As it is the staple food of all young children, it must be carefully guarded. During the month 740 dairies and 45 creameries and milk depots were inspected. 920 gallons of milk was condemned and returned to the shippers. During the warm months this may happen very often. The inspection of 35 herds for tuberculosis disclosed 17 animals reacting.

The value of the work of the milk division is best indicated by the death rate of children under two years of age. In 1909

before the division began its work the death rate was 32.6 per 1000 births, in 1923 it was 4 per 1000 births.

The School Division differs in some important respects from those noted so far, as much of its work is instructive rather than regulatory. Most of you think of the division as excluding children from school and issuing permits to return. The better part of the work is more constructive. Talks to classes reached 513 persons, 43 teachers' meetings, and 21 Parent-Teacher Association meetings as well as 85 other groups were reached with health talks.

Readings for the Pupil

1. Addams, Jane. Twenty Years in Hull House. New York: Mcmillan Company, 1911. Chapter XII.
2. Dunn, Arthur W. Community Civics for City Schools. New York: D.C. Heath & Company, 1921. Chapter XI.
3. Du Puy, William A. Uncle Sam's Modern Miracles. New York: Fredrick A. Stokes, 1914. Page 1-14, 213, 231.
4. Hill, Howard Copeland. Community Life and Civic Problems. Boston: Ginn & Company, 1922. Chapter XI.
5. Hughes, R.O. Elementary Community Civics. New York: Allyn & Bacon, 1921. Chapter II.
6. Marshall, Leon and Judd, Charles H. Lessons in Community and National Life. Superintendent of Documents, Washington D.C. Lesson A 19, Lesson B 4.

What is done for the Unfortunate?

The care of the various groups of persons who cannot care for themselves and do not have relatives who can do this for them is not a part of the duty of city government. The country is the governmental unit which has the care of the poor who must be supported at public expense. Because the city of Portland is so large a part of Multnomah county, and the relief work is of so much importance, it is included in this study. The County Farm, where the paupers are supported, is not within the field of this discussion and, therefore, will be omitted.

The outstanding agency in the relief work is the Public Welfare Bureau. This organization has a history of growth from a small beginning to an organization of importance. The Public Welfare Bureau had its origin in a movement started by the Christian Endeavor Society of the First Congregational Church in 1888. Because of the conditions in the city and the ability of those doing this work, it developed into a city-wide organization and became the City Board of Charities. The Public Welfare Bureau is the successor of this earlier organization. It is the largest family welfare society in the county.

The Bureau is composed of some four hundred persons who are interested in welfare work. It is incorporated, which gives it a legal status. The members at the annual meeting elect a board of directors of twenty-one, the mayor of the city and the three County

Commissioners are members ex-officio, making a full board of twenty-five. It is non-sectarian and non-political. The Bureau is financed by the Portland Community Chest and Multnomah County.

In February, 1921, the Board of County Commissioners chose the Public Welfare Bureau as the disbursing agent of the county's outdoor relief, abolishing the old County Relief Department. By this action, the Board avoided duplication of work as well as the expense of housing and financing this department, at the same time availing itself of the organization and machinery of the Bureau, which the county was already housing. In this way, the county avoids entirely the service relief expense while its outdoor relief allowance is administered by a staff of trained workers. Under this plan, the Public Welfare Bureau is directly responsible to the County Commissioners for the disbursement of the county's outdoor relief funds. The Bureau, therefore, has the disbursing of two funds for indigent families. The Community Chest funds are used for those items of family relief for which county funds are not available.

There are seven visitors on the field staff. The county is conveniently divided into seven sections and each visitor assumes full responsibility for the work in one of these sections. The visitor investigates the cases in the section, making a full record of information in each case. Much correspondence is required each year throughout the United States and foreign countries. The aim at all times is to so help the families as to make it possible for them to become self-sustaining. As a part of this rehabilitation work, the visitors secure several thousand dollars every year from relatives

and other private sources. The Bureau made a careful survey of the Christmas giving, which showed some bad cases of duplicating. One family received twenty-one dolls. The total amount given at the Christmas season amounted to \$200,000.00. This waste of duplication can be saved if the givers will make use of the information which the Bureau is prepared and glad to give.

For a better understanding of the work of the Bureau, the latest biennial reports should be secured from the office in the Court House.

The Community Chest

The Community Chest is the organization to raise money for patriotic and charitable purposes and to distribute the same to the organizations doing this kind of service. The Chest was organized in July, 1920, at a meeting of the President's Council, a meeting of delegates from various clubs and civic organizations, who adopted a constitution which still stands as the organic law of the Chest.

These organizations, which still represent the membership of the Chest, were as follows: Portland Chamber of Commerce, Rotary Club of Portland, The City Club, Progressive Business Men's Club, Portland Labor Council, Portland Ad Club, Portland Church Federation, Loyal Legion of Loggers and Lumbermen, Kiwanis Club, East Side Business Men's Club, Portland Parents and Teachers Association, Oregon Civic League, Portland Realty Board, Veterans of Foreign Wars, Grand Army of the Republic, Portland Association of Credit Men, Daddies Club, Women's War Auxiliary, Hotel Men's Association,

Spanish War Veterans, Musician's Club, City of Portland, County of Multnomah, American Legion. The Chest was incorporated October 5, 1920.

