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ABERDEEN

POPULATION TRENDS

IN GRAYS HARBOR COUNTY

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for

GRAYS HARBOR REGIONAL
PLANNING COMMISSION

In Cooperation with the

U. S. HOUSING and

HOME FINANCE AGENCY

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1961

VERNON S. COTTER

PLANNING CONSULTANT

This report is part of a comprehensive survey of the Grays Harbor Planning Area, undertaken in behalf of the cities of Aberdeen, Cosmopolis, Hoquiam, McCleary, Montesano, Westport, the County, Public Utility District, Port of Grays Harbor, the Grays Harbor Industries, and the Chambers of Commerce of Aberdeen, Hoquiam, and Elma, under the Federal Urban Planning Assistance Program.

The study contains information pertaining to population of Grays Harbor County. The population information and estimates contained herein will be useful to public officials, business, industry, and those persons interested in the future development of this area. The information will be helpful in making decisions regarding expenditures for future services and facilities whether for private or public use such as schools, parks, streets, highways, traffic, utilities or harbor development.

A synopsis of the history of population growth of the various cities and county area is also included. This history of the early settlement of the area cannot adequately describe the hardships and the many problems that had to be coped with in the early days, but does establish the time of some events.

The report was prepared under the general supervision of the Washington State Department of Commerce and Economic Development, and was financed in part through an urban planning grant from the Housing and Home Finance Agency under the provisions of Section 701 of the Housing Act of 1954, as amended.

Respectfully submitted,

Vernon S. Cotter

PLANNING CONSULTANT

POPULATION TRENDS
IN
GRAYS HARBOR COUNTY

This report was prepared for
THE GRAYS HARBOR REGIONAL PLANNING COMMISSION
and the
DEPARTMENT OF COMMERCE AND ECONOMIC DEVELOPMENT

by
Vernon S. Cotter
Planning Consultant

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PART ONE

PEOPLE AND HISTORY OF GRAYS
HARBOR COUNTY AND THE INCOR-
PORATED CITIES OF

ABERDEEN

COSMOPOLIS

HOQUIAM

McCLEARY

MONTESANO

WESTPORT

PEOPLE AND HISTORY

Grays Harbor County

In setting forth a few noted highlights of the very first pioneers who came to Grays Harbor, let it be remembered that they came by both sea and land. It would be questionable to say which group endured the greater hardships, for all were men of vision, striving to find and develop the vast potentials of a land rich in many untapped resources. It is indeed a fascinating story from the time of the first Spanish sailing vessel which touched briefly on the inlet of Grays Harbor in July of 1775 to the present day.

On the morning of May 7, 1792, Captain Robert Gray, sent as a representative of the Boston Fur Company, sailed his ship, the Columbia, into that bay of water which now bears his name. His log tells little of his findings but he did give the name of Bulfinch to this region in honor of Charles Bulfinch of Boston. However, when George Vancouver came at a later date, he logged on his charts the name of Grays Harbor, in honor of his predecessor, and by that name it has remained. Sixteen years later, Captain Gray died in 1808 in Charleston, South Carolina, with high honor of having been the first white man to carry our flag around the world.

The only inhabitants here in 1792 were a few hundred Indians scattered in various places where food and fishing were easily available. Reports of the hostility of the Indians somewhat differ but it is noticeable that in not too long a time both the settlers and the Indians were exchanging helpful ideas.

Those that came by water had heard reports of the many sea otter to be found here and as this news spread, various groups came to see for themselves and liked what they saw. Seeking them out for their skins developed into a thriving business and as early as 1788 the first trading took place between the Boston Fur and the Northwest. As time went along, small groups of people began to come from inland for brief visits by way of the Chehalis River or the Willapa Bay. This was in the early 1800s and there are still among us today who can recall stories told by their parents and grandparents of the almost unbelievable struggle to reach this wilderness country. Because of the density of growth of this northwest region and the inaccessibility in reaching various places, Grays Harbor was one of the last areas of the great northwest to be settled. Roads were few and rough and the waterways were the only manner in which to travel.

Let us now turn to the first permanent white settler of Grays Harbor. He was William O'Leary and his coming in 1846 ended the freedom of the lands to the Indians, as they had grown accustomed to it for so long a time. He settled at the mouth of the now known O'Leary Creek. His understanding of the Indians, and perhaps a bit of luck too, created a friendship between them much needed by a lone resident such as Mr. O'Leary.

He lived in the harbor area for twenty years, skillfully raised potatoes, fished a great deal, hunted, and traded with the Indians. Then suddenly and quite mysteriously, he left the harbor and went to live with the James Gleason family who had settled in the Satsop Valley. He remained with them until his death in 1901, making a total of 53 years in Grays Harbor. He was buried in the Catholic cemetery on Hunters Prairie ^{near} Elma. Where he came from when he first penetrated the wilderness was never known for he was reluctant to divulge his early life.

Records show that 1824 brought the next sizable group of white settlers. Then for seventeen years, the migration was almost at a standstill. But the summer of 1841, members of the Charles Wilkes Expedition arrived. They stayed approximately twenty-four days but did not think too highly of the harbor area and pressed on.

Though all dates are important to a growing land, there are a few outstanding ones; 1855 was such a year. The Indians talked of it as the year of the "Big Sick," for smallpox descended on both peoples and their number was tragically reduced. But a truly happy and memorial year was 1858. On December 5th, to be exact, the arrival of the first sailing ship to carry cargo to Grays Harbor arrived with the much needed freight. The depressed pioneers now felt that outside help was at last coming to help them in their arduous tasks.

The white folks by now were fast learning the art of making log canoes from the Indians and as salmon, sturgeon, berries, and wild game were in great abundance, much river travel was done in search of food. But the need of variety was felt in time and it took the vision of Patterson Luark, and a Mr. Fisher, to see the potentials of the oyster. In 1861, together they staked out the first beds and an industry destined to grow as the great Northwest developed.

Education for the growing number of children was becoming a pressing issue and in November of 1859, the first official school house was erected in Cosmopolis. It was a crude 16' x 18' structure but welcomed by all and a gala opening was made on January 3, 1860. Samuel C. Jones was the first teacher at a salary of \$25 a month and board.

Mail to the settlers was getting through to Olympia and was delivered to the harbor at infrequent intervals by those who might be journeying this way. The first regular mail service was put into effect West of Montesano in 1860, when William P. Wright took on the job as the first carrier, traveling by canoe and horseback between Olympia and Point Chehalis.

Moving on up through the years, we note that the first whaling plant was built at Bay City in 1911. Nearly 200 whales were taken and processed that first year, averaging about sixty tons in weight. The value per whale ran close to \$2,000. This enterprise extended to a nine year operation; then ceased.

Naturally where expansive waterways are found, many ships are needed and Thomas McDonald is credited with exploiting his skills in this field. He started building a small schooner, naming it the "Volunteer." The last of his stately masted schooners, the "Vigilant," was a five-masted schooner and it was destined to be the last of the big sailing vessels to roam the high seas. However,

World War I created a big demand for boats of all types and Grays Harbor rallied to the need with many seaworthy vessels. They are credited with contributing substantially to the defense of our country. But as important as shipbuilding was for a time, the early 20s brought an end to shipbuilding in the local yards. The steam-propelled type of vessel had replaced the more picturesque sailing vessel of the day.

But fast on the heel of this closing business was a bigger and more lasting one. The new boom, which grew and has endured with the times, was the epic of plywood, paper-making, pulp and plastics.

To bring to an end to a manuscript such as this, let it be said that only a small portion of the fascinating history of this great Northwest has been recorded. The loss of it will be strongly felt by the younger generations who will wish to know more about the land in which they live, and about the surprising number of the Nation's important men who had their humble beginning in this area.

For the brave souls who so courageously contributed to the growth of Grays Harbor County, and who as individuals did not gain space here, we salute you. You sought what all freedom-loving men hold most priceless - a better world in which to live. You found it through hardships, crude pioneering methods and determination of mind and faith.

Aberdeen

Aberdeen takes its place in the annals of history as the youngest city on Grays Harbor and, incidentally, the largest. The beginning of this metropolis is closely linked with the life of its founder - Samuel Benn. He was born in New York in 1832 and his love of the sea and high adventure created for him a noteworthy life. He was all of 17 when gold was discovered in California. Hearing of this, he became restless and in March of 1856, he, with a friend, George Hubbard, left New York for San Francisco on the steamer "Northern Light." Their trip was a hazardous one and they were forced to leave the steamer and continue by train and then to another steamer which finally landed them at San Francisco. For two years, they mined for gold but the huge gold discovery at Fraser River was being talked about so they went there only to be disappointed with their findings. Puget Sound became their next destination. They bought a boat in Victoria and leisurely cruised down to Olympia. From here they set out on foot for Grays Harbor.

Benn settled at the junction of the Wishkah and Chehalis, built a home and lived here until 1875. He had the association of two fine neighbors, C. A. Damon, who had settled at Oyehut, and Mathew McGee, who had built a huge house at Lone Tree on Brown's Point. Then in 1875, the James Stuart and Alexander Young family came to Aberdeen and also settled on the Wishkah River. For nine years, these three families were the only settlers in the now Aberdeen area. The Indians had given the name Wishkah to this river; the name meaning "Stinking Water."

The first saw mill was built here in 1884 by A. J. West, who had arrived on the harbor only a short time before. Even with this activity, it was a lonely place for only six buildings comprised the settlement. But an air of activity livened things up considerably when Captain Weatherwax came in April, 1885. He and his party came for the purpose of buying a load of lumber, recorded to be the first to be shipped from Grays Harbor.

A reality at that time, but subject for endless conversations, was the name of "Plank Island" given to the settlement of Aberdeen. Because this whole area was tide land, there was no foundation on which to build sidewalks. Planks were erected on stilt-like supports and this served as sidewalks until the land could be filled in. It is interesting to note that Eldridge Wheeler wrote in 1890 - "At that time the corner now occupied by the Finch building was out in the suburbs and the now I and Heron Streets were solid forest."

But developments were slowly progressing and the first celebration in Aberdeen was a gala occasion. This was on July 4, 1886. People came all the way from Montesano, Cosmopolis and Hoquiam by steamboat. Montesano proudly brought their brass band - the only one in the country.

But development of the area was set back by a series of fires in 1887-1889 and the largest one of all in 1903. Fourteen blocks, which covered twenty-two acres, were wiped out. But true to pioneer spirit, the citizens set about

†
the next day to rebuild their loss. The only brick building at that time, which had been built by N. G. Kaufman, was also consumed by the fire.

The first residence built after plotting the town was that of J. M. Stouton. The first hotel was erected by J. C. Fairfield, Jack Waldron, and W. H. Pedlar. Badly needed, and erected by Adolph Payette, was the first store building. Judge John C. Pearson was Aberdeen's first lawyer, and Dr. Telfer gave his services to the sick. The first druggist was S. W. Pearson and J. C. Fairfield the first postmaster. One of the busiest men in the community was J. G. Lewis who held the office of Police Chief.

Sam Benn was held in high esteem by all who knew him, for he contributed much to build and steadily improve the standards of this growing town. He gave generously of his land for city improvement before he died in 1935 at the unbelievable age of 103.

Aberdeen was incorporated as a third class city on May 12, 1890, with a population of 1,400, to a second class city on October 3, 1906, and proudly became known as a first class city on December 7, 1929.

As with all of the Northwest, Aberdeen held its share of ready to cut timber and the first logging team to come to Grays Harbor were two brothers from Nova Scotia, Alex and Robert Polson. Not long before the turn of the century, they organized the Polson Brothers Logging Company. But they were burned out soon afterwards and had to reorganize in 1903. In recent years, the Polson Logging Company has been sold to Rayonier.
*

A great deal of credit must be given to the early settlers of both Aberdeen and Hoquiam, for had they not extended a helping hand to each other, the development of both communities would have not progressed as it has.

The unwritten records of this thriving Grays Harbor community holds countless stories of extreme interest and it is indeed a fortunate occasion when one has the opportunity to talk with those remaining few who lived and were a part of this epic of time.

Cosmopolis

Sometime before 1855, James Pilkington settled at Cosmopolis. He built a small home near the large Indian Village located there. Other early comers were the David Byles family, Fred and Lucy Carter, Charles and Amanda Fry. For short periods, other families came - stayed a short time and moved on to take up residence in other areas which seemed more promising to their needs. As a rule, the homes were built back in the dense forests and the daylight and sun could be observed only by looking straight up.

Each Spring, these pioneers would journey up river above Sand Island to plant their gardens. In the Fall, they returned to harvest their potatoes and vegetables, going by way of canoe.

By 1889, Cosmopolis had a population of about 400. The little community boasted one saw mill, two restaurants, three saloons, a butcher shop and a blacksmith shop. One newspaper came into being, but lasted only a short time.

Though there were no sidewalks, with the exception of planks laid down in the mud, the town was considered a center of culture and refinement.

We note that a brickyard and a tannery operated quite successfully for a period of time, but neither business is still in existence there today.

The growing need for a school became evident, and Cosmopolis was the first settlement in Grays Harbor County to officially erect one. It was started in 1859 and had a celebrated opening on January 3, 1860. It was crudely built, but a concentrated point where the children could gather and be taught an education. The community spirit of one helping the other was noted among the pioneers and despite the many hardships, illnesses and lack of commodities, this little village continued to grow.

Perhaps no area in its growing stage has been given a greater boost than that of Cosmopolis by the Weyerhaeuser Timber Company who chose to locate one of their many plants here. In 1900, Frederick Weyerhaeuser came to Grays Harbor with a group of friends and purchased 900,000 acres of nature's finest westcoast Hemlock and Douglas Fir forests and formed the Weyerhaeuser Timber Company. This was indeed a man of wisdom and believed strongly in replanting timber for future use as it was cut. In 1941, the company established the first certified tree farm in the United States. This was known as the Clemons and was located near Montesano. Now the planting of tree farms has become quite a sizable business, being maintained by both companies and individuals and found in far-reaching areas of the Northwest. The plant here grew steadily with the years in both production and employment, giving a livelihood to countless families. It has been an organization founded on fair and considerate relations between officials and employees from its early beginning. Today, Weyerhaeuser is big business and affords delightful tours

to the many who pass through the harbor. This writer, not long ago, was amazed to read of the growth of this vast enterprise, but again it is understandable for fair play has a way of paying big dividends.

All of Grays Harbor and Cosmopolis, in particular, pays tribute to this great institution who has added so materially to the growth of this community.

Hoquiam

John R. James came to Hoquiam in 1857; the first white man to settle here. In a short time, he moved near "James Rock," long a landmark of the Grays Harbor area. He chose a sight on the West side of the Hoquiam River and built himself a home of split cedar. For his orchard, he grafted apple shoots to wild crab apple. The orchard still stands. When James A. Karr arrived about a year later, he too built his home on the West bank and became a close neighbor of James. Ed Campbell followed in 1860 as the third permanent resident, but unlike the other two men, he went to the East bank and built his house. The story goes that Campbell hiked all the way to Grays Harbor; an event that he often related. In later years, the home sites of all three of these men were incorporated into the City of Hoquiam.

Karr was an intelligent man, and taught in the first schools of both Cosmopolis and Montesano. Instead of being paid in cash, he was given cattle by the parents of the pupils he taught. In this way, he stocked his land. In 1863, he married Abigail B. Walker and their union produced eleven children. Karr was the first auditor for Chehalis County and also served three terms in the legislature in 1875, 1882 and 1893.

Ed Campbell was single when he first came but later married and as his fortune grew, he and his wife enlarged their home and made it into a hotel. Travelers into the area were badly in need of overnight accommodations and often times as many as sixty guests would stop with them in a single night. The overflow were given space in his barn at fifty cents a night.

Rapid strides were made in the growth of Hoquiam. Soon after 1882, the community grew into a sizable industrial center. Perhaps no one individual was more responsible for this advancement than George H. Emerson. He was sent from San Francisco by A. M. Simpson to investigate the resources of Grays Harbor with the idea of establishing a mill here. He was quite impressed with what he saw and purchased 300 acres of land from John A. James in 1881. This mill was known as the "Northwest" and began operation in 1882. Later, this mill was destroyed by fire; a great shock to the community, but was rebuilt in 1897.

Emerson was a graduate of Harvard and had driven an ox team from Kansas City across the plains to San Francisco. From here he went into the logging business in Oregon before entering Washington. He was a very capable man, took interest in all community affairs and for this reason was affectionately called the "Father of Hoquiam." He died in 1914. The Grays Harbor Washingtonian wrote at that time, in part "...It is largely due to his efforts that there exists today the town of Hoquiam." Interesting is the Indian translation of the word "Hoquiam," meaning "hungry for wood."

The first post office was established in 1867 by the combined efforts of James Karr and Ed Campbell. The town was governed until

May 24, 1890, by a board of trustees. It then was incorporated and its first Mayor was J. T. Burns. Campbell took over as Postmaster. In 1889, Hoquiam had around 450 inhabitants. A school was established in 1874 in the house built by John James.

In the twenty-fifth anniversary issue of May 19, 1916, The Hoquiam Record newspaper had this to say: "In 1890 - 8th, I, J and K Streets were planked and the planked roadway to Aberdeen was also built that year. This improvement furnished the first means of traffic, other than by water, to our neighboring town. There was, of course, the old Olympia trail around the bluff." In the Winter of 1891, the first ferry on the Hoquiam River was operated, and in June of 1891, the Hoquiam Washingtonian proudly boasted that 600 men were working in the sawmills of Grays Harbor County. The payroll was about \$40,000 a month. Wages were around \$35 a month for general laborers and \$100 for camp foremen.

The history of no growing community in the West is complete without the inevitable boom and collapse. Grays Harbor City was such a place. This was started with the idea of making it the great metropolis of Washington State. The site for this, picked by eastern capitalists in 1889, was three miles West of Hoquiam. On April 13, 1889, the first work of clearing the town site began. Also a wharf a mile long was built from the town site to deep water in the bay. Several streets were graded and business buildings started. On July 20, 1889, the first lots were offered for sale; none being less than \$500. Interested purchasers waited in line all night to buy. Because of this, the immediate area of Hoquiam saw some rapid developments. Ed Campbell sold his holdings and made considerable money. James Karr divided his pasture into lots and sold them as fast as he could write the deeds. Hoquiam built a \$100,000 hotel and named it the "Hoquiam." A bank was started along with several other types of businesses.

But the railroad, which was to have been built leading into Grays Harbor, was never built and almost overnight the extravagant plans for Grays Harbor City collapsed.

Today, only a long line of stumps of pilings remain as a monument to the dreams of a few that never materialized. It is generally felt that had these plans been made just a few years later, Grays Harbor City would no doubt have become a reality.

In 1928, a pulpmill added to the prosperity of Hoquiam and was known as the Grays Harbor Pulp Company. In 1936, this became a division of Rayonier, Inc., who now have mills throughout the great Northwest and in Florida. The whole of Grays Harbor County has benefited substantially from this fine organization.

McCleary

McCleary is named after Henry McCleary who came West from his farm in Ohio. He had done mill work there so the logging business was a natural one for him to follow in this rugged Northwest country. He arrived in Tacoma in 1890, held various jobs until the year 1897 when he joined in partnership with an already established firm known as Fay and Son. This was a logging operation near Garden City on Mill Creek. When lumber became scarce, they moved on to South Bend and built a new mill in the Fall of that year. But as before, there were many ups and downs in their business to the extent that McCleary bought out his partner, Fay, in 1899. Despite the many hardships and periods of poverty experienced by McCleary, he managed to hold on and in the growing years accumulated sizable holdings. He was known among his men to be fair, generous and greatly concerned about their welfare. It is said he lived daily by the Ten Commandments and was constantly seeking out ways in which to help those around him. Most operations in this community at this time were of the smaller type; the making of cedar shingles.

In 1907 and 1908, A. E. White built the first store, later becoming the Summitt Mercantile Company. Summitt was closely tied in with McCleary's history for it was here that the first post office for this entire community was established in November, 1878. The Postmaster was Harrison D. Taylor.

After McCleary went into business for himself, he hired four men, A. W. Teagle, John Olmsted, Charles Crosby and Robert Padgett, to work for him. It is noted that all of these men were regular employees for many years to come. Mr. Teagle became Manager and later wrote a very interesting account of his years with the McCleary family.

Two sons, Charles and Frank McCleary, grew up with their father in the logging business but as time went along, they departed from this way of life and took up other interests.

In 1923, Mr. McCleary built a magnificent home for his wife in Olympia. It was to be a gift of appreciation for her devotion and hardships she had endured throughout the years. But she died before it was finished. For a time, Mr. McCleary, with his son, Frank, lived there in luxury. It was one of the first mansions to have an entire roof of solid copper and another feature, a huge circular stairway near the entrance. He had lavished \$100,000 on this show place and it seemed all should have been well, but his heart never left the little community of McCleary and in his moments of loneliness he came back to keep in touch with the happenings around his town. Later, he again married and the second Mrs. McCleary became a leader in the community. The present Community Church in McCleary was dedicated to her.

Perhaps the highlight of McCleary's career was the sale of his entire holdings in December of 1941 to the Simpson Logging Company of Shelton. The early part of 1942 saw for the first time the entrance of the A. F. of L. and C.I.O. Unions into the lumber business.

In 1943, Simpson Lumber Company had no desire to take on the responsibility of local government and advised the citizens to incorporate and run their own city businesses. An election was held on December 5, 1942, and Lee Wills was elected Mayor.

Some interesting dates connected with this growing town was its first automobile, a two cylinder Rec, owned by John Olmsted.

The first bank was opened on May 9, 1921, and closed February 16, 1942, after twenty-one years of prosperity.

The McCleary Volunteer Fire Department was organized in February, 1942; Russell Robbins as Chief.

Much admiration goes to this little town for having installed, in 1946, the first automatic dial phones of Grays Harbor County.

In 1952 and 1953, a two-stage treatment sewer plant was erected at a cost of over \$500,000.

A new library opened in March of 1949. This replaced the Grays Harbor County Bookmobile.

In December, 1953, the McCleary Stimulator began as a local paper under the management of Norman A. Porter.

The new McCleary school building, with gymnasium and auditorium, was built in 1952 and put in use in March, 1953. One of the finest schools in the state, plans for additional rooms have already been made.

Harry P. Craft had the first telephone.

The modern hospital was built in the Spring of 1913 and the town rejoiced at having its first good doctor and nurse, Dr. Burton Fleming and his wife.

Mr. McCleary passed away in May, 1943. After his death, the beautiful mansion in Olympia was sold, later remodeled and is now the Olympia Medical Center.

To sum up the accomplishments of just one little lumbering town of this great Northwest, David H. Dickson, Editor of the Elma Chronicle, upon his retirement in February, 1953, had this to say -

"McCleary, as a direct result of the Simpson influence, is one of the fastest growing towns in Western Washington."

This writer agrees.

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Montesano

Montesano, being located in a rich agricultural valley, makes it readily understandable why it is one of the oldest towns in Grays Harbor County. Isaiah H. Scammon, who came from Maine by way of California in 1852, was the first white man to settle here. He had a donation claim of 640 acres on the South side of the Chehalis River. At that time, his closest neighbor was Walter King who lived on the Wynooche River. Corydon F. Porter was also living in the area on a claim which is now known as Porter Creek. John Brady arrived shortly before 1853 and took up residence on the Satsop River on the spot now known as the town of Brady, which bears his name. News traveled swiftly of the richness of this valley country; others soon followed and it wasn't long until the country side was dotted with numerous homes.

At first, Montesano was known as Scammon's Place, in honor of its first resident. Later in 1860, it became Montesano. The first part, "Monte," means mountain and "Sano" means healthy. This combination seemed quite appropriate for such a lovely valley. What is now known as South Montesano is the location in those days of Scammon's Place.

About this period there were mixed feelings on where the County seat should be located, but in 1860 Montesano was chosen and it remains today the County Seat of Chehalis County.

The first school for this immediate area was established in 1863, being the second officially built school of Grays Harbor County.

On October 7, 1869, a community grave yard was located where the Methodist Church now stands. This plot was used for almost two years until April, 1871, when a new and more spacious cemetery was established on "Maces Mound," and was given the name Wynooche Cemetery.

John Esmond is credited with starting the first store in 1872; its location being in what was known at that time as Lower Town.

It is interesting to note that the first carriage was owned and used by Nelson Waite in 1878. Much admiration was expressed by those who, in later years, became the proud owners of such fancy modes of transportation.

One of the first newspapers to be much appreciated by young and old alike was the "Vidette," established on February 1, 1883. Also during this same year, Montesano was incorporated.

Montesano's first postmaster, after the town was incorporated, was W. H. Bush.

Always present was the mindful need of more roads, and though they were going in slowly, the settlers found visiting and business activities still

quite difficult to accomplish. Perhaps no road was more important than the one built from Olympia to Montesano. From information given by Jeb Rogers in 1889, the first stagecoach driver, it took eight hours to make the trip between the two towns. This was a distance of forty-five miles and was considered in those times a rugged trip. The road was very winding, threading its way among countless trees. The stage seated nine to ten passengers and many of the hills were so steep the men got out and walked to aid the horses on their long and arduous pull.

As the years rolled by, the lumber industry steadily grew. Better roads, though slow in coming, made it somewhat easier to transport the huge logs. There have been periods of both prosperity and depression, but the families survived and the industry continued to expand. Social activities were planned mainly for the week ends so that the men folks could be home to participate.

The year 1893 saw the beginning of another famous logging operation in this community. That of the Schafer Brothers Logging Company, ^{John} and Anna Schafer, who had settled in the Satsop Valley in 1870, had three sons - Peter, Hubert and Albert. They were highly intelligent and skilled men in their field and went on to make a sizable fortune for themselves. In 1955, after sixty-two years of hard work, the Schafer brothers sold their entire holdings to the Simpson Lumber Company. Tourists, and old timers alike, can still see the weather-worn Schafer building standing on the highway between Brady and Montesano. This extended operation naturally added to the material growth of this community.

Since Grays Harbor County is made up of several towns, it is difficult to say that one contributed more substantially to the over-all growth than another. But Montesano has been prominent from the beginning as the County Seat and with the fine group of active and civic-minded men behind its government, this writer sees, in time, a still more thriving community.

Westport

Westport, because of its unique location at the mouth of the Chehalis River, has been from the very beginning, one of the truly important and colorful centers of Grays Harbor County.

Records point out a man by the name of Speak built the first house on the Southern point in 1856. In 1857, Paterson Luark came followed by Glen Peterson in 1859. Westport was given the name Peterson's Point in honor of this early settler. It was also know, for a time, as Chehalis Point and by this name it was known when the first mail was delivered by stagecoach.

The early settlers were never without some degree of fear of the Indians, but the situation became acute in 1860. Feeling there might be a large-scale uprising, Captain Wright of the steamship "Enterprise" was sent to Olympia to seek help from the Governor. He sent a substantial number of troops who stayed less than a year and fired not a shot.

In due time, Glen Peterson created a freighting business by team along the beach from North Cove. Their home was frequently an overnight stopping place for weary travelers. From Peterson Point, the people took the boat up Grays Harbor or went by team to Willapa Harbor. Even at this early date, Westport was enjoyed as a Summer resort and excellent fishing grounds for a large and wide variety of sea foods. It since has become world renowned as a Sports Fishing Center. A man by the name of E. Nyhus opened the first store at the cove sight now occupied by the Westhaven Dock.

An interesting bit of early history relates how Ed Kaakinen, in the early thirties, who was the founder of the now famous Crabbing Industry, was offered Point Chehalis by its owner, Aberdeen Tug Fleet Owner Dick Liltican, for the sum of \$150.00. Kaakinen refused to take it, saying it wasn't worth that much. Today, he couldn't buy it for ten million dollars.

The Government, as early as 1882, made the first surveys of the bay and harbor. Since that time, large sums of money have been spent in building jetties, deepening the channel, filling in tidelands, and building docks and dock buildings.

It was about this time that the people of this area felt something should be done about the number of ship wrecks which had taken place at the mouth of the harbor. They appealed to the Government for a lighthouse. On April 14, 1898, after two years in building, a fine new lighthouse, with imported French made lens, was commissioned, and Charles Jacobson was the first keeper.

So colorful is the life of this extraordinary man that this writer wishes to dedicate a bit of space here to his fine accomplishments; also to his son, Roy. Without their dedication to duty, countless ships, and an untold number of men, would never have survived.

Charles Jacobson had a deep love of the sea. He was a sturdy boy born in Sondefjord, Norway. At the age of fifteen, he was sailing the open waters around his native country and at twenty-one held a master's license for sailing vessels. But he had heard of America and wanted to see its greatness. So in 1884, he landed in New York. A year later, he joined the Cutter "Bear" and spent nineteen months cruising to Alaskan waters and later assisted in transporting personnel of Byrd's South Polar Expedition. Later he joined the Cutter "Rush," followed by the Coast and Geodetic Survey Steamship "McArthur." It was after this period that he joined the U.S. Life Saving Service. At first, he was stationed at North Cove, then went to Willapa Bay for six years and from here to Point Adams Life Saving Station at the mouth of the Columbia River for five additional years. When his assignment came to be transferred to the new lighthouse at Grays Harbor, he came and stayed until his retirement.

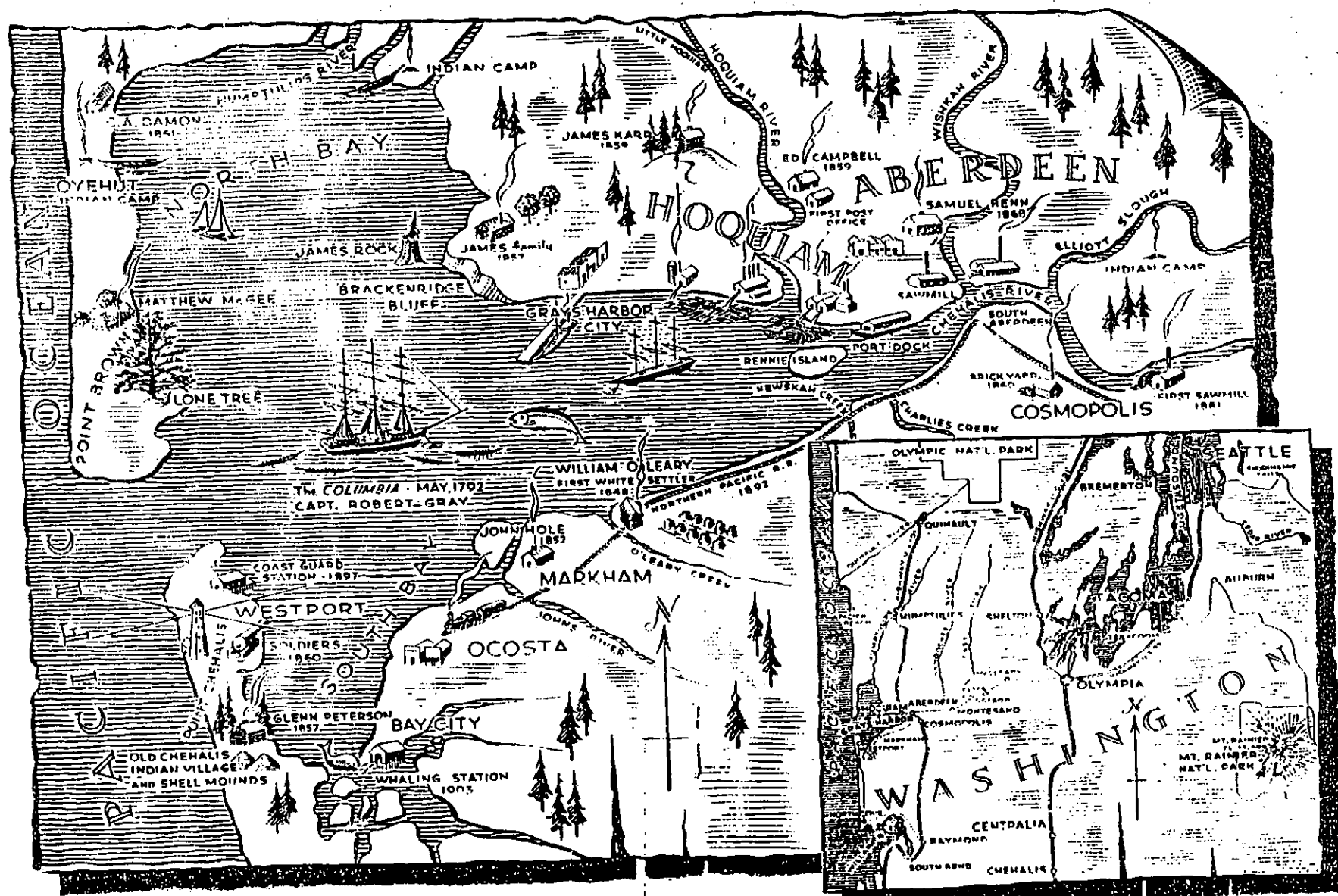
On the day he took over his duties at Westport, he had a two weeks' old son, Roy. Upon his father's retirement in 1917, he followed as keeper of the same lighthouse. He gave approximately twenty-six more years to the strict guidance of sea-going vessels.

It was the writer's privilege to talk quite at length with Roy Jacobson (or "Sharkey" as he is known around Westport) and a more interesting conference could not be had on any subject. He told of his childhood being spent under the ever-changing light that cast its rays toward the ocean. The first fog horns were run by steam and if a distress call came, his father and crew took off through the surf in open boats manned only by hand oars. The one thing that Charles Jacobson sought more than anything else was better equipment for his crew. The general feeling was that since they held a one hundred percent safety record, improved equipment was unnecessary. However, three years before his retirement, there was a fine power boat assigned to Grays Harbor. Seattle's waterfront saw a great deal of Charles Jacobson in later years. He lived to be almost ninety-two and died August 3, 1954.

Working closely with the lighthouse service was the Coast Guard. For many years, this worked primarily as one unit but during Roosevelt's administration he divided them and made two distinct services.

Retracing our steps a bit back through the years, it was December 12, 1911, that the citizens of Grays Harbor County voted to organize the County into a Port District. Then eighteen years later in 1929, the Westport Dock was established to assist the steadily growing fishing industry.

Today, Westport is truly a tourist attraction and much is being planned to make it an even larger one. During the height of the fishing season, the harbor is crowded with charter boats coming from Alaska to Mexico. It is a colorful place, visited by local folks and celebrities alike. Civic pride and the desire of those closely connected with Westport will carry this unique area to even greater acclaim.



Historical Cartograph of Grays Harbor

PART TWO

POPULATION DATA, TABLES, EMPLOY-
MENT STATISTICS, ANNEXATIONS, BUILD-
ING PERMITS, NEW SERVICES, SCHOOL
DISTRICTS AND ATTENDANCE, AND GEN-
ERAL ECONOMIC CHARACTERISTICS OF
POPULATION. ALSO A COMPARISON
OF INFORMATION ON POPULATION AND
HARBOR POTENTIALS.

POPULATION TRENDS IN GRAYS HARBOR COUNTY

Grays Harbor County population grew at a slow rate in the beginning, partly due to the difficult problems of transportation and communication. The Territorial Government officially established the County on April 14, 1854, but some questions arose as to its legal status. These questions were finally settled by action of the Supreme Court on March 15, 1915, when Grays Harbor was again officially made a county. Due to prosperous times, the population increased steadily and reached a peak in 1930. After the Market crash, a slump in building resulted, the price of lumber went down, and there were few jobs available. As a result, many people moved seeking work elsewhere resulting in a drop of the total population in the 1940 count. From that time, there has been a slow population gain resulting in some activity in residential, commercial and industrial development.

Trends in Population Growth

The material gathered together for this study pertains to the many phases of population growth and its various activities. In Table 'A,' all of the incorporated cities of Grays Harbor County are listed alphabetically with a total population of all cities; the unincorporated part of the County, a total city and County population, and the State of Washington. Population is listed for the years 1930, 1940, 1950, and the 1960 Census count; also the amount of gain or loss of population and the percent over the last ten years. Plate 'I' is a logarithmic chart showing the population count from the census for ten-year intervals plotted on a logarithmic scale of thousands of persons, except for Oakville and Westport which are plotted in hundreds, and the State of Washington which is plotted in hundreds of thousands. The estimated State population of 3,530,000 persons for 1975 was made by the Stanford Research Institute. The local estimates are a combination of a number of methods used to estimate population.

Grays Harbor Regional Planning Comm.

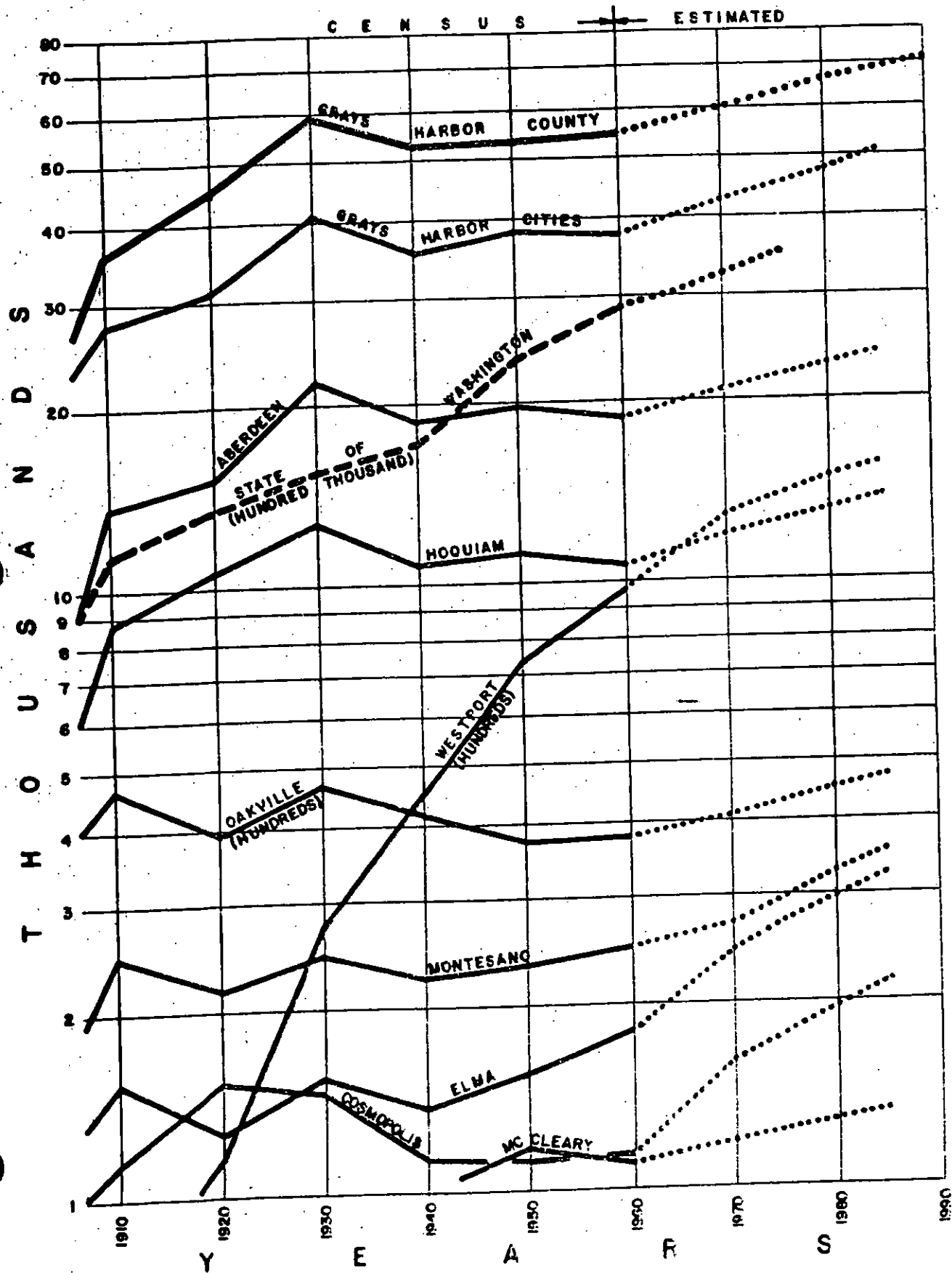
Population of Grays Harbor County 1930 to 1960

City	1930	1940	1950	1960	No.	%
Aberdeen	21,723	18,846	19,653	18,741	-912	-4.6
Cosmopolis	1,493	1,206	1,164	1,312	148	12.7
Elma	1,545	1,370	1,543	1,811	268	17.3
Hoquiam	12,766	10,835	11,123	10,762	-361	-3.2
McCleary	-	-	1,175	1,115	-60	-5.1
Montesano	2,460	2,242	2,328	2,486	158	6.7
Oakville	469	418	372	377	5	1.3
Westport	272	443	731	976	245	33.6
Total Cities	40,728	35,360	38,089	37,580	-508	-1.3
G.H. Co. (only)	19,254	17,806	15,555	16,885	1,329	8.5
G.H. Cities & Co.	59,982	53,166	53,644	54,465	821	1.5
State of Wash.	1,563,396	1,736,191	2,378,963	2,853,214	474,251	19.9

('A')

Source: US Bureau of Census Final 1960
Washington State Census Board

POPULATION



Some of the methods studied in making the local estimates were the Cohort-Survival (births, deaths, and migration), the comparison of projections method, the ratio method used by the Census Bureau for certain areas, and logarithmic trend. Population projections made with the best of information should be checked at least every five years with special counts to see if the estimates are in line with the actual growth and if not, corrections should be made. In this manner, progress toward the completion of the planning program can be regulated to fit the needs of the population and a realistic program can be carried on to the Plan's completion.

Table 'B' lists the natural increase in live births over deaths, the rate per 1,000 population, the decennial population change and the net migration for the State, Grays Harbor, and five nearby counties for a comparisons of growth. Grays Harbor shows a large migration which was possibly caused by the change in total employment. A fluctuation in the price and demand for lumber also created a fluctuation in the number of jobs available. If these people could have found other jobs in the area, they would have possibly remained in Grays Harbor. This stresses the need to develop a variety of industries within the area so that all payrolls will not depend on one product for support.

Natural Increase & Net Migration
1940 - 1960

	Births	Deaths	Natural Increase		Decennial Pop. Change	Net Migra- tion
			Number	Rate Per 1000 Pop.		
State	454,211	214,828	239,383	137.9	642,772	403,389
Grays Harbor	10,983	5,946	5,037	94.7	478	-4,559
Mason	2,963	1,193	1,770	152.6	3,419	1,649
Thurston	9,067	3,814	5,253	140.9	7,599	2,346
Lewis	8,669	4,767	3,902	94.3	2,362	-1,540
Pierce	48,341	26,309	22,032	121.0	93,795	71,763
King	139,199	67,555	71,644	141.9	228,012	156,368

('B')

Note: A comparison of adjacent counties with the largest net numerical out migration between 1940 and 1950 was Grays Harbor, Lewis and Stevens within the State of Washington. Grays Harbor lost 4,559 population by migration, but it had sufficient natural increase to record a gain of 478 persons during this ten-year period.

Source: Washington State Census Board

Table 'C' shows the number of live births and deaths in Grays Harbor County by the year from 1940 to 1960 and the gain in population which amounted to 11,580 for the twenty year period, as compiled by the State Department of Health. If this population had all remained within this County, the results would have amounted to a gain of approximately 12% over the last ten years.

**Number of Live Births and Deaths in Grays Harbor
County for the years 1940 - 1960**

<u>Year</u>	<u>Live Births</u>	<u>Deaths</u>	<u>Population Gain</u>
1940	933	592	341
1941	933	584	349
1942	1,030	566	464
1943	958	541	417
1944	926	567	359
1945	917	579	338
1946	1,127	611	516
1947	1,426	607	819
1948	1,369	679	690
1949	1,294	638	656
1950	1,252	671	581
1951	1,294	688	606
1952	1,285	600	685
1953	1,251	576	675
1954	1,202	572	630
1955	1,167	596	571
1956	1,298	594	704
1957	1,206	628	578
1958	1,182	632	550
1959	1,152	649	503
1960	1,176	628	548
	24,378	12,798	11,580

('C')

Source: State Department of Health

The rural population of the County is another important factor in the study of population. In Table 'D,' the rural farm and rural non-farm population is considered separately, and divided into male and female listings for each five-year interval from birth to seventy-five and over. This table can be used to determine rural school attendance and labor force available in the rural areas of the County.

Grays Harbor County
Characteristics of Rural Non-farm and Rural
Farm Population for 1950

	<u>Rural Farm</u>		<u>Rural Non-farm</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
Total Population	4,899		17,969	
Under 5 years	228	216	1,094	961
5-9 "	241	223	871	842
10-14 "	253	216	751	699

	Rural Farm		Rural Non-farm	
	Male	Female	Male	Female
15-19 years	232	167	644	573
20-24 "	134	86	634	552
25-29 "	131	123	562	659
30-34 "	127	118	706	642
35-39 "	162	170	686	603
40-44 "	162	184	639	536
45-49 "	149	150	549	451
50-54 "	171	173	516	433
55-59 "	180	160	498	377
60-64 "	179	181	491	350
65-69 "	149	74	407	289
70-74 "	91	59	263	195
75 and over	61	41	278	196

('D')

Source: US Census Bureau

In Table 'E' the Grays Harbor County is compared with ten other counties that have had at one time the same population count as this county. The comparison is made over a twenty year period from 1940 to 1960. The percent of change for the last ten years is also shown in the last column; some have had substantial growth, while one county has lost population. Except for one county with a loss, this county shows the smallest gain of this group of counties. Further study of the reasons for this very small gain may bring out the need to take some positive action for its correction. Grays Harbor ranked second in population in 1940, third in 1950 and sixth in 1960 of this group of ten counties. This would indicate a trend in the wrong direction and would indicate that a better selling job has to be done to attract people and industry.

Population Comparison of Eleven Cos.

	1940	1950	% Over 1940	1960	% Over 1950
Kitsap	44,287	75,724	70.6	84,176	11.2
Whatcom	60,355	66,733	10.6	70,312	5.4
Benton	12,053	51,379	326.2	62,070	20.8
Cowlitz	40,155	53,369	32.9	57,801	8.3
Thurston	37,285	44,684	20.4	55,049	22.6
GRAYS HARBOR	53,166	53,644	0.9	54,465	1.5
Skagit	37,650	43,271	14.4	51,350	18.7
Grant	14,668	24,346	65.0	46,471	90.9
Walla Walla	30,547	40,135	31.4	42,195	5.1
Lewis	41,393	43,285	4.6	41,855	-1.3
Chelan	34,412	39,301	14.2	40,744	3.7

('E')

Source: US Census 1950

The County outline, shown in Plate 'II' is from the 1950 Census Report and shows the thirteen census districts as used in the census of that year. The districts and the population count within each district is also shown on the Plate. The change over the ten-year period has only been 821 persons. Most of this increase has been in the unincorporated area and a couple of cities. The Central Park area in the County and along the coast have been areas of considerable growth.

Another comparison is made in Table 'F' with adjacent counties, three metropolitan areas and three states, Washington, Oregon and Idaho. The list includes populated areas within three hours travel time except Idaho. The three metropolitan areas are Seattle, Tacoma and Portland. As these areas grow in population, a certain amount of this development and influence will spread to the Grays Harbor area. Business will become more competitive and as business and industry seek more people to serve and better sites for their operation, this area could be affected.

Population
Counties, Metropolitan Areas and
States

	<u>Total 1950</u>	<u>Total 1960</u>	<u>1950 - 1960 % of Increase</u>
Grays Harbor	53,644	54,465	0.1
Mason	15,022	16,251	6.8
Thurston	44,884	55,049	21.4
Lewis	43,755	41,858	-5.9
Pierce	275,876	321,590	16.2
King	732,992	935,014	26.6
Pacific	16,558	14,674	-11.3
Portland Met. Area	704,829	726,068	3.3
Tacoma Met. Area	143,673	147,979	2.3
Seattle Met. Area	467,591	557,087	18.0
State of Washington	2,378,963	2,863,214	19.9
Oregon	1,521,341	1,766,687	16.3
Idaho	588,637	667,191	13.3

('F')

Source: US Census 1950-1960

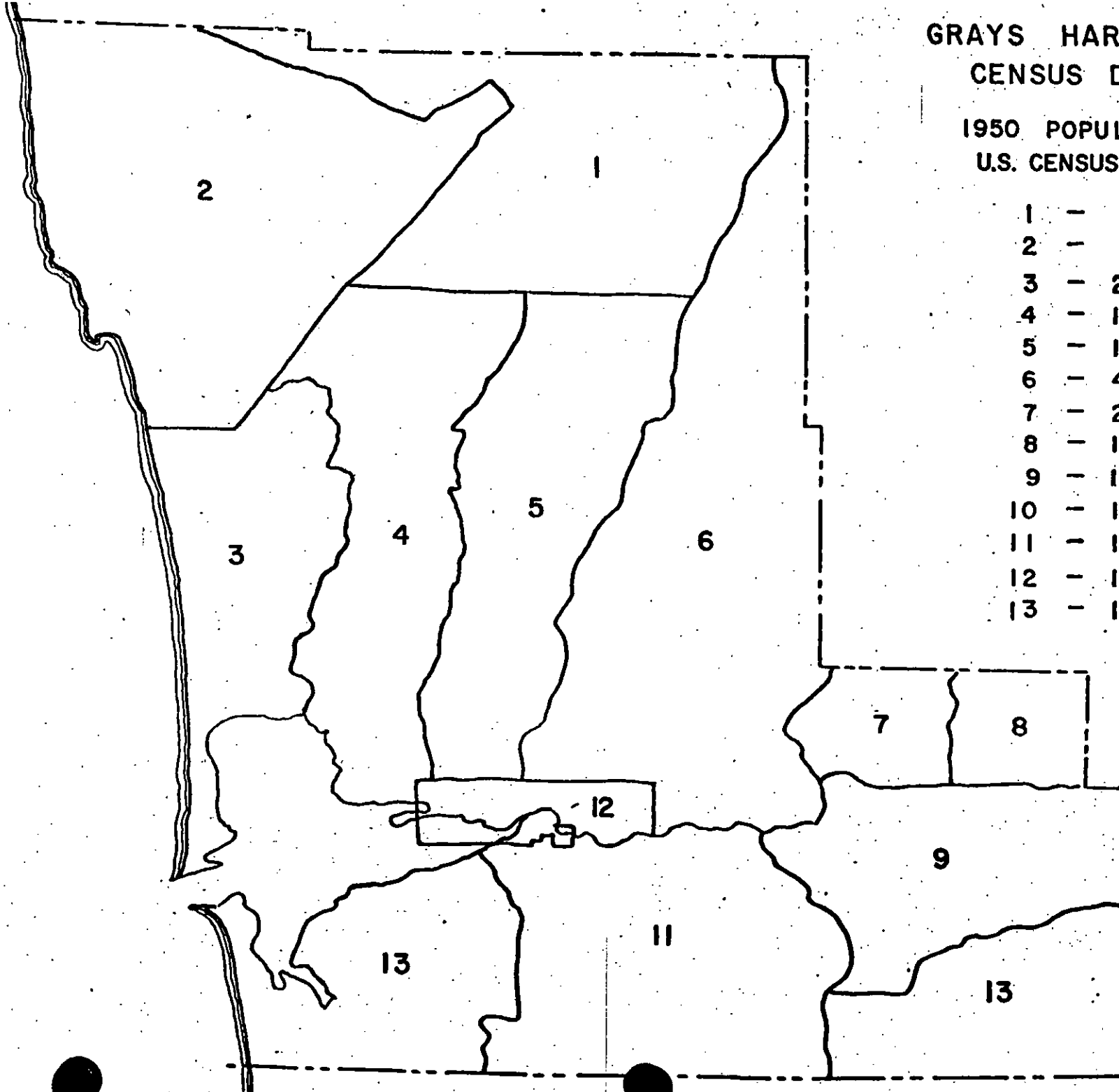
GRAYS HARBOR COUNTY CENSUS DIVISIONS

1950 POPULATION BY U.S. CENSUS DIVISIONS

1	-	508
2	-	439
3	-	2328
4	-	1244
5	-	1823
6	-	4123
7	-	2304
8	-	1859
9	-	1819
10	-	1152
11	-	1970
12	-	1470
13	-	1829

1960 Population by Divisions

1	-	659
2	-	594
3	-	2436
4	-	1426
5	-	1991
6	-	4439
7	-	2732
8	-	1713
9	-	1773
10	-	1076
11	-	2088
12	-	2050
13	-	1985



Many people prefer to live within commuting distance of a metropolitan area so they can take advantage of the multiple choice of items and bargains, the social activities, and yet still retain a rural atmosphere for their home in a quiet location away from the "hustle" and "bustle" of traffic and crowds. Within three hours, and most of it two hours travel time by freeway from Grays Harbor, there are nearly 2.5 million people. They are scattered over the nine counties and within the Portland Metropolitan area. Two and a half million people, within two to three hours travel time by freeway, can make many unforeseen changes in an inviting and attractive community in a very short time. This change can be accelerated by the people within Grays Harbor area in many ways. People are interested in attractive and inviting towns and places. The attraction can be in many ways such as historical, scenic, quaint, with old fashioned charm, sport facilities, the water front or beaches for picnic or beauty, and areas park-like in character for relaxation, providing the areas have easy access, lots of conveniences and ample parking space. People will then have a chance to stop, or will want to stop to enjoy the available facilities. To bear this out, the U. S. Forest Service reports they have had an increase of 109% in the number of persons using their facilities in the Northwest over an eight-year period from 1950 to 1958 and are expecting many more this year.

Tables 'G' and 'H' are population tables with the population separated into the various age groups at five-year intervals and divided into male and female classification. Another part of the tables show a comparison of Grays Harbor County, the State of Washington and the cities of Aberdeen and Hoquiam. The comparison of the percent of the total population within each age group is another figure that may be used to compute school and labor force figures. These figures are only available from the 1950 Census at this time; the 1960 figures will not be available for some months. Other figures shown here can also be used in studies to develop a program to provide better facilities for the Senior Citizen.

Population Studies - Age & Sex of Population
Grays Harbor County & State of Washington
 1950

Age Groups	GRAY'S HARBOR CO.				WASHINGTON			
	Male	Female	Total	% of Tot.	Male	Female	Total	% of Tot.
Under 5 Yrs.	2,976	2,829	5,807	10.6	154,907	129,349	263,326	11.06
5-9 "	2,428	2,237	4,665	8.6	104,097	99,689	203,786	8.5
10-14 "	1,946	1,888	3,834	7.1	81,262	78,433	159,685	6.7
15-19 "	1,689	1,598	3,287	6.1	85,085	72,607	157,695	6.6
20-24 "	1,617	1,666	3,283	6.1	92,158	83,461	175,619	7.4
25-34 "	3,916	3,958	7,876	14.6	193,275	190,448	383,723	16.08
35-44 "	4,059	3,700	7,759	14.4	174,350	165,489	339,839	14.2
45-54 "	3,279	2,892	6,171	11.3	136,651	128,002	264,653	11.1
55-64 "	3,191	2,577	5,768	10.7	114,361	104,861	219,222	9.2
Over 65 "	2,957	2,237	5,194	9.6	105,632	102,773	211,405	8.8
TOTAL								
-1950-	28,062	25,562	53,644	99.5	1,223,851		2,378,963	103.64
('G')						1,555,112		

Population Studies - Age & Sex of Population
Aberdeen & Hoquiam
1950

Age Groups	ABERDEEN				HOQUIAM			
	Male	Female	Total	% of Tot.	Male	Female	Total	% of Tot.
Under 5 Yrs.	1,070	1,056	2,126	10.8	586	595	1,181	10.6
5-9 "	795	715	1,513	7.6	521	454	975	8.76
10-14 "	545	586	1,131	5.7	397	387	784	7.04
15-19 "	529	541	1,070	5.4	354	317	601	5.40
20-24 "	536	685	1,221	6.2	415	343	656	5.8
25-34 "	1,573	1,536	3,109	15.8	799	883	1,682	15.1
35-44 "	1,542	1,431	2,973	15.2	865	784	1,652	14.8
45-54 "	1,190	1,067	2,257	11.4	704	618	1,322	11.8
55-64 "	1,223	1,024	2,247	11.4	620	545	1,165	10.4
65 and over	1,104	692	1,796	10.1	604	501	1,105	9.9
TOTAL								
-1950-	10,107	9,546	19,653	99.4	5,696	5,427	11,123	99.4

('H')

The status of labor force is shown in Table 12 for the cities of Aberdeen and Hoquiam, Grays Harbor County, the State of Washington, and the percent of each. This information is only available for the 1950 Census count; the 1960 data will not be available 'till later in the year when other comparisons will be made in the second phase of the Planning Program. This information has only been compiled for cities over 10,000 population and the County as a whole. The County percentages, if applied to a city, would be nearly correct due to the County being an over-all average.

Status of Labor Force
Aberdeen, Hoquiam, Grays Harbor County & State of
Washington-1950

	ABERDEEN	HOQUIAM	G.H.CO.	STATE OF WASH.
Persons 14 & over	15,095	8,325	-	1,781,875
% of Population	76.0	74.8	-	77.4
Labor Force	8,461	4,805	21,824	957,611
% of Persons over 14	56.2	57.7	-	53.7
Civilian Labor Force	8,414	4,794	21,673	900,746
% of Labor Force	99.4	99.7	99.4	94.0
Employed	7,812	4,407	20,333	840,062
% of Civilian Labor Force	92.4	92.4	93.5	93.2
Unemployed	602	397	1,341	60,684
% of Civilian Labor Force	7.1	7.6	6.1	6.7

(cont. Page 27)

	<u>ABERDEEN</u>	<u>HOQUIAM</u>	<u>C. H. CO.</u>	<u>STATE OF WASH.</u>
Private Wage and Salary Workers	6,114	3,543	15,158	571,994
Government Workers	599	374	1,671	114,719
% of Employed	7.6	8.6	8.2	13.6
Self - employed	1,042	780	3,239	142,358
% of Employed	13.3	17.5	15.9	16.9
Unpaid Family Workers	57	40	264	10,991
% of Employed	0.7	0.9	1.2	1.3
('I')				

Employment by the major occupational groups for 1950 is listed in Table 'J' with a total number and the percent listed for Aberdeen and Hoquiam, the County and the State. (Aberdeen and Hoquiam listed together.) The list includes most of the major types of jobs found in this area.

Employment by Major Occupational
Groups - 1950

<u>Occupational Groups</u>	<u>ABERDEEN HOQUIAM</u>		<u>COUNTY</u>		<u>STATE</u>	
	<u>Total</u>	<u>%</u>	<u>Total</u>	<u>%</u>	<u>Total</u>	<u>%</u>
Professional, Technical, etc.	922	9.28	1,308	2.4	84,922	3.6
Farmers, Farm Management	11	.012	637	1.1	46,023	1.9
Managers, Officials & Proprietors	1,547	14.35	1,979	3.6	88,076	3.8
Clerical and Kindred	1,217	11.43	1,632	3.0	108,748	4.5
Sales Workers	947	8.80	1,296	2.4	67,724	2.8
Craftsmen, Foremen, etc.	1,599	14.8	2,612	4.8	143,283	6.0
Operatives and Kindred	3,075	28.6	4,972	9.2	134,924	5.6
Private Households	222	2.40	288	0.5	14,931	0.6
Service Workers	1,144	11.6	0	-	78,663	3.4
Farm Labor (unpaid family workers)	3	.002	99	0.1	32,773	1.3
Laborers (except Farm & Mine)	18	0	3,536	6.5	78,873	3.3
Occupations not reported	-	-	491	0.9	20,945	0.8

('J')

*Not reported

Source: US Census

The economic characteristics of the population of the Cities of Aberdeen and Hoquiam, as they relate to the employment and labor force divided into male and female, are shown in Table 'K' along with additional miscellaneous information on the two cities on percent gain, persons per household, income, and information on housing units for 1960.

**Economic Characteristics of Population
By Sex - 1950 Census**

	<u>ABERDEEN</u>		<u>HOQUIAM</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
Total Population	10,107	9,546	5,696	5,427
Employment Status Over 14 Yrs. of Age				
	7,799	7,292	4,262	4,063
Labor Force	6,271	2,190	3,508	1,297
Not in Labor Force	1,528	5,102	754	2,766
Major Occupations (Empl.) (Office, Managers, Sales)	5,775	2,037	3,253	1,184
Experienced (Unemployed)	440	146	243	111
Industry (Empl.)	5,775	2,037	3,253	1,184
Agriculture	32	4	7	7

Miscellaneous Data

Percent Gain (1940 to 1950 population)	4.3	2.7
(1950 to 1960 population)	-4.6	-3.2
Median Age in Years	33.9	33.3
Percent 65 or Older	10.1	9.9
Percent Non-white	0.5	0.1
Persons per Household - 1950	2.82	2.93
- 1960	2.81	2.96
Persons 1 Yr. Old & Over in Same Household	60.1	76.9

	<u>ABERDEEN</u>	<u>HOQUIAM</u>
Persons 14 to 17 in School	91.7	85.8
Twenty-five Yrs. and Over Median School Years Completed	10.3	10.1
Percent Employed in Manufacturing	37.1	47.5
Families and Unrelated Indiv. Median Income	\$3,216.	\$3,379.
Percent Less Than \$2,000.	29.8	26.2
Civilian Labor Force Unemployed (1950)	7.2	7.4
Total Number Housing Units (1960)	7,400	3,892
Total Number Housing Units Occupied (1960)	6,550	3,599
Total Number Housing Units Vacant (1960)	850	293

('K')

Source: US Census

Table 'L' is a tabulation compiled by the local office of the State Employment Security Department. This table lists the number and the rate under State Insured Unemployment at the mid-month in the Grays Harbor area. The table covers the ten-year period from 1950-1960. The seasonal fluctuation and the yearly change in unemployment can readily be seen by comparing years and months. How to overcome this large seasonal change in jobs available is a basic problem for this area. The problem has remained with us over the last ten years, so it will evidently not go away by just ignoring it. This is a major problem, and only by joint effort of all the cities, the County, business, industry, public and private agencies and organizations working together, with a common interest, can some progress be made in providing steady payrolls the year around.

**State Insured Unemployment at Mid-month (mid-week of month) in
Aberdeen Area (Grays Harbor County) 1950 - 1960**

	1950		1951		1952		1953		1954		1955	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Jan.	3355	20.2	353	3.8	1917	12.2	1501	9.3	1855	12.6	1247	9.1
Feb.	3037	18.3	602	4.1	1158	7.4	1205	7.5	2209	14.8	997	7.3
Mar.	1214	7.3	994	6.1	1073	6.9	1044	6.5	1045	7.0	1173	8.6
Apr.	736	4.4	469	3.2	888	5.7	1137	7.1	945	6.5	786	6.2
May	529	3.2	210	1.4	842	5.4	631	3.9	636	4.4	397	3.1
June	354	2.1	149	1.0	921	2.9	543	3.4	480	3.3	264	2.1
July	448	3.1	450	2.9	517	3.2	736	5.0	1107	7.8	501	3.9
Aug.	318	2.2	404	2.6	488	3.0	952	6.5	1256	8.9	483	3.8
Sep.	251	1.7	604	3.9	548	3.4	1114	7.6	1372	9.7	441	3.5
Oct.	225	1.5	713	4.6	608	3.8	1137	7.7	721	5.2	512	4.0
Nov.	376	2.6	742	4.7	1202	7.5	1642	11.2	877	6.3	741	5.3
Dec.	458	3.1	1086	6.6	1258	7.8	1957	13.3	1095	7.9	1003	7.0
Average Weekly	898	5.7	559	3.5	925	6.3	1131	8.0	1132	8.9	701	5.0

	1956		1957		1958		1959		1960		
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	
Jan.	1268	9.9	2152	15.0	2178	15.5	1189	9.5	1306	10.0	
Feb.	1305	10.2	1775	12.4	2240	16.0	1081	8.6	1250	9.6	
Mar.	1313	10.3	1122	7.8	1609	11.5	1001	8.0	1738	13.3	
Apr.	727	5.3	914	6.3	1337	9.8	691	5.6	775	5.9	
May	637	4.6	600	4.2	925	6.8	545	4.4	814	6.2	
June	333	2.4	477	3.3	572	4.3	374	3.0	648	4.9	
July		4.5	1007	7.0	1183	8.9	566	4.5	1137	8.6	
Aug.	610	4.4	1247	8.7	1176	8.9	550	4.4	985	7.4	
Sep.	640	4.6	1183	8.2	886	6.7	818	6.5	1077	8.1	
Oct.	875	6.3	1353	9.5	908	7.1	758	5.9	1621	12.3	
Nov.	1227	8.7	1666	11.7	1201	9.3	1114	8.7	2087	15.8	
Dec.	1443	10.2	1960	14.0	1246	9.7	1236	9.7	1691	12.8	
Average Weekly	894	6.2	1308	9.9	1357	10.8	842	6.4	1227	9.4*	(*Partially Estimated

The four Tables 'M' compiled by the State Employment Security Department for the periods listed can be used for comparison of the various industrial, commercial and service-type of employment within Grays Harbor County. The fourth quarter of the years 1950, 1955 and 1959, and the first quarter of 1960, are shown with agricultural totals added to the 1959 and 1960 lists. The total number of employer units and the total covered employment, and the dollars in wages paid for each classification, can be compared for the ten-year period. It will be noted that there is more of a variation in contract construction and manufacturing than the retail trade, services, insurance and real estate, which has been fairly steady. But all could be improved by developing a diversified industrial program and actually putting it into effect. These tables show where a little more than 75% of the total labor force is working. Further studies will be conducted as a part of another phase of the Planning Program where more information will be compiled on business and industry.

Employer Units, Employment and Wages Covered by
Washington Unemployment Compensation Act
Classified by Industry, Fourth Qtr., 1950

<u>Grays Harbor County</u> <u>Industry</u>	<u>Emp.</u> <u>Units</u>	<u>Covered Employment</u>			<u>Wages Paid</u> <u>4th Qtr., 1950</u>
		<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>	
Total	1,420	16,672	16,249	16,070	\$14,599,658
FORESTRY & FISHING	63	59	47	35	39,756
MINING AND QUARRYING	0	0	0	0	0
CONTRACT CONSTRUCTION	110	505	414	381	379,825
MANUFACTURING	255	10,420	10,095	9,728	9,938,024
Logging, Lbr., Wood Prod., Furn.	200	8,592	8,389	8,093	8,303,631
Other Durable Goods Manuf.	14	203	202	222	197,985
Food and Kindred Products	27	527	416	312	282,821
Other Non-durable Goods Mfg.	14	1,098	1,088	1,101	3,008,587
TRANSPORTATION & ALLIED SERVICES	62	652	649	632	548,593
COMMUNICATIONS & UTILITIES	12	401	390	390	334,078
WHOLESALE TRADE	64	650	651	714	509,975
WHOLESALE & RETAIL TRADE	8	183	170	169	266,647
RETAIL TRADE	463	2,413	2,449	2,623	1,706,671
General Merchandise	25	409	401	559	248,450

(Cont. Page 32)

Industry	Emp. Units	Covered Employment			Wages Paid 4th Qtr., 1950
		Oct.	Nov.	Dec.	
Food & Liquor Stores	94	377	394	386	\$253, 281
Automotive	37	430	447	442	444, 222
Apparel & Accessories	33	170	171	197	118, 052
Retail Trade, N. E. C.	103	478	487	503	372, 166
Eating & Drinking Places	141	486	479	466	231, 864
Filling Stations	30	68	70	70	38, 636
FINANCE, INSURANCE & REAL ESTATE	77	289	287	287	214, 396
SERVICES	303	1, 097	1, 095	1, 109	659, 967
Hotels, Rooming Houses, etc.	23	147	138	145	60, 853
Personal & Business Services	79	384	376	392	204, 344
Auto & Other Repair Services	45	103	113	109	87, 236
Amusements	25	170	182	173	72, 435
Professional & Social Services	131	293	286	290	145, 099
NOT ELSEWHERE CLASSIFIED	3	3	2	2	1, 724

('M')

Employer Units, Employment and Wages Covered by
Washington Employment Security Act
Classified by Industry, Fourth Qtr., 1955

Grays Harbor County Industry	Emp. Units	Covered Employment			Wages Paid 4th Qtr., 1955
		Oct.	Nov.	Dec.	
Total	1, 400	14, 250	14, 151	14, 262	\$15, 140, 416
FORESTRY & FISHING	31	75	70	49	48, 385
MINING AND QUARRYING	7	26	24	26	31, 441
CONTRACT CONSTRUCTION	108	926	994	1, 156	1, 251, 127
MANUFACTURING	256	8, 188	8, 014	7, 662	9, 246, 884
Logging, Lbr., Wood Prod., Furn.	204	6, 328	6, 201	5, 836	7, 348, 696
Other Durable Goods Manuf.	16	335	341	340	412, 846
Food and Kindred Products	27	601	556	564	319, 019
Other Non-durable Goods Mfg.	9	924	916	922	1, 166, 323
TRANSPORTATION & ALLIED SERVICES	84	493	512	613	569, 980
COMMUNICATIONS & UTILITIES	9	379	379	378	412, 198

(Cont. Page 33)

<u>Industry</u>	<u>Emp. Units</u>	<u>Covered Employment</u>			<u>Wages Paid 4th Qtr., 1955</u>
		<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>	
WHOLESALE TRADE	68	343	336	336	\$ 464,576
WHOLESALE & RETAIL TRADE	9	87	82	83	87,032
RETAIL TRADE	464	2,353	2,367	2,569	1,999,285
General Merchandise	19	334	349	486	299,279
Food & Liquor Stores	94	452	450	445	365,064
Automotive	34	429	436	437	494,903
Apparel & Accessories	27	120	121	152	100,607
Retail Trade, N.E.C.	105	432	451	484	418,638
Eating & Drinking Places	126	462	451	452	255,504
Filling Stations	59	124	109	113	65,290
FINANCE, INSURANCE & REAL ESTATE	78	320	324	327	302,908
SERVICES	284	1,055	1,046	1,057	725,203
Hotels, Rooming Houses, etc.	29	161	156	161	84,878
Personal & Business Services	69	332	330	330	287,271
Auto & Other Repair Services	30	77	71	73	70,307
Amusements	22	147	135	131	64,142
Professional & Social Services	134	338	354	362	218,605
NOT ELSEWHERE CLASSIFIED	2	5	3	4	1,397
('M')					

Employer Units, Employment and Wages Covered by
Washington Employment Security Act

Classified by Industry, Fourth Qtr., 1959

<u>Grays Harbor County</u>	<u>Emp. Units</u>	<u>Covered Employment</u>			<u>Wages Paid 4th Qtr., 1959</u>
		<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>	
Total	1,349	13,204	12,980	12,949	\$15,388,425
AGRICULTURE, FORESTRY & FISHING	38	42	47	53	34,505
MINING AND QUARRYING	3	10	11	6	10,544
CONTRACT CONSTRUCTION	112	571	526	436	702,266
MANUFACTURING	225	7,704	7,631	7,629	9,864,650
Logging	81	1,291	1,316	1,269	1,810,934
Lumber & Wood Prod.	77	3,952	3,921	3,946	4,894,968
Furniture & Fixtures	6	402	386	347	450,637
Machinery, except electrical	8	190	175	185	305,626

(Cont. Page 34)

Industry	Emp. Units	Covered Employment			Wages Paid 4th Qtr., 1959
		Oct.	Nov.	Dec.	
Transportation Equipment	4	19	20	19	\$ 17,861
Other Durable Goods Mfg.	12	226	221	218	331,218
Food and Kindred Prod.	28	534	508	559	455,477
Other Non-durable Goods Mfg.	9	1,090	1,084	1,086	1,597,929
TRANSPORTATION & ALLIED SERVICES	63	509	500	420	620,214
COMMUNICATIONS & UTILITIES	13	209	208	208	273,840
WHOLESALE TRADE	73	395	399	405	593,961
RETAIL TRADE	425	2,283	2,214	2,364	2,030,560
Building, Materials & Farm Equipment	21	153	148	155	182,153
General Merchandise	18	296	297	406	252,377
Food	59	425	424	434	343,405
Auto Dealers & Serv. Stas.	83	460	447	450	512,803
Apparel & Accessories	21	103	95	101	102,585
Furniture & Home Furn.	19	102	109	111	127,414
Eating & Drinking Places	133	491	442	423	259,781
Miscellaneous Retail Stores	71	253	252	284	250,042
FINANCE, INSURANCE & REAL ESTATE	87	328	330	324	337,485
SERVICES	309	1,038	999	989	742,646
Hotels, Rooming Houses, etc.	40	165	153	144	79,655
Personal & Business Services	56	254	258	257	234,333
Auto & Other Repair Services	36	84	85	91	98,822
Amusements	26	97	86	87	56,870
Prof., Social & Misc. Serv.	151	436	417	410	272,966
NOT ELSEWHERE CLASSIFIED	1	115	115	115	117,754
('M')					

Employer Units, Employment and Wages Covered by
Washington Employment Security Act

Classified by Industry, First Qtr., 1960

Grays Harbor County	Emp. Units	Covered Employment			Wages Paid 1st Qtr., 1960
		Jan.	Feb.	Mar.	
Total	1,329	12,734	12,649	12,241	\$14,157,691

(Cont. Page 35)

Industry	Emp. Units	Covered Employment			Wages Paid 1st Qtr., 1960
		Jan.	Feb.	Mar.	
AGRICULTURE, FORESTRY & FISHING	37	59	42	41	\$ 46,253
CONTRACT CONSTRUCTION	109	382	366	402	511,529
MANUFACTURING	220	7,658	7,602	7,053	9,182,170
Logging	75	1,248	1,257	1,332	1,696,818
Lumber & Wood Prod.	78	3,920	3,873	3,500	4,467,812
Furniture & Fixtures	5	~~325~~	374	97	349,957
Fabricated Metal Prod.	3	7	6	10	8,156
Machinery, except electrical	8	192	199	200	323,679
Transportation Equipment	4	18	22	24	25,307
Other Durable Goods Mfg.	9	214	217	214	277,427
Food and Kindred Prod.	28	604	574	599	444,704
Other Non-durable Goods Mfg.	10	1,080	1,080	1,077	1,588,310
TRANSPORTATION & ALLIED SERVICES	62	469	452	454	596,610
COMMUNICATIONS & UTILITIES	14	209	212	212	251,438
WHOLESALE TRADE	71	397	398	400	500,176
RETAIL TRADE	418	2,141	2,111	2,145	1,894,779
Building Materials & Farm Equip.	24	155	152	160	161,242
General Merchandise	19	302	277	281	254,086
Food	57	408	407	416	334,237
Auto Dealers & Serv.Stas.	83	451	453	461	514,299
Apparel & Accessories	20	89	88	83	73,103
Furniture & Home Furn.	18	96	98	95	112,436
Eating & Drinking Places	127	401	407	423	232,302
Miscellaneous Retail Stores	70	239	226	226	213,074
FINANCE, INSURANCE & REAL ESTATE	87	332	335	336	307,144
SERVICES	308	967	1,015	1,084	688,111
Hotels, Rooming Houses, etc.	35	142	148	164	75,120
Personal & Business Services	57	249	260	264	219,348
Auto & Other Repair Services	40	76	80	83	84,532
Amusements	26	78	78	125	45,129
Prof., Social & Misc. Services	150	419	452	448	263,982
NOT ELSEWHERE CLASSIFIED	3	120	117	114	179,481
(UM)		35.			