Each year all participating institutions submit to the budget committee their estimates for the coming year. Questions as to the budget are discussed with the representative of the institutions. The budget committee then determines the amount which the Chest will give. When the drive fails to obtain the full quota each beneficiary must have, its budget is reduced in proportion to the shortage. The accounts of all participating institutions are audited by a field auditor paid by the chest.

The two objectives of the Chest are, first, economy in soliciting of funds to support the agencies and second, the securing of care and economy in the conduct of each agency.

The agencies can be grouped under two main divisions. The first includes charity organizations which care for persons in need; the second division may be called philanthropy. The philanthropic division renders service in the building of individual character and in civic betterment. Below is a list of the beneficiaries for 1927.

Charity

Albertina Kerr Nursery Home
American Red Cross
Baby Home (Waverly)
Boys and Girls Aid Society
Catholic Charitable Societies
Catholic Women's League
Florence Crittenden Home
Jewish Charitable Societies
Juvenile Hospital for Girls
Louise Home

Charity - Cont.

Oregon Prisoners' Aid Society
Pacific Protective League
Parents Educational Bureau
People's Institute and Free Dispensary
Portland Commons
Portland Fruit and Flower Mission
Public Welfare Bureau
Visiting Nurse's Association
Volunteers of America
Women's Protective Division

Philanthropy

Americanization Council
Boy Scouts of America
Camp Fire Girls
Catholic Philanthropies
Girl Scouts
Jewish Philanthropies
National Safety Council
Portland Council of Social Agencies
Portland Settlement Center
Y.M.C.A.
Y.W.C.A.

The work of the Chest is gaining in the support which is given to it by the general public. It reached its quota for the first time this last drive. The grand total of the budget is \$589,274.00.

Readings for the Pupils.

- Addams, Jane -- Twenty Years in Hull House. N.Y. Macmillan Co. 1911
Chapt. VIII. Problems of Poverty
- Bok, Edward Williams. -- Why I Believe in Poverty.
Boston Houghton Mifflin Co. 1915.
- Burch, Henry Ried and Patterson, Samuel Howard -- Problems in American
Democracy. N. Y. Macmillan. 1918. Chapters XXXIII, XXXIV,
XXXV, XXXVI, XXXVII.
- Dunn, Arthur William, Community Civics for City Schools. Boston,
D. E. Heath & Co. 1921. Chapter XXII
- Hill, Howard Copeland, Community Life and Civic Problems.
Boston Ginn & Co. 1922. Chapter XII.
- Marshall, Leon C. and Judd, Chas. H. Lessons in Community and
National Life. Supt. of Documents, Washington, D. C.
Lesson C-26, Lesson C-30.
- Reed, Thos. Harrison -- Loyal Citizenship. Yonkers on Hudson World
Book Co. 1922. Chap. XXIV and XXVII

Readings for the Teacher

- Barton, Geo. Edw. - Re-Education. Boston Houghton Mifflin Co. 1917.
- Bowen, Louise Holbrook, - Safeguards of City Youth. N.Y. Macmillan, 1914. Chapters II and III
- Devine, Edw. Thorne - Social Work. N.Y. Macmillan. 1922
- Ellwood, Charles - Sociology and Modern Social Problems. N.Y. American Book Co. 1919. Chapters XII and XIV.
- Fishman, Joseph F. - The American Jail. Atlantic Monthly, Vol. 130, p. 792, Dec. 1922.
- Parsons, Philip A. - An Introduction to Modern Social Problems. N.Y. Alfred A. Knopf. 1924.
- Woods, Arthur - Crime Prevention. Princeton University Press. 1918. Chapters I, II, III, IV.

How Did We Get the Public Library?

The story of the public library from its start to the present time is a fine illustration of service and sacrifice for public welfare. On January 12, 1864, a small group of Portland citizens met in the court room of the U.S. District Court to perfect an organization for securing a library and reading room. This same group had already subscribed \$2500.00 to be used in starting the library. The organization was perfected by the adoption of a constitution and the election of officers. The association was incorporated soon after.

Rooms were secured over two stores at the corner of First and Stark Streets, for which a rental of \$50.00 per month was paid. March 1st, 1869 the library occupied rooms on the second floor of the Ladd and Tilton Bank. This space was donated by the generosity of Mr. W.S. Ladd. The report of the president states that these were the finest rooms in the city and that the rental value was \$1500.00 per year.