Annexations

Annexation is an indication of city growth where the city has outgrown its existing boundaries and new development is taking place adjacent to the city. The reason annexation is requested, in most cases, is to have the city supply the needed services such as sewer, water, police and fire protection.

In the Grave Harbor area, the City of Aberdeen is expanding but there is still room for new development within the present city limits. The City of Hoquiam's two annexations took place in July, 1955, and November, 1956, of ten acres each. But the city is now planning an extensive annexation program. Cosmopolis has outgrown the original square mile and is expanding into the hill area to the Southwest. Some 103 lots and 17 parcels of land have been added to the city by one annexation. This annexation being mostly residential in character, it added over \$57,200 to the tax roll. The City of Westport had three annexations; one in 1945 and two in 1946, which added extensive areas to the city and made it possible to develop the potentials of the fishing industry within the city limits. The City of Montesano had six annexations from 1951 to 1954 which added approximately 86 acres to the city. Most of this land was undeveloped acreage at the time, but parts are now developing into high value subdivision property. The town of McCleary had two annexations late in 1946 which added a total of 40 acres to the city. The development of homes has been slow in the past, but present indications point to an increase in building.

This expansion of cities indicates a trend of new development and this forces the smaller cities to annex more area for city growth. This movement will increase as new people come into the areas, made more accessible by better roads and freeways from the Metropolitan areas. People coming into the area are accustomed to services provided by the larger cities and will request the same services from the County and local communities.

Building Permits

Building permits can be listed as new residential, commercial or industrial with a number for remodeling, additions, private garages and miscellaneous. In this part of the study, we are interested in new dwellings, commercial and industrial development as they indicate new growth within an area. The information available was for varied periods of time, and included total amounts for all types of improvements where a building permit was required. In most cases, the information was in total dollars per year and in Hoquiam, the kind of permit was also listed which might possibly be typical of the other cities.

The listing of the building permits and the total dollars spent per year show that there is a steady increase in construction and remodeling and without this, the area would soon deteriorate and could become a ghost town. The total amount of money being spent on new improvements is a very good indication that some people have a great deal of hope for the future of this area. This feeling should be developed to the limit in all property owners so that the run down areas and buildings would be brought up to some suitable standard to make the whole area attractive.

and inviting to the tourist, commerce and new industries.

In addition to the building permits, the new water connections for the Cities of Aberdeen and Hoquiam are listed. (Table 'O')

Building Permits

Montesano

1950 ...	\$153,998
1951 ...	136,118
1952 ...	175,205
1953 ...	73,975
1954 ...	181,342
1955 ...	194,180
1956 ...	313,615
1957 ...	148,765
1958 ...	219,019
1959 ...	295,580
1960 ...	273,643
	<u>\$2,165,440</u>

Hoquiam

1951 ...	\$ 508,355
1952 ...	710,692
1953 ...	598,187
1954 ...	367,424
1955 ...	1,025,362
1956 ...	1,833,318
1957 ...	465,879
1958 ...	432,094
1959 ...	495,694
1960 ...	3,368,662
	<u>\$9,805,667</u>

<u>Business</u>	<u>Residential</u>	<u>Tot.</u>
7	26	33
2	27	29
7	13	20
3	15	18
8	38	46
9	13	22
3	16	19
9	9	18
9	9	18
23	10	33

Westport

1954 ...	\$ 63,615(Sep.)
1955 ...	164,400 Dec.)
1956 ...	204,585
1957 ...	230,935
1958 ...	150,825
1959 ...	251,594
1960 ...	6,760(Jan.)
	<u>\$1,072,714</u>

McCleary

1947 ...	\$ 45,750
1948 ...	181,725
1949 ...	50,642
1950 ...	101,809
1951 ...	180,365
1952 ...	320,119
1953 ...	58,904
1954 ...	57,022
1955 ...	85,475
1956 ...	54,204
1957 ...	63,891
1958 ...	85,122
1959 ...	208,796
1960 ...	72,620
	<u>\$1,560,444</u>

Cosmopolis

1955 ...	\$ 40,000(Nov.)
1956 ...	4,518,279
1957 ...	158,095
1958 ...	122,225
1959 ...	386,975
1960 ...	67,567
1961 ...	3,180(Jan.)
	<u>\$5,250,361</u>

Aberdeen

1955 ...	339,812
1956 ...	1,505,799
1957 ...	1,581,822
1958 ...	2,027,626
1959 ...	1,146,580
1960 ...	1,357,197
	<u>\$8,958,836</u>

Grays Harbor County (only)

	<u>No.</u>	
1950 ...	164	\$ 254,850
1951 ...	207	964,060
1952 ...	202	375,508
1953 ...	201	315,665
1954 ...	206	463,667
1955 ...	181	1,241,140
1956 ...	234	1,201,722
1957 ...	204	624,007
1958 ...	227	761,458
1959 ...	245	1,468,845
1960 ...	250	1,672,970
		<u>\$9,343,892</u>

('N')

Another indication of new growth is the number of new telephone connections made to all types of users - residential, commercial, business and industry. This steady growth from 10,549 in 1951 to 11,481 phone services in 1961, for a gain of 932 new services, is typical of many other services in the area. This figure is from the Pacific Telephone-Northwest, and does not include the service provided by the West Coast Telephone Company for Elma, Montesano or McCleary.

Water and Telephone for Aberdeen & Hoquiam

Aberdeen -- New Water Connections Added To Total Services

<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>
6,356	6,387	6,418	6,448	6,452

Aberdeen -- Hoquiam Telephones in Service

1951	....	10,549	
1952	....	10,663	
1953	....	10,675	
1954	....	10,877	
1955	....	10,933	(Figures furnished by
1956	....	11,236	local office of Pacific
1957	....	11,476	Telephone-Northwest)
1958	....	11,516	
1959	....	11,460	
1960	....	11,431	
1961	....	11,481	

Hoquiam -- New Water Connections

1951	.....	30
1952	.....	36
1953	.....	48
1954	.....	19
1955	.....	44
1956	.....	26
1957	.....	51
1958	.....	25
1959	.....	22
1960	.....	21
		<u>322</u>

Active Meter Connections -
December 31, 1960: 3,359

('O')

Schools

The school children of today are the citizens of tomorrow. How we provide for them today and in the future is important. The schools today require a large portion of our tax dollar. How economically they are provided for in the future will depend on how adequate a school plan and program is developed for the future.

At the present time, Grays Harbor County is divided into twenty-six school districts. Over the years, there has been considerable change in the number of schools, classrooms; and school districts. The natural migration of population in and out of the County and the school bus have been responsible for a good part of this change in school facilities.

The information furnished here will help to show the gradual change in school attendance; also the school districts and numbers, the classrooms in use, the average daily attendance, and the schools within the districts. The average daily attendance is for the years 1940, 1945, 1950, 1955, 1959, 1960, and what information was available for the year 1930. The lists also include the attendance in one private school.

Schools in Grays Harbor County

Average Daily Attendance in Grays Harbor School Districts

District	-A-	-B-	1960	1959	1955	1950	1945	1940	1930
#5 Aberdeen	217	11	5,478	4,956	4,620	3,562	2,849	2,980	#48- 53
#26 Ocean City	2	1	(1-6) 18	(1-8) 45	(1-8) 48	49	41	71	71
#27 Hunter's	2	1	44	40	47	42	43	73	65
#28 Hoquiam	125	6	2,375	2,892	2,791	2,242	2,125	2,279	3,002
#46 Newton	3	1	Incl. in #28	Incl. in #28	60	81	85	118	106
#62 Copalis Beach	3	1	69	55	55	34	59	117	159
#70 Garden City	2	1	34	29	35	31	27	56	58
#74 Carlisle	2	1	18	23	17	24	19	27	65
#76 Pacific Beach	4	1	93	105	124	90	73	65	111
#77 Taholah	4	1	108	88	64	56	64	83	67
#97 Quinault	17	3	297	297	291	249	113	191	#50- 59
									#44-Hump. 46
									Total 105
#98 Moclips		2	315	314	289	232	155	221	#41- 158
									#75-Aloha 60
									Total 218
#99 Cosmopolis	20	1	315	291	283	284	244	239	#111-Artic 60
									276
									Total 326

(Cont. Page 40)

District	-A-	-B-	1960	1959	1955	1950	1945	1940	1930
#104 Satsop	2	1	55	43	51	51	49	67	65
#106 McCleary		1	259	243	291	253	215	142	259
#114 Olympic V.	4	1	112	96	86	50	58	60	#22- 48
									98
									Total 146
#116 Porter	2	1	32	29	33	38	107	156	190
#117 Wishkah			176	179	167	167	132	176	219
#123 Ocosta		1	589	582	484	517	372	117F. 379GH	(Was #120) 299
#124 Monte	45	2	932	996	894	751	654	804	842
									Upper Wyn. 42
									#107- 57
									Total 941
#137 Elma	48	3	1,020	965	970	854	Was #118 784	Was #118 900ADA	#37- 15 #118- 835 #16- 46 Total 896
							#42-19 #37-12 Tot.31		
#400 Oakville	15	2	257	252	265	233	237	#109 #115 #200 #125 Tot.348	#109- 53 #115- 202 #200- 132 #102- 41 Cedarville 43 Total 471
7th Day Adv.	2	1	60-61Yr 38	59-60Yr 28	54-55Yr 12	(Started in '53-'54 Yr)			
#12 Springfield	2	**					32	38ADA Now #28 & #97	
#19 White Star	2	**					75ADA #42-19 Tot.94	68ADA Now #137	
#31 Melbourne	1	**					21	44ADA Now #124	

School	-A-	-B-	1960	1959	1955	1950	1945	1940	1930
Our Lady of Good Help Grade School 1-8, Hoquiam	4	1	175	191	153	142	105	101	121

-A- No. of Classrooms

-B- No. of Schools

****Note:** Changes in enrollment may be caused by
moving of one grade to another school.

Source: Grays Harbor
County Supt. of
Schools & Princi-
pal of Private
School

('P')

School Enrollment for the Year 1950* For the City
of Aberdeen & Hoquiam

<u>Enrollment</u>	<u>ABERDEEN</u>	<u>HOQUIAM</u>
5 and 6 years old	660	360
Number in School	175	140
Percent in School	26.5	-
Number in Kindergarten	240	100
7 to 13 years old	1,805	1,260
Number in School	1,770	1,235
Percent in School	98.1	98.0
14 to 15	465	300
Number in School	445	280
16 to 17	440	265
Number in School	385	205
18 to 19	425	210
Number in School	195	75
20 to 24	1,225	635
Number in School	165	60
Percent in School	13.5	9.4
25 to 29 years old	1,555	825
Number in School	65	60
Percent in School	4.2	7.3

(Cont. Page 42)

<u>School Years Completed</u>	<u>ABERDEEN</u>	<u>HOQUIAM</u>
Male 25 and over	6,635	3,620
Median Years Completed	9.7	9.3
Female 25 and over	5,890	3,290
Median Years Completed	10.9	10.9
<u>Marital Status</u>		
Male 14 Years and over	7,799	4,262
Single Male	1,894	931
Married Male	5,133	2,942
Female 14 Years and over	7,279	4,063
Single Female	973	521
Married Female	5,096	2,942
Married Couples	4,795	2,875
Families	5,380	3,110

*Note: 1960 Census figures not available

Characteristics of Rural Non-farm Families
 &
 Rural Farm Population
Grays Harbor 1950.

<u>Years of School Completed</u>	<u>RURAL NON-FARM</u>	<u>RURAL FARM</u>
25 Years of Age and over	10,455	2,895
No School	210	60
1-4 years	615	210
5-6 years	820	200
7 years	735	200
8 years	2,530	845

(Cont. Page 43)

<u>High School</u>	<u>RURAL NON-FARM</u>	<u>RURAL FARM</u>
1-3 years	1,980	485
4 years	2,220	580
<u>College</u>		
1-3 years	600	190
4 years or more	350	70
<u>Years Not Reported</u>	395	55
<u>Median Years Completed</u>	9.2	8.9

('Q')

Source: US Census Bureau

Economic Characteristics of the Population by Sex and
Occupation for Grays Harbor

The economic characteristics of the population of this County by sex and occupation is shown in this list as a part of the population study for general information. Accurate comparisons may be made later when data is available from the 1960 Census. The list includes the type of job, or the group classification of the job, to be found in this County. Listing the number of persons in two groups, male and female, also gives another side of the labor force available and the number in each type of occupation. This information is listed in Table 'R' and is suitable for study purposes when applied to this year's.

	<u>MALES</u>	<u>FEMALES</u>
Total Population - All ages	28,062	25,582
Employed - 14 yrs. old and over	21,056	18,980
Labor Force	16,742	5,082
Civilian Labor Force	16,591	5,082
Employed	15,600	4,732
Private Wages and Salary	11,736	3,422
Government Workers	1,052	619
Self-employed Workers	2,743	496
Unpaid Family Workers	69	195

(Cont. Page 44)

	<u>MALES</u>	<u>FEMALES</u>
Unemployed	991	350
Experienced Workers	971	340
New Workers	20	10
Not in Labor Force	4,314	13,898
Keeping House	120	11,527
Unable to Work	1,043	380
Inmates (Institutions)	130	68
14-19 years old	1,322	1,212
20-64 years old	660	512
65 and over	1,039	199
Major Occupation Group	15,600	4,732
Professional, Technical	745	563
Farmers & Farm Managers	585	52
Managers, Officials, Farm Executives	1,667	312
Clerical and Kindred	527	1,105
Sales	729	567
Craftsmen, Foremen and Kindred	2,556	56
Operatives and Kindred	4,283	689
Private Household	9	279
Service Workers		
Farm Labor (Unpaid Family Workers)	49	50
Laborers (Except Farm & Mine)	3,338	148
Occupation Not Reported	129	62
Experienced Unemployed	971	340
Industry		
Employed	15,600	4,732
Agriculture	866	131
Forestry and Fish	445	21
Mining	18	1
Construction	902	19
Manufacturing	7,907	260
Railroad Express	200	11
Trucking and Warehouse	147	13
Other Transportation	410	17
Utilities and Sanitary	182	31
Wholesale Trade	345	58

(Cont. Page 45)

	<u>MALES</u>	<u>FEMALES</u>
Food and Dairy Products (Retail)	415	240
Eating and Drinking	292	450
Other Retail	1,202	668
Finance, Insurance & Real Estate	236	193
Business Services	65	24
Repair	388	18
Medical and Health	138	332
('R')	<u>Source: US Census 1950</u>	

Population and Harbor Potentials

The Port of Grays Harbor is a natural harbor and is the center of the industrial development of this area. The harbor has great potential as one of the industrial centers of the State. It has deep water facilities, is served by two railroads, and will soon have direct connection with a freeway for truck travel to and from three metropolitan areas. Another asset is the large amount of good land available for industrial sites. The land is reasonably priced and a large portion is owned by the cities or County and the balance by private individuals. Compared to the three metropolitan areas nearby, land is available here in large acreage at reasonable prices. A joint effort should be made by all persons in the area to make this harbor the most inviting to industry in the Northwest.

The three following tables compare this harbor with other shipping ports of similar total population. In the tables, the major shipping ports of the State are compared. The total population of the Cities of Aberdeen, Cosmopolis, Hoquiam and Westport are grouped together as one. Grays Harbor would be fifth in order of population with only a slight decrease in population over the last ten years of -.02 percent, while Vancouver, Washington, had a -22 percent for the same period. The Seattle, Olympia and Longview ports had the greatest gain in population over the same ten-year period. The second and third parts compare Aberdeen and Hoquiam with other shipping ports of equal population within the State. No attempt is made to compare the amount of shipping in or out of the ports at this time. The comparison is on a population basis as to how many people are served by, or live near, the various ports and their relation to the cities which they serve.

Comparison of Grays Harbor Area with Other Shipping
Centers

	<u>POPULATION</u>			
	<u>1940</u>	<u>1950</u>	<u>1960</u>	<u>%</u>
Seattle	368,302	467,591	557,087	19.1
Tacoma	109,408	143,673	147,979	3.0
Bellingham	29,314	34,112	34,688	1.7
Vancouver, Wn.	18,788	41,664	32,464	-22.0
WESTPORT, COSMOPOLIS, ABERDEEN, HOQUIAM	31,331	32,671	31,791	-.026
Longview	12,385	20,339	23,349	14.8
Olympia	13,254	15,819	18,273	15.5
Bremerton	15,131	27,678	28,922	4.5
Richland	-	-	23,548	-
Longview	12,385	20,339	23,349	14.8
ABERDEEN	18,846	19,653	18,741	-4.6
Renton	~~12,436~~	16,039	18,453	15.1
Olympia	13,254	15,819	18,273	15.5
Pasco	3,913	10,228	14,522	42.0
Kennewick	1,918	10,106	14,244	40.9
Port Angeles	9,409	11,233	12,653	12.6
Astoria, Ore.		12,331	11,239	-8.8
HOQUIAM	10,835	11,123	10,762	-3.2

(Cont. Page 47)

..... ACKNOWLEDGMENTS

In addition to the members of the City, County, and Regional Planning Commissions who have cooperated to make this Planning Project possible, the following agencies and published sources of information have been consulted to furnish material for this report.

United States Department of Commerce - Bureau of Census
Stanford Research Institute
Washington State Census Board
Washington State Department of Health
Washington State Employment Security Department
Washington State Department of Commerce & Economic Development
Grays Harbor County Engineer's Office
Grays Harbor County Superintendent of Schools
Grays Harbor County Library
University of Washington

Historical References

Grays Harbor Historical Society
Washington State Historical Association
Private Collection of Jessie Young Irvine
Brief Historical Sketch of Grays Harbor, produced by William D. Welsh
of Rayonier, Inc. - Manuscript
by Ed Van Syckle
Historical Study of Grays Harbor County With Emphasis on the History
of the City of Aberdeen - by Yvonne Theresa Short
History of Grays Harbor County - by King Wiley
Out of the Woods - by Ernest C. Teagle
The Story of Grays Harbor Pulp. Weyerhaeuser Timber Company
Consultations With Descendants of Early Settlers

GRAYS HARBOR PLANNING AREA

LAND USE ANALYSIS AND ECONOMIC BASE REPORT #2

for

**GRAYS HARBOR REGIONAL
PLANNING COMMISSION**

In Cooperation with the

U. S. HOUSING and

HOME FINANCE AGENCY

00097

VERNON S. COTTER

PLANNING CONSULTANT

This is the second report prepared as a part of the comprehensive plan for the Grays Harbor area (the first one having been the one on Population Trends). This report contains information on

- (1) Land Use Analysis of the urban area of Grays Harbor County, and
- (2) Economic Base data on Agricultural, Commercial, and Industrial activities, Port and Shipping, Fishing, and Tourist facilities.

The information can be used in the study of community development. By being able to compare data compiled for this area with other cities and towns, we can determine whether we are short or long on the various activities that go into making a healthy and successful community. Once we know our shortages and problems, steps can be taken to correct them.

I want to take this opportunity to thank the many people and agencies who have been cooperative in helping to supply data and information for this report; and in particular to thank Mrs. Anne Cotton (typing and statistical material), Mrs. Mabel Cotter (surveys and statistical data), Mr. Peterson and Mr. Thalacker (mapping and pertinent data), without whose help this project could not have been completed.

Respectfully submitted,

Vernon S. Cotter
Planning Consultant

L A N D U S E A N A L Y S I S
A N D
E C O N O M I C B A S E D A T A

This Report was prepared for the Grays Harbor Regional Planning Commission, under the general supervision of the Washington State Department of Commerce and Economic Development, and was financed in part through an urban planning grant from the Housing and Home Finance Agency under the provisions of Section 701 of the Housing Act of 1954 as amended.

Prepared by

Vernon S. Cotter
Planning Consultant

December - 1962

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P A R T O N E

T h i s L A N D U S E A N A L Y S I S
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t h e a m o u n t o f l a n d u s e d
f o r e a c h o f t h e v a r i o u s
u s e s , t h e a c r e s , a n d . t h e
p e r c e n t a g e o f t h e t o t a l .

LAND USE

Grays Harbor County

Total land use in Grays Harbor County, Washington, was determined in 1951 by the United States Department of Agriculture in the following manner:

Nonforest Land

Agricultural:

cropland, pastures, farm building area,
and stumpland used for pasture 65,960 acres

Grass and brush not used for pasture:

including undrained marsh and
undeveloped ocean beach land 7,250 acres

Open nonvegetative:

including area inside city limits, and
other lands in urban uses 18,140 acres

Total nonforest land 91,350 acres

= 7.47 percent of total land surface

Forest Land

Commercial forest, unreserved:

includes all forest or cutover land that
is neither legally reserved from logging
nor physically impossible to log 1,098,620 acres

Commercial forest, reserved:

includes all forest land that is suitable
for logging but legally reserved from
logging (10,990 acres of this is
within the Olympic National Park) 12,710 acres

Noncommercial forest:

includes all forest land (both reserved
and unreserved) that cannot be logged
for practical reasons (alpine, rocky) 20,830 acres

Total forest land 1,223,510 acres

= 92.53 percent of total land surface

P l a n n i n g a r e a

(e x c l u d i n g c i t i e s a n d t o w n s)

L a n d U s e

The Planning Area used as base for the present detailed study and survey is a strip of land across the county in an east-west direction: eight townships long (from the Pacific Ocean on the west to the towns of Oakville and McCleary on the east), and three townships wide in a north-south direction (from the south boundary line of the county, where it adjoins Pacific County, northward). This area includes most of the Chehalis River Valley in Grays Harbor County. The major part of the county's agricultural industry takes place in the Planning Area, and our largest urban development is also located within this strip of land, around the bay with deepwater frontage serving the industrial development.

The total area of the twenty-four townships is only 463,143 acres, or 37.85 percent of the total area of Grays Harbor County. This total includes the area within incorporated cities and towns. However, in the following pages, the term Planning Area when used by itself will be used to designate the area exclusive of the cities and towns.

The gross land-and-water area of the Planning Area (excluding the 18,149.20 acres in the incorporated cities and towns) amounts to 444,993.80 acres. A large portion of the gross Planning Area is in Forest, Agricultural, or Vacant use classification. This amounts to 347,419.13 acres, or 78.07 percent of the gross Planning Area. The water, river and bay areas amount to 89,243 acres or 20.05 percent of the gross Planning Area. Other uses account for the remaining 8,330.87 acres, or 1.88 percent, as discussed below.

Present Land Use

The Land Use Inventory made in 1961 brought to light the information that of this total land and water surface of 463,143 acres in twenty-four townships, 8,330.87 acres have been developed for various urban uses outside city limits. Table 1, on page 5, shows the detailed breakdown of the various land uses.

Residential Development

(Unincorporated Area Only)

From the Land Use Inventory it was found that single-family residential land use occupies 1,867.33 acres, and multiple-family land use about 1.50 acres, making a total of 1,868.83 acres, or 22.43 percent of the 8,330.87 acres of developed area.

This includes the unincorporated urban area of Central Park, and the rural valleys north and east of Montesano and east to Oakville and McCleary, as well as beach resort areas outside incorporated towns.

Due to a gradual change in agricultural methods used in Grays Harbor farming, and due partly also to a change in Census definition of what constitutes a farm between the 1950 and 1960 Censuses, there has been a decrease in the number of individual farms in the county resulting in less farm residence in rural areas. Rural non-farm residence has increased.

Commercial Development

(Unincorporated Area Only)

Scattered throughout the Planning Area, many small commercial enterprises have developed to serve the local residents. These commercial establishments occupy 282.52 acres or 3.39 percent of the developed area.

The growth of this commercial development will be slow in most locations, largely depending on an increase in population plus added purchasing power. Some of these establishments, located on highways or in beach areas, draw much of their income from tourists, and development of this type will depend on increases in tourism.

Competition from major shopping centers, which provide fresher and larger choice of goods and supplies, can be expected to increase, and the smaller stores will have a hard time meeting this new and better competition. Such competition will affect both tourist and resident types of trade.

Industrial Development

(Unincorporated Area Only)

The 3.34 acres in light industry consists of trucking and related land use. Heavy industry, occupying 252.58 acres, includes logging and lumber mills, junk yards, and large canneries. The remaining 1,240 acres in industrial classification is occupied by the railroads.

With large tracts of suitable industrial land decreasing in the Seattle-Tacoma metropolitan area, and with their cost per acre increasing, the Grays Harbor planning area has a better chance to attract the industries that need large blocks of land. One or two large industries with good pay-rolls could change the whole economy of Grays Harbor.

Public Land Use (Unincorporated Area Only)

All city, county, federal and state uses, schools, parks, and similar uses are included in this group. The breakdown shows 57.96 acres in schools, 193 acres in parks, and 263.67 acres in other public use, making a total of 514.63 acres or 6.18 percent of the developed area.

This percentage is low, even relative to present population, and will have to be increased to take care of county growth plus the visitors from nearby metropolitan areas.

Street Right-of-way

(Unincorporated Area Only)

Street right-of-way in the developed portions of the Planning Area now occupies 4,170 acres or 50.05 percent of the developed acreage. This is well above the average for streets in urbanized areas. The average for many city and urbanized county areas is 30 percent or less. Many of the newer developments have around 20 to 25 percent of their developed area in street right-of-way, without loss of needed circulation.

There is not too much that can be done about the existing condition, but by proper use of the Subdivision Ordinance and Master Street Plan, this high percentage of streets could be reduced about half in the future.

TABLE 1. PLANNING AREA LAND USE INVENTORY

Area: Planning Area (Excluding Incorporated Cities & Towns)

Date of Survey: July 1961

Source: Vernon S. Cotter - Consultant

<u>LAND USE</u>	<u>ACRES</u>	<u>PERCENT OF GROSS</u>	<u>PERCENT OF TOTAL DEVELOPED</u>	<u>REMARKS</u>
Grand Total Planning Area	463,143.00			
Total without Cities (Gross)	444,994.00	<u>100.00</u>		
Total Developed				
(Gross minus Agri. & Water)	8,330.87	(1.88)	<u>100.00</u>	
Net Developed				
(Gross minus Sts., Agri. & Water)	4,160.87	(.94)		
Total Residential		.42	22.43	low
Single Family Residential	1,867.33			
Multiple Family Residential	1.50			
Total Commercial		.06	3.39	average
Retail	282.52			
Parking	-			
Total Industrial		.34	17.95	high
Light Industry	3.34			
Heavy Industry	252.58			
Railroads	1,240.00			
Total Public		.12	6.18	average
Schools	57.96			
Parks	193.00			
Other Public	263.67			
Streets	4,170.00	.94	50.05	high
Agricultural, Forest, & Vacant	347,419.13	78.07		high
Water, Bays & Rivers	89,243.00	<u>20.05</u>		
		<u>100.00</u>	<u>100.00</u>	

Central Park Area

(an unincorporated Community in the County)

Land Use

"Central Park" is a strip approximately one mile wide, between Aberdeen on the West and Montesano on the East. State Highway 410 is the main access road into the area.

This area is predominantly forest and agricultural, located on a relatively high plateau which slopes gently to the south toward the Chehalis River. Near the center, a new residential community is fast developing, with homes in the medium to high value brackets.

Present Land Use

A Land Use Inventory of this area was made in July 1961. Since then, other plans have been developed, and the area is now defined as Zoning District Map No. 1 of the Central Park Area.

The Zoning District Map No. 1 encompasses a total of 6,033 acres. Of this total area, 5,273.64 acres are now in forest or agricultural use. The Wynooche River, which runs through the east end of the district, occupies 68.86 acres.

Table 2 shows the detailed breakdown of the land use. (See page 9).

Residential Development

From the Land Use Inventory it was determined that the single-family residential development occupies 216.64 acres, or 31.37 percent of the developed area. Most of this development is new, and quite attractive due to the scenic location and open-space feeling found in partly developed tracts. However, there are some problems developing in the area now, due to lack of proper subdivision controls. The old original subdivision divided the land into narrow deep lots which are too large for one residence and too narrow for good subdivision. In some cases, the front of one lot faces the rear of the lot across the street.

Repetition of this type of subdivision can be avoided by use of the proposed subdivision ordinance prepared as a part of this planning project and submitted to all the cities and county of Grays Harbor. This subdivision ordinance could be applied uniformly throughout the county and all the incorporated cities. The ordinance provides for adequate review of each plat or subdivision and provides minimum standards for lot size, street widths, and improvements, so that the division of land will be adequate for the intended use.

Commercial Development

The survey revealed the fact that 39.27 acres or 5.69 percent of the developed area is in commercial use. There are a number of small home occupations and workshops which may expand as the population of the area increases. To date they do not create any problems in the area, but their expansion should be controlled so that they will not be detrimental to the adjacent property by creating excess traffic, noise, smoke, odor or fumes.

The average commercial development for small cities is 4 percent of the developed area. Thus the present area, if properly located, should serve the Central Park district for a number of years.

Industrial Development

Industrial development within the Central Park area occupies 15.92 acres or 2.04 percent of the developed area. This is about equally divided into three uses: junk yard, freight trucking lines, and machine shop use.

This amount is low for small cities; but the future of Central Park is more suitable as a residential area, for owners and employees of industries located in Aberdeen, Hoquiam, and Cosmopolis. Proposed zoning plans for Central Park will also restrict the major portion of the area to residential use.

One of the main Railroad lines serving Grays Harbor runs through the south edge of the district and occupies 108.85 acres or 15.76 percent of the developed area. As adequate right-of-way is available there is no immediate possibility

of any expansion. Present facilities could be doubled without requiring any additional land.

Public and Semi-Public Land Use

There are three types of land use in this group: the school, which uses 0.46 acre or 0.07 percent of the developed area; the playground, which occupies 2.53 acres (of private land) or 0.20 percent; and public agencies, which occupy 13.42 acres or 1.94 percent; making a total of 2.21 percent for public or semi-public use.

Since the time of the survey, a ten-acre parcel of land has been acquired by the local Lions Club which will be developed as a park and playground for the people of the area.

Street Right-of-Way

Street right-of-way occupies 296.41 acres or 42.93 percent of the developed area. This amount is above the average for residential areas now being developed in this state.

This large percentage of land devoted to street use can be reduced by simple application of better design standards for future subdivisions. The adoption of a Master Street and Highway Plan for the area will help by providing the minimum circulation yet adequately serving the area. Such a plan has been prepared and submitted to the County Planning Commission as a part of this "701" planning project.

The adoption of the proposed subdivision and platting ordinance in the county will also help to eliminate this type of excessive use of land where it is not required to serve the needs of the area.

TABLE 2. CENTRAL PARK AREA LAND USE INVENTORY

Area: Central Park and Vicinity
 Date of Survey: July 1961
 Source: Vernon Cotter - Planning Consultant

<u>LAND USE</u>	<u>ACRES</u>	<u>PERCENT OF GROSS</u>	<u>PERCENT OF TOTAL DEVELOPED</u>
TOTAL AREA (Gross)	6,033.00	(100.00)	
TOTAL DEVELOPED AREA (Gross minus Agricultural & Water)	690.50		(100.00)
NET DEVELOPED AREA (Gross minus Streets, Agricultural & Water)	394.09		
TOTAL RESIDENTIAL			
Single Family (	216.64	3.57	31.37
Multiple Family (			
TOTAL COMMERCIAL			
Retail	39.27	0.64	5.69
Parking			
TOTAL INDUSTRIAL			
Light Industry	3.34	0.03	0.22
Heavy Industry	12.58	0.19	1.82
Railroads	108.85	1.79	15.76
TOTAL PUBLIC			
Schools	0.46	0.01	0.07
Parks & Playgrounds	2.53	0.02	0.20
Other Public	13.42	0.21	1.94
STREETS	296.41	4.91	42.93
AGRICULTURE, FOREST & VACANT	5,273.64	87.43	
WATER	68.86	1.20	
		<u>100.00</u>	<u>100.00</u>

T o w n o f M c C l e a r y

L a n d U s e

The population growth of McCleary has been slow but generally steady. Population amounted to 1,175 persons in 1950, with a slight drop in the 1960 census count due to a drop at that time in the lumber market with resulting loss of jobs.

The general growth pattern has taken place in a concentrated area adjacent to the Simpson Mill. Commercial development is along Main Street and a part of the old Olympic highway. Simpson's, the one major industry of the area, is located in the northeast part of the town.

Many of the homes date back to the early 1900s, when the town grew with the growth of the lumber industry in the eastern part of the county.

Present Land Use

McCleary occupies 623 acres, of which 225.95 acres or 36.26 percent has been developed for urban purposes. The Land Use Inventory conducted in summer 1961 indicated that 75.43 acres or 33.59 percent of the developed land of the town is in residential use; 2.15 percent is in commercial use, 6.84 percent is in public and semi-public use, and 36.39 percent is in street right of way.

A breakdown of the existing land use is shown in the following Table 3.

TABLE 3. McCLEARY LAND USE INVENTORY

Area: Town of McCleary

1960 Population - 1,115

Date of Survey: July 1961

Source: Vernon Cotter - Planning Consultant

<u>LAND USE</u>	<u>ACRES</u>	<u>PERCENT OF GROSS</u>	<u>PERCENT OF TOTAL DEVELOPED</u>	<u>PERCENT OF NET DEVELOPED</u>
TOTAL AREA OF CITY (Gross)	623.00	(100.00)		
TOTAL DEVELOPED AREA (Gross minus Vacant & Water)	225.95	(36.26)	(100.00)	
NET DEVELOPED AREA (Gross minus Streets, Vacant & Water)	143.75	(23.05)		(100.00)
TOTAL RESIDENTIAL				
Single Family	72.53	11.64	32.10	50.47
Multiple Family	2.90	0.46	1.29	2.02
TOTAL COMMERCIAL				
Retail & Parking	4.88	0.78	2.15	3.39
TOTAL INDUSTRIAL				
Light Industry	0.57	0.09	0.25	0.40
Heavy Industry	43.00	6.90	19.04	29.91
Railroads	4.40	0.70	1.94	3.06
TOTAL PUBLIC & SEMI-PUBLIC				
Schools	4.13	0.66	1.82	2.87
Parks & Playgrounds	6.20	0.99	2.74	4.31
Other Public	5.14	0.83	2.28	3.57
STREETS	82.20	13.21	36.39	
VACANT	393.95	63.25		
WATER	3.10	0.49		
		100.00	100.00	100.00

A breakdown of the developed land area by type of land use gives some indication of the demand for residential, commercial, industrial, and public land within the town. This is an important consideration in developing a future land use plan for the town. The final land use map should be based on this data; it is an important tool in developing zoning regulations and in analyzing the many town problems.

Residential Development

New development has been slow and scattered through the town, with most of the most recent development taking place in the new Tracts. The present residential development is predominantly single-family, in the medium-value bracket; with 72.53 acres or 32.10 percent in single-family and 2.90 acres or 0.46 percent in multiple family use, making a total of 32.56 percent in residential land use,

Commercial Development

The commercial land use, which amounts to 4.88 acres or 2.15 percent of the developed area of the town, occupies portions of eight blocks in the center of McCleary, adjacent to and across from the city hall, library, fire station and city park. Some public parking is provided by private operators of the stores, but this parking space is limited, and would have to be used for other purposes if the existing stores planned to expand their business facilities. The business area is showing improvement, with the addition of a new Post Office and Bank, and the remodeling of the fronts of a few stores in the last two years. This may spur other building owners to improve their property to keep tenants.

Industrial Development.

There are presently 43 acres used for one industrial purpose. All this is used by the Simpson Logging Company, which owns most of the forest land in this portion of the district. The plant is located north of the Old Olympic Highway and west of the McCleary Summit Road. There is also a small shingle mill located near the center of town. McCleary is definitely a one-industry town. Total industrial land use in the town amounts to 47.97 acres or

21.00 percent of the total developed area. Of the above total, 4.40 acres is used by the railroad and 0.57 acre is light industrial use. This amount of industrial land is well above the average for towns of this size.

Public and Semi-Public Land Use

Included in this category are city, county, state and federal buildings and uses, schools, parks and playgrounds, and similar uses. Within the town are 15.47 acres or 6.84 percent devoted to public use. Of this, 1.82 percent is in schools, 2.74 percent in parks and playgrounds, and 2.28 percent in other public uses.

Street Right-of-way

Street right-of-way accounts for 82.20 acres, or 36.39 percent of the developed area of the town. Most of this dedicated street right-of-way is improved and opened to public use. The percentage of land area in street right-of-way is a little above average, and should be decreased by the proper use of the subdivision ordinance and the proposed major street plan. Savings on street costs can be accomplished if the town follows the requirements of the proposed street plan in needed right-of-way and through street connections.

Plan for McCleary

The addition of one new industry could change the population picture and show an increase in one year. Even an increase in the price of lumber could change the employment status of the town. The gain or loss of a few families can quickly change; but the development of a sound program of civic improvements and an effort made to carry through on the plans will result in lasting benefits to the town.

T o w n o f O a k v i l l e

L a n d U s e

Oakville has shown very little development in the last ten years, possibly due to lack of a good payroll. Present lumber activities hardly provide enough employment for the present residents.

Any increase in agricultural or industrial land use would help the town. Some effort will have to be made by the town's people to make the town more inviting to industry. The location here of a cannery to process some of the crops locally produced is a possibility.

Present Land Use

Oakville occupies an area of 277 acres, or a little over one third of a square mile.

The Land Use Inventory conducted in the summer of 1961 indicated that, of the total 277 acres, 108.82 has been developed by subdivision, but only 49.39 acres is actually used at present.

The survey also indicated that 14.89 percent of the total developed area was used for residential, 2.84 percent for commercial, 2.12 percent for industrial, 9.93 percent for railroad, 15.60 percent for public and semi-public, while 54.62 percent is in street right-of-way.

It is necessary to know what exists, and where it exists, in order to prepare a plan for future development. This plan is an important tool in planning and in the development process of the city, and is used as the basis of a future Zoning Plan. It is also helpful in the use of a subdivision ordinance and in analyzing various planning and development problems of the city.

A detailed breakdown of the existing land use is shown in Table 4, following.

TABLE 4. OAKVILLE LAND USE INVENTORY

Area: Town of Oakville

1960 Population - 377

Date of Survey: July 1961

Source: Vernon Cotter - Planning Consultant

<u>LAND USE</u>	<u>ACRES</u>	<u>PERCENT OF GROSS</u>	<u>PERCENT OF TOTAL DEVELOPED</u>	<u>PERCENT OF NET DEVELOPED</u>
TOTAL AREA OF TOWN (Gross)	277.13	(100.00)		
TOTAL DEVELOPED AREA (Gross minus Vacant & Water)	108.82	(39.28)	(100.00)	
NET DEVELOPED AREA (Gross minus Streets, Vacant & Water)	49.39	(17.82)		(100.00)
TOTAL RESIDENTIAL				
Single Family	16.21	5.84	14.89	32.83
Multiple Family	0	0	0	0
TOTAL COMMERCIAL				
Retail	3.09	1.12	2.85	6.25
Parking				
TOTAL INDUSTRIAL				
Light Industry	0.26	0.09	0.24	0.53
Heavy Industry	2.05	0.74	1.88	4.15
Railroads	10.81	3.90	9.93	21.88
TOTAL PUBLIC & SEMI-PUBLIC				
Semi-Public	1.78	0.64	1.64	3.60
Schools	14.06	5.07	12.92	28.47
Parks	0.86	0.31	0.79	1.74
Other Public	0.27	0.10	0.25	0.55
STREETS	59.43	21.44	54.62	
VACANT	168.31	60.74		
WATER	0	0		
		<u>100.00</u>	<u>100.00</u>	<u>100.00</u>

Residential Development

Some new residential development has taken place in scattered locations but in general the residential development is compact.

Most of the older residential construction is maintained in fair to good condition. There are a few structures that need major repair or remodeling. There are also a couple of vacant structures that should be removed, as they are fire hazards to the adjacent property, and also they depreciate land values of the whole area and retard new construction.

Commercial Development

The 3.09 acres of business development occupies portions of eight blocks mostly facing the main street (State Highway No. 9). The majority of the buildings are more than 25 years old and many are around 50 years. There are also a few commercial operations scattered around the city as home occupations, but these are small and do not create any problems at this time.

The present commercial areas suffer from the lack of good payrolls in the area to provide the needed buying power. This in turn creates another problem by the limited choice of goods and services.

The ratio of commercial area to the total developed area, 2.84 percent, is slightly less than the average for towns of this size.

Industrial Development

The 2.31 acres in industrial development is located along the railroad tracks, by necessity, because the industry relates to wood products so that rail as well as highway transportation has been needed. The 2.12 percent of developed area devoted to industry is below average for small cities, which usually runs about 12 percent. Within a mile or so of the town there have been a number of small sawmills that operated for short periods of time on local logs.

One reason for the small amount of industry is that most of the virgin timber in the surrounding area has been logged off, and the second growth has a number of years to go before it will be ready to harvest. Much of this timber land is in large parcels owned by big mills located many miles from Oakville.

One type of industry suggested for the town would be a cannery or frozen-food packaging plant to take care of the fruits, berries, and vegetables grown in the vicinity. The related problems of water and sewerage disposal would be engineering details that could be worked out to suit the demands if such industry could be encouraged to locate here.

Public and Semi-Public Land Use

This category includes all city, county, state, park, school, and public-utility structures and facilities. There are some 17 acres of land in this use within the town of Oakville, amounting to nearly 16 percent of the developed area. Most is in school facilities, which occupy about 14 acres or 13 percent of total developed area.

Street Right-of-way

Street right-of-way within the town amounts to 59.43 acres, or 54.62 percent of the developed area. This large amount of street area creates a major maintenance problem at an excessive cost to the taxpayer. This cost is a continuing cost that goes on from year to year unless the town officials can do something to reduce street area.

This is the type of problem given to planning commissions to study in most towns. By the adoption of a good street plan, and the vacation of un-needed streets, some saving could be accomplished. The original subdivision of the land into small square blocks was the basic cause of this problem. Through a good planning program for street development, improvement, and vacation, future cost in streets and in maintenance can be reduced.

C i t y o f M o n t e s a n o

L a n d U s e

Most of the streets, homes, and commercial buildings of Montesano date back to a time when living conditions were far different than they are today. The early homes were built within walking distance of the commercial area. And industry was built near the railroads and along the river. Today, due to the automobile and truck, homes are more scattered and industry can locate almost anywhere so long as there is a good highway.

Montesano is fortunate in that the land use pattern of the city is compact and quite orderly. How long this will continue will depend on how good the existing plans and ordinances are, and how well they are enforced by the city officials. A long-range land use plan has been prepared as part of this planning project and submitted to the city for consideration and adoption, to be used as a guide for all future growth. Some plan for future growth has to be followed as new growth comes into the city, or the present pattern of orderly development will soon disappear.

Present Land Use

The city of Montesano occupies 856 acres; and of this, 426.87 acres, or 49.86 percent has been developed for urban use. A Land Use Inventory conducted in the summer of 1961 indicates that 33.50 percent of the developed area is in residential use; 3.77 percent is in commercial land use; 5.88 percent is in industrial use, with the railroad occupying an additional 5.00 percent; 6.90 percent is in public use other than streets; with 44.95 percent of the developed area in street right-of-way.

The breakdown of the developed land area by type of use gives an indication of the demand for residential, commercial, industrial and public land within the city. This information is important when developing a future land use plan for the city. The land use map is an important tool in developing zoning regulations and in analyzing other city problems.

Table 5 shows the detailed breakdown of present land use in Montesano.

TABLE 5. MONTESANO LAND USE INVENTORY

Area: City of Montesano
Date of Survey: July 1961
Source: Vernon Cotter - Planning Consultant

1960 Population - 2,486

<u>LAND USE</u>	<u>ACRES</u>	<u>PERCENT OF GROSS</u>	<u>PERCENT OF TOTAL DEVELOPED</u>	<u>PERCENT OF NET DEVELOPED</u>
TOTAL AREA OF CITY (Gross)	856.15	(100.00)		
TOTAL DEVELOPED AREA (Gross minus Vacant & Water)	426.87	(49.86)	(100.00)	
NET DEVELOPED AREA (Gross minus Streets, Vacant & Water)	235.00	(27.44)		(100.00)
TOTAL RESIDENTIAL				
Single Family	138.02	16.12	32.34	58.73
Multiple Family	4.93	0.58	1.16	2.10
TOTAL COMMERCIAL				
Retail & Parking	16.11	1.88	3.77	6.86
TOTAL INDUSTRIAL				
Light Industry	17.73	2.07	4.15	7.55
Heavy Industry	7.40	0.86	1.73	3.15
Railroads	21.33	2.49	5.00	9.08
TOTAL PUBLIC				
Schools	17.65	2.06	4.13	7.51
Parks	4.97	0.58	1.16	2.11
Other Public	6.86	0.80	1.61	2.91
STREETS	191.87	22.42	44.95	
VACANT	429.28	50.14		
WATER	0	0		
		100.00	100.00	100.00

Residential Development

In the last few years, new residential development has taken place in scattered areas about the city, but most in the northern part of the city. The older residential areas are generally well maintained, with only a few buildings in the beyond-repair stage, these being in an area southwest of the central business district.

The multiple-family use is located near the central business district and has little effect on the residential area to the north. Most of the multiple-residential land use is in old large homes that have been converted into rooms or apartments.

Commercial Development

Montesano is one of the few cities of the county faced with the problem of commercial spread along the main highways leading in or out of the city. The construction of the new shopping center in the center of the city adjacent to the existing business may have a lasting effect on the spread of small stores along the highway, since it will increase competition. In particular, it will provide adequate parking with a chance for one-stop multiple purchasing.

More public parking should be provided in the central business district, additional to that of the new shopping center, as curb parking cannot provide the spaces needed for the buying public, store owners and employees.

The commercial area occupies portions of some 16 blocks in the center of the city, with the central business district facing Pioneer, Main, and Marcy Streets. On these streets there are a number of buildings about 50 years old which are not suitable for present-day business without a great deal of modernization. As these buildings are vacant or only partly occupied, the owners are unable to bring them up to usable condition. The city should investigate the possibilities of some type of program for modernization or renewal. As they stand today, many of them detract from the appearance of the central business district and are a fire hazard for the rest of the business buildings.

The commercial section of a city has to remain alive and active, so that it can attract customers and new business; not give the impression that it is dead, by keeping dilapidated buildings as tombstones of the past. If the central business district of a city dies, so does business, at a great cost to the landowners and residents of the city.

Commercial development in Montesano occupies 16.11 acres or 3.77 percent of the developed area of the city. This is a little low compared to most cities of this population.

Industrial Development

There are 25.13 acres of land in Montesano used for industrial purposes. This is 5.88 percent of the developed area. The railroad occupies another 21.33 acres or 5.00 percent. The predominant industrial use is lumber and wood products. The mills are located in the southern part of the city, adjacent to the railroad and river. The city needs other industries to provide steady payroll to help support the business area; some effort should be made to promote development of industries which would not depend entirely on the lumber market.

Public Land Use

City, County, State and Federal buildings, schools, parks, and similar land uses are included in this category. There are 17.65 acres or 4.13 percent in schools; 4.97 acres or 1.16 percent of the developed area in parks; and 6.86 acres or 1.61 percent in other public use.

Street Right-of-way

Street right-of-way within the city amounts to 191.87 acres, or 44.95 percent of developed area. Most of these streets are opened and improved. This high percentage presents a costly maintenance problem year by year. The Planning Commission in future may reduce this by proper application of the proposed Subdivision Ordinance and the proposed Master Street Plan to require only the minimum streets needed to provide needed service and circulation.

C i t y o f A b e r d e e n

L a n d U s e

Most of the homes and commercial buildings in Aberdeen date back many years, some to the period just after the turn of the century. At that time, home sites were chosen to be within walking distance of the shopping and industrial area. Today, with the family car, everybody has transportation; as a result, development is spreading up into the northern hills, also to the south and to the east. This spreading of development, with the use of private cars for practically all trips to the central business district, helps to create traffic and parking problems in the downtown area.

The same has taken place in the industrial and commercial development. Once industry had to locate adjacent to the railroad, but now, due to trucking, these plants can locate almost anywhere. In commercial development, small neighborhood stores are scattered along the main highways.

Aberdeen has grown without too effective land use control, as shown by the land use map based on the Land Use Inventory of 1961. The city Zoning Ordinance and Map, adopted in 1947, now needs to be checked with the present actual land use pattern, to see if it is accomplishing the desired plan of development, since many changes have taken place in the intervening 15 years. The proposed land use plan for the city should be studied and compared with the present zoning map to see if it is doing the job and actually guiding new growth and modernization toward a future plan of development.

Present Land Use

Aberdeen covers 6,912 acres, of which 2,128 has been developed for urban use. The Land Use Survey indicated that 32.68 percent of the developed land is in residential use, 4.65 percent is in commercial use, 12.79 percent is in industrial land use, 5.18 percent is in public land use, and 44.72 percent is in street right-of-way.

A detailed breakdown of existing land use is shown in Table 6.

TABLE 6. ABERDEEN LAND USE INVENTORY

Area: City of Aberdeen

1960 Population - 18,741

Date of Survey: July 1961

Source: Vernon Cotter - Planning Consultant

<u>LAND USE</u>	<u>ACRES</u>	<u>PERCENT OF GROSS</u>	<u>PERCENT OF TOTAL DEVELOPED</u>	<u>PERCENT OF NET DEVELOPED</u>
TOTAL AREA OF CITY (Gross)	6,912.00	(100.00)		
TOTAL DEVELOPED AREA (Gross minus Vacant and Water)	2,128.71	(30.80)	(100.00)	
NET DEVELOPED AREA (Gross minus Streets, Vacant & Water)	1,176.71	(17.03)		(100.00)
 TOTAL RESIDENTIAL				
Single family	593.16	8.58	27.87	50.41
Multiple family	102.43	1.48	4.81	8.70
 TOTAL COMMERCIAL				
Retail & Parking	99.08	1.43	4.65	8.42
 TOTAL INDUSTRIAL				
Light Industry	32.60	0.47	1.53	2.77
Heavy Industry	223.93	3.24	10.52	19.03
Railroads	15.39	0.22	0.72	1.31
 TOTAL PUBLIC				
Schools	70.92	1.03	3.34	6.03
Parks	17.42	0.25	0.82	1.48
Other Public	21.78	0.32	1.02	1.85
 STREETS	952.00	13.77	44.72	
 VACANT	4,228.55	61.18		
 WATER	554.74	8.03		
		<u>100.00</u>	<u>100.00</u>	<u>100.00</u>

The foregoing breakdown of the developed land area by type of use gives some indication of the demand for residential, commercial, and industrial land in the city. This information is important in developing a future land use plan for the city. The land use map which is based on this data is an important tool in developing zoning regulations and in analyzing planning problems.

Residential Development

On the north side of the Chehalis River in Aberdeen, the flat land is limited. The original residential development which took place in this area is therefore quite compact, with little vacancy.

The newer growth has taken place on the hillside to the north, where new subdivision of land is taking place.

On the south side of the Chehalis River there is considerable more land, both level and hillside, suitable for residential use. There are many platted subdivisions in this area which are practically undeveloped; they would require clearing, drainage, roads, and public facilities to make them usable.

Most present development has been in the medium-to-low value type of structures, with many of them the do-it-yourself type (when funds are available). Many are incomplete. Mixed in with these are a few homes in the high-value bracket which help to bring up values in the district.

Single-family residential development amounts to 27.87 percent of the developed area, and multiple-family residential land use amounts to 4.81 percent.

For purposes of analysis, the following comparison with other areas may be useful: 28 eastern cities averaged 34.08 percent for single-family residential land use, and 33 Oregon cities averaged 32.30 percent. For multiple-residential land use the figures were 3.48 percent and 3.10 percent respectively.

This comparison shows Aberdeen as being a little below average in amount of land used for residential purposes, in a comparison against some fifty cities.

Commercial Development

The central business district of Aberdeen is located between First Street and State Street north to south, and from "F" Street on the east to "M" Street on the west. East of the Wishkah River there is a small business district from Heron Street to and along Wishkah Street as far as Fairfield Street. South of the Chehalis River Bridge there is another, along Curtis and Boone Streets, which serves as neighborhood shopping area for South Aberdeen. Another business district extends westward from the central business district in a strip type of development; along Wishkah to Park Street, along Park to Simpson Street, and west along Simpson to the west city limits line at Myrtle Street. Simpson Street commercial establishments vary from super-markets to automobile sales and services, with many serving local trade only.

The central business district itself is quite compact, and very little vacant land is available. There are about twenty off-street private parking lots in the central business district, but most are all-day owner-employee parking, so do not meet the needs of the shopper. There are four supermarkets that provide private parking for their customers and have good results with quick turnover of the parking spaces. Curb parking is very limited in the central business district. Street traffic loads are increased by the presence of cars circling the area to find parking space.

Buildings in the central business district are nearly all in the 25 to 50 year age bracket. There are many vacancies in the older buildings along Heron Street. A trend has started in movement of the center of the central business district toward the north and west, recently emphasized by the construction of a new Post Office, an office building, and an apartment building. At the same time there has been removal of some buildings in the old area on the south edge of the central business district. Possibly this renewal process could be speeded up with an Urban Renewal Project to make the central business district more attractive to the shopper, by providing the much needed parking space. Also, under such an overall plan, better arrangement and construction would be possible, rather than random lot development by the owner; especially as there will always be some lot owners who do not want to improve their property or are unable to do so.

Industrial Development

Of the 271.92 acres, or 12.77 percent of the total developed area, in industrial land use, 32.60 acres or 1.53 percent is in light industry, while 223.93 acres or 10.52 percent is in heavy industry, with 15.39 acres or 0.72 percent in railroad use.

A large part of the heavy industrial classification is in lumber or plywood mill use. By necessity these industries have located near the water, for moving logs, and adjacent to the three railroad lines that serve the area along the Chehalis River. A number of light industries are located on the fringe of the commercial district adjacent to the heavy industrial district.

The general location of industrial development in Aberdeen is well suited to the type of industry and its relation to the city, permitting easy access of employees and delivery services. There is a high percentage of land vacancy which will permit future expansion.

Public

Public and semi-public land use occupies 110.12 acres or 5.18 percent of the developed area. Of this, 70.92 acres or 3.34 percent is in school use, with Grays Harbor College occupying some 35 acres. Public parks occupy 17.42 acres or 0.82 percent, and 21.78 acres or 1.02 percent is in other public use.

Street Right-of-way

Street right-of-way within the city accounts for 952 acres or 44.72 percent of developed area. This is high. Nearly all streets are open and improved for public use, with some exceptions in the hills where topography makes opening or improvement impossible, due to bad street design in the original subdivision. This type of subdivision would not be permitted under the proposed subdivision ordinance submitted to the city planning commission as part of the "701" Planning Project. The Proposed Street Plan submitted to the city last year would help determine proper location for through and local streets, thus reducing excessive street right-of-way widths where not needed, while requiring adequate widths where through streets are needed to provide circulation of vehicles and public facilities.

C i t y o f H o q u i a m

L a n d U s e

The development of residential, commercial, and industrial structures in Hoquiam has been similar to most other development on Grays Harbor in that most structures were built in the early 1900s. A similar location pattern was also followed, with the lumber mills locating along the river and near the railroads. Adjacent to them were the commercial structures, in a compact area along Eighth Street and Simpson Avenue, and spreading out about a block on each side. Surrounding the commercial development were numerous hotels and rooming houses which housed the people employed in the lumber mills. Transportation, which was a big problem, was solved by the fact that most of these people could walk to work, or to the stores for their daily needs. The adjacent single-family residential development was also within walking distance. But today the use of the automobile has changed the whole transportation picture, so that people are moving out of this compact central area.

In the present land use study, data from a report compiled for the city in 1960 was used in part. In order to compare Hoquiam data with total data compiled for the county and for other cities, additions had to be made to make the information complete. The total water area was added so that the comparison would be the same for all cities.

Present Land Use

Hoquiam's total city area amounts to 6,144 acres, of which 2,982.38 acres is water area.

The land use survey indicated that 460.08 acres, or 33.04 percent of the developed area, is in residential use; 36.59 acres or 2.63 percent is in commercial use; 426.40 acres or 30.64 percent is in industrial use; 99.95 acres or 7.19 percent is in public and semi-public use; 368.70 acres or 26.50 percent is in street right-of-way.

Detailed breakdown of existing land use is shown in the following table.

TABLE 7. HOQUIAM LAND USE INVENTORY

Area: City of Hoquiam
 Date of Survey: July 1961
 Source: Vernon Cotter - Consultant

1960 Population - 10,762

<u>LAND USE</u>	<u>ACRES</u>	<u>PERCENT OF GROSS</u>	<u>PERCENT OF TOTAL DEVELOPED</u>	<u>PERCENT OF NET DEVELOPED</u>
TOTAL AREA OF CITY (Gross)	6,144.00	(100.00)		
TOTAL DEVELOPED AREA (Gross minus Vacant & Water)	1,391.72	(22.65)		
NET DEVELOPED AREA (Gross minus Streets, Vacant & Water)	1,023.02	(16.65)		
TOTAL RESIDENTIAL				
Single Family	449.70	7.32	32.31	44.09
Multiple family	10.38	0.17	0.75	1.21
TOTAL COMMERCIAL				
Retail (	36.59	0.59	2.63	3.58
Parking (				
TOTAL INDUSTRIAL				
Light Industry (				
Heavy Industry (	426.40	6.95	30.64	41.32
Railroads (				
TOTAL PUBLIC & SEMI-PUBLIC				
Schools	54.22	0.88	3.89	5.32
Public - Parks	45.73	0.74	3.29	4.48
STREETS	368.70	6.00	26.49	
VACANT	1,769.90	28.80		
WATER	2,982.38	48.55		
		100.00	100.00	100.00

Residential Development

The concentrated residential development has all taken place on the flat land in the past. New development is now moving into the hill area to the north and west.

Future residential development has to go northward or westward because no other land is available. City expansion by annexation has to take place up the Hoquiam Valley or Little Hoquiam Valley, in the near future, and to the west as far as Grays Harbor City will be a future possibility.

Present residential development occupies 460 acres, with 449.70 acres of this or 32.30 percent in single-family residential use, and 10.38 acres or 0.74 percent of the total developed area in multiple-family use.

Commercial Development

The business district occupies portions of some 14 blocks in an L-shaped pattern. The commercial land use amounts to 36.59 acres, or 2.63 percent of the total developed area. A small strip of commercial land use has started to develop along the main highway to the north of the city, of a neighborhood type. Another strip of commercial land use is developing along Simpson Avenue to the east of the Hoquiam River. This strip of commercial land will possibly change in character faster than the north strip, as it will become more local in its service to the area as Freeway development progresses, since through traffic will be rerouted.

The Urban Renewal Project now under way in the central business district will produce more detailed studies and information on the possible changes in buying habits of Hoquiam residents than are permitted in this regional study.

Industrial Development

The 426 acres or 30.64 percent of developed area devoted to industry now is only a small portion of possible future land available within the city of Hoquiam.

The major industries now include lumber, pulp, paper, machinery, and wood products. Hoquiam needs -- in fact, all of Grays Harbor County needs -- a more diversified industrial development. This is needed to stabilize the payrolls of this area, which fluctuate with the price of lumber. Employment in the pulp and paper phase of the forest products business is increasing at present due to increased production and available market in world trade. However, everything possible should be done to encourage new small industries to get started in this area.

Public and semi-public

This category includes city, county, state and federal buildings, schools, parks, and public utilities. This type of land use occupies approximately 100 acres or 7.19 percent of the developed area of the city. Of this amount, a little over 45 acres is in public park use, with the balance of 55 acres in public building area and schools.

To serve the estimated increase in future population adequately, this amount of land should be more than doubled. This suggests a long-range plan of development and land acquisition so that this needed area can be reserved or purchased at an economical price; because as the demand increases, so does the price.

Street right-of-way

The total dedicated street right-of-way accounts for 368.70 acres or 26.50 percent of the developed area. Nearly all of these streets are improved and open to the public. There are a few exceptions in the older subdivisions, where topography makes it impossible to open the mapped street.

This type of subdivision can be eliminated by the city planning commission through the use of the new subdivision ordinance and standards adopted for improvements. The adoption of the Master Street Plan for the city will be the guide for the opening and type of improvement for all existing and future streets.

T o w n o f C o s m o p o l i s

L a n d U s e

Cosmopolis is located on the Chehalis River, adjacent to and just south of Aberdeen. The major industry (Weyerhaeuser pulp mill) provides the employment and tax base for the community.

Most development is of medium value with much of it over 25 years old. There is some new development taking place in the hill area to the south.

There is a large high plateau just south of the town which is ideal for future expansion of the residential development. As the pulp and paper industry grows, so will employment increase, creating a demand for medium to high value homes for company employees.

Present Land Use

The town of Cosmopolis now occupies 746.54 acres; but of this total area, 100.34 acres or 13.44 percent is occupied by the Chehalis River.

The July 1961 Land Use Inventory indicated that 26.43 percent of the developed area was used for residential purposes, 1.46 percent was commercial, 33.81 percent in industry, 3.68 percent in public uses, and 34.62 percent in street right-of-way.

This information provides data required by the town planning commission in their studies for future development, and will help in revising the zoning ordinance to meet the changing conditions.

Table 8, following, gives the details of the present land use breakdown.

TABLE 8. COSMOPOLIS LAND USE INVENTORY

Area: Town of Cosmopolis 1960 Population - 1,312
 Date of Survey: July 1961
 Source: Vernon Cotter - Planning Consultant

<u>LAND USE</u>	<u>ACRES</u>	<u>PERCENT OF GROSS</u>	<u>PERCENT OF TOTAL DEVELOPED</u>	<u>PERCENT OF NET DEVELOPED</u>
TOTAL AREA OF CITY (Gross)	746.54	(100.00)		
TOTAL DEVELOPED AREA (Gross minus Vacant & Water)	235.42	(31.53)	(100.00)	
NET DEVELOPED AREA	153.91	(20.62)		(100.00)
TOTAL RESIDENTIAL				
Single family	55.14	7.39	23.42	35.83
Multiple family	7.08	0.95	3.01	4.60
TOTAL COMMERCIAL				
Retail	3.20	0.43	1.46	2.07
Parking				
TOTAL INDUSTRIAL				
Light Industry	0.28	0.04	0.02	0.18
Heavy Industry	52.74	7.06	22.40	34.27
Railroads	26.81	3.59	11.39	17.42
TOTAL PUBLIC				
Schools	4.78	0.64	2.03	3.11
Parks	0	0	0	0
Other Public	3.88	0.52	1.65	2.52
STREETS	81.51	10.92	34.62	
VACANT	410.78	55.02		
WATER	100.34	13.44		
		100.00	100.00	100.00

Residential Development

In the flat or older part of town there has been only a small amount of new construction in recent years, while in the hill area to the south there have been quite a number of new homes built in the medium value bracket. Single-family residential development occupies 55.14 acres or 23.42 percent of the developed area. Multiple-family residential land use occupies 7.08 acres or 3.01 percent, making a total of 62.22 acres or 26.43 percent of the developed area of the town in residential use.

Commercial Development

The commercial development now occupies a portion of seven blocks, with some commercial development along the main highway toward the north.

Present commercial land use occupies 3.20 acres or 1.46 percent of the total developed area. This figure is below the average for cities of this size; but due to the large shopping center in Aberdeen, five minutes away by automobile, local stores have considerable competition.

Industrial Development

There are 79.83 acres used by industry within the town. Of this amount, 0.28 acre, or 0.04 percent, is in light industry; 52.74 acres or 22.40 percent is heavy industry; and 26.81 acres or 11.39 percent is in railroad use; making a total of 33.81 percent of the developed area of the town.

As additional by-products of wood pulp are developed, and more types of paper, paperboard, fiber, and the like are made from the raw products produced in this area, diversification of employment will result and help to stabilize the industrial payrolls.

Public Land Use

Total public land use in Cosmopolis amounts to 8.66 acres. This includes city, county, state, federal and other public agencies. These use 3.88 acres or 1.65 percent. Schools occupy 4.78 acres or 2.03 percent of the developed area. There are no public parks or playgrounds as such. Steps should be taken to provide some public park area soon.

Street Right-of-way

The present street system, established many years ago, now amounts to 81.51 acres or 34.62 percent of the developed area of the town. This amount of street area is above the average for cities of this population.

With the adoption of the proposed new subdivision ordinance and Master Street Plan, better control of future subdivision can be had by the town. The Planning Commission may be able to reduce the percentage of street area and still serve the new tracts with all the necessary facilities at low cost to the taxpayer.

Cosmopolis is fortunate in that, by the help of the large tax base available, and good management of their street funds, they have been able to improve their local street system, to the extent that it is one of the best in the county.

T o w n o f W e s t p o r t

L a n d U s e

Many of the homes and some of the commercial buildings are over 25 years old and are a reminder of the days when Westport was only a summer weekend resort. A change has taken place and many more people are making this area their year-round residence. With all the new development taking place in the Westhaven area to serve sportfishermen, this trend will probably continue. At present, this newer area is separated from the old part of town by about a half mile of vacant land.

The Town of Westport is the third largest community in area in the county, comprising some 2,044 acres to the high tide line. Of this total area, 1,635.14 acres are vacant, leaving a total developed area of 408.86 acres, or 20 percent of the total area. Of the total developed area, 296.89 acres or 72.61 percent is in street right-of-way.

Westport has grown without effective land use controls. The scattered pattern of land use is shown on the land use survey map made in the summer of 1961. Scattered development with non-conforming land use has a tendency to create doubt as to future growth and particularly in land values. The suggested future land use plan submitted to the town in 1962 would be helpful in guiding future development and stabilizing land values. The proposed land use plan provides space for residential, commercial, industrial, and public uses needed for future growth.

Present Land Use

New residential growth has been slow compared to some of the other beaches where plans for long-range development have been prepared and are being followed. People are interested in knowing what the future of an area is going to be, before they will invest their money. What new development has taken place has been mixed and quite scattered. The single-family residential land use occupies 63.96 acres or 15.64 percent of Westport developed area, and multiple-residential use occupies 1.18 acres or 0.29 percent, making a combined total of 65.14 acres or 15.93 percent of the developed area. This is low compared to most cities, where residential area is 30 to 60 percent of total developed area. Details are shown in the following table.

TABLE 9. WESTPORT LAND USE INVENTORY

Area: Town of Westport
Date of Survey: July 1961

1960 Population - 976

Source: Vernon Cotter - Planning Consultant

<u>LAND USE</u>	<u>ACRES</u>	<u>PERCENT OF GROSS</u>	<u>PERCENT OF TOTAL DEVELOPED</u>	<u>PERCENT OF NET DEVELOPED</u>
TOTAL AREA OF CITY (Gross)	2,044.00	(100.00)		
TOTAL DEVELOPED AREA (Gross minus Vacant & Water)	408.86	(20.00)	(100.00)	
NET DEVELOPED AREA (Gross minus Streets, Vacant & Water)	111.97	(5.48)		(100.00)
TOTAL RESIDENTIAL				
Single Family	63.96	3.13	15.64	57.13
Multiple Family	1.18	0.06	0.29	1.05
TOTAL COMMERCIAL				
Retail	21.47	1.05	5.25	19.18
Parking				
TOTAL INDUSTRIAL				
Light Industry	1.01	0.05	0.25	0.93
Heavy Industry	0.16	0.01	0.04	0.10
TOTAL PUBLIC				
Schools	0	0	0	0
Parks	11.29	0.55	2.76	10.08
Other Public	12.90	0.63	3.16	11.53
STREETS	296.89	14.52	72.61	
VACANT	1,635.14	80.00		
WATER	0	0		
		<u>100.00</u>	<u>100.00</u>	<u>100.00</u>

Commercial

Commercial development in the Town of Westport is quite scattered, with most of the stores, restaurants or stands locating along the main highways (Forrest, Ocean, and Montesano) or in the dock area. Many motels, trailer parks, and home occupations are located on the side streets, and have a decided effect on the values and future use of the district. The commercial land use occupies 21.47 acres or 5.25 percent of the developed area of the town. A good percentage of this commercial land use is located in the Westhaven section, which is very compact; it is devoted to sport and commercial fishing, with needed accessory uses such as restaurants, bars, motels, fishing tackle sale and rental, and custom canneries.

Industrial

Industrial development is located in several widely separate places. One is an auto wrecking yard located at an entrance to the town; it does not add to the attractiveness of Westport. Two are contractor yards located a block or two off the highway. Present industrial use occupies 1.17 acres or 0.29 percent of the developed area.

The fish processing facilities now existing within the town limits are mainly of a type that would be classified under commerce rather than under industry.

The start of more industrial development has begun at the Westhaven Fish Basin. Such development is needed in this area to service the fishing fleet, and to store, package, smoke or freeze salmon, crab, oysters and bottom-fish for shipment to market.

Public

Public land use occupies 24.19 acres or 5.92 percent of the developed area. This land use is divided into 12.90 acres of federal, state and local uses other than park, and 11.28 acres of city park, which is only partially developed.

Streets

Streets in the Town of Westport occupy 296.89 acres of land or 72.61 percent of the developed area.

This excessive amount of street area creates many problems: cost of future improvements, cost of yearly maintenance, cost of drainage, waste of good land that could have been put to better use both private and public.

In comparison, to show what good planning can do to pay for the effort it takes, the following example is given, from our own county. The new development at Ocean Shores on the north beach has over three times as much developed acreage as Westport -- 1,432 acres. Of this, only 330 acres is in street right-of-way, or a little over 23 percent; compared to 72.61 percent in the Town of Westport.

This excessive street area in Westport presents many present and future problems to the Town Council. How they effectively reduce this present and potential cost to the taxpayer will depend on how good their planning program is and how they program their steps to redesign some areas so as to reduce this excessive street area.