The library continued to be housed by the generosity of Mr. Ladd during a period of twenty four years, until the Association moved into their own building in June 1893. This new home of the library occupied the north end of the block from Broadway to Park on Stark Street, where the Liberty Theater now stands. It was a stone building, two stories above the basement, with the entrance on Stark Street. This building was secured as the result of the generosity of some of the leading citizens who had secured the lot for the building. The building was made possible by the bequest of Ella M. Smith, who gave the bulk of her estate to the

Library Association for a building. The appraised value of the estate was \$140,000.00 and the building was planned on that basis. Because of the general financial conditions at that time the appraised amount was not realized. The building when completed had cost some \$160,000.00. This difference had to be met by subscriptions which at that time were hard to get. The president of the association, in his report of 1895, says, "The development of the library has followed very closely the prosperity of the community. It has shared the abundance of its friends and has felt the business blight of the days of depression."

This building housed the library for a period of twenty years. As will be shown later the library had been changed from a private to a public institution.

To meet the building needs a law was passed by the state legislature permitting counties to levy a tax for the purpose of erecting a county library building. The Library Association sold the property on Seventh and Stark and with the proceeds they purchased the block on which the Central Library now stands. This was deeded to the County. The building was erected with money raised by a tax levy on Multnomah County. This completes the story of the housing of the central library to the present time.

We will now see how the library has operated. At the start the rules provided for three classes of membership. A perpetual membership cost \$250.00; a life membership \$100.00; and the usual or full membership entailed a fee of \$5.00 and dues of \$1.00 per month.

This, with some slight changes, was the plan until June 1901. At this time by a contract with the City of Portland the library became a free public library. Two members of the city government became members of the board of directors, and a tax of 1/5 of a mill collected for the support of the library. The next change was to extend the service to cover the entire county, which was done in February 1903. The County Commissioners are members of the board of directors of the library. A tax on the county covers the operating expenses. The present free county library has had a continuous growth from the small start in 1864 to the outstanding institution of today. Your attention is called to the tabulation of facts following. The reference department had its start from the gift by Mr. John Wilson of his private library, not the in tabulation.

The expansion of the usefulness of the library began in 1903 by the placing of stations in the outlying parts of the city and county. The branch libraries began in 1907 with three, East Portland, Sellwood and Albina. The securing of permanent buildings for the branches had a fine boost when \$165,000. was secured from the Carnegie funds. The policy for securing buildings for the branches is to require the people of the section to be served to raise the money. The association will then furnish and operate the branch. The latest branch library to be so organized is the one at Fortieth and East Hancock Street, known as the Rose City branch. The report of October 31, 1926 shows 18 branches with 13 in separate buildings.

The School department began in 1905 in a small way. October 31, 1911 marked the end of the first full year of the school department. The School Board had given all the books of the school libraries into the care of the central library. This was the time of the appointment of High School librarians. The school department has become one of the most outstanding and important of the departments. The platoon organization has increased the use of library books by the school children. To get some idea of the scope of the work which the library is doing a few items from the report of October 31, 1926 will help.

Number of days operated		364
Open for lending	75 hours per week	
Open for reading	82 hours per week	
Total number of volumes		429,730
Number of volumes lent for home use		2,581,484
Number of borrowers		137,502

Endowment funds

Henry Failing	\$10,000.00
Stephen Skidmore	5,000.00
H.W. Feeheimer	6,250.00
Ella M. Smith	127,500.00
E.S. Kearney	10,000.00
Henry Failing	10,000.00
S.G. Reed	10,000.00
H.W. Corbitt	5,000.00
H.J. Corbitt	500.00
C.H. Lewis	500.00
Mrs. W.L. Sitton	500.00
Rose F. Bursell fund	100.00
S.G. Reed loan fund	100.00
Mrs. E.S. Kearney	100.00
John Wilson	2500.00

Gifts

Rent free 1869 - 1893	\$30,000.00	W.S. Ladd
For first building lots		
C.H. Lewis	200.00	
H.W. Corbitt	200.00	
Henry Failing	200.00	
W.H. Fechheimer	500.00	
Donald MacLeay	100.00	

Lloyd Brooks	500.00
Carnegie Corporation	165,000.00
Sites North Portland and Gresham	Citizens of community
Site for St. Johns	M. L. Holbrook
Site for East Portland	W. B. Ayer
Site for Arleta	Citizens
Site for Rose City Park	Citizens
For reduction of debt, Failing heirs	26,250.00
Amada Reed, for book fund	10,000.00
Equipment for new rooms, a number of persons.	7,000.00
Lecture fund, several persons	1,000.00
Mary Frances Isom Pension Fund	5,000.00
Staff Loan Fund, W. B. Ayers	1,000.00
Wilson Library, valued at time	20,711.70
Failing Memorial Library	16,500.00
Simon Benson for Benson School	1,000.00
Dornbecker Gift of per year for purchase of technical books	500.00

Abstract of Developments

- 1864 Convass started by H. W. Wakefield to obtain funds for a reading room and library. W. S. Ladd first to subscribe. \$2500.00 raised. United States District Judge Mathew P. Deady elected president and R. B. Knapp secretary of the temporary board of directors. W. S. Ladd was first president of regular board. Mr. Harvey W. Scott first librarian.
- 1869 Ladd and Tilton donate use of rooms over the bank until 1893.
- 1872 Movement started for building fund.
- 1875 Campaign for permanent endowment carried out by Judge Deady.
- 1879 Evening assistant employed.
- 1885 Site for building purchased.
- 1889 Bequest of Ella M. Smith.
- 1893 First building completed.
- 1900 Mr. John Wilson gives his library.
- 1901 Contract with the city to make the library free.