The Master Street Plan proposed for the area can give the Town Council great help in planning their future street program along with the proposed subdivision ordinance.

A great deal can be done to correct these problems. However, they won't go away by just ignoring them. The citizens have to do something about them.

TABLE 10. SUMMARY OF CITY AREAS IN GRAYS HARBOR COUNTY

<u>CITY</u>	<u>ACRES</u>	<u>SQUARE MILES</u>
Aberdeen	6,912.00	10.80
Hoquiam	6,144.00	9.60
Westport*	2,044.00	3.19
Montesano	856.15	1.34
Cosmopolis	746.54	1.17
McCleary	623.00	0.97
Elma	546.28	0.85
Oakville	277.13	0.43
	18,149.10	28.35
Grays Harbor County Total Area	1,219,200.00	1,905.00
Unincorporated Area	1,201,050.90	1,876.65
Total Planning Area	463,143.00	723.66
Planning Area (Less Incorporated areas)	444,993.90	695.30
Central Park (Zoning District No. 1)	6,033.00	9.43

* Note: Area computed to high water line.

P A R T T W O

This Economic Base
Section consists of
data gathered about
commerce, industry,
shipping, and the
tourist trade in
the regional area.

GEOLOGY OF THE GRAYS HARBOR PLANNING AREA.

(Abridged)

Source: Tertiary Stratigraphy of Western Washington &
NW Oregon. C. E. Weaver. Seattle: U. of Wash. 1937

The lowest known geologic layer underlying the Grays Harbor Planning Area is a very deep very homogeneous bed of hardened sandstone and shale, the old ocean bed, more than 10,000 feet thick. (In the highest peaks of the Olympics, this layer is the top, owing to having been violently shoved up to such a height that no later layers had a chance to be built on top.)

Next is a layer of lava which forms the "basement rocks" of the Grays Harbor area. This lava came upward, by submarine volcanic action, while the area was underwater. It varies from 500 to 3000 feet in thickness. Several "tongues" of it were folded into above-water hills, and some of these (the Willapa Hills) were high enough so that no later layers formed on top. A ridge of this lava six to ten miles wide forms the watershed south of Grays Harbor between it and Willapa Bay.

Above that lava layer, the sandstone-and-shale formation continued as before. The ocean bed was sometimes at the surface and sometimes quite deep in the course of the succeeding geologic periods. There is one thin layer of lava (derived from Eastern Oregon eruptive sources) about midway of this sandstone-and-shale formation. This sandstone-and-shale, whose name is the Astoria Formation, is at the surface in much of the hillier portion of western Grays Harbor County.

Above that in turn is a less stable, finer-grained, almost clayey sandstone-and-shale layer known as the Montesano Formation. This is at the surface in most lowland portions of the Grays Harbor Planning Area.

Recent formations consist of sand and gravel not firmly compressed into rock, and these tend to be localized near the present water's edge of Grays Harbor and the lower Chehalis River.

At the eastern edge of the county, where a tongue of the old lava formed a divide between Grays Harbor and Puget Sound, there are gravels from the terminal moraine of a recent glacier. No glacial action ever touched the rest of the Grays Harbor area. (It was under water during the ice ages.)

TABLE 11. MINERAL RESOURCES OF THE GRAYS HARBOR PLANNING AREA.

Source: Wash. State Dept. of Conservation

KIND OF RESOURCE

LOCATION & EXTENT

Building sand & gravel
Brick clay
Limestone
Peat
Ilmenite-magnetite
Silicate manganese
Petroleum

Widespread and plentiful
Widespread and plentiful
Humptulips River (4-20-9W)
Beach areas inland from dunes
North Bay of harbor
Widespread
Beach areas, widespread

TABLE 12. LAND CLASSIFICATION IN GRAYS HARBOR COMPARED WITH TOTAL UNITED STATES AND WASHINGTON STATE

(Note: This comparison is approximate only, as the different sources used different bases of calculation)

Sources: U. S. Forest Service, Timber Resources for America's Future, 1958, p 27. U. S. Forest Service Report No. 111, August 1953, Table 4. 1959 Census of Agriculture, Vol I part 46, Table 1.

<u>LAND CLASSIFICATION</u>	<u>UNITED STATES</u>	<u>WASHINGTON STATE</u>	<u>GRAYS HARBOR COUNTY</u>
<u>Forest land</u>			
Unreserved			
Farm woodlands, pastured		7.3%	1.6%
Farm woodlands, not pastured		1.9%	2.1%
Other unreserved commercial		36.4%	86.1%
Total unreserved commercial		45.6%	89.8%
Commercial but reserved from logging		3.0%	1.0%
Total commercial forest	25%	48.6%	90.8%
Noncommercial (unproductive)	9%	7.2%	1.7%
Total forest land	34%	55.8%	92.5%
<u>Farm land</u>			
Cropland	21%		
Pasture & range	36%		
Total land in farms		43.8%	8.2%
Minus farm woodlands shown above		-9.2%	-3.7%
Net total agricultural & range	57%	34.6%	4.5%
<u>All other uses</u>	9%	9.6%	3.0%
	100%	100.0%	100.0%

CLIMATE OF THE GRAYS HARBOR PLANNING AREA.

Source: U. S. Weather Bureau, Bulletin No. 60-45, 1960

"The Pacific Ocean forms the western boundary. A narrow, sandy, coastal plain with shallow bays, tidal flats, stream deltas, and low headlands lies between the coastline and the coastal range. The broad Chehalis River Valley separates the Willapa Hills, a southern extension of the Coastal Range, from the Olympic Mountains /which/ tower to nearly 8,000 feet in dome-like structures, carved deeply by rivers.

"In the streams, there are two periods of high flow. One occurs during the winter months, coinciding with the period of maximum precipitation, and the other in spring caused by melting snow in the higher elevations. Although overflow may be expected in most years, severe flooding occurs infrequently.

"Winds of gale force occur /on the coast and at high elevations/ during the winter season. Devastating storms such as tornadoes, blizzards, cloudbursts and floods occur infrequently and generally do not cause widespread damage.

"Various climatic controls produce entirely different conditions within short distances.

"The semipermanent high and low pressure areas over the North Pacific Ocean have a very definite influence on the climate. /In summer, this/ brings a northwesterly flow of air, cool and relatively dry; thus summer is the season of lightest precipitation. /Winter/ brings a southwesterly flow of warm and moist air on shore. This air is warmer than the land surface, consequently, cooling and condensation takes place, resulting in a rainy season during the late fall and winter.

"The heaviest precipitation in the United States occurs along the western slope of these coastal mountains. The average annual rainfall increases from 75 inches in the lower Coastal Plains to more than 135 inches along the southwestern slope of the Olympic Mountains. The greatest recorded is 184 inches at Wynoochee Oxbow. Snowfall is light in the lower elevations.

"The average maximum temperature in July ranges from 70°F near the coast to 75°F along the southwestern slope of the Coastal Range and the average minimum temperature is near 50°F. Temperatures during the winter are slightly higher along the coast than inland. Maximum temperatures in January range from 43° to 45°F and minimum temperatures from 32° to 38°F. Most of this area is covered with timber; lumbering and the manufacture of wood products being the major industries. Farming is limited to the raising of livestock and dairying in valleys and in the better drained plains areas. Cranberry production is well adapted to numerous bog areas near Grays Harbor and Willapa Bay." (Abridged from original)

TABLE 13. CLIMATE: VARYING "MICROCLIMATES" IN PLANNING AREA, AS SHOWN IN TOTAL PRECIPITATION BY MONTHS FOR OBSERVATION STATIONS IN VARIOUS LOCALITIES WITHIN GRAYS HARBOR COUNTY, WASHINGTON.

Source: U. S. Weather Bureau, Climatic Summary of the U. S. No. 11-39, 1960 ed.

LOCATION	JA	FE	MR	AP	MY	JE	JL	AG	SE	OC	NO	DE	TOTAL*
Aberdeen (46 59 N, 123 49 W, elevation 12')	12	10	9	5	4	3	1	2	4	8	11	15	83.49
20 mi NNE of Aberdeen (47 16 N, 123 43 W, elevation 435')	18	15	14	8	6	4	2	2	6	12	15	22	126.01
Elma (47 00 N, 123 24 W, elevation 238')	8	9	6	4	3	2	1	1	3	6	8	10	60.23
Hoquiam (46 58 N, 123 53 W, elevation 9')	10	11	8	5	3	2	1	1	3	7	9	11	71.10
Moclips** (47 14 N, 124 12 W, elevation 115')	10	10	8	6	3	2	1	2	3	8	11	11	74.38
Oakville (46 50 N, 123 14 W, elevation 85')	8	7	6	3	2	2	1	1	2	5	7	9	52.34
Point Grenville** (47 18 N, 124 17 W, elevation 100')	9	12	9	6	3	2	2	2	4	10	12	13	83.18
Quinault Ranger Station (47 28 N, 123 51 W, elevation 220')***	20	16	14	9	6	4	3	3	6	13	16	23	132.73
Satsop (47 00 N, 123 30 W, elevation 40')	10	8	7	4	3	3	1	1	3	6	9	12	66.66
South Olympic Tree Farm (47 14 N, 123 35 W, elevation 580')***	16	17	13	7	5	3	2	2	5	12	15	19	116.42
Wynooche Oxbow (47 20 N, 123 38 W, elevation 670')	26	17	19	12	5	6	2	3	7	11	18	31	155.59

* All figures are mean precipitation for 22 years. However, monthly figures have been rounded to nearest inch; hence they do not add up to the totals.

** Outside Planning Area but nearest beach locations available.

*** Outside Planning Area but within its watershed.

TABLE 14. CLIMATE: MEAN ANNUAL SNOWFALL IN GRAYS HARBOR LOCATIONS
Source: U. S. Weather Bureau, Climatic Summary of the U. S., #11-39

LOCATION	JA	FE	MR	AP	MY	JE	JL	AG	SE	OC	NO	DE	TOTAL*
Aberdeen	6	2	-	-	-	-	-	-	-	-	-	1	8.4
20 mi NNE of Aberdeen	12	1	1	1	-	-	-	-	-	-	-	1	15.1
Elma	7	1	-	-	-	-	-	-	-	-	-	-	9.0
Hoquiam	5	4	-	-	-	-	-	-	-	-	-	1	11.1
Moclips	-	1	1	-	-	-	-	-	-	-	-	1	2.2
Oakville	3	2	-	-	-	-	-	-	-	-	-	3	9.3
Quinault Ranger Station	5	-	2	-	-	-	-	-	-	-	1	1	8.1
Satsop	4	1	-	-	-	-	-	-	-	-	-	-	5.7
South Olympic Tree Farm	20	10	5	1	-	-	-	-	-	-	2	6	42.2

* Monthly figures rounded to nearest inch, do not add to totals.

From Table 14, above, two conclusions can be drawn in reference to the effect of snowfall on the economic base of the Grays Harbor Planning Area. First, as to commerce: in the urbanized portions of the area, highway and local transportation are rarely interfered with by snow, and then for only a matter of hours. Second, as to agriculture and industry: comparing this table with Table 13, it is apparent that relatively little of the precipitation in the watershed areas falls as snow. This means that very little is retained in "hard storage" for the dry spring and summer months, which increases the necessity for reservoir construction to maintain a regular flow of industrial and agricultural water.

TABLE 15. CLIMATE: MEAN TEMPERATURES BY MONTHS, GRAYS HARBOR
Source: U. S. Weather Bureau, Climatic Summary of the U. S. #11-39

LOCATION	JA	FE	MR	AP	MY	JE	JL	AG	SE	OC	NO	DE	TOTAL
Aberdeen	39	42	44	48	53	57	60	61	58	53	45	42	50.2
Elma	37	42	44	49	55	59	63	63	59	52	44	41	48.7
Moclips	43	43	46	49	52	55	58	58	57	53	47	44	50.4
Oakville	38	40	44	48	53	59	63	64	59	51	44	39	50.1
Quinault Ranger Station	38	41	44	49	52	58	64	64	59	52	45	40	50.4
South Olympic Tree Farm	35	39	42	47	54	58	61	61	58	50	43	39	48.8

TABLE 16. CLIMATE: MEAN MAXIMUM TEMPERATURES AND ALL-TIME HIGH TEMPERATURES BY MONTHS IN GRAYS HARBOR LOCATIONS
Source: U. S. Weather Bureau, Climatic Summary of the U. S. 11-39

<u>LOCATION</u>	<u>JA</u>	<u>FE</u>	<u>MR</u>	<u>AP</u>	<u>MY</u>	<u>JE</u>	<u>JL</u>	<u>AG</u>	<u>SE</u>	<u>OC</u>	<u>NO</u>	<u>DE</u>	<u>ALLTIME</u> <u>HIGH</u>
Aberdeen	45	49	53	58	63	67	70	70	69	62	52	47	104
Elma	44	50	54	60	67	71	76	75	72	62	53	47	104
Hoquiam	44	49	51	56	62	66	69	69	69	61	52	47	100
Moclips	49	50	54	57	60	63	66	65	64	61	53	49	94
Oakville	44	48	53	59	65	72	78	78	72	61	52	45	103
Quinault Ranger Station	44	48	53	59	66	71	78	78	70	62	51	45	104
South Olympic Tree Farm	41	46	50	58	67	71	75	74	70	60	50	44	97

This shows a pattern of mild winters and cool summers with -- especially at the beaches -- a long spring and an "Indian summer" important in tourist development. May and September, which are not now very active tourist months, are among the pleasantest of the year along the beaches.

TABLE 17. CLIMATE: MEAN MINIMUM TEMPERATURES AND ALL-TIME LOW TEMPERATURES BY MONTHS IN GRAYS HARBOR LOCATIONS
Source: U. S. Weather Bureau, Climatic Summary of the U.S. 11-39

<u>LOCATION</u>	<u>JA</u>	<u>FE</u>	<u>MR</u>	<u>AP</u>	<u>MY</u>	<u>JE</u>	<u>JL</u>	<u>AG</u>	<u>SE</u>	<u>OC</u>	<u>NO</u>	<u>DE</u>	<u>ALLTIME</u> <u>LOW</u>
Aberdeen	33	34	36	39	43	47	50	51	48	43	38	36	+ 6
Elma	30	33	34	38	43	47	50	50	47	42	37	34	0
Hoquiam	32	35	36	39	44	48	51	51	49	44	39	36	+ 6
Moclips	38	37	38	41	44	48	51	50	49	46	41	38	+20
Oakville	32	33	34	37	41	45	48	49	46	41	36	32	- 8
Quinault Ranger Station	32	34	35	38	42	47	50	50	47	43	38	34	+ 11
South Olympic Tree Farm	29	32	34	37	41	45	47	48	45	41	36	33	+ 1

It will be apparent that Grays Harbor residents do not spend much on antifreeze for cars and trucks. If a warehouse is well built, it may not need to be heated at all. However, the wide variation between the mean and the extreme has often caused losses to farmers.

TABLE 18. FREEZE DATA FOR LOCATIONS IN GRAYS HARBOR COUNTY (TO 1960)

Source: U. S. Weather Bureau, Climates of the States: Washington

LOCATION	TEMP- ERA- TURE	MEAN DATE, LAST SPRING OCCURRENCE	MEAN DATE, FIRST FALL OCCURRENCE	MEAN DAYS BETWEEN OCCURRENCES	NUMBER OF OCCURRENCES	
					SPRING	FALL
Aberdeen (last 29 years)	32°F	April 19	October 25	189	29	29
	28	March 17	November 23	251	29	28
	24	February 1	December 17	319	21	16
	20	January 16	December 26	344	17	8
	16	January 12	-	-	14	3
Oakville (last 24 years)	32°F	May 9	October 10	154	24	24
	28	March 28	November 1	218	24	24
	24	February 20	December 1	284	21	19
	20	January 28	December 18	324	16	12
	16	January 16	December 23	341	14	8
Quinault Ranger Station (last 22 years)	32°F	April 12	November 7	209	22	22
	28	February 24	December 11	290	20	18
	24	February 5	December 25	322	16	8
	20	January 21	December 29	342	14	4
	16	January 8	-	-	6	1

By reference to the altitudes and locations given in Table 13, it can be seen that the influence of the ocean is greater in this area than the influence of altitude. The Quinault Ranger Station has a longer frost-free season than Oakville, despite its higher altitude, because it is closer to the ocean.

A comparison of this table with Tables 14, 15 and 17 reveals a pattern in which frosts are limited to "cold waves" lasting a few days, alternating with periods of "unseasonable" warmth. Thus the actual complete dormant season of plants is relatively short. In many locations, frosts must be expected to nip fruit trees after bud-formation is well along. Frosts are usually accompanied by a dry wind, which increases agricultural damage, but reduces interruptions to highway traffic because it means little or no glare ice on roads.

TABLE 19. HUMIDITY (NORMAL MINIMUM RELATIVE HUMIDITY), BY TEN DAY TIME PERIODS FROM APRIL THROUGH SEPTEMBER, GRAYS HARBOR

Source: U. S. Weather Bureau, Seattle-Tacoma Airport Fire Weather Office, memorandum of December 17 1962 to Vernon Cotter

<u>TIME PERIOD</u>	<u>QUINAUT RANGER STATION</u>	<u>MONTESANO</u>
April 1-10	57.5	56.0
11-20	56.6	54.0
21-30	53.8	53.0
May 1-10	51.5	50.5
11-20	52.4	52.8
21-31	53.2	54.6
June 1-10	53.5	56.1
11-20	54.3	56.0
21-30	53.2	55.3
July 1-10	51.1	54.0
11-20	50.8	54.5
21-31	51.0	56.8
August 1-10	52.0	57.0
11-20	51.9	54.6
21-31	55.4	56.1
September 1-10	54.1	52.5
11-20	59.4	55.5
21-30	60.9	56.8

We have here data for one upland forest locality and one valley farming locality. The latter (Montesano) is on the whole warmer and dryer than the former (Quinault Ranger Station). However, during the crop-ripening months of May-August, the Montesano humidity is higher than the Quinault humidity. This, taken together with the temperature and precipitation figures in Tables 13, 15, 16 and 17 (the nearest locations to Montesano in those tables are Elma and Satsop) will indicate some reasons for the unusual nature of Grays Harbor farming (see Table 12, and tables in the Agriculture section hereinafter). This is a climate favorable for growth of raspberries, strawberries, cabbage, green peas, mildews, molds and slugs. It is also exceptionally favorable for cattle breeds that originated in damp climates, and for types of stockfeed that do not require dry curing. The data for the forest location are limited but suggest that it is not the "normal" but the exceptional minimum that shuts down logging; a close watch is kept in forest areas for fire hazard weather.

TABLE 20. INDUSTRY IN GRAYS HARBOR COUNTY: NUMBER OF COMPANIES, NUMBER OF EMPLOYEES, AND PAYROLLS COVERED UNDER SOCIAL SECURITY (EXCLUDES SELF-EMPLOYED AND RAILROAD EMPLOYEES), BY INDUSTRY CLASS

Source: U. S. Department of Commerce & U. S. Department of Health, Education, & Welfare, COUNTY BUSINESS PATTERNS First Quarter 1959, Part 10 Table 3

INDUSTRY GROUP	Number of employees mid-March	Pay-rolls Jan-March (\$000)	-----SIZE CLASS OF COMPANIES-----								
			Total	0 to 3	4 to 7	8 to 19	20 to 49	50 to 99	100 to 249	250 to 499	500 and up
<u>Total</u>	12,873	13,430	1,182	734	214	138	46	26	15	8	1
<u>Agriculture, forestry & fisheries</u>	114	100	31	26	2	2	-	1	-	-	-
<u>Fisheries</u>	50	55	19	16	1	2	-	-	-	-	-
<u>Mining</u>	*	*	1	-	-	-	-	1	-	-	-
<u>Contract construction</u>	258	284	75	54	11	10	-	-	-	-	-
General contractors	91	92	26	19	3	4	-	-	-	-	-
Special trade contr	143	166	42	30	7	5	-	-	-	-	-
<u>Manufacturing</u>	7,636	8,941	177	71	27	23	11	16	12	8	1
<u>Food</u>	676	328	19	4	3	5	5	3	-	-	-
(Dairy products)	115	108	4	2	-	-	1	1	-	-	-
(Canned & frozen food)	344	202	11	-	-	5	4	2	-	-	-
(Canned & cured seafood)	*	*	10	-	-	4	4	2	-	-	-
Lumber & wood prod	5,127	6,208	123	56	19	16	6	11	8	7	-
(Logging)	1,375	1,677	61	35	14	5	2	2	1	2	-
(Sawmills & planing)	1,725	2,060	44	16	4	9	4	6	4	1	-
(General)	1,270	1,569	17	5	1	2	1	3	4	1	-
(Special prod.)	455	491	27	11	3	7	3	3	-	-	-
(Millwork &c)	1,822	2,262	14	2	1	2	-	3	2	4	-
(Millwork)	*	*	6	2	1	1	-	1	1	-	-
(Plywood & veneer)	*	*	8	-	-	1	-	2	1	4	-
(Wooden containers)	*	*	3	2	-	-	-	-	1	-	-
(Nailed box & shook)	*	*	3	2	-	-	-	-	1	-	-
Furniture & fixtures	*	*	5	1	1	1	-	1	-	1	-
(Household furn.)	*	*	3	-	-	1	-	1	-	1	-
Paper &c	*	*	3	-	-	-	-	-	2	-	1
(Pulp mills)	*	*	2	-	-	-	-	-	1	-	1
(Paper mills)	*	*	1	-	-	-	-	-	1	-	-
Printing & publishing	107	121	7	3	2	1	-	1	-	-	-
Machinery exc. electric	*	*	6	3	2	-	-	-	1	-	-
(Paper ind. machinery)	*	*	1	-	-	-	-	-	1	-	-
Misc. manufacturing	*	*	3	2	-	-	-	-	1	-	-
(Musical instr. mfg.)	*	*	1	-	-	-	-	-	1	-	-

* Figures withheld to avoid disclosure of operations of individual company operating units.

Table 20 (continued)

Industry in Grays Harbor County: Number of Companies, Number of Employees, and Payrolls Covered Under Social Security

INDUSTRY GROUP	Number of employees mid-March	Pay-rolls Jan-March (\$000)	Total	0	4	8	20	50	100	250	500
				to 3	to 7	to 19	to 49	to 99	to 249	to 499	and up
Transportation & other											
public utilities	556	617	65	37	10	11	6	-	1	-	-
Trucking & warehous.	201	243	39	25	7	3	4	-	-	-	-
(Trucking)	181	223	33	21	6	2	4	-	-	-	-
Communication	255	258	10	3	2	2	2	-	1	-	-
Telephone	220	218	6	2	1	-	2	-	-	-	-
Wholesale trade	424	496	67	30	21	12	4	-	-	-	-
Groceries &c	67	54	15	7	6	2	-	-	-	-	-
Misc. wholesale	140	158	28	14	9	4	1	-	-	-	-
Petroleum bulk	55	67	11	6	2	3	-	-	-	-	-
Retail trade	2,133	1,710	385	228	90	48	13	6	-	-	-
Bldg.mat.& farm eqp.	142	128	27	14	7	6	-	-	-	-	-
Hdwr & farm equip.	64	51	15	9	4	2	-	-	-	-	-
(Hardware stores)	39	30	11	8	2	1	-	-	-	-	-
General merchandise	251	178	15	8	2	2	-	3	-	-	-
Food	391	318	58	39	10	4	2	3	-	-	-
Grocery stores	293	237	43	31	6	3	-	3	-	-	-
Auto.dlrs & serv.sta.	434	455	76	47	14	8	7	-	-	-	-
New & used car dlrs	278	343	20	3	4	6	7	-	-	-	-
Gasoline serv.sta.	112	67	48	40	8	-	-	-	-	-	-
Apparel & accessories	144	113	24	11	8	4	1	-	-	-	-
Furniture & home furn.	114	113	18	7	6	5	-	-	-	-	-
Eating & drinking pl.	421	212	104	67	22	12	3	-	-	-	-
Misc. retail stores	236	193	63	35	21	7	-	-	-	-	-
Drug stores &c	68	45	17	8	8	1	-	-	-	-	-
Retail stores n.e.c.	43	20	17	12	5	-	-	-	-	-	-
Finance, insurance, & real estate	289	262	77	57	12	6	1	1	-	-	-
Insurance	24	17	12	10	2	-	-	-	-	-	-
Real estate	66	45	28	24	1	3	-	-	-	-	-
Ins.& real est.comb.	40	42	17	13	4	-	-	-	-	-	-
Services	1,356	877	289	220	36	23	7	1	2	-	-
Hotels & lodging	144	70	24	17	4	1	1	1	-	-	-
Hotels, motels	141	70	21	14	4	1	1	1	-	-	-
(Year round hotels)	124	66	11	6	2	1	1	1	-	-	-
Personal services	231	156	52	38	8	3	3	-	-	-	-
Laundry & cleaners	106	53	17	10	5	-	2	-	-	-	-
(Clean & dye)	34	21	12	7	5	-	-	-	-	-	-
Beauty shops	31	12	13	11	1	1	-	-	-	-	-
Barber shops	13	13	11	11	-	-	-	-	-	-	-

Table 20 (concluded)

Industry in Grays Harbor County: Number of Companies, Number of Employees, and Payrolls Covered Under Social Security

INDUSTRY GROUP	Number of employees mid-March	Pay-rolls Jan-March (\$000)	Total	0	4	8	20	50	100	250	500
				to 3	to 7	to 19	to 49	to 99	to 249	to 499	to up
Services, continued											
Auto.repair services & garages	49	48	18	13	4	1	-	-	-	-	-
(Auto repair shops)	*	*	17	12	4	1	-	-	-	-	-
Medical & other health	475	304	63	51	6	2	2	-	2	-	-
Physicians & surgeons	63	41	29	26	3	-	-	-	-	-	-
Dentists	24	15	17	17	-	-	-	-	-	-	-
Hospitals	331	215	4	-	-	1	1	-	2	-	-
Legal services	23	11	18	18	-	-	-	-	-	-	-
Nonprofit membership organizations	183	114	70	56	9	5	-	-	-	-	-
Labor organizations	50	32	27	24	3	-	-	-	-	-	-
Civic, social, fraternal	96	66	28	19	5	4	1	-	-	-	-
Misc. services	47	35	14	9	4	1	-	-	-	-	-
Accounting &c	40	31	11	7	3	1	-	-	-	-	-
Unclassified	*	*	15	11	3	-	1	-	-	-	-

* Figures withheld to avoid disclosure of operations of individual company operating units.

Table 20 gives useful information of two kinds. First, as to the distribution of size of operating unit in different industries located here. (See Table 22 for a distribution by total number of employees in the industry here.) Second, as to relative pay scales in the different industries. By sheer coincidence, it happens that this may be read at a glance. If the left-hand column of figures in Table 20 "Number of Employees..." is larger than the respective figure in the next column "Payrolls..." -- then the industry has a relatively low pay scale. If the left-hand figure is smaller, then the industry has a relatively high pay scale. If they are about even, the pay scale is close to average.

The reason that this table shows several operating units with more than 500 employees, whereas other tables in this report show the largest size group as 250-499, is that this table shows all persons on the payroll at one specific date, whereas the others present an annual average.

TABLE 21. EMPLOYMENT TRENDS AS SHOWN IN TOTAL NUMBER OF PAID EMPLOYEES BY TYPE OF INDUSTRY AND LOCATION, 1947-58

Source: U. S. Census, Selected Characteristics of the Redevelopment Area # SP-7, March 1962

<u>CATEGORY</u>	<u>YEAR</u>	<u>TOTAL WASH. STATE</u>	<u>TOTAL GRAYS HARBOR</u>	<u>ABER- DEEN</u>	<u>HO- QUIAM</u>	<u>OTHER GRAYS HARBOR</u>
Manufactures*	1958	212,049	7,469	2,132	2,400	2,937
"	1954	192,354	7,590	1,962	2,223	3,405
"	1947	144,252	7,465	2,541	2,893	2,031
Mineral industries*	1958	2,035	40			40
"	1954	3,096	40			40
Retail trade**	1958	120,865	2,156	1,394	325	437
"	1954	108,399	2,107	1,426	283	398
"	1948	105,688	2,464	1,533	333	598
Wholesale trade **	1958	49,198	388	254	103	31
"	1954	32,771	570	436	97	37
"	1948	44,062	912	729	132	51
Selected services**	1958	40,056	585	395	96	94
"	1954	32,771	570	436	97	43
"	1948	29,552	644	428	161	55
TOTAL 1958			10,638	4,175	2,924	3,539
TOTAL 1948			11,485	5,231	3,519	2,735
CHANGE 1948-1958			- 847	-1,056	- 595	+ 804

* Annual average.

** As of November.

Table 21, on the preceding page, rewards careful study.

The total jobs in manufacturing industry in Grays Harbor County in 1958 was within 4 of being the same as in 1947 -- a period during which manufacturing employment for the state rose 68%. Hoquiam lost 493 manufacturing jobs, Aberdeen lost 311; other parts of the county absorbed them.

Retail trade declined slightly. Nearly all this decline reflected the disappearance of small outlying stores, resulting from improvements in roads and increase in automobile ownership. Aberdeen, the central market city, retained its relative position.

Wholesale trade reflected the postwar trend toward more centralized chainstore wholesaling and warehousing, as a result of large-scale truck distribution over improved highways. To Grays Harbor this was a severe economic blow, which hit Aberdeen the hardest -- 524 jobs evaporated, 475 of them from Aberdeen -- 14% of Aberdeen's total jobs.

The net rise in rest-of-county selected services is known from other sources to reflect the rise of the tourist trade. Had the figure been an annual average instead of being for the slack month of November, it would better reflect this.

Considering the employment totals in summary, it will be seen that in that decade 1947-58, Aberdeen lost 1,056 jobs. Hoquiam lost 595. Total of the two neighbor cities, 1,631. Of these, 804 jobs were replaced and remained as part of the county's economic base. The other 847 jobs were lost to the county's economic base. All but 59 of the lost jobs were in wholesale and retail trade, representing a streamlining of the distribution industry in line with national trends, rather than a drop in volume of business handled.

It is primarily this concentrated loss in the field of wholesale trade employment that accounts for the high vacancy rate in commercial buildings in the southeast portion of the Aberdeen central business district. These older buildings were unsuited for modernizing into retail stores or any form of business that must present an attractive physical aspect to the public. Their high vacancy rate increases the problem for their owners of repairs and maintenance to fit them for any occupancy at all.

TABLE 22. RANK OF NON-AGRICULTURAL BUSINESSES IN GRAYS HARBOR COUNTY BY TOTAL EMPLOYMENT, MARCH 1961

Source: Washington State Department of Employment Security, Quarterly Report, Employment and Payrolls in Washington State, First Quarter 1961

<u>TYPE OF BUSINESS</u>	<u>NUMBER OF FIRMS</u>	<u>NUMBER OF EMPLOYEES</u>	<u>RANK</u>	<u>REMARKS</u>
Lumber & wood prod. mfg.	74	2,939	1	25.0% of total
Logging	75	1,249	2	10.6% "
"Other nondurable" mfg.*	10	1,119	3	9.5% "
Contract construction	112	548	4	
Food & kindred prod. mfg.	26	523	5	
Prof., social & misc. services	154	487	6	
Auto dealers & serv. stations	88	424	7	
Transportation &c	58	420	8	
Food, retail	60	406	9	
Wholesale trade	75	402	10	
Eating & drinking places	123	401	11	
Finance, insurance, real est.	92	343	12	
General mdae retail	21	282	13	
Furniture & fixtures mfg.	5	279	14	2.5% "
Personal & business serv.	55	254	15	
Miscellaneous retail	63	231	16	
Machinery mfg.	9	218	17	
Communications & utilities	14	205	18	
Hotels, rooming houses &c	40	189	19	
"Other durable" mfg.	9	188	20	
Bldg. mat. & farm equip. retail	23	165	21	
Unclassified	4	125	22	
Furniture & home furn. retail	14	92	23	
Apparel & accessories retail	21	91	24	
Amusements	24	84	25	
Auto & other repair serv.	38	75	26	
Transportation equip. mfg.	4	14	27	
Fabricated metal prod. mfg.	3	10	28	
TOTAL	1,294	11,763		Forest industry 46.6% of total

* Includes pulp and paper mills

Table 23. CLASS OF WORKER IN NONAGRICULTURAL INDUSTRIES IN GRAYS HARBOR COUNTY, 1960, BY SEX AND PLACE OF RESIDENCE

Source: 1960 Census of Population #49C Tables 74, 84

<u>EMPLOYMENT CATEGORY</u>	<u>TOTAL GRAYS HARBOR</u>	<u>ABERDEEN</u>	<u>HOQUIAM</u>	<u>OTHER GRAYS HARBOR</u>
<u>All men employed</u>	<u>13,046</u>	<u>4,625</u>	<u>2,788</u>	<u>5,633</u>
Private wage & salary	10,138	3,704	2,200	4,234
Government workers	1,125	366	249	510
Self-employed	1,771	551	339	881
Unpaid family workers	12	4	-	8
<u>All women employed</u>	<u>5,106</u>	<u>1,970</u>	<u>1,167</u>	<u>1,969</u>
Private wage & salary	3,818	1,609	967	1,242
Government workers	725	191	125	409
Self-employed	441	166	59	216
Unpaid family workers	122	4	16	102
<u>Total both sexes</u>	<u>18,152</u>	<u>6,595</u>	<u>3,955</u>	<u>7,602</u>
Private wage & salary	13,956	5,313	3,167	5,476
Government workers	1,850	557	374	919
Self-employed	2,212	717	398	1,097
Unpaid family workers	134	8	16	110

TABLE 24. WEEKS WORKED IN 1959 BY PERSONS EMPLOYED IN GRAYS HARBOR COUNTY, BY PLACE OF RESIDENCE IN 1960

Source: 1960 Census of Population 49C, Tables 33,36,76,86

	<u>ABERDEEN</u>	<u>HOQUIAM</u>	<u>REST OF GRAYS HARBOR COUNTY</u>	<u>TOTAL GRAYS HARBOR COUNTY</u>
TOTAL PERSONS WHO WORKED IN 1959	7,905	4,843	10,296	23,044
50 to 52 weeks	4,506	2,448	5,104	12,058
48 to 49 weeks	377	330	810	1,517
40 to 47 weeks	733	542	1,119	2,394
27 to 39 weeks	660	475	852	1,987
14 to 26 weeks	715	439	894	2,048
13 weeks or less	914	609	1,517	3,040
Percent of those who worked at all in 1959 who worked 50-52 weeks				52.3%

TABLE 25. EMPLOYER UNITS, EMPLOYMENT, AND WAGES COVERED BY WASHINGTON EMPLOYMENT SECURITY ACT, BY QUARTER, 1960-62, G H CO.
Source: State Employment Security Department, Quarterly Reports

<u>EMPLOYER UNITS</u>	<u>FIRST MONTH</u>	<u>SECOND MONTH</u>	<u>THIRD MONTH</u>	<u>WAGES PAID IN QUARTER</u>	<u>PERCENT OF STATE TOTAL</u>	<u>RE- MARKS</u>
Fourth Quarter 1960	1,357	13,205	11,770	12,513	\$14,566,895	1.84%
First Quarter 1961	1,336	12,278	11,669	11,829	\$13,766,717	1.88%
Second Quarter 1961	1,380	12,695	13,283	13,899	\$15,441,078	1.94%
Third Quarter 1961	1,380	13,969	14,274	13,559	\$16,416,990	1.93%
Fourth Quarter 1961	1,367	13,135	12,774	12,591	\$15,430,699	1.80%
First Quarter 1962	1,367	12,254	12,574	12,609	\$14,946,228	1.82%

Low: Feb.
(11,669)
High: Aug.
(14,274)

TABLE 26. EMPLOYER UNITS, EMPLOYMENT, AND WAGES, COVERED BY WASHINGTON EMPLOYMENT SECURITY ACT, CLASSIFIED BY INDUSTRY, FOR GRAYS HARBOR COUNTY, FIRST QUARTER 1962

Source: State Employment Security Dept. Quarterly Report on Employment and Payrolls in Washington State, First Quarter 1962, released October 17, 1962

INDUSTRY	EMPLOYER UNITS	COVERED EMPLOYMENT			WAGES PAID \$
		Jan.	Feb.	March	
*TOTAL	1,367	12,254	12,574	12,609	14,946,228
*Agriculture, forestry & fishing	43	80	94	57	73,336
Contract construction	109	491	467	448	789,886
Manufacturing	224	6,953	7,205	7,208	9,348,009
Logging	75	1,294	1,366	1,349	1,846,825
Lumber & wood products	76	3,275	3,330	3,338	4,082,718
Furniture & fixtures	6	149	344	320	330,029
Fabricated metal products	3	6	5	4	7,393
Machinery, except electric	9	212	212	216	364,217
Transportation equipment	4	16	16	18	19,979
Other durable goods mfg.	9	204	203	209	280,417
Food & kindred products	29	650	542	552	513,985
Printing, publishing, &c	9	101	103	107	141,542
Other nondurable goods mfg.	4	1,046	1,084	1,095	1,760,904
* Transportation & allied serv.	65	464	499	552	613,899
Communications & utilities	16	202	204	202	278,967
Wholesale trade	74	366	368	366	493,380
Retail trade	418	2,167	2,176	2,208	2,031,360
Bldg. materials & farm equip.	24	176	172	173	188,461
General merchandise	21	276	255	259	270,339
Food	61	431	440	441	364,158
Auto dealers & serv. stations	82	437	439	440	506,899
Apparel & accessories	23	96	89	97	84,219
Furniture & home furnishings	14	93	93	93	110,583
Eating & drinking places	128	422	448	467	262,586
Miscellaneous retail stores	65	236	240	238	244,115
Finance, insurance & real estate	99	351	344	354	341,450
* Services	315	1,061	1,096	1,093	779,197
Hotels, rooming houses &c	45	188	212	216	115,645
Personal & business services	58	253	253	251	232,947
Auto & other repair services	38	81	83	78	86,681
Amusements	23	74	71	74	37,040
Prof., social & misc. services	151	465	477	474	306,884
Not elsewhere classified	4	119	121	121	196,744

* Note from source: "Employment covered by the Washington Employment Security Act means personal service performed for wages or other remuneration with the following exceptions: (1) Agricultural labor performed on a farm, (2) Domestic service, (3) Governmental service (4) Railroads, (5) minor exceptions." It also excludes partners and proprietors. Heaviest exclusions are in the categories starred.

TABLE 27. ANNUAL PAYROLL, VALUE ADDED, AND NEW CAPITAL EXPENDITURES
BY TYPE OF INDUSTRY AND LOCATION, 1947-58

Source: U. S. Census, Statistics for Redevelopment Areas, Statistical
Profile of Aberdeen Wash., # SP-7, March 1962

<u>CATEGORY</u>	<u>YEAR</u>	<u>TOTAL</u> <u>WASH.</u> <u>STATE</u>	<u>TOTAL</u> <u>GRAYS</u> <u>HARBOR</u>	<u>ABER-</u> <u>DEEN</u>	<u>HO-</u> <u>QUAM</u>	<u>GRAYS</u> <u>HARBOR</u> <u>OTHER</u>
<u>Annual Payroll (\$000)</u>						
Manufactures	1958	1,157,119	33,933	10,085	11,109	12,739
"	1954	842,660	30,739	8,199	9,525	13,015
"	1947	437,802	23,201	6,430	10,714	6,057
Mineral industries	1958	10,851	242	NA	NA	NA
"	1954	14,218	NA	NA	NA	NA
Retail trade	1958	374,795	6,780	4,486	872	1,422
"	1954	323,646	6,404	4,433	767	1,282
"	1948	247,652	5,879	3,963	756	1,160
Wholesale trade	1958	230,675	1,663	1,191	350	122
"	1954	200,962	1,655	992	455	208
"	1948	139,520	2,571	2,036	417	118
Selected services	1958	120,624	1,749	1,232	270	247
"	1954	90,706	1,644	1,286	265	93
"	1948	64,968	1,386	986	311	89
<u>Value Added (\$000)</u>						
Manufactures	1958	2,166,632	64,436	17,453	22,152	24,831
"	1954	1,549,060	51,868	12,449	20,364	19,055
"	1947	874,021	48,463	17,675	19,272	11,516
<u>New Capital Expenditures (\$000)</u>						
Manufactures	1958	160,445	2,949	1,122	803	1,024
"	1954	147,130	3,865	462	1,823	1,580

TABLE 28 SUMMARY OF ECONOMIC CHARACTERISTICS FOR URBAN PLACES OF 10,000 OR MORE IN GRAYS HARBOR COUNTY, COMPARED WITH COUNTY TOTAL AND STATE TOTAL, 1960

Source: 1960 Census of Population 49-C, Tables 33, 36

	<u>TOTAL GRAYS HARBOR COUNTY</u>	<u>ABERDEEN</u>	<u>HOQUIAM</u>	<u>WASH. STATE</u>
Nonworker/worker ratio (ratio of persons not in labor force, including children under 14, to persons in labor force)	1.64/1	1.60/1	1.47/1	1.54/1
% of females 14 & over who are in labor force	30.7%	32.1%	35.2%	34.4%
% of married women (husband present) who are in labor force	29.8%	30.4%	33.9%	31.9%
% of married women with own children under 6 who are in labor force	18.7%	19.3%	23.3%	19.4%
% of males 18 to 24 who are in labor force	85.8%	84.0%	88.1%	83.2%
% of males 65 and over who are in labor force	25.6%	22.1%	25.8%	27.8%
% of civilian labor force who are unemployed	8.1%	7.9%	9.0%	6.6%
% of employed persons who are in manufacturing industries	41.9%	37.0%	45.5%	24.6%
% of employed persons who are in white collar occupations	32.6%	38.5%	34.0%	44.8%
% of employed persons who work outside county of residence	2.7%	1.9%	1.6%	6.9%
% of employed persons using public transportation	2.9%	3.9%	2.8%	7.0%
% of those who worked at all in 1959 who worked 50-52 weeks	52.3%	57.0%	50.5%	55.0%
% of families with incomes under \$3,000	17.2%	17.0%	14.2%	15.3%
\$10,000 and over	13.9%	18.7%	11.8%	16.6%

TABLE 29 EMPLOYMENT STATUS OF ALL PERSONS 14 YEARS OF AGE AND OLDER IN GRAYS HARBOR COUNTY, BY PLACE OF RESIDENCE 1960

Source: 1960 Census of Population 49C, Tables 73, 83

<u>CLASSIFICATION</u>	<u>TOTAL GRAYS HARBOR</u>	<u>ABERDEEN</u>	<u>HOQUIAM</u>	<u>REST OF GRAYS HARBOR</u>
MEN				
TOTAL MALE 14 AND OVER	19,704	6,883	3,860	8,961
Total in labor force	14,808	5,028	3,006	6,774
In Armed Forces*	123	18	-	105
Civilian labor force	14,685	5,010	3,006	6,669
Employed	13,651	4,643	2,788	6,220
Unemployed	1,034	367	218	449
Total not in labor force	4,896	1,855	854	2,187
Inmate of institution	231	63	12	138
Enrolled in school	1,429	437	246	746
Other: under 65	865	375	142	348
65 and over	2,371	980	454	937
WOMEN				
TOTAL FEMALE 14 AND OVER	18,965	6,769	3,825	8,371
Total in labor force	5,828	2,171	1,345	2,312
Employed	5,197	1,970	1,171	2,056
Unemployed	627	201	174	252
Total not in labor force	13,137	4,598	2,480	6,059
Inmate of institution	214	36	24	154
Enrolled in school	1,633	449	350	834
Other: under 65	8,822	3,090	1,626	4,106
With own children				
under 6	3,104	985	546	1,573
Married, husband present	2,918	896	529	1,493
Other: 65 and over	2,468	1,023	480	965

* "In Armed Forces" -- this group consists of those whose census residence in 1960 was in this county; that is, members of the Armed Forces stationed here. It does not include those stationed elsewhere whose permanent home is here.

TABLE 30 INDUSTRY GROUP OF EMPLOYED PERSONS, BY PLACE OF RESIDENCE IN GRAYS HARBOR COUNTY, 1960

Source: 1960 Census of Population #49-C, Tables 75, 85

INDUSTRY GROUP	<u>ABERDEEN</u>	<u>HOQUIAM</u>	<u>REST OF GRAYS HARBOR</u>	<u>TOTAL GRAYS HARBOR</u>
TOTAL EMPLOYED PERSONS	6,613	3,959	8,276	18,848
Agriculture	18	4	674	696
Forestry & fisheries	67	28	150	245
Mining	5	-	8	13
Construction	299	170	469	854
Manufacturing	2,449	1,800	3,653	7,902
Wood products*	1,579	1,077	2,831	5,487
Primary metal industries	9	8	13	30
Fabricated metal industries	-	5	4	9
Machinery, exc. electrical	73	122	64	259
Machinery, electrical	5	-	16	21
Transportation equipment	4	-	9	13
Other durable goods	70	75	58	203
Food & kindred products	181	140	289	610
Printing & publishing	95	39	56	190
Other nondurable goods*	433	334	313	1,080
Railroad & railway express service	55	29	77	161
Trucking service & warehousing	72	44	100	216
Other transportation	242	66	66	374
Communications	94	24	32	150
Utilities & sanitary service	79	37	43	159
Wholesale trade	180	77	124	381
Food & stores	215	102	227	544
Eating & drinking places	277	131	270	678
Other retail trade	690	315	649	1,662
Finance, insurance & real estate	233	107	90	430
Business services	45	12	8	65
Repair services	95	67	104	266
Private households	177	152	177	506
Other personal services	238	118	255	611
Entertainment & recreation services	52	15	64	131
Hospitals	156	93	111	360
Educational services: Government	210	150	294	654
Private	65	20	34	119
Welfare, religious & nonprofit membership groups	99	77	74	250
Other professional & related serv.	128	71	161	360
Public administration	179	162	293	634
Industry not reported	186	88	153	427

* Pulp and paper manufacturing are under "Other nondurable goods"

TABLE 31 EMPLOYED WOMEN: INDUSTRY GROUP, BY PLACE OF RESIDENCE
IN GRAYS HARBOR COUNTY, 1960

Source: 1960 Census of Population 1960, Tables 75 and 85

<u>INDUSTRY GROUP</u>	<u>ABERDEEN</u>	<u>HOQUIAM</u>	<u>REST OF GRAYS HARBOR</u>	<u>TOTAL GRAYS HARBOR</u>
TOTAL EMPLOYED WOMEN	1,970	1,171	2,056	5,197
Agriculture, forestry, fisheries	4	4	100	108
Construction, mining	13	13	4	30
Manufacturing	314	254	316	884
Machinery	4	4	6	14
Transportation equipment	-	-	-	-
Other durable goods	146	123	104	373
Food & kindred products	90	52	160	302
Textile mill products	-	-	-	-
Apparel &c	-	-	-	-
Other nondurable goods	74	75	46	195
Transportation, communication, & public utilities	69	48	40	157
Wholesale trade	43	12	18	73
Food & dairy products stores	89	45	117	251
Eating & drinking places	186	92	201	479
Other retail trade	249	86	227	562
Finance, insurance, real estate	100	63	53	216
Business & repair services	8	8	13	29
Personal services	301	227	303	836
Entertainment & recreation services	17	-	16	33
Hospitals	140	89	103	332
Educational services: Government	117	84	207	408
Private	52	4	30	86
Other professional & related serv.	137	82	138	357
Public administration	50	32	126	208
Industry not reported	81	28	39	148

**TABLE 32 EMPLOYED WOMEN: OCCUPATION GROUP, BY PLACE OF RESIDENCE
IN GRAYS HARBOR COUNTY, 1960**

Source: 1960 Census of Population 49-C, Tables 74, 84

<u>OCCUPATION GROUP</u>	<u>ABERDEEN</u>	<u>HOQUIAM</u>	<u>REST OF GRAYS HARBOR</u>	<u>TOTAL GRAYS HARBOR</u>
TOTAL EMPLOYED WOMEN	1,970	1,171	2,056	5,197
Professional & technical	272	126	262	660
Medical & other health:	82	37	62	181
salaried	82	37	53	172
self-employed	-	-	9	9
Teachers, elementary & secondary	84	55	133	272
Other professional & technical:	106	34	67	207
salaried	68	30	55	153
self-employed	38	4	12	54
Farmers & farm managers	-	4	23	27
Mgrs., officials, proprietors exc. farm	108	49	144	301
salaried	69	28	42	139
self-employed in retail trade	19	8	57	84
self-employed, other than retail	20	13	45	78
Clerical & kindred workers	492	326	408	1,226
Secretaries, stenographers, typists	102	72	63	237
Other clerical	390	254	345	989
Sales workers	194	73	166	433
Retail trade	174	73	158	405
Other than retail trade	20	-	8	28
Craftsmen, foremen & kindred workers	28	8	22	58
Operatives & kindred workers	195	167	280	642
Durable goods manufacturing	68	82	52	202
Nondurable goods manufacturing	75	69	153	297
Nonmanufacturing industries	52	16	75	143
Private household workers*	156	148	149	453
Service wkrs exc. private household	411	208	469	1,086
Waitress, bartender, cook, counter	176	100	225	501
Other service workers	234	108	242	585
Farm laborers & farm foremen	-	-	60	60
Laborers exc. farm & mine	21	17	28	66
Occupation not reported	93	45	47	185

* Excludes "babysitters" regularly enrolled in school.

TABLE 33 EMPLOYED MEN: OCCUPATION GROUP, BY PLACE OF RESIDENCE
IN GRAYS HARBOR COUNTY, 1960

Source: 1960 Census of Population 49C, Tables 74, 84

OCCUPATION GROUP	ABERDEEN	HOQUIAM	REST OF GRAYS HARBOR	TOTAL GRAYS HARBOR
TOTAL EMPLOYED MEN	4,643	2,788	6,220	13,651
Professional & technical	389	197	283	869
Engineers & technical	71	17	42	130
Medical & other health: salaried	29	-	4	33
self-employed	22	21	24	67
Teachers, elementary & secondary	56	53	56	165
Other professional: salaried	185	102	142	429
self-employed	26	4	15	45
Farmers & farm managers	9	-	349	358
Mgrs., officials, proprietors exc. farm	608	303	644	1,555
salaried	322	159	238	719
self-employed in retail trade	134	32	162	328
self-employed, other than retail	152	112	244	508
Clerical & kindred workers	192	119	191	502
Sales workers	288	155	155	598
in retail trade	165	91	108	364
in other than retail trade	123	64	47	234
Craftsmen, foremen & kindred workers	766	588	1,091	2,445
Construction craftsmen	175	131	255	561
Foremen not elsewhere classified	118	75	144	337
Mechanics & repairmen	162	167	292	621
Metal craftsmen exc. mechanics	75	60	72	207
Other craftsmen	236	155	328	719
Operatives & kindred workers	1,235	794	1,663	3,692
Drivers & deliverymen	285	154	388	827
Other operatives: durable goods mfg.	621	401	959	1,981
nondurable goods mfg.	171	137	183	493
nonmanufacturing industries	158	102	131	391
Private household workers	-	4	8	12
Service workers exc. household	215	158	215	588
Protective service workers	62	69	71	202
Waiters, bartenders, cooks, counter men	44	25	41	110
Other service workers	109	64	109	276
Farm laborers & farm foremen	-	-	210	210
Laborers exc. farm & mine	665	383	1,239	2,287
Construction	40	8	94	142
Manufacturing	374	291	882	1,547
Other industries	251	84	263	598
Occupation not reported	276	87	172	535

TABLE 34 EXPERIENCED UNEMPLOYED: MAJOR OCCUPATION GROUP, BY SEX AND PLACE OF RESIDENCE IN GRAYS HARBOR COUNTY, 1960

Source: 1960 Census of Population 49C, Tables 75, 85

<u>OCCUPATION GROUP</u>	<u>ABERDEEN</u>	<u>HOQUIAM</u>	<u>REST OF GRAYS HARBOR</u>	<u>TOTAL GRAYS HARBOR</u>
MEN				
TOTAL MALE UNEMPLOYED	367	214	437	1,018
Professional & technical	4	3	8	15
Farmers & farm managers	-	-	4	4
Managers & officials exc. farm	21	4	16	41
Clerical	8	8	4	20
Salesmen	4	11	5	20
Craftsmen & foremen	89	28	66	183
Operatives &c	82	69	151	302
Private household workers	-	-	-	-
Service workers exc. household	17	4	-	21
Farm laborers & foremen	12	-	25	37
Laborers except farm & mine	95	73	142	310
Occupation not reported	35	14	16	65
WOMEN				
TOTAL FEMALE UNEMPLOYED	160	158	216	534
Professional & technical	17	4	12	33
Farmers & farm managers	-	-	-	-
Managers & officials exc. farm	-	4	-	4
Clerical	30	19	46	95
Sales	14	12	32	58
Craftsmen & foremen	-	-	4	4
Operatives &c	40	42	37	119
Private household workers	20	20	37	77
Service workers except household	23	24	28	75
Farm laborers & foremen	-	-	-	-
Laborers except farm & mine	4	13	-	17
Occupation not reported	12	20	20	52
TOTAL MALE AND FEMALE UNEMPLOYED	527	372	653	1,552

**TABLE 35 EMPLOYABILITY AS REFLECTED IN AGE OF PERSONS IN
LABOR FORCE, BY PLACE OF RESIDENCE IN GRAYS HARBOR COUNTY 1960**

Source: 1960 Census of Population 49C, Tables 73, 83

<u>AGE</u>	<u>TOTAL GRAYS</u>		<u>REST OF GRAYS</u>	
	<u>HARBOR COUNTY</u>	<u>ABERDEEN</u>	<u>HOQUIAM</u>	<u>HARBOR COUNTY</u>
MEN				
14 to 17	542	152	137	253
18 to 24	1,684	548	340	796
25 to 34	2,677	859	477	1,341
35 to 44	3,483	1,293	673	1,517
45 to 64	5,555	1,885	1,220	2,450
65 and over	867	291	159	417
WOMEN				
14 to 17	248	107	51	90
18 to 24	727	284	128	315
25 to 34	745	280	189	276
35 to 44	1,497	504	368	625
45 to 64	2,249	818	545	886
65 and over	362	178	64	120
All ages -- married --				
husband present	3,789	1,312	863	1,614
children under 6	699	217	164	318
**no husband present,				
children under 6	145	72	25	48
total with				
children under 6	844	289	189	366

**** "No husband present" includes those whose marriage has
been terminated (by widowhood, divorce, annulment, or
legal separation) and those where the husband was not
a member of the same census household.**

TABLE 36 EMPLOYABILITY AS REFLECTED IN POSSIBLE LACK OF FLUENCY IN ENGLISH: MOTHER TONGUE OF THE FOREIGN-BORN POPULATION, GRAYS HARBOR COUNTY 1960

Source: 1960 Census of Population 49C, Tables 80, 90

<u>MOTHER TONGUE</u>	<u>TOTAL GRAYS</u> <u>HARBOR COUNTY</u>	<u>ABERDEEN</u>	<u>HOQUIAM</u>	<u>REST OF</u> <u>GRAYS</u> <u>HARBOR</u>
TOTAL FOREIGN BORN	4,090	2,024	857	1,209
English	726	278		
Norwegian	372	159		
Swedish	475	224		
Danish	25	4		
Dutch	14	9		
French	55	28		
German	260	109		
Polish	193	92		
Czech	25	12		
Slovak	12	4		
Hungarian	25	25		
Serbo-Croatian	227	151		
Slovenian	43	27		
Russian	48	32		
Ukrainian	12	-		
Lithuanian	22	-		
Finnish	541	368		
Rumanian	4	4		
Yiddish	4	4		
Greek	102	77		
Italian	86	40		
Spanish	12	4		
Portuguese	4	4		
Japanese	-	-		
Chinese	49	49		
Arabic	-	-		
All other	118	69		
Not reported	676	251		

The foregoing table is relevant to problems of training for new industry, as well as to problems of foremanship on the job.

TABLE 37 EMPLOYABILITY AS REFLECTED IN MOBILITY OF THE LABOR
FORCE IN GRAYS HARBOR COUNTY, 1960
Source: 1960 Census of Population 49C, Tables 72, 92

	<u>ABERDEEN</u>	<u>HOQUIAM</u>	<u>REST OF GRAYS HARBOR</u>	<u>TOTAL GRAYS HARBOR COUNTY</u>
TOTAL POPULATION	18,741	10,762	24,962	54,465
<u>Where the people were born:</u>				
Foreign born	2,024	857	1,209	4,090
White	1,942	853	1,186	3,979
Nonwhite	82	4	25	111
Native born	16,717	9,905	23,753	50,375
Native born, native parents	13,129	7,886	20,137	41,152
White	13,021	7,825	19,449	40,295
Nonwhite	108	61	688	857
Native born, foreign or mixed parentage	3,588	2,019	3,616	9,223
White	3,543	2,016	3,544	9,103
Nonwhite	45	3	72	120
State of birth; native-born				
Born in Washington State	10,103	5,871	14,948	30,922
Born in different state	6,334	3,922	8,880	18,836
Born in U. S. outlying area, at sea, etc.	104	31	77	212
State of birth not reported	176	81	148	405
<u>Extent to which people have moved: (Residence in 1955)</u>				
TOTAL POPULATION 5 YEARS AND OVER IN 1960	16,988	9,650	22,282	48,920
Living in same house 1955-60	8,935	5,150	11,452	25,537
Different house this county	5,461	3,336	6,301	15,298
Different state	973	589	1,414	2,976
Abroad	149	54	124	327
Moved, place not reported	67	21	105	193
Year moved into present house:				
1959-60	5,081	2,494	6,134	13,709
1958	1,520	967	2,532	5,019
1957	1,540	634	1,855	4,039
1954 to 1956	2,844	1,644	3,965	8,453
1950 to 1953	2,672	1,302	3,143	8,269
1940 to 1949	2,739	1,809	3,621	8,269
1939 or earlier	1,551	942	1,698	4,191
Always lived in this house	794	970	1,904	3,668

TABLE 38 ELECTRIC POWER CONSUMPTION TREND IN GRAYS HARBOR COUNTY
1950-1962

Source: Memorandum from Public Utility District No. 1 of Grays Harbor County, dated January 9, 1963

<u>YEAR</u>	<u>KWH SOLD</u>
1950	158,665,611
1951	167,907,211
1952	179,981,040
1953	205,044,020
1954	222,440,575
1955	259,900,291
1956	289,226,204
1957	310,017,449
1958	323,130,250
1959	355,098,283
1960	377,613,697
1961	418,480,529
1962	469,409,783

Table 38 does not include quite all the electric power consumed in the county. During the period of the table, the southeast corner of the county (Oakville and vicinity) was served by a private company. The absence of those figures does not affect the trend: in 12 years, use of electric power has almost exactly tripled.

Complete data on fuel consumption for domestic, farm, and industrial use cannot be obtained because of the considerable amounts of locally-produced wood fuel. Most of this is not cut as fuelwood but consists of mill byproducts, principally bark.

For indicator figures on petroleum fuel consumption, see Table 46, page 78. This is also not a complete total, as some petroleum products come by tanker truck, especially to the east side of the county.

Gas is a minor fuel but increasing. Coal is a very minor fuel and decreasing.

The preceding portion of this Economic Base section of the report dealt with statistical data that apply to more than one aspect of the area economy. The remainder will contain data applicable to individual aspects of the economy.

In general, the order of the Standard Industry Classification will be followed, with one exception indicated below. Where an item is omitted, it is nonexistent or of minor economic importance; for instance, mineral production is omitted, since the production is small and is consumed locally. (In 1957, the value of mineral production in Grays Harbor County was \$186,753, consisting entirely of stone, sand, and gravel.)

The exception noted above is that transportation is placed first.

This is done in order to emphasize the fact that nothing is more basic to the economy of Grays Harbor than transportation.

The fundamental fact about Grays Harbor is the harbor itself.

True, the harbor is not the predominant source of direct income -- the forest-products manufacturing industry is that. But without the harbor, the forest-products manufacturing industry would not be concentrated here, and the urbanized area under study would not have developed.

TERMINAL FACILITIES, GRAYS HARBOR, WASHINGTON

Source: United States Coast Pilot 7, Pacific Coast, 8th edition

"Terminal facilities. -- Midway between Hoquiam and Aberdeen, the Port of Grays Harbor operates a modern freight terminal with two slips, one of which is maintained to a depth of 30 feet. The terminal has rail connections and is equipped with modern improvements for handling lumber and other cargo. Fuel oil may be obtained from pipeline connections on the dock. Storage space for lumber and lumber products is available. There is covered warehouse space of 30,000 square feet. There is 1,760 feet of berthing space at the port dock, and private berths with a total of 2,920 feet of space at other points in the harbor. Floating cranes are available which can handle maximum lifts of 50 tons. There are 2 fueling berths with 500 feet each.

"Supplies.--Fuel oils, water, provisions, and ship chandlery can be obtained. A limited amount of coal is kept on hand and any amount can be obtained on short notice.

"Repairs.--There are marine railways, the largest of which can haul out vessels 100 feet in length, 9 feet in draft, and 250 tons in weight. Machine shops and foundries can make ordinary repairs.

"Towage.--Towboats are available for use inside the harbor. Open barges are available.

"Customs.--Aberdeen is a port of entry; marine documents are issued.

"Immigration.--The Immigration Service maintains an office at Aberdeen.

"Channels.--A Federal project provides for an entrance channel 30 feet deep over the bar, thence 30 feet deep to a turning basin of the same depth near Cosmopolis, thence 16 feet deep to a turning basin of the same depth at Montesano. The channels are maintained at or near project depth as far as Cosmopolis."

As of early 1963, the following changes and additions should be made in the above:

Both slips are now maintained to 30 feet (formerly one).

Covered warehouse space has been increased to 50,000.

The Port's bridge crane can handle 60 tons.

No coal is now kept on hand (none has been requested since before the date of the Coast Pilot edition quoted).

TABLE 39 DOCKS AND WHARVES ON GRAYS HARBOR, 1963 (INCOMPLETE)

<u>COMMON NAME & LOCATION</u>	<u>LENGTH</u>	<u>DEPTH</u>
PORT DOCK TERMINAL NO. 1 North shore Grays Harbor, midway between mouths of Hoquiam & Wishkah Rivers	1750 ft (see p 70)	30 ft
RAYONIER North shore Grays Harbor just east of Hoquiam River	For 1 large ship	30 ft
ANDERSON & MIDDLETON North shore Grays Harbor, about $\frac{1}{2}$ mile west of mouth of Wishkah River	606 ft	30 ft
ULTICAN North shore of harbor (Chehalis River) east of Wishkah River	For 1 large ship	30+ feet
STANDARD OIL DOCK North shore of harbor (Chehalis River) about 1 mile east of Wishkah River	For 1 large ship	30+ ft (about 50 ft)
WEYERHAEUSER SAWMILL South shore of harbor (Chehalis River) about $\frac{1}{2}$ mile east of Wishkah River	For 1 large ship	30 ft
WESTHAVEN (WESTPORT FISHING BASE) South shore Grays Harbor, just inside entrance, south of Pt. Chehalis; cove is 3500' x 700'.	Main pier 620'. 16 ft 12,000 lin.ft. small boat berths	
HOQUIAM FISH BASE Foot of 5th St., Hoquiam	Structures burned	Shoaled
ABERDEEN BOAT BASIN North shore harbor (Chehalis River) just east of Wishkah River	Abandoned	Shoaled
WEYERHAEUSER PULP MILL South shore harbor (Chehalis River) at Cosmopolis	For tugs and barges	16 ft+

Table 39 continued DOCKS & WHARVES ON GRAYS HARBOR 1963

<u>COMMON NAME & LOCATION</u>	<u>LENGTH</u>	<u>DEPTH</u>
BAY CITY (OLD WHALING STATION) South Bay of harbor, 2 miles SE of Pt Chehalis	No dock. Over- head clearance 32' at bridge	14'
CROWN PACKERS Adjoining old Hoquiam Fish Base	About 60'+	9'+
STRITTMATTER'S Hoquiam River	About 60'+	9'+
QUIGG BROS Near mouth of Hoquiam River	For gravel scows	?
WASHINGTON FISH Wishkah River	100'+	9-10'
WEST COAST FISH Wishkah River, around bend	60'+	?
PAKONEN'S BOATYARD South side of harbor (Chehalis River) between Chehalis Bridge and Weyerhaeuser	Marine railway & about 200 lin.ft.berths	30'
CHILMAN'S SHIPYARD Hoquiam River	Marine railway (to 100')	9'

TABLE 40. LOG RAFTING AREAS IN GRAYS HARBOR (INCOMPLETE LISTING)

<u>LOCATION</u>	<u>NUMBER OF RAFTING AREAS</u>
Hoquiam River	12+
Wishkah River	1
Chehalis River	
South Aberdeen area	3
Junction City area	1
Montesano area	1
Grays Harbor north shore	8
Grays Harbor south shore	Numerous; no count
Grays Harbor "middle grounds"	Numerous; no count
Port Terminal No. 1	2

TABLE 41 TREND IN SIZE OF VESSELS USING GRAYS HARBOR, AS SHOWN BY LOADED DRAFT OF VESSELS CROSSING GRAYS HARBOR BAR OUTBOUND, 1934-1961 (SHIPS ONLY -- FISHING VESSELS &C EXCLUDED)

Source: Annual Reports of Port of Grays Harbor

Year	Total Ships	30' and More	28' to 29.9'	26' to 27.9'	24' to 25.9'	22' to 23.9'	20' to 21.9'	18' to 19.9'	Less than 18'
1934	342	(26' and over)	25	47	72	81	73	44	
1935	344	"	"	24	39	88	111	67	26
1936	404	"	"	38	51	100	109	93	13
1937	409	"	"	29	59	103	115	85	18
1938	243	"	"	7	12	50	75	74	25
1939	310	"	"	19	35	51	95	84	36
1940	307	"	"	18	23	57	108	69	32
1941	263	"	"	21	33	48	119	41	11
1942	110	"	"	13	6	18	58	7	8
1943	32	0	1	10	3	9	5	2	2
1944	56	0	6	12	12	12	7	5	2
1945	68	0	6	7	17	13	13	8	5
1946	109	0	7	5	7	29	40	17	4
1947	147	0	2	19	18	38	40	28	12
1948	126	0	13	20	17	35	24	8	9
1949	152	2	23	16	12	41	33	15	10
1950	177	1	19	18	20	43	35	22	19
1951	156	1	16	18	22	36	27	15	21
1952	157	7	19	11	13	37	32	16	22
1953	143	4	31	18	25	22	13	13	17
1954	171	1	26	16	32	27	28	14	27
1955	180	5	25	17	16	41	30	22	24
1956	170	1	17	13	29	39	36	16	19
1957	150	2	16	11	19	27	34	28	15
1958	190	0	14	10	30	31	37	31	17
1959	191	1	25	15	24	41	35	27	13
1960	224	4	20	20	41	44	37	31	14
1961	236	10*	37	28	37	34	39	26	13

* In 1961 there were 3 ships with drafts 32' to 33', 1 31' to 32', 6 30' to 31'. This is the first year in which the Port has recorded vessels with draft over 31'.

TABLE 42 TRENDS IN COMMERCE USING GRAYS HARBOR AS SHOWN IN
DESTINATION OF WATERBORNE EXPORTS FROM GRAYS HARBOR (IN TONS)

Source: Compiled from Annual Reports of Port of Grays Harbor

Year	<u>Pacific Coast & Hawaii ("Coastwise")</u>	<u>East & Gulf Coasts USA ("Intercoastal")</u>	<u>Foreign</u>	<u>Total</u>
1934	85,285	156,137	320,484	561,906
1935	190,086	109,560	259,684	559,330
1936				
1937	400,490	116,603	274,590	791,683
1938	163,802	50,037	70,036	283,875
1939	164,897	89,579	129,525	384,001
1940	268,083	97,004	172,992	538,079
1941	351,416	91,754	108,593	551,763
1942	171,949	4,729	32,746	209,424
1943	49,933	0	52,250	102,183
1944	100,970	0	58,375	159,345
1945	99,485	0	41,605	141,090
1946	48,709	47,082	55,021	150,812
1947	44,962	91,460	60,745	197,167
1948	35,107	109,271	37,194	181,572
1949	15,685	208,302	40,521	264,508
1950	44,453	162,329	64,720	271,502
1951	27,285	155,837	99,787	282,909
1952	6,417	178,477	122,290	307,184
1953	5,174	166,547	162,354	334,075
1954	7,326	144,710	128,175	280,211
1955	5,742	297,547	109,471	412,760
1956	4,779	207,622	72,511	284,912
1957	679*	140,985	70,754	212,418
1958	7,190	243,106	25,280	297,683
1959	6,699	271,344	38,935	317,497
1960	10,851	21,114	79,055	111,020
1961	6,826	211,226	204,667	422,719

* Bunker fuel

TABLE 43 TRENDS IN COMMERCE USING GRAYS HARBOR, AS SHOWN IN GRAYS HARBOR WATERBORNE SHIPMENTS OF LUMBER AS PERCENT OF STATE AND AS PERCENT OF REGION (WASHINGTON-OREGON-BRITISH COLUMBIA)

Source: Compiled from Annual Reports of Port of Grays Harbor

YEAR	GRAYS HARBOR AS PERCENT OF STATE		GRAYS HARBOR AS PERCENT OF REGION		WASHINGTON STATE AS PERCENT OF REGION		
	G. H.	Rest of Wash.	G. H.	Rest of Region	Wash.	Ore.	B. C.
1934	17%	83%	7.8%	92.2%	46.2%	21.6%	32.2%
1935							
1936	21	79	9	91	44	23	33
1937	22	78	10	90	47	24	29
1938	10	90	3	97	35	30	35
1939	11	89	4	96	36	29	35
1940	19	81	8	92	40	28	32
1941	26	74	10	90	40	36	24
1942	26	74	9	91	36	29	35
1943	14	86	4	96	26	26	48
1944	16	84	5	95	30	NA	NA
1945	23	77	6	94	25	24	51
1946	29	71	6	94	20	32	48
1947	23	77	5	95	23	35	42
1948	23	77	5	95	23	35	42
1949	19	81	6	94	29	36	35
1950	20	80	5	95	24	36	40
1951	21	79	5	95	25	38	37
1952	23	77	5	95	23	40	37
1953	22	78	5	95	23	36	41
1954	21	79	4	96	20	33	47
1955	23	77	5	95	22	36	42
1956	17	83	4	96	24	39	37
1957	16	84	3	97	22	38	40

These figures cover lumber, plywood and shingles, but exclude pulp and paper, and also logs.

TABLE 44 OUTBOUND LUMBER SHIPMENTS FROM GRAYS HARBOR BY SEA

Source: Compiled from annual reports of the Port of Grays Harbor

<u>YEAR</u>	<u>LUMBER FBM</u>	<u>YEAR</u>	<u>LUMBER FBM</u>	<u>YEAR</u>	<u>LUMBER FBM</u>
1909	457,415,000	1924	1,059,480,555	1944	62,302,934
1910	443,124,000	1925	1,116,110,691	1945	67,311,434
1911	456,186,000	1926	1,416,296,493	1946	90,007,448
1912	486,313,000	1927	1,418,196,872	1947	118,396,654
1913	425,439,000	1928	1,204,042,976	1948	107,730,129
1914	437,729,000	1929	1,086,234,621	1949	147,476,316
1915	305,166,000	1930	646,641,993	1950	155,787,401
1916	300,043,000	1931	453,646,188	1951	163,999,999
1917	293,324,000	1932	197,734,216	1952	165,309,653
1918	262,716,000	1933	283,087,852	1953	178,950,372
1919	289,838,000	1934	279,157,883	1954	142,115,610
1920	362,570,000	1935	297,339,684	1955	164,077,225
1921	407,319,340	1936	394,228,775	1956	105,251,735
1922	758,612,865	1937	435,754,470	1957	93,513,427
1923	880,605,363	1938	134,139,886	1958	153,396,695
		1939	192,385,879	1959	160,824,586
		1940	311,907,930	1960	175,901,262
		1941	330,250,397	1961	203,442,654
		1942	124,649,768		
		1943	51,260,991		

The above table would not be worth while recording as mere detail of the history of lumber shipments, but this table is in a way a history of Grays Harbor. One thing it shows is the reason why so many industrial and commercial buildings in the area are either about 50-60 years old or about 25-30 years old. These were the buildings put up in a hurry to take advantage of a lumber boom period. Because they were built in a hurry, many were jerrybuilt; which is one reason why many are now badly deteriorated and not worth modernizing. The table also reveals the way in which the booms were followed by slack periods during which buildings often stood empty for periods of years and owners could not afford to maintain them -- another reason for buildings and whole districts to deteriorate. The grand total of the above table is 20,454,754,220 feet board measure.