- 1902 Reference department and children's room started.
- 1903 Service extended to the county. First branch at Gresham. First deposit station at Bridal Veil.
- 1906 Extension work created a department.
- 1907 Sellwood, Albina and East Portland branches started.
- 1908 First branch building, East Side Library.
- 1910 School department organized. East Portland Building burned. New building finished.
- 1911 Carnegie grant of \$105,000 and \$60,000 for branch buildings. North Portland branch opened. First high school librarian at Jefferson.
- 1912 Albina Branch building opened. Washington and Lincoln High School librarians appointed.
- 1913 New building occupied. Technical department. Information desk. Municipal reference library. North Portland branch building. Gresham branch building. St. Johns branch building. South Portland temporary building. County schools transferred to school department.
- 1914 Training class established.
- 1915 Franklin High School library.
- 1918 Arleta Branch building.
- 1919 Benson Polytechnic librarian appointed.
- 1920 Music division. High School of Commerce librarian. James John, now Roosevelt, librarian appointed. Book-wagon in summer.
- 1924 Belmont-Hawthorne Branch building. Rural service truck. Hospital service and Grant High School library.
- 1926 Rose City Park Branch building opened. Department of Adult Education.

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What is the Form of Government?

1. How Portland's City Government Grew.

The city government of Portland at its start in 1851 was the simple form for small cities. The officers were mayor, council, recorder, and treasurer. The activities only touched on a few items as streets, sidewalks, policing, or maintaining order.

The charter of 1864 shows some expansion. The elected officers were a council of nine, three aldermen from each of the three wards elected for a term of three years, mayor, treasurer, and assessor. The Council elected an auditor. The Mayor appointed the city attorney, the street commissioner, and the surveyor, subject to the approval of the council.

The City Council had authority to create additional wards, which was done as the city grew.

In 1891, after the consolidation of the three cities of Portland, East Portland and Albina, there were eight wards with two aldermen from each ward. The activities of the council may be judged by the committees, which were Ways and Means, Accounts and Current Expenses, Street Cleaning and Sprinkling, Streets, Sewers and Drainage, Health and Police, Parks and Public Property, Judiciary and Elections, Commerce, License, Light and Water.

The Mayor in his annual message of 1891 made the following statement:

"A rather peculiar condition of affairs exists in the projected public works of our city. We have a Water Commission for the purpose of laying pipes, building aqueducts, to furnish water,

with the authority to issue bonds of the city to the amount of \$2,500,000; a City Hall Commission to provide a building for city offices, with authority to issue bonds to the amount of \$675,000; a Bridge Commission, which may issue bonds to \$600,000; the Port of Portland, charged with securing a depth of water in the Willamette and Columbia Rivers. In addition to these, a Board of Fire Commissioners, a Board of Police Commissioners.

"You, the honorable council have nothing to say in regard to the conduct of these departments, but the privilege is extended to you to pay all salaries and to pay all bills contracted."

This condition changed to greater diffusion of authority. The report of 1912, the last under the old charter, shows a council of fifteen, one alderman from each of the ten wards and five elected at large.

The standing committees of the council were: Ways and Means, Accounts and Current Expense, Street Cleaning and Sprinkling, Streets, Sewer and Drainage, Parks and Public Property, Health and Police, Judiciary and Elections, Street Lighting, License, Commerce, Landing and Wharves, Liquor License, Committee on Industry.

In addition to these, the mayor had an Executive Board of ten men, selected by himself. This board was organized in the following committees: Rules and Order of Business, Fire, Police, Bridges, Streets, Sewers, Street Cleaning, Lights, City Hall, Current Expense. There was also the Commission of Public Docks and the Water Board.

The Portland Telegram for April 24, 1913 says: "The present form of city government has the power vested in Mayor, fifteen council-

men, an Executive Board of ten, a Water Board of four, a Park Board of four, a Health Board of three, a Dock Commission of five, and an Auditorium Commission of three.

"The executive power is vested in Mayor, Executive Board and the above mentioned boards and commissions. The Executive Board meets twice a month, makes all purchases, passes on bills, has charge of Fire, Police and Street Departments, Street Lighting, Harbor and City Found.

"The legislative power is vested in the Council. They meet when necessary, pass ordinances, subject to the Mayor's veto, and to initiative and referendum."

The Journal in an editorial April 24 has this to say: "The revolution against Portland's present system of government is not new. It has been in progress ever since 1907, when Mayor Lane appointed a committee of fifteen to prepare a commission charter. Since that time every mayor while in office has urged the abandonment of the present system. Mayor Simon urged a change and appointed a commission to prepare a charter. Mayor Bushlight did it and he has used his office to further the commission plan."

The work of conducting the campaign was pushed by a committee of leading citizens. They secured the services of a group from the New York Bureau of Municipal Research. The reports of this organization put before the people a record of the facts by outside authorities.

The following chart, prepared by the above mentioned bureau, shows the confusion and conflicts of authority.

2. Present Form of City Government

The form of Portland's government was changed in 1913 from the Mayor-Council type to the Commission form. The so-called Des Moines model is followed here. Five commissioners are elected for a term of four years. An Auditor is also elected who has the qualification of a commissioner, and in addition, must be an expert accountant. One of the commissioners is elected as Mayor. He is both Mayor and a Commissioner. As Mayor he has the right to assign the newly elected men to a department, also to change a bureau from one department to another. The Mayor has authority to investigate any department. This power of the mayor has a unifying force, and meets an objection to the earlier commission organization in that each man on the council had no one to oversee his work, being equal, no one could say much to the other as he was open to the same attack from them.

The five men as a council pass all ordinances, then each supervises his department.

An examination of the diagram showing the relation of bureaus and departments will help you to understand the organization. The outstanding contrast of the commission form as against the Council-Mayor plan is that in the commission plan one of the commissioners is responsible for what is going on in his department. The outstanding fault of the old form was diffusion of authority.

The City Auditor being elected by the voters is responsible to the people. He is independent of the commissioners. He has the right to refuse to audit items which he thinks may be prevented

from spending money illegally. The two features in which the Portland charter differs from the Des Moines plan are: first, the power of Mayor to shift and examine departments, and second, the independent auditor.

The Growth of City Activities in Portland.

- | | |
|---------------------------------|------------------------------------|
| 1851 Elections | 1874 Good Samaritan Hospital |
| Legislative | St. Vincent's Hospital |
| Executive | 1877 Public School Library |
| Taxation | 1878 Trunk sewer (brick and stone) |
| Marshal | Public scales permits |
| Treasurer | |
| Public School | |
| 1852 Volunteer Fire Dept. | |
| Jail | |
| 1854 Cemetery | 1882 Oregon Humane Society |
| Street Grading | 1883 Paid Fire Dept. |
| City Attorney | First High School Bldg.(1883-85) |
| Assessor | 1886 Greenhouse |
| Ferries | Detectives |
| Licenses | Bull Run water system started |
| 1856 Street Cleaning | 1887 Medical college |
| 1857 Water Works | Zoo |
| Water Mains | City Water Supply |
| 1862 Small Pox Hospital | 1888 Refectory |
| 1864 Portland Library Assn. | 1889 Harbor police |
| Sewers | Evening Elementary School |
| 1865 Street lighting | 1890 Water Meters first used |
| Police | Meter repairs |
| Street improvement | Garbage collection (private) |
| Recorders' court | Rubbish collection (private) |
| 1865 Old court house | Criminal identification |
| 1867 | 1891 Bull Run reserve |
| 1867 Day and Night Police | Building permits |
| 1869 County hospital | Plumbing inspector |
| High school | 1892 Art museum |
| 1870 Chapman & Lowndale squares | City Hall (1892-94) |
| Municipal court | 1893 First Public library building |
| Holladay park | Weights and measures |
| Pound | Health officers and dept. |
| Library reading room in | 1893 Bull Run conduit No. 1 laid |
| Ladd & Tilton Bank Bldg. | 1897 Macleay park (donated) |
| 1871 Washington Park | 1900 Park board |
| 1873 Pipe sewer | Baths |
| Night school | 1901 Library contract with city, |
| 18 | free library |
| | Free kindergarten |
| | Juvenile court |
| | 1902 Reference room in library |
| | Juvenile dept. in library |

- | | | | |
|------|--|------|--|
| 1903 | Mounted police
Fire boat
Civil service
Library contract with county and city
Band concerts in park | | School gardens
Summer vacation schools
Motor police
Dental clinic
Electrical inspection |
| 1904 | Food inspection
Sanitary inspection | 1912 | Traffic police
Public comfort stations
Street drinking fountains
Street tree planting
Community recreation buildings
Property identification |
| 1905 | Lewis and Clark fair
Hard surface pavements
Women's protective division (Policewomen)
Manual training in schools
Hand street cleaning
Building inspector
Tuberculosis sanitorium (private) | 1913 | Boulevard lighting
Commission government
Motion picture censorship
Municipal garage
" shop
Purchasing agent
Public library-Central building
Police headquarters building
Emergency hospital
Meat inspection |
| 1906 | Rose festival
Associated charities
Domestic science in schools
Public baths
Police and fire relief | 1914 | Public market
School for blind
Tuberculosis clinic
Traffic survey
Multnomah Falls (donated) |
| 1907 | School census
Branch libraries and branch reading rooms
Playgrounds (People's Inst.)
Park and boulevard system | 1915 | Benson park (donated)
Fire prevention work and Fire marshal
Municipal lodging house
Motor bus inspection
Sign inspection |
| 1908 | Trade school
Medical inspection of schools
Sealer of weights and measures
School nurse
School for deaf, stammers, and defectives
Street flushing
Motor street sweeping | 1916 | Public auditorium (began) |
| 1909 | Free employment bureau
Playgrounds (parks)
Playground instructors
Dairy inspection
Milk inspection
Mt. Tabor park (1909-10)
Testing laboratory (pavements) | 1917 | Municipal fish market
" golf links |
| 1910 | City milk chemist
School dept. of library
Garbage incinerator
Swimming pools
Public dock commission
Bertillon and finger print identification