TABLE 45 TRENDS IN WATERBORNE COMMERCE USING GRAYS HARBOR, AS SHOWN IN PULP AND PAPER SHIPMENTS OUTBOUND BY SEA (IN TONS)

Source: Compiled from annual reports of Port of Grays Harbor

YEAR		FOREIGN	INTERCOASTAL	COASTWISE	TOTAL
1933					25,800
1934		4,280	14,818	4,730	23,828
1935		19,433	14,738	8,963	43,134
1936		22,608	10,867	6,615	40,088
1937		57,473	751	4,933	63,157
1938		22,252	18,774	6,539	47,565
1939		7,902	31,846	7,478	47,226
1940		75	12,432	587	13,094
1941		2,336	0	0	2,336
1942		0	0	0	0
1943	623 paper, 403 pulp, 26 woodflour			0	1,052
1944	2,310 " 1,575 " 152 "			0	2,035
1945	1,751 " 552 " 277 "			0	2,580
1946	60 " 103 " 0 "			585	748
1947				0	0
1948		2,210 pulp		0	2,210
1949		11,336 "	6,322 pulp	0	17,658
1950	592 "	11,182 "	0	0	11,774
1951	24 "	5,816 "	0	0	5,840
1952	161 "	16,386 "	0	0	16,557
1953	175 "	18,507 "	0	0	18,682
1954	231 "	29,129 "	0	0	29,360
1955	196 "	40,031 "	0	0	40,227
1956	19 "	46,174 "	24 paper	0	46,217
1957		46,164 "	0	0	0
1958		23,361*	0	0	23,361
1959		30,969*	0	0	30,969
1960		51,981*	0	0	51,981
1961		51,129*	0	0	51,129

* Unitemized "General Cargo" in reports. In those years, it may fairly safely be presumed that all general cargo was in fact pulp and paper. Examination of previous years' itemized record shows the only other exports since 1950 were 15 tons "Groceries" in 1951 and 25 tons "Tallow" in 1953. Before World War II the picture was different; substantial quantities of doors, furniture, and other wood products were then exported by sea. Nearly all the furniture was for coastwise destinations, nearly all the rest foreign.

TABLE 46 TRENDS IN USE OF FUELS, AS INDICATED IN PETROLEUM IMPORTS RECEIVED IN GRAYS HARBOR BY SEA (ALL COASTWISE) (TONS)

Source: Compiled from annual reports of Port of Grays Harbor

<u>YEAR</u>	<u>FUEL OIL & DIESEL OIL RECEIVED</u>	<u>GASOLINE RECEIVED</u>	<u>LUBE OIL & GREASE RECEIVED</u>	<u>TOTAL PETROLEUM PRODUCTS</u>
1933	45,341	14,703	702	60,746
1934	53,984	16,325	674	64,344
1935	67,425	18,572	724	86,721
1936	66,111	25,508	894	92,513
1937	80,915	33,466	709	115,090
1938	88,104	31,652	291	120,047
1939*	82,503	30,523	128	113,154
1940	70,110	33,094	13	103,207
1941	46,873	23,666	0	70,539
1942	54,336	13,921	0	68,257
1943	45,175	16,850	209	62,234
1944	61,277	8,743	0	70,020
1945	74,680	18,499	0	93,179
1946	93,155	19,212	0	112,367
1947	98,487	26,348	0	124,835
1948	112,492	34,052	0	146,544
1949	126,576	42,129	0	168,705
1950	144,612	52,020	0	196,632
1951	132,796	54,531	0	187,527
1952**	127,398	45,309	0	172,707
1953	103,716	40,104	0	143,820
1954	110,676	36,569	0	147,245
1955	157,981	44,182	0	202,163
1956	131,872	52,456	0	184,328
1957	156,254	43,398	0	199,652
1958				180,087
1959				181,669
1960				208,335
1961				196,601

* In 1939, "hog fuel" appeared in the port records for the last time; 41,118 tons of it were imported (coastwise) that year.

**In 1952, with the introduction of oceangoing barge traffic to Grays Harbor, tanker ship deliveries began to be supplemented by tank barge deliveries. Barge deliveries are included in the figures in this table.

TABLE 47 LOG TRAFFIC IN GRAYS HARBOR - IMPORT & EXPORT 1952-61

Source: Compiled from annual reports of the Port of Grays Harbor

<u>YEAR</u>	<u>IMPORT (ENTIRE HARBOR)</u>	<u>EXPORT (ENTIRE HARBOR)</u>
1952	1,600 tons (by barge)	3 shiploads logs
1953	4,370 " "	1 shipload logs & piling, 1 shipload logs & lumber
1954	5,534 " "	9,516,769 FBM logs to Japan
1955	7,718 " (barge from Oregon)	0
1956	37,918 " (barge, coastwise)	0
1957	56,035 " " "	1,718 tons (1,145,110 FBM) (foreign)
1958	6 bargeloads (U.S.)	2 shiploads pulp & logs (foreign)
1959	3 shiploads (foreign)	2 shiploads logs, 1 shipload pulp & logs (foreign)
1960	2 bargeloads (coastwise)	4,440,301 FBM, to Japan
1961	4 bargeloads (coastwise)	61,552,651 FBM, to Japan

Coastwise imports have mainly been of large peeler logs for plywood. Foreign imports have been of hardwood (mahogany, etc.) for plywood face layer. A few topgrade selected spruce logs have come from Alaska for use by the company that manufactures piano sounding boards.

There are no figures on log traffic within the harbor itself but this is known to be on a vast scale. Most of the mills store their raw materials in the water, and there is constant shifting and ferrying of logs. (See Table 40, LOG RAFTING AREAS, on page 72).

The coastwise export of logs in giant oceangoing rafts, formerly a large-scale activity. These log rafts went to destinations as far away as San Diego. The San Diego mill closed down, and the remaining California coastal mills get their logs from other sources.

TABLE 48 VOLUME OF COMMERCE HANDLED BY PORT OF GRAYS HARBOR
TERMINAL NO. 1 (PUBLIC) AS COMPARED WITH REMAINDER OF HARBOR

Source: Compiled from annual reports of Port of Grays Harbor

YEAR	PORT TERMINAL NO. 1		REMAINDER OF HARBOR	TOTAL TONNAGE
	TONNAGE 000	DOCK REV- ENUE \$000	TONNAGE (000)	
1946	34	90	232	266
1947	55	115	285	340
1948	68	116	289	357
1949	90	93	378	468
1950	88	144	435	523
1951	72	157	449	521
1952	84	126	454	538
1953	96	168	426	522
1954	91	145	379	470
1955	116	188	551	667
1956	145	310	402	547
1957	137	270	364	501
1958	142	130	366	508
1959	97	169	416	513
1960	180	278	416	596
1961	274	359	355	629

The above table covers total inbound and outbound cargo except local fish deliveries. It will be seen that the increase in such cargo handled by the Port has not been at the expense of the remainder of the harbor.

The revenues shown are dock revenues only. The Port's total gross revenues for 1961 were more than double its dock revenues: \$798,678.75, with expenses of \$708,445.93. However, not all its dock revenues were from handling the above tonnage of cargo; this is the reason why cargo tonnage and revenue have not increased in proportion. As recently as 1953, the Port's dominant activities were in relation to the local harbor log traffic, transferring logs from trucks to water, water to railroad cars, etc.

The above figures do give some idea not only of the harbor physical activity but also of the payrolls it generates.

TABLE 49 NUMBER OF VESSELS AND COMMODITY CARRIED, INBOUND AND OUTBOUND, GRAYS HARBOR, WASHINGTON (SAMPLE YEARS)
Source: Port of Grays Harbor Annual Reports

Year	<u>Lumber</u> <u>Outbound</u> <u>Only</u>	<u>Genl Cargo</u> <u>Outbound</u> <u>Only</u>	<u>Inbound</u> <u>Genl & bulk</u> <u>cargo only</u>	<u>Inbound</u> <u>Petroleum</u> <u>Only</u>	<u>Other</u>	<u>Total</u>
1946	74	0	0	33	2	109
1951	73	*7	12	62	2	156
1956	63	**47	10	50	0	170
1961	85	**53	9	53	29	229

* Pulp and paper

** Pulp

⊙ Logs

A comparison of the foregoing table with the one below will emphasize one of Grays Harbor's problems in reducing transportation costs. This is an exporting area; overwhelmingly. Two-thirds of the railroad cars, and an even higher proportion of the ships, must travel one way empty; they cannot bring a load of one kind and take away a load of another kind, as is possible (except with the petroleum tankers) in diversified metropolitan areas.

TABLE 50 RAILROAD CARLOADINGS IN GRAYS HARBOR COUNTY 1958-62
Source: Northern Pacific, Union Pacific, and Milwaukee Road (files of Vernon Cotter)

<u>YEAR</u>	<u>CARS RECEIVED</u>	<u>CARS FORWARDED</u>
1958	6,523	19,361
1959	7,274	21,212
1960	5,699	20,588
1961	6,005	20,783
1962	4,738	23,408
Total, 5 years	30,239	105,352

Chief products shipped, in order of number of carloads, are: Lumber, Plywood (about 1000 cars a year), Shingles, Pulpwood chips (to destinations in the state), Wood pulp, Box shooks (about 400-500 cars a year, to California), Furniture, Paper, Canned goods (cranberry products, sea foods.)

TABLE 51 AIR TRAFFIC IN GRAYS HARBOR COUNTY AS REFLECTED IN NUMBER OF PASSENGERS BOARDING AIRLINE PLANES AT HOQUIAM, 1946-62

Source: Special report from West Coast Airlines, September 1962

<u>MONTH</u>	<u>1946</u>	<u>1947</u>	<u>1948</u>	<u>1949</u>	<u>1950</u>	<u>1951</u>	<u>1952</u>	<u>1953</u>
January		143	126	205	121	175	202	157
February		163	163	139	173	179	205	198
March		277	295	178	212	229	227	299
April		326	320	290	284	319	290	352
May		463	361	337	299	349	318	399
June		405	358	355	360	357	400	424
July		479	553	512	368	400	422	449
August		648	583	540	429	422	477	432
September		533	428	322	353	314	434	386
October		341	279	191	232	242	265	281
November		226	177	126	181	212	193	219
December	127*	187	226	133	313	206	215	138
Year Total	127	4191	3874	3328	3225	3394	3648	3734

<u>MONTH</u>	<u>1954</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>
January	109	140	168	357	306	355	346	189	260
February	107	157	159	311	338	334	326	252	225
March	128	174	200	422	379	431	417	287	320
April	211	215	203	547	430	438	469	344	353
May	409	412	214	608	438	495	595	404	346
June	501	489	517	625	570	584	536	476	397
July	456	443	491	669	493	565	599	462	437
August	416	504	595	689	610	623	623	496	531
September	347	432	480	586	500	467	502	353	
October	225	374	404	479	445	362	493	298	
November	136	256	375	424	337	343	369	268	
December	189	236	249	363	353	325	361	300	
Year Total	3234	3832	4055	6080	5199	5322	5636	4129	

* Service inaugurated December 5 1946.

TABLE 52 TRUCK TRANSPORT IN GRAYS HARBOR COUNTY AS SHOWN IN 1961
TRAFFIC COUNTS AT SELECTED HIGHWAY LOCATIONS (AVERAGE DAILY VOLUME)

Source: Washington State Department of Highways, 1961 Annual Report

<u>HIGHWAY LOCATION</u>	<u>AVERAGE DAILY TRAFFIC VOLUME</u>	<u>PERCENT PANELS & PICKUPS</u>	<u>PERCENT SINGLE TRUCKS</u>	<u>PERCENT TRUCK COMBS.</u>
PSH 9, Jct Grand Mound Branch				
East leg	5200	13	6	2
West leg	6400	13	5	2
PSH 9, E City Limits Elma	6400	13	5	2
PSH 9, Jct Old PSH 9, east of Aberdeen				
Southeast leg	7600	15	4	1
Northwest leg	8400	15	4	1
PSH 9, Jct FAS 248, N of Hoquiam				
South leg	3250	16	14	11
North leg	1900	NA	NA	NA
Grand Mound-Elma Branch, Jct PSH 9 nr E city limits Elma,				
Southeast leg	2050	17	6	2
PSH 9, Jct PSH 13 at Artic,				
Northeast leg	540	18	4	2
South leg	2200	17	7	9
Northwest leg	1800	17	8	10
SSH 9-C, Jct FAS 334 at Burrows,				
Southeast leg	1250	15	6	1
Northwest leg	1300	16	8	1

The above table gives only a partial and inadequate idea of the importance of trucking to the Grays Harbor economy. Most logs move by truck from point of origin to mill or water. Most farm milk now moves by tank truck. Most consumer goods come by truck from Puget Sound wholesalers.

TABLE 53 TRAFFIC TRENDS: AVERAGE DAILY TRAFFIC VOLUME AT
STATE HIGHWAY LOCATIONS IN GRAYS HARBOR COUNTY, 1954-1961

Source: Wash. State Dept. of Highways Annual Traffic Reports

<u>LOCATION</u>	<u>1954</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>
<u>Primary State Highway No 9</u>								
Thurston/GH Co Line	2195			1950	2300			
SE CL McCleary	2549		2600	2300	2300			
W CL McCleary	2748	3350	3150	3050		3150	3300	
Jct SSH 9D, NE leg	2579		2900		2950	2950	3150	3600
" SW leg	3341	3750	3750	3650	3500	3950	4250	4500
Jct PSH 9 Grand								
Mound Br, E leg		4400	4500	4350	4350	4850	4950	5200
" W leg		5600	5700	5600	5700	6200	6100	6400
E CL Elma		5600	5700	5600	5700	6200	6100	6400
W CL Elma		5400		6400	6600			6700
Jct FAS 332/FAS 570								
at Brady, E leg	5338	5400		5800	5900			5700
" W leg	5231				6000			5800
E CL Montesano	5655	6100		6200	6800			6900
W CL Montesano	5603		6000	6000	6300			6100
Jct Old PSH 9, SE leg		6100	6700	6200	6700	6900		7600
" NW leg		6700	7700	6800	7400	7500	7100	8400
E CL Aberdeen	6558		8600	8400	7700		7500	9400
Wishkah R Bridge	12117	13700	11700*	10900*	11200	12300		13700
W CL Aberdeen/								
E CL Hoquiam			13300	12500				
Simpson Av Bridge	12007	12200	13200	12800	13500	15200		13700
Jct SSH 9C in Hoq, SE leg				5600				
N CL Hoquiam	3423	3500	3700	3550	3400			
Jct FAS 248, N of								
Hoq, S leg		2750	3100	3000	2950	3250	3100	3250
" N leg	1330	1500	1600	1550	1700	1750	1750	1900
Jct County road, S								
of Humptulips, SE leg	998	1000			1550			
" N leg	1114							
S limits Humptulips								1200
NE limits Humptulips								1400
Jct FAS 566 S Wye	1178	760	1150	1100				1450
" W Wye	1284	1250	1350	1300				1650
Jct County road, W end								
Lake Quinault, SE leg								1450
" NW leg	772	760	920	780	760	920	880	900
At Raft River	530	600	720	620				
G H/Jefferson Co Line	447		600	520				

* Decrease due to opening of new Chehalis River Bridge in 1956.

Table 53 (continued)

Traffic Trends: Average Daily Volume at State Highway Locations

<u>LOCATION</u>	<u>1954</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>
<u>Primary State Highway No. 9 - Elma-Grand Mound Branch</u>								
Thurston/GH Co Line	1643				2100			
E CL Oakville	1740					1500		1500
W CL Oakville	1656					1250		1150
Jct FAS 572 at								
Porter, SE leg	1205					1300	1400	1650
" NW leg	1619	1650	1700	1650		1650	1550	1750
Jct PSH 9 nr E CL Elma		2150	2250	2200	2050	2250	2050	2050
<u>Primary State Highway No. 9 - Artic Branch</u>								
Jct PSH 13 at Artic, NE leg		480	560	380	420	460	500	540
Jct FAS 568, Preachers								
Slough, NE leg	480	520	600	600				640
Jct County road at So.								
Montesano, SW leg	600	680	800					840
" N leg								
South Montesano Bridge	834	900	1050	1050	940			840
S CL Montesano			1500					1150
<u>Primary State Highway No. 13 - Raymond-Aberdeen</u>								
Pacific/GH Co Line	1235							
Jct FAS 573 at								
Artic, S leg	1050	1250	1600	1400		1600		1750
" N leg	1120	1300	1700	1500				1750
Jct PSH 9, Artic								
Branch, S leg		1550	2050	1950	1850	1950	2000	2200
" NW leg		1100	1500	1450	1450	1500	1550	1800
Jct County road at								
S CL Cosmopolis,								
SE leg	1124	1100	1500	1450		1600	1550	
" NW leg		1450		3150		2700	3100	3050
NW CL Cosmopolis, /								
SE CL Aberdeen			5600					
JCT SSH 13A in Ab, E leg				6400				
" NW leg			13000	12000	12400	12500		12800
New Chehalis River Bridge								
(opened January 1956)			13000	12000	12400	12500		12800

Table 53 (concluded)

Traffic Trends: Average Daily Volume at State Highway Locations

<u>LOCATION</u>	<u>1954</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>
<u>Secondary State Highway No. 9-C, Hoquiam-North Beaches</u>								
W CL Hoquiam	1002	1100	1250	1300				1600
Jct FAS 334 at								
Burrows, SE leg		580	740	760	840	1000	1100	1250
" NW leg		560	700	720	680	1050	1050	1300
Jct Oyhut Beach Rd, E leg								1350
" NW leg							860	840
At Ocean City								920
South of Copalis	799		880	900	680		660	
North of Copalis	514		660	680	360		300	
So of Pacific Beach	633	640	700	720	340		400	540
No of Pacific Beach			660	680				440
At Quinault Indian								
Res. Boundary		420	320	340	280			320
<u>Secondary State Highway No. 9-D, McCleary-Kamilche</u>								
Jct PSH 9, W of								
McCleary, N leg	624		700	680	860			600
Jct County rd, N of								
McCleary, W leg	543	700	620	600	680		940	
" E leg	623		680	900	900		900	
GH/Mason Co line	707							
<u>Secondary State Highway No. 13-A, Westport-Aberdeen</u>								
Old N CL Westport (1.11								
mile from dock)	992	1300			3100	2100		2600
S CL Westport	459	540			980	400		980
Jct SSH 13A Tokeland								
Branch, N leg	429					400	860	1150
" E leg	1217	1300			1600		1350	1350
Jct County Rd, E of								
Westport Jct, W leg		1300			1600		1350	1350
" E leg		1800			2200	2150	2100	2050
South Bay Bridge	1794	1900	2350		2200	2150	2100	2050
Jct County Rd so. of								
Markham, W leg	1970	2100			1950	2150		
" N leg	2159				1900	2200		
S CL Aberdeen	2490	2940	3300		2700	3150		
Tokeland Branch								
Jct SSH 13A Westport								
Jct, S leg	963	1350		2150	2800		1850	2000

**TABLE 54 TOURIST TRAFFIC TRENDS AS REFLECTED IN TRAFFIC COUNTS
(AVERAGE DAILY VOLUME) AT SELECTED HIGHWAY LOCATIONS IN GRAYS
HARBOR COUNTY, 1953-1961**

Source: State Dept. of Highways Annual Reports

<u>HIGHWAY LOCATION</u>	<u>1953</u>	<u>1954</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>
13-A, Westport, Old North City limits (1.11 mi. from dock)	1027	992	1300			3100	2100		2600
13-A, "Westport Y,"									
South leg	773	963	1350		2150	2800		1850	2050
North leg	310	429					400	860	1150
East leg	1166	1217	1300			1600		1350	1350
9-C, south of Copalis	844	799		880	900	680		660	
9, Jct County road at Humptulips									
Southeast leg	1026	998	1000			1550			
North leg	1032	1114							
9, Jct County road, West end of Lake Quinault									
Southeast leg									1450
Northwest leg	756	772	760	920	780	760	920	880	900
9-C, Jct FAS 334 at Burrows, NW of Hoquiam									
Southeast leg	628	537	580	740	760	840	1000	1100	1250*
NW leg	607	549	560	700	720	680	1050	1050	1300**

* 22% trucks

**25% trucks

TABLE 55 BRIDGE TRAFFIC (AVERAGE DAILY VOLUME) 1953-1961

Source: State Dept. of Highways Annual Reports

<u>HIGHWAY LOCATION</u>	<u>1953</u>	<u>1954</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>
Aberdeen, Wishkah Br.	11585	12117	13700	11700	10900	11200	12300		13700
Hoquiam, Simpson Av.	11121	12007	12200	13200	12800	13500	15200		13700
Aberdeen, Chehalis Br.	-	-	-	13000	12000	12400	12500		12800
South Bay Bridge	1691	1794	1900	2350		2200	2150	2100	2050
S Montesano Bridge		834	900	1050	1050	940			840

TABLE 56 FARMS IN GRAYS HARBOR COUNTY: ACREAGE, VALUE, ECONOMIC CLASSIFICATION, USE CLASSIFICATION, AND RELATED INFORMATION 1954-59

Source: 1959 Census of Agriculture Volume I Part 46

<u>CATEGORY</u>	<u>1959</u>	<u>1954</u>
<u>Number of Farms and Acreage</u>		
Total number of farms	896	1,324
Decrease in number of farms due to change in census definition of a farm between 1954 and 1959	225	
Net decrease in number of farms, 1954 to 1959	203	
Acres of land in farms	99,529	118,217
Total acres of land in county: 1,219,200 acres		
Proportion in farms (proportion for state: 43.8%)	8.2%	
Average size of farm, acres (for state: 362.9)	111.1	89.3
<u>Value of Land and Buildings</u>		
Average value per farm	\$20,108	\$15,819
Average value per acre (state: \$148.74)	\$ 200.64	175.93
Proportion of farms reporting value	96%	91%
<u>Farms by Economic Class</u>		
Commercial farms	372	
\$40,000 or more farm products sold in 1958	12	
\$20,000-\$39,999	23	
\$10,000-\$19,999	85	
\$5,000-\$9,999	127	
\$2,500-\$4,999	105	
\$50-2,499	20	
Other farms (not classed as commercial by Census)	536	
Part time farms	411	
Part retirement farms	125	
"Abnormal" farms (institution farms, &c)	0	
<u>Off-farm work and other income</u>		
Farm operators also working off their farm	557	930
Working off their farm 100 or more days a year	477	783
With other income exceeding value of farm products sold	599	839

Table 56 continued

Farms: Acreage, Value, Economic Classification, Use Classification, &c

<u>CATEGORY</u>	<u>1959</u>	<u>1954</u>
<u>Ownership tenure of farms</u>		
Full owners	778	1,144
Part owners	89	124
Managers	1	4
Tenants (all types of tenancy)	40	52
<u>Age of Farm Operators</u>		
Total operators reporting age	887	
Under 25	5	
25 to 34	86	
35 to 44	187	
45 to 54	225	
55 to 64	199	
65 and over	185	
Average age	52.5	
<u>Type of farm</u>		
Field-crop	5	
Vegetable	-	
Fruit & nut (includes berries)	40	
Poultry	35	
Dairy	136	
Livestock, other than poultry and dairy	89	
General farms	15	
Miscellaneous and unclassified farms	588	
<u>Extent of irrigation</u>		
Farms reporting irrigated land	170	147
Proportion of all farms	19.0%	11.1%
Total acres in those farms	23,282	19,880
Irrigated acres in those farms	4,450	
Irrigated cropland harvested - farms reporting	113	94
Acres	2,133	1,296
Irrigated land not harvested (pasture etc) acres	2,317	
Source of irrigation water -- ground water on farm	64	
Surface water on farm	97	
Both	9	
Irrigation organization	18	
Irrigation organization & water on farm	0	

TABLE 57 FARM EXPENDITURES IN GRAYS HARBOR COUNTY, 1958-

Source: 1959 Census of Agriculture, Volume I Part 46, Table 4

<u>CATEGORY</u>	<u>Farms</u>	<u>Dollars</u>
Total farms classed as "commercial"	372	
Total farms reporting expenditures listed below (any)	372	
Amount in dollars, total		\$1,699,886
Feed for livestock & poultry		1,003,732
Purchase of livestock & poultry		241,529
Machine hire		50,209
Hired labor		239,881
Gasoline & other petroleum fuel for farm business		141,749
Seeds, bulbs, plants, trees		22,786

As indicated in Table 56, "commercial" farms are a minority in numbers but probably account for a preponderance of farm products sold.

Table 58 FARM LABOR in 1959 ON GRAYS HARBOR FARMS (IN FIRST WEEK OF NOVEMBER) COMPARED WITH 1954; AND RESIDENCE OF FARMER

Source: 1959 Census of Agriculture, Volume I Part 46, Table 6

<u>CATEGORY</u>	<u>----1959-----</u>		<u>----1954-----</u>	
	<u>Farms</u>	<u>Persons</u>	<u>Farms</u>	<u>Persons</u>
Family workers, including farm operator	750	1,181	1,272	1,834
Operator, working 1 or more hours		705		1,241
Operator, working 1-14 hours		311		
" " 15 or more hours		394		
Unpaid members of family, 15 or more hrs	326	476		
Hired workers	100	165	150	230
Regularly employed (100 or more days/yr)	59	68	50	73
One only	52			
Two or more	7			
Farm operator resident on farm	840		1,254	
Farm operator not resident on farm	33		53	

TABLE 59 FARM EQUIPMENT AND FACILITIES, 1954-59, IN GRAYS HARBOR

Source: 1959 Census of Agriculture, Volume I Part 46, Table 6

TYPE OF EQUIPMENT OR FACILITY	----1959----		----1954----	
	Farms	Number	Farms	Number
Grain combines	15	15	30	30
Corn pickers	0	0	0	0
Pick-up balers	83	83	32	32
Field forage harvesters	98	109	61	61
Motortrucks	578	806	732	915
Tractors, all types	677	1,093	868	1,249
Tractors, other than garden	582	786		
One only	431			
Two or more	151			
Wheel tractors	557	686	632	747
Crawler tractors	95	100	99	109
Garden tractors	292	307	383	393
Automobiles	788	991	1,091	1,372
Telephones	752		902	
Home freezer	517		531	
Milking machine	206		285	
Electric milk cooler	141			
Crop drier	5			
Power operated elevator, conveyor or blower	180			

Possibly the most important information in Table 59 is the relatively rapid increase it shows in pick-up balers and field forage harvesters. These reflect a trend toward an intensive type of animal husbandry. Because this is the one type of farming that has consistently expanded in the Grays Harbor area over the past 25 years, it is well worth careful attention.

It is also important for the state as a whole, where the 2nd and 3rd highest value of sales of farm commodities are Cattle and Calves, and Dairy Products. However in other parts of the state the increase has been less steady. (See Economic Data Series #60-5).

In other branches than animal husbandry: of the 17 crops of major importance economically in Washington, only two (green peas and strawberries) are of economic importance in Grays Harbor, and the latter on a very small scale. Statewide, the 17 crops accounted for 88% of all crop value, and 53% of total farm production value, in 1960. (Source: Seattle-First National Bank Quarterly Review, July 1961)

TABLE 60 CATTLE ON FARMS IN GRAYS HARBOR COUNTY

Source: County Agricultural Data Series, Grays Harbor County Agriculture 1956, p 41; 1959 Census of Agriculture Table 8; Grays Harbor County Extension Agent

<u>Year</u>	<u>All Cattle</u>	<u>Beef Cattle</u>	<u>Dairy Cattle</u>
1939	15,800	3,300	12,500
1940	16,100	3,600	12,500
1941	17,700	3,800	13,900
1942	17,800	3,500	14,300
1943	19,000	4,500	14,500
1944	19,500	4,000	15,500
1945	19,400	3,400	16,000
1946	16,600	2,000	14,600
1947	16,000	2,500	13,500
1948	16,000	3,000	13,000
1949	16,100	3,500	12,600
1950	16,400	3,900	12,500
1951	16,200	4,300	11,900
1952	16,500	5,000	11,500
1953	17,800	5,600	12,200
1954	18,700	6,100	12,600
1955	20,500	7,700	12,800
1956	21,000	7,700	13,300
1957			
1958			
1959	18,911		
1960	18,911	9,027	9,884

Total number of cattle on farms has never fallen below the 1939 level. Since 1948, no year has failed to show an increase.* Dairy cattle, of course, have shown a drop after the World War II peak (which reflected the wartime butter scarcity), and their output is now sold as fluid milk for urban consumption in this and adjoining counties (as far as Olympia). It is the numbers of beef cattle that have shown striking increase. From a postwar low of 2,000 in 1946, when they were 12% of the total, they have increased steadily in both numbers and percent. By 1954 they were 26.2% of the total; in late 1962 it was announced that they were more than half the total for the first time.

* The apparent drop in 1959-60 is due to a different method of reporting.

TABLE 61 CATTLE AND CALVES ON GRAYS HARBOR FARMS 1954-59

Source: 1959 Census of Agriculture Volume I Part 4 Table 8

	----1959----		----1954----	
	<u>Farms</u>	<u>Number</u>	<u>Farms</u>	<u>Number</u>
Total cattle and calves	750	18,911	1,133	19,898
Cows, including heifers that have calved	661	9,314	967	9,759
Milk cows	487	6,884	831	7,279
Heifers and heifer calves	630	6,362	878	6,455
Steers, bulls, steer & bull calves	601	3,235	788	3,684

Size of herds

All cattle and calves -	1	13
	2-4	148
	5-9	200
	10-19	113
	20-49	157
	50-99	90
	100 up	29

Cows including heifers that have calved	1	150
	2-9	269
	10-19	80
	20-29	55
	30-49	67
	50-74	22
	75-99	11
	100 up	7

Milk cows	1	136
	2-9	189
	10-19	35
	20-29	41
	30-49	53
	50 or more	33

It is somewhat odd that there were 206 farms reporting ownership of milking machines, when there were only 162 farms owning 10 or more milk cows.

In general, it would appear from the above table that beef cattle herds in this area are larger than dairy herds.

TABLE 62 FARM PRODUCTS SOLD FROM GRAYS HARBOR FARMS 1954-59

Source: 1959 Census of Agriculture Volume I part 46 Table 5,12,9

TYPE OF PRODUCT	COUNTY RANK (of 39)		----1959--	---1954---
	1959	1954		
All farm products sold	29	26	\$3,563,844	\$3,331,435
Average per farm	33		3,925	2,426
All crops sold	29	28	924,067	915,180
Field crops	30		90,632	83,809
Vegetables	15		168,988	179,844
Fruits,nuts,berries	10		225,330	221,505
Forest products, including standing timber*			408,044	439,368
Horticultural specialties			31,073	90,654
All livestock & products sold	24		2,639,777	2,416,255
Poultry & poultry products	17	19	227,251	241,287
Dairy products	14	12	1,637,308	1,643,812
Livestock & prod., other	28	24	775,218	531,156
Cattle other than calves			564,209	396,795
Calves			173,135	112,631
All other stock & prod.			47,874	21,730
* Cut by 285 farms, sold by 102, in 1959				

TABLE 63 FARM PRODUCTS SOLD -- DAIRY PRODUCTS, 1954-59

Source: 1959 Census of Agriculture Vol. I Part 46 Table 10

TYPE OF PRODUCT	-----1959-----		-----1954-----	
	Farms	Amount	Farms	Amount
Any milk or cream sold \$	266	\$1,637,308	408	\$1,643,812
Average sales per farm \$		\$ 6,155		\$
Milk sold as whole milk,lbs	191	40,276,389	304	42,477,162
Cream sold, lbs butterfat	85	44,980	104	74,184

Without detailing the poultry products it may be noted that they consisted more than half of broiler or fryer chickens sold for meat. Without detailing the field crops, they may be described as overwhelmingly consisting of livestock feed.

TABLE 63 FARM PRODUCTS SOLD: VEGETABLES, 1954-59

Source: 1959 Census of Agriculture Vol I Part 46 Table 11

<u>CATEGORY</u>	<u>---1959---</u>		<u>---1954---</u>	
	<u>Farms</u>	<u>Acres</u>	<u>Farms</u>	<u>Acres</u>
Vegetables harvested for home use	564		892	
Vegetables harvest for sale	31	1,187	37	724
Green peas	23	1,022	25	711
All others	8	165	12	13

TABLE 64 FARM PRODUCTS SOLD: TONNAGE OF VEGETABLES BY KIND, 1957-62

Source: Grays Harbor Agricultural Extension Agent

<u>KIND OF VEGETABLE</u>		<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>
Beans, fresh market, acres						2	
tons						80	
" freezing-canning, acres					8		
tons					32		
Carrots	acres	-	1	1	1	0	
	tons		12	12	12	0	
Cabbage	acres	-	4	4	3	3	3
	tons		40	40	30	30	30
Cucumbers	acres	10	10	12	3	3	3
	tons	45	45	50	15	15	12
Broccoli, freezing	acres	-	38	25	80	0	
	tons		105	75	240	0	
Sweet corn, fresh mkt	acres	8	15	16	6	8	
	tons	25	60	64	24	32	
" freezing-canning, acres		-	85	75	80	40	
	tons		340	300	320	160	
Potatoes	acres	70	60	40	65	65	70
	tons	560	550	360	585	645	520
Green Peas	acres	650	720	650	804*	1000	
	tons	1495	1468	970	1452*	1750	

* Including 4 acres, 12 tons, for fresh market.

TABLE 65 CRANBERRY PRODUCTION IN GRAYS HARBOR COUNTY

Source: 1945-58, State Dept. of Agriculture, Agriculture in Grays Harbor County 1956 (1959 edition); 1958-62, Ocean Spray (Markham)

YEAR	GRAYS HARBOR COUNTY		PACIFIC COUNTY		COMBINED TOTAL		REMARKS
	Acres	Tons	Acres	Tons	Acres	Tons	
1945	230	675					First year of data
1946	210	785					
1947	170	883					
1948	170	770					
1949	180	730					
1950	180	595					5.4 tons per acre 3 tons per acre
1951	190	1,025					
1952	200	600					
1953	200	900					
1954	200	700					
1955	220	700					
1956	280	900					
1957	280	1,290					
1958	260	830	381	1,232	641	2,062	
1959					650	3,470+	
1960					659	1,452-	7.55 tons per acre 3 tons per acre
1961					668	5,045+	
1962					686	2,023-	

TABLE 65-A OTHER BERRY AND FRUIT PRODUCTION FOR SALE IN GRAYS HARBOR COUNTY, 1954-59

Source: 1959 Census of Agriculture Vol. I Part 46, Table 11

FRUIT	-----1959-----			-----1954-----		
	Farms	Acres	Pounds	Farms	Acres	Pounds
Strawberries	16	50	68,929	16	51	108,867
Raspberries	16	5	2,194	24	6	12,707
Blackberries*	3	1-	460	5	5	7,445
Blueberries	3	3	12,180	6	5	8,906
Apples	92		2,664 boxes	135		2,708 boxes

* Not including wild blackberries harvested for sale.

TABLE 66 FISH PRODUCTION BY SPECIES DELIVERED AT GRAYS HARBOR 1960

Source: State Department of Fisheries Annual Report 1960

<u>SPECIES</u>	<u>AMOUNT</u>	<u>DOLLARS**</u>
Salmon, commercial	2,586,302 lbs	\$1,037,854
Crabs	3,286,508 "	498,623
Oysters	523,249 "	154,847
Clams, commercial	443,558 "	101,563
Miscellaneous	1,974,004 "	142,965
TOTAL	8,813,621 "	\$1,935,852
Salmon, sportsfishing	75,000 fish*	
Clams, noncommercial 1961	5,700,000 clams	

* At an average of 10 lbs each, this would be 750,000 lbs.

The 1960 sports catch was light. 1961 was 102,300 fish.