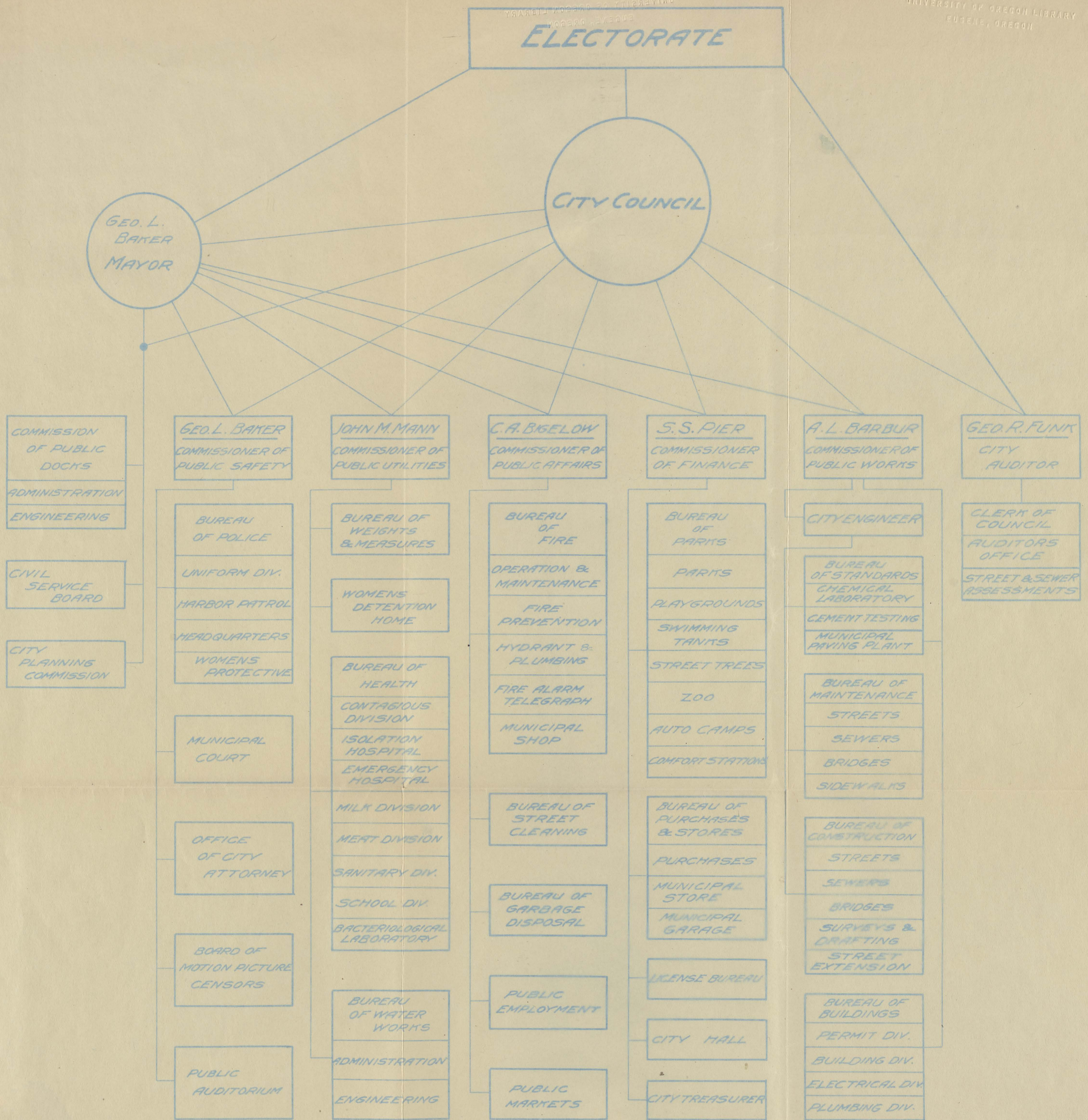
Bacteriological laboratory | 1918 | " asphalt paving plant
Detention home for women |
| 1911 | Library contract with county
Terwilliger boulevard
High school librarians
School truant officer | 1919 | Court of domestic relations
Mills open air school
Americanization course in public schools
Boys and girls club work (Agriculture in schools)
City planning commission |
| | | 1920 | Fire dept. completely motorized |
| | | 1921 | Dock commission terminal No. 4 Completed |
| | | 1922 | Starting of complete terminal for united railway facilities |

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CITY OF PORTLAND, OREGON.
ORGANIZATION CHART
1920

VOTERS

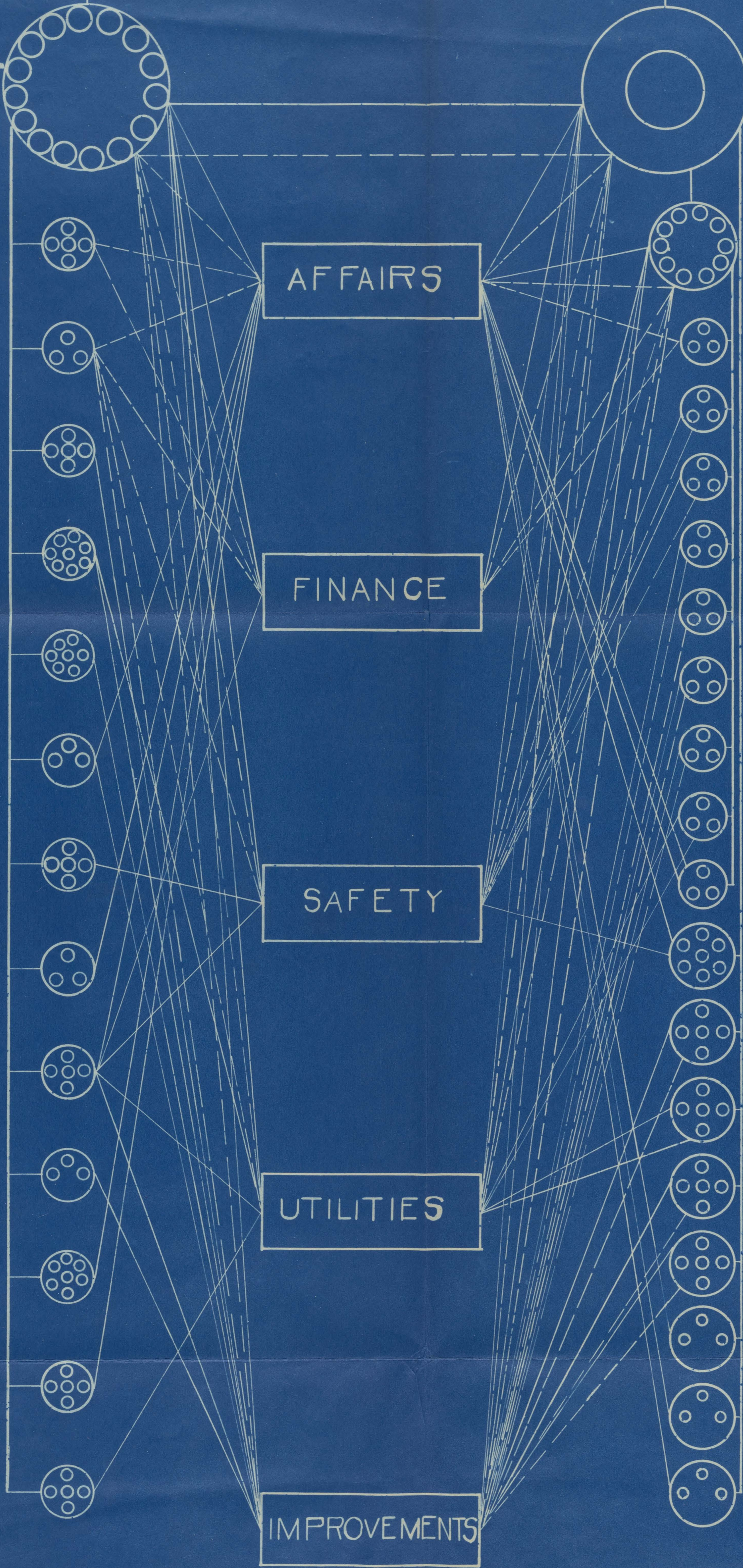
COUNCIL

MAYOR

Committees of the Council

Committees of the Board

Boards and Commissions



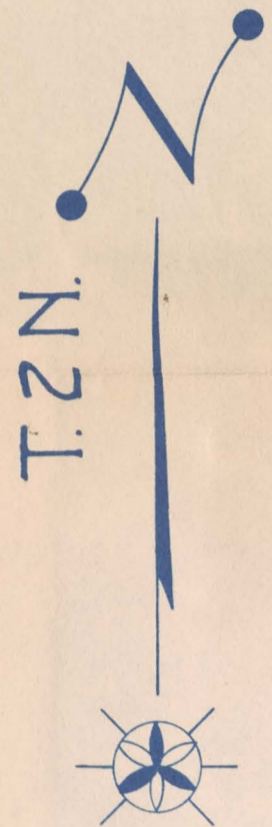
————— Directing Control
----- Budget Control

MAP SHOWING TERRITORIAL EXPANSION OF PORTLAND.

HIRAM U. WELCH - COUNTY ASSESSOR

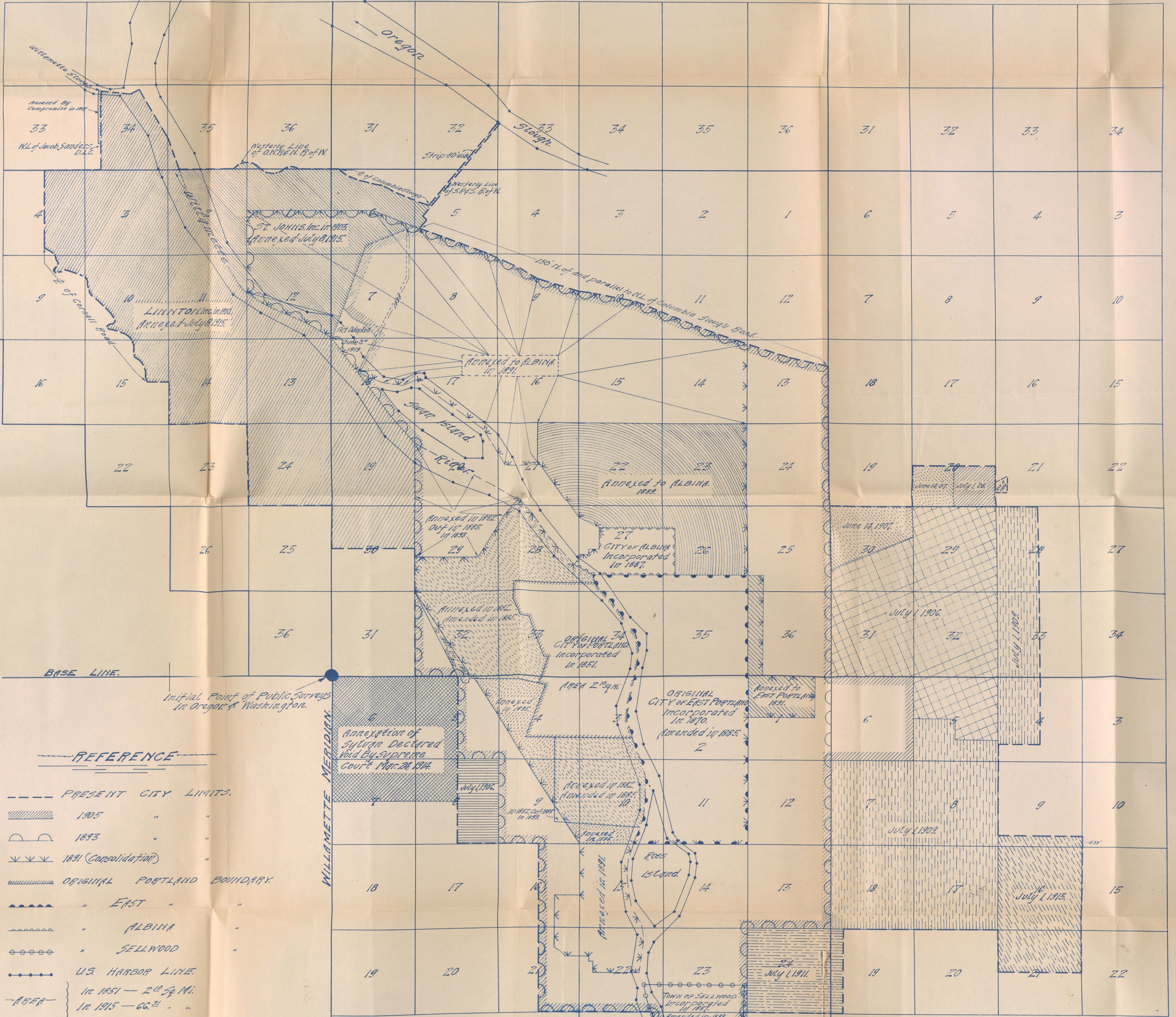
D.B. Ambler Chief Draftsman

SCALE OF MILES
0 1/2 1



T.1N.

T.1S.



REFERENCE

- PRESENT CITY LIMITS.
- ||||| 1905 " "
- 1893 " "
- 1891 (Consolidation) " "
- ORIGINAL PORTLAND BOUNDARY
- " EAST " "
- " ALBINA " "
- " SELLWOOD " "
- U.S. HARBOR LINE.
- AREA } In 1851 - 2^{1/2} Sq. Mi.
- } In 1915 - 66^{1/2} " "

NOTE
1891 City Limits same as in 1893 except all that part lying North and West of a line passing through Sections 6, 7, 18, 19, 15, which was detached. Line shown 1893 and 1903 Limits were identical.

All of Sellwood lying South of the South Line of Sections 22 and 23, 15-16, detached from Clatsop County and annexed to Multnomah County in 1893.

COUNTY ASSESSOR'S OFFICE
HIRAM U. WELCH, ASSESSOR
MULTNOMAH COUNTY, OREGON
DATE: 1915

R.1E.

R.2E.