**Value to fisherman.

TABLE 67 FISHING BOATS LICENSED IN SOUTHWEST WASHINGTON 1959

Source: State Department of Fisheries Annual Report 1960

<u>SIZE OF BOAT</u>	<u>Grays Harbor</u>	<u>HOME PORT</u> <u>Columbia River</u>	<u>Willapa Harbor</u>
Under 5 tons	252	359	140
5 to 20 tons	156	77	19
20 tons & up	12	4	5
	420	440	164

"Approximately 1,000 commercial fishing boats call at Grays Harbor during a year. As many as 500 are in Grays Harbor for a period of a day or two, but the normal number is 300 during the period from April to October. Most of these boats use the Westhaven facilities for mooring even if they do not sell their catch locally. The 1,000 fishing boats that use the facilities on a full or part time basis employ some 2,200 people on board."

(Source: Port of Grays Harbor Annual Report 1953, p 19)

TABLE 68 FISHING LICENSES ISSUED IN GRAYS HARBOR DISTRICT

Source: Economic Data Series #7 (State Dept. of Commerce & Ec.Dev.)

<u>TYPE OF LICENSE</u>	<u>1940</u>	<u>1945</u>	<u>1950</u>	<u>1955</u>	<u>1957</u>
Gill Net	129	132	117	113	143
Personal	-	-	2,373	194	207
Boat	-	-	269	164	192
Oyster Farm	-	-	8	13	14
Troll	-	-	30	18	26
Clam	2,364	7,536	-	25	19
Crab	9	-	35	12	5
Other	61	-	16	9	6
(Economic Data - Fisheries)			-97-		

TABLE 69 FISH AND SHELLFISH PRODUCTION DELIVERED AT GRAYS HARBOR BY SPECIES, FOR SAMPLE YEARS 1945-1960, IN NUMBER OF POUNDS

Source: State Department of Fisheries Annual Reports

SPECIES	<u>1945</u>	<u>1950</u>	<u>1955</u>	<u>1960</u>
<u>Shellfish</u>				
Oysters, Pacific*	155,800	727,100	1,052,745	523,249
Clams, razor	1,126,210	249,840	804,097	443,558
Clams, hardshell		2,000		
Crabs	1,961,978	2,469,804	3,269,131	3,286,508
Octopus				72
Shrimp				229,805
<u>Fish Livers</u>	120,040	758	177	935
<u>Bottom fish</u>				
Black cod	114,325	7,034	1,555	16,963
Flounder	95,803	13,731	6,874	5,726
Ling cod	495,925	154,225	159,388	233,026
Surf perch	3,303	806	5,279	4,782
Rockfish	6,091,761	331,704	181,195	670,578
Sole	567,219	178,969	222,419	184,756
True cod	25,165	25,252	29,871	41,992
<u>Miscellaneous food fish</u>				
Albacore	5,009,416	3,161,370	194,084	158,440
Halibut	35,986	1,669	8,800	83,292
Pilchard	4,696,820	0	0	0
Shad	10,369	0	45	1,800
Shark, all species	35,054	0	0	0
Skate	1,218	0	0	0
Smelt, eulachon	0	0	0	135
Smelt, silver	289,674	475,595	362,186	238,542
Sturgeon	11,714	11,951	23,399	103,044
White sea bass	0	0	0	116
<u>Salmon**</u>				
Chinook	2,146,040	1,550,199	2,872,949	1,102,512
Chum	320,722	692,286	856,636	306,586
Pink	14,375	351	274,300	401
Silver	3,582,151	4,081,090	2,009,508	1,020,638
Sockeye	240,516	503,511	285,764	156,165

* Grown on oyster farms. Spawn is imported from Japan.

**Does not include sports catch, but does include catch on coastal Indian rivers.

TABLE 70 FOREST LAND IN GRAYS HARBOR COUNTY AVAILABLE FOR LOGGING
 ("COMMERCIAL UNRESERVED") AS OF 1951 FOREST INVENTORY, IN ACRES
 Source: Forest Survey Report No. 111 (1953) Table 4, p 7

TYPE OF TIMBER	Privately	PUBLIC NONFEDERAL			-----FEDERAL-----		
	Owned	State	County	City	Indian	Natl	Other
						Forest	
<u>Douglas-fir</u>							
Sawtimber							
Large old-growth	7,250				90	23,340	
Small old & lg young	4,560	1,150		10	320	1,100	
Small young	47,160	3,410	1,780	400			40
Pole timber	143,400	22,480	7,470	3,610	600	510	
Seedlings & saplings	77,250	20,650	2,360	1,470	460	4,360	
<u>Western hemlock</u>							
Sawtimber - large	70,490	4,650	4,600	2,710	18,260	47,480	
" - small	66,880	3,470	6,760	3,130	2,110	1,950	
Pole timber	66,130	2,980	11,930	1,070	16,040	1,350	
Seedlings & saplings	66,670	4,480	6,060		12,430	1,300	
<u>Sitka spruce</u>							
Sawtimber - large	3,330		270		9,190	3,440	
" - small	3,830	120	240		190		
Pole timber	4,500	40	230	60	1,400		
Seedlings & saplings	240					240	
<u>Western redcedar</u>							
Sawtimber - large	6,020	400			48,850	4,790	
" - small	1,700	440	260		7,390		
Pole timber	2,230		800		15,080	210	
Seedlings & saplings	1,130	160	360		1,910	200	
<u>Pacific silver fir, other true fir, & mountain hemlock</u>							
Sawtimber - large	310	160			3,710	38,990	
" - small						720	
<u>White pine & lodgepole pine</u>							
Sawtimber - large	440				80		
" - small	1,330	80	40		3,560		
Pole Timber	1,490		80		6,740		
Seedlings & saplings	440				1,320		
<u>Red alder & other hardwood</u>							
Sawtimber - large	3,160	110	30		470	360	
" - small	16,290	460	380	230	1,010	10	
Pole timber	27,950	1,880	810	360	1,150	20	
Seedlings & saplings	2,700	520			880		

TABLE 71 FOREST: NET VOLUME OF LIVE SAW TIMBER (11"+ dbh) AND GROWING STOCK (5"-11" dbh) ON COMMERCIAL FOREST LAND IN GRAYS HARBOR COUNTY BY OWNERSHIP CLASS, AS OF 1951 FOREST INVENTORY

Source: USDA Forest Survey Report No. 111

<u>OWNERSHIP CLASS</u>	<u>-----SAW TIMBER-----</u>		<u>GROWING</u>
	Million FBM	Million FBM	<u>STOCK</u>
	log scale,	International	Million
	Scribner rule	1/4-inch rule	cu. ft.
Private	10,306	11,150	2,697
State	702	761	212
County	662	718	187
Municipal	278	300	69
Federally owned or managed:			
Indian	3,937	4,250	894
National forest	4,823	5,198	973
Other (public domain)	Less than 1	Less than 1	
Total all ownerships	20,708	22,377	5,032

TABLE 72 FOREST: NET VOLUME OF LIVE SAW TIMBER AND GROWING STOCK ON COMMERCIAL FOREST LAND BY SPECIES, AS OF 1951 FOREST INVENTORY

Source: USDA Forest Survey Report No. 111

<u>SPECIES</u>	<u>-----SAW TIMBER-----</u>		<u>GROWING</u>
	Million FBM	Million FBM	<u>STOCK</u>
	log scale,	International	Million
	Scribner rule	1/4-inch rule	cu. ft.
Softwoods:			
Douglas-fir	2,804	3,063	747
Western hemlock	10,612	11,461	2,541
Mountain hemlock	55	60	12
Sitka spruce	956	1,014	171
Western redcedar	2,588	2,744	551
Alaska-cedar	84	88	15
Western white pine	181	195	49
Lodgepole pine	29	33	8
Pacific silver fir	2,721	2,939	509
Total softwoods	20,030	21,597	4,603
Hardwoods:			
Red alder	663	763	391
Bigleaf maple	15	16	38
Black cottonwood	Less than 1	1	
Total hardwoods	678	780	429

TABLE 73 FOREST: AVERAGE ANNUAL COMMODITY DRAIN* ON LIVE SAW
TIMBER AND GROWING STOCK ON COMMERCIAL FOREST LAND BY SPECIES
GROUP FOR THE PERIOD 1948-51 IN GRAYS HARBOR COUNTY

Source: USDA Forest Service Report No. 111 (1953)

	<u>SOFTWOODS</u>	<u>HARDWOODS</u>	<u>TOTAL</u>
<u>Saw timber</u>			
<u>In MBM log scale, Scribner rule:</u>			
Timber products	402,658	13,741	416,399
Logging residual	9,905	338	10,243
Total commodity drain	412,563	14,079	426,642
<u>In MBM International 1/4-inch rule:</u>			
Timber products	432,357	16,146	448,503
Logging residual	10,636	397	11,033
Total commodity drain	442,993	16,543	459,536
<u>Growing stock</u>			
<u>In thousand cubic feet:</u>			
Timber products	75,279	6,368	81,647
Logging residual	8,537	722	9,259
Commodity drain	81,647	9,259	90,906

* Commodity drain is the total of timber-products output and logging residual. Timber-products output is the portion of the inventory volume removed from the woods; logging residual is the portion cut or killed in logging not removed from the woods.

TREE FARMS. The tree farm movement started here in Grays Harbor County, in 1940. Now every state has tree farms. However in some states (such as Iowa, where the "tree farms" average 71 acres in size) they are evidently not talking about tree farms as Grays Harbor knows them. At the end of 1960, there were 54 million acres in tree farms nationally, with an average size of 2,850 acres; in the State of Washington, 4 million acres, average size 6,060. In Grays Harbor County there are now 10 certified industrial tree farms, total acreage 750,000, the smallest about 6,000 and the largest about 350,000. In addition there are several hundred small, non-industrial "tree farms."

(Sources: American Tree Farmer & Forestry Digest, December 1960, page 13; and State Department of Natural Resources).

TABLE 74. FOREST LAND: EXTENT OF RESTOCKING ON CUTOVER OR BURNED COMMERCIAL FOREST LAND IN GRAYS HARBOR COUNTY, FOR ALL CONIFER (SOFTWOOD) SPECIES, BY TYPE OF OWNERSHIP, AS OF THE 1951 FOREST INVENTORY, IN ACRES

Source: Computed from USDA Forest Survey Report No. 111

<u>CLASSIFICATION</u>	<u>TOTAL</u>	<u>PRIVATE</u>	<u>STATE</u>	<u>COUNTY</u>	<u>CITY</u>	<u>INDIAN</u>	<u>NATL FOREST</u>
<u>Restocked</u>							
Pole timber (5.0"-10.9" dbh)							
On cutovers	292,430	215,010	25,500	20,510	4,740	24,970	1,660*
On burns	17,720	2,540				14,890	290
On plantations	320	200					120
Total	310,470	217,750	25,500	20,510	4,740	39,860	2,110
Seedlings & saplings (under 5" dbh)							
On cutovers	174,420	128,190	17,630	8,700	1,470	16,120	2,310
On burns	240	240					
On plantations	28,830	17,300	7,660	80			3,790
Total	203,490	145,730	25,290	8,780	1,470	16,120	6,100
<u>Total restocked</u>	513,860	363,480	50,790	29,290	6,210	55,980	8,210
<u>Unstocked</u>							
Recent clearcut	37,510	20,440	3,070	80		6,630	7,290
Old clearcut	25,390	13,850	4,310	1,720		5,510	
<u>Total unstocked</u>	62,900	34,290	7,380	1,800	-	12,140	7,290
<u>Total acreage</u>	576,860	397,770	58,170	31,090	6,210	68,120	15,500
% recent unstocked	6.50	5.14	5.19	0.27	-	9.73	40.70
% old unstocked	4.42	3.46	7.49	5.53	-	8.09	-
Total % unstocked	10.92	8.60	12.68	5.80	-	17.82	40.70

Forestry. The following data can hardly be reduced to any statistical form, nor used for direct comparisons, but will be valuable for understanding Grays Harbor industrial practices in forest management.

Company Z's forest management program operates nearly a quarter million acres, of which a little more than half is its own ownership and the rest is managed by it under a cooperative contract with the U. S. Forest Service. Among the forest activities being conducted in one year recently were

Aerial and field surveys (the aerial survey took 3 years).

Fire hazard reduction: maintenance of fire roads (100 miles maintained, 14 miles improved), reduction of slash concentration (on about 2000 acres) by controlled burning, brush control on roadside and railroad right-of-way by spraying (125 miles).

Predator control: bear trapper employed, hunters allowed; also hunter access allowed during deer and elk season.

Planting and seeding: This tree farm reported its 16 millionth tree planted. Somewhat under 1000 acres a year was being reforested, mostly by hand-planting of 2-year-old Douglas-fir seedlings for an average of 440 trees per acre as "fill-in" on partially stocked stands. Cost was \$16.55 per acre. On other acreage, hand seeding of 3/4 lb Endrin Latex protected seed per acre, with use of cyclone seed casters, cost (for seed and labor) \$6.15 per acre.

Cone harvest and seed production: Average cost of Douglas-fir cones was \$2.31 per bushel purchase price, whose yield of seed proved out at 6.1 ounces per bushel = \$7.87 per pound of seed. In addition to fresh seed, the company had at this time (1959) about 1,000 pounds of seed in cold storage, up to 4 years old.

Salvage and thinning: Contractors were used rather than direct employment. Under company forester supervision, the contractors cut forester-marked logs (using small tractors and also horse teams) on sites 45-55 years old; these thinnings were milled on site into cants; 26 miles of new road were built to sites to be thinned.

Company Y's present allowable cut is 200 million board feet per year. This cut is based on very conservative expected yields averaging only 570 board feet per acre per year. As old denuded non-stocked and poor-stocked lands are rehabilitated and put into full production, the allowable cut is anticipated by this company to increase to 300 million board feet per year with expected yields averaging 800 board feet per acre per year.

Note: both the companies mentioned above conduct extensive research programs, with published results, in both basic and applied research problems on soils, plant physiology, silviculture, plant diseases and predators, etc.

State and Federal forestry activities are omitted as outside the scope of this report.

TABLE 75 MANUFACTURING ESTABLISHMENTS IN GRAYS HARBOR COUNTY, BY SIZE CLASS OF LARGEST ESTABLISHMENT 1958 (AVERAGE EMPLOYMENT FOR YEAR)

Source: 1958 Census of Manufactures Vol MC58(S)9 p 2

<u>INDUSTRY CODE</u>	<u>INDUSTRY</u>	<u>TOTAL</u>	<u>1-19</u>	<u>20-49</u>	<u>50-99</u>	<u>100-249</u>	<u>250-499</u>
Largest Establishment 250-499							
2411	Logging	70	63	3	2	-	2
2421	Sawmills & planing mills	17	9	-	3	4	1
2431	Millwork plants	6	4	1	-	-	1
2432	Veneer & plywood plants	6	-	-	2	1	3
2441	Nailed wooden boxes & shook	3	2	-	-	-	1
2511	Wood furniture not upholstered	4	2	-	1	-	1
2611	Pulp mills	2	-	-	-	-	2
2621	Paper mills	1	-	-	-	-	1
Largest establishment 100-249							
3554	Paper industries machinery	1	-	-	-	1	-
3931	Musical instruments & parts	2	1	-	-	1	-
Largest establishment 50-99							
2031	Canned & cured seafoods	13	5	7	1	-	-
2429	Special product sawmills n.e.c.	30	26	2	2	-	-
2711	Newspapers	3	2	-	1	-	-
Largest establishment 20-49							
2026	Fluid milk	3	2	1	-	-	-
2033	Canned fruits & vegetables	1	-	1	-	-	-
2051	Bread & related products	2	1	1	-	-	-
2951	Paving mixtures & blocks	1	-	1	-	-	-
3273	Ready-mixed concrete	2	-	2	-	-	-
3321	Gray iron foundries	1	-	1	-	-	-
Largest establishment 1-19							
2011	Meat packing plants	1	1	-	-	-	-
2021	Creamery butter	1	1	-	-	-	-
2036	Fresh or frozen packaged fish	1	1	-	-	-	-
2086	Bottled & canned soft drinks	2	2	-	-	-	-
2095	Animal oils, n.e.c.	1	1	-	-	-	-
2499	Wood products, n.e.c.	1	1	-	-	-	-
2540	Partitions & fixtures	1	1	-	-	-	-
2591	Venetian blinds & shades	1	1	-	-	-	-
2721	Periodicals	1	1	-	-	-	-
2751	Printing, letterpress	3	3	-	-	-	-
2870	Agricultural chemicals	1	1	-	-	-	-
3443	Boiler shop products	1	1	-	-	-	-
3444	Sheet metal work	1	1	-	-	-	-
3481	Fabricated wire products, n.e.c.	1	1	-	-	-	-
3599	Machine shops	5	5	-	-	-	-
3691	Storage batteries	1	1	-	-	-	-
3713	Truck & bus bodies	1	1	-	-	-	-
3732	Boat building & repairing	2	2	-	-	-	-
3993	Signs & advertising displays	1	1	-	-	-	-
3999	Miscellaneous products n.e.c.	1	1	-	-	-	-
		196	143	20	12	7	12

TABLE 76

**DISTRIBUTION OF MANUFACTURING ESTABLISHMENTS
BY EMPLOYMENT SIZE CLASS AND MAJOR INDUSTRY GROUP
Grays Harbor County, Washington - 1958**

<u>Major Industry Group</u>	<u>---Number of Employees---</u>				<u>Total</u>
	<u>1-19</u>	<u>20-99</u>	<u>100-249</u>	<u>250 up</u>	
Food & kindred products	115	11	0	0	126
Tobacco products					0
Textile mill products					0
Apparel & related products					0
Lumber & wood products	105	15	5	8	133
Furniture & fixtures	4	1	0	1	6
Paper & allied products	0	0	0	3	3
Printing & publishing	6	1	0	0	7
Chemicals & allied products	1	0	0	0	1
Petroleum & coal products	0	1	0	0	1
Rubber & plastic products	0	0	0	0	0
Leather & leather products	0	0	0	0	0
Stone, clay & glass products	0	2	0	0	2
Primary metal industries	0	1	0	0	1
Fabricated metal products	3	0	0	0	3
Machinery except electrical	5	0	1	0	6
Electrical machinery	1	0	0	0	1
Transportation equipment	3	0	0	0	3
Instruments & related products	0	0	0	0	0
Miscellaneous manufactures	3	0	1	0	4
Total	145	32	7	12	196

Source: U. S. Department of Commerce, Bureau of the Census
1958 Census of Manufactures (46-13, Table 7)

TABLE 77 MANUFACTURING ESTABLISHMENTS: NUMBER, EMPLOYMENT, VALUE ADDED BY MANUFACTURE, AND CAPITAL EXPENDITURES, BY LOCATION OF ESTABLISHMENT IN GRAYS HARBOR COUNTY, 1954-58

Source: 1958 Census of Manufactures Table 3 page 46-6

	<u>ABERDEEN</u>	<u>HOQUIAM</u>	<u>REST OF COUNTY</u>	<u>TOTAL COUNTY</u>	<u>TOTAL STATE</u>
NUMBER OF ESTABLISHMENTS	55	30	111	196	5,065
With average employment of:					
1 to 19	37	19	89	145	3,908
20 or more	18	11	22	51	1,157
NUMBER OF EMPLOYEES:					
Annual average, 1958	2,132	2,400	2,937	7,469	212,049
" 1954	1,962	2,223	3,405	7,590	192,354
Payroll entire year 1958(\$000)	10,085	11,109	12,739	33,933	1,157,119
NUMBER OF PRODUCTION WORKERS:					
Annual average, 1958	1,881	2,134	2,627	6,642	157,260
Man-hours entire year (000)	3,393	3,880	4,588	11,861	305,811
Wages entire year (\$000)	8,491	9,599	11,027	29,117	761,376
VALUE ADDED BY MANUFACTURE (\$000)					
1958	17,453	22,152	24,831	64,436	2,166,632
1954	12,449	20,364	19,055	51,868	1,549,060
CAPITAL EXPENDITURES, NEW(\$000)	1,122	803	1,024	2,949	160,445

To appreciate the concentration of different types of economic activity in different locations in the county, compare the above (which covers manufacturing activity) with Table 88 on page 116 (wholesale trade activity by location), Tables 90 on page 117 and 92 on page 119 (retail trade activity by location), and with the Land Use Analysis for the different localities on pages 1-39.

By these comparisons it will be seen that manufacturing dominates the economic activity in Hoquiam, Cosmopolis and McCleary, while Aberdeen is the center for wholesale and retail trade, and Westport is dominated by tourism and commercial fishing.

TABLE 78 ~~LUMBER~~ AND WOOD PRODUCTS MANUFACTURING ESTABLISHMENTS IN GRAYS HARBOR COUNTY BY TYPE, 1958

Source: 1958 Census of Manufactures, Table 6

	<u>Logging Camps & Contractors</u>	<u>Sawmills & Planing Mills</u>	<u>Millwork, Plywood & Containers</u>	<u>Total</u>
Total number of establishments	70	47	16	133
With average employment of:				
1 to 19	63	35	7	105
20 or more	7	12	9	28
Number of employees:				
Annual average 1958	1,327	1,627	2,090	5,044
Payroll entire year (\$000)	6,430	7,343	9,173	22,946
Number of production workers:				
Annual average 1958	1,136	1,506	1,931	4,573
Man-hours entire year (000)	1,986	2,663	3,626	8,275
Wages entire year (\$000)	5,267	6,593	8,270	20,130
Value added by manufacture*	8,722	11,547	14,103	34,373
Capital expenditures, new*	1,497	267	572	2,336

* \$000

The above table is incomplete. It excludes the following industry groups of products manufactured in Grays Harbor County whose basic raw material is wood:

Furniture and fixtures
Transportation equipment, including boats
Pulp and paper

The Census did not publish data for those groups because to do so would indirectly disclose confidential information reported by individual companies.

TABLE 78A AVERAGE MAN-HOURS OF PRODUCTION WORKERS IN LUMBER & WOOD PRODUCTS MANUFACTURING ESTABLISHMENTS IN GRAYS HARBOR COUNTY 1958
Source: computed from table above

	<u>Logging Camps & Contractors</u>	<u>Sawmills & Planing Mills</u>	<u>Millwork, Plywood & Containers</u>	<u>All</u>
Average hours worked				
Per man per year	1,748.2	1,768.2	1,877.8	1,809.6
Per man per week	33.6	34.0	36.1	34.8

TABLE 79 LOG PRODUCTION FROM GRAYS HARBOR COUNTY FOREST LANDS,
BY YEAR AND BY TYPE OF OWNERSHIP (THOUSANDS BOARD FEET)

<u>YEAR</u>	<u>STATE & PRIVATE</u>	<u>NATIONAL FOREST</u>	<u>INDIAN LANDS</u>	<u>TOTAL</u>
1945				326,130
1946				217,729
1947				196,147
1948				215,314
1949	202,050	104,300	44,957	351,307
1950	269,680	149,100	51,221	470,001
1951	258,035	139,400	68,000	465,435
1952	225,332	109,700	88,601	423,633
1953	157,885	100,700	97,456	356,041
1954	163,006	98,700	98,545	360,151
1955	189,942	73,467	143,421	399,830
1956	234,407	94,700	113,368	442,475
1957	158,127	87,730	60,218	306,731
1958	201,755	80,335	64,884	346,964
---STATE---- MFBM Acres ---PRIVATE---- MFBM Acres				
1959	12,572 599	223,555	6,666	
1960	10,814 443	273,478	7,082	
1961	3,847 111	194,052	6,045	

Source: State Department of Natural Resources

"The basic limiting factor in the lumber industry, even though markets are poor at the moment, is availability of logs. ... You can get a rough idea of what this means in payroll when I tell you that statistics in the industry indicate that roughly every thousand board feet of logs produces about forty-three dollars of manufacturing payroll."

(Source: Dan Goldy, former Regional Administrator of the Bureau of Land Management in Portland, Ore. Speech reprinted in County News-Digest (Olympia, Wash.) April 1961 page 3)

TABLE 80 TOTAL LUMBER PRODUCTION IN GRAYS HARBOR COUNTY, BY YEAR
(THOUSANDS BOARD FEET)

Source: West Coast Lumbermens Association Statistical Yearbook

<u>YEAR</u>	<u>LUMBER PRODUCTION (MBM)</u>	<u>--LUMBER MILLS---</u>			<u>HOURLY EMPLOYMENT</u>	
		<u>Idle</u>	<u>Active</u>	<u>Total</u>	<u>June</u>	<u>Dec.</u>
1945	353,869			25		
1946	352,831			33		
1947	281,625			39		
1948	304,010			28		
1949	285,923			21		
1950	328,042			21		
1951	300,980			22		
1952	266,109			15		
1953	271,013			14		
1954	223,366	7	13	20		
1955	270,338	3	14	17		
1956	209,788	1	11	12		
1957	190,788	-	11	11	861	819
1958	249,500	-	10	10	967	925

TABLE 81 LUMBER PRODUCTION IN GRAYS HARBOR BY SPECIES, 1957-58
Source: West Coast Lumbermens Association Statistical Yearbook

<u>SPECIES</u>	<u>MFBM 1957</u>	<u>MFBM 1958</u>
TOTAL PRODUCTION	190,788	249,500
Douglas-fir	14,028	8,623
Western hemlock	96,048	163,774
Western red cedar	38,236	22,955
Sitka spruce	14,015	20,934
White fir	28,102	32,114
Pine	359	1,100
All others	-	-

Statistics for other wood products manufacture are not available on a basis from which Grays Harbor production can be separated from that of other parts of the state. For plywood, we have ascertained that about 1000 carloads are shipped by rail per year from this county, plus shipments by water. For furniture, and also for pulp and paper, the statistics are withheld by the Bureau of the Census in order to avoid revealing information about individual companies.

Comparison of companies within the Grays Harbor area is difficult as will be seen by the following. (Material in files of Vernon Cotter)

Logging. Company A does some logging by direct employment, and other logging through contractors who operate their own crews on land that this company controls. The direct employment in recent years has varied from an average of 276 to an average of 597 on the payroll. This average monthly employment cannot be related to the quantity of logs delivered because it does not include contractor employment. The annual payroll for direct logging employment, which has varied from \$1,400,000 to \$2,400,000 and in most years has been close to \$2,000,000, does not vary in direct relation to the number of employees because of different numbers of hours worked by individual employees. The total delivered logs from all sources has varied in the past decade from a low of 88.0 million board feet (1957) to a high of 196.4 (1956).

Company B, which controls more than 200,000 acres, logs an average of 135 million board feet from it (sustained-yield basis; plus salvage, etc.) In addition some logs are purchased, nearly all Douglas-fir. This company has recorded the man-hours worked in logging (per M feet log scale) which in 1955 was 5.53, in 1956 6.36, in 1957 6.06, in 1958 5.78, in 1959 6.07.

Company C, which controls over 300,000 acres, has an average employment on its logging operations of 450 men, with total logging man-hours over 900,000 a year. Equipment used in the woods: 20 tractors, 20 yarder donkeys, 18 shovel-type loaders and construction shovels, 80 gasoline chain saws.

Logging roads, etc. Company D figures its logging roads separate from fire-protection roads and other service roads. In 1958 this company built 41.2 miles of truck logging road at an average cost per mile of \$19,800; in 1959, 49.1 miles at \$22,600; difference accounted for by bridges and concrete culverts.

Company E's log trucks make four round trips from woods to mill in an average working day. Allowing for time out of service, etc., the company's 75 trucks average 250 round trips per day.

Company F, which operates a logging railroad, employs from 64 to 72 men in this operation, average 1955-59 of 67.

Company G's booming and rafting of logs increased employment steadily between 1955 and 1959 from 23 to 37.

Lumber mill. Company H employs 225 men at its lumber mill which manufactures both kiln dried and unseasoned dimension lumber for studs and framing. The mill is located on the ship channel with its own loading wharf, and ships approximately half of its lumber by sea and half by rail (own spur). All logs arrive by truck. Mill fuel is bark and planer shavings. A by-product of commercial value is pulpwood chips, produced at the rate of 1 board foot in chips for every 4 board feet of lumber.

Plywood mill. Company J's plywood plant has a 24-hour capacity of 275,000 square feet (3/8" basis), and in 1959 produced 66,438 M square feet of plywood. Employment, payroll, and man-hours-per-MFBM not available.

Pulp mill. Company K operates a pulp mill with a 24-hour daily capacity of 400 tons, producing sulphite pulp by an acid process using magnesium oxide and sulphur. Effluent is evaporated and burned to recover chemicals. Raw materials are hemlock (low-grade logs plus mill residues), some spruce, and for certain grades some alder. Mill residues are partly of local origin, partly trucked in from Pacific County (20-25 miles). Pulp is shipped to converting plants elsewhere, mainly by rail; the mill has harbor frontage plus rail and road access. Employment at the mill is 250.

Pulp mill. Company L operates a pulp mill employing 550 persons. Daily production capacity is 400 tons of highly purified wood cellulose and pulp for fine papers. Silvichemicals are produced from process waste materials. Products are shipped by rail (to the east coast) and by ship (to 20 foreign countries).

Milling, all types. Company M, which operates a number of mills of different types, computed that the average man-hours per thousand board feet, in converting logs into products at its various mills in or adjacent to Grays Harbor County, was 19.5 in 1959, compared with 20.9 in 1958.

Milling, all types. Company N in 1960 began manufacture of the following new products: acoustical tile, formboard for use with poured gypsum roof deck, partition panel using insulation board laminate layers.

Paper mill. Company O's paper mill, capacity 200 tons a day, employs 350 persons in producing various types of paper used in offices. The mill uses 3.2 million gallons of water a day. Distribution, throughout the 11 Western states, is 60% by truck, 40% by rail.

TABLE 82 BUYING POWER: NUMBER OF INDIVIDUALS RECEIVING INCOME IN 1959, AND MEAN INCOME RECEIVED, BY PLACE OF RESIDENCE IN G H COUNTY

Source: 1960 Census of Population 49C, Tables 69,76,86

	<u>Wash. State</u>	<u>Total Grays Harbor</u>	<u>Aberdeen</u>	<u>Hogquiam</u>	<u>Rest of County</u>
<u>All types of income</u>					
Number of recipients		28,636	10,212	5,850	12,574
Mean income	\$3,821	\$3,677	\$3,929	\$3,638	NA*
<u>Wages or salary income</u>					
Number of recipients		19,519	6,930	4,257	8,332
Mean income	\$3,726	\$3,602	\$3,739	\$3,602	NA
<u>Self-employment income (income less losses)</u>					
Number of recipients		4,212	1,283	683	2,246
Mean income	\$4,717	\$4,277	\$5,096	\$4,762	NA
<u>All other types</u>					
Number of recipients		4,905	1,999	910	1,996
Mean income	\$1,119	NA	NA	NA	NA
*NA - not available					

TABLE 83 AGGREGATE INCOME, 1959, OF ALL INDIVIDUALS IN GRAYS HARBOR COUNTY, BY PLACE OF RESIDENCE, IN MILLIONS OF DOLLARS

Source: Bureau of the Census, Statistical Profile of Aberdeen, 1962

	<u>Wash. State</u>	<u>Total Grays Harbor</u>	<u>Aberdeen</u>	<u>Hogquiam</u>	<u>Rest of County</u>
Total individual income					
from all sources (100%)	\$105 100%	\$40 100%	\$21 100%	\$44 100%	
Income from wages & salaries (70%)	\$ 70 67%	\$26 65%	\$15 71%	\$29 66%	
Income from all other sources* (30%)	\$ 35 33%	\$14 35%	\$ 6 29%	\$15 34%	
* Income minus losses					

TABLE 84 BUYING POWER: INCOME OF FAMILIES IN GRAYS HARBOR COUNTY IN 1959, SHOWING RANGE OF INCOME, BY PLACE OF RESIDENCE

Source: 1960 Census of Population 49C, Tables 76, 86, 93; Bureau of the Census, Statistical Profile of Aberdeen, Wash., SP-7, March 1962

<u>INCOME OF FAMILIES</u>	<u>TOTAL GRAYS HARBOR</u>	<u>ABERDEEN</u>	<u>HOQUIAM</u>	<u>FARM FAMI- LIES</u>	<u>REST OF COUNTY</u>
TOTAL NUMBER OF FAMILIES*	14,186	4,915	2,861	700	5,710
<u>Family income:</u>					
Under \$1,000	440	174	59	30	177
\$1,000 to \$1,999	1,008	330	150	83	435
\$2,000 to \$2,999	990	332	196	81	381
\$3,000 to \$3,999	973	261	197	51	464
\$4,000 to \$4,999	1,984	638	378	80	888
\$5,000 to \$5,999	2,196	737	520	89	850
\$6,000 to \$6,999	1,773	576	337	84	776
\$7,000 to \$7,999	1,234	417	288	59	470
\$8,000 to \$8,999	925	301	244	20	360
\$9,000 to \$9,999	685	230	153	25	277
\$10,000 to \$14,999	1,360	591	248	(	(
\$15,000 to \$24,999	475	277	58	(98	(622
\$25,000 and over	143	51	33	(	(
<u>Median income:</u>					
Families*	\$5,773	\$5,980	\$5,866	\$5,281	NA**
Unrelated individuals	1,681	1,695	1,698	NA	NA
Families & unrelated individuals	5,055	5,043	5,210	4,725	NA
Families consisting of husband, wife, & two children under 18 (husband the only earner):					
Number of such families	1,829	548	NA	NA	NA
Median income of such "	\$6,083	\$6,229	NA	NA	NA
Public assistance recipients	2,869				

* Census definition of a family: "A group of two or more persons living in the same household who are related to each other by blood, marriage or adoption." This excludes persons who have a family but do not live under the same roof with the other members of it; also persons who live with a family to which they are not related. These latter two categories are included by the Census along with people living alone as "Unrelated Individuals."

**NA = Not Available.

TABLE 85 BUYING POWER: INCOME OF PERSONS IN GRAYS HARBOR COUNTY, 1959, SHOWING RANGE OF INCOME BY SEX & PLACE OF RESIDENCE
Source: 1960 Census of Population, 49C, Tables 76, 86

	<u>TOTAL GRAYS HARBOR COUNTY</u>	<u>ABERDEEN</u>	<u>HOQUIAM</u>	<u>REST OF COUNTY</u>
<u>MALE - Total number, aged 14 & over, receiving income</u>	18,414	6,445	3,641	8,328
\$1 to \$499 or less	1,067	336	181	550
\$500 to \$999	1,283	441	217	1,507
\$1,000 to \$1,499	1,528	553	252	723
\$1,500 to \$1,999	804	283	161	360
\$2,000 to \$2,499	742	227	152	363
\$2,500 to \$2,999	600	170	122	308
\$3,000 to \$3,499	696	194	151	351
\$3,500 to \$3,999	849	265	148	436
\$4,000 to \$4,499	1,542	463	308	771
\$4,500 to \$4,999	1,647	596	382	669
\$5,000 to \$5,999	2,951	1,013	696	1,242
\$6,000 to \$6,999	1,848	706	356	786
\$7,000 to \$9,999	1,752	645	341	766
\$10,000 and over	1,095	553	174	368
<u>Median income, males</u>	\$4,529	\$4,744	\$4,668	NA
<u>FEMALE - Total number, aged 14 and over, receiving income</u>	10,222	3,767	2,209	4,246
\$1 to \$499 or less	2,362	683	535	1,144
\$500 to \$999	2,233	819	477	937
\$1,000 to \$1,499	1,543	577	294	672
\$1,500 to \$1,999	822	345	155	322
\$2,000 to \$2,499	708	329	133	246
\$2,500 to \$2,999	434	163	99	172
\$3,000 to \$3,499	572	188	158	226
\$3,500 to \$3,999	394	161	109	124
\$4,000 to \$4,499	360	147	95	118
\$4,500 to \$4,999	243	87	60	96
\$5,000 to \$5,999	277	114	52	111
\$6,000 to \$6,999	72	41	16	15
\$7,000 to \$9,999	144	84	21	39
\$10,000 and over	58	29	5	24
<u>Median income, females</u>	\$1,167	\$1,331	\$1,157	NA

TABLE 86 BUYING POWER: INCOME AND RETAIL SALES, BY PLACE OF RESIDENCE IN GRAYS HARBOR COUNTY, 1960,

Source: Sales Management Magazine, May 10, 1961, pp 318-20, 582-586

	<u>TOTAL GRAYS HARBOR COUNTY</u>	<u>ABERDEEN</u>	<u>HOQUIAM</u>	<u>REST OF COUNTY</u>
Population (000)	54.4	18.6	10.7	25.1
% of USA Population	.0300	.0103	.0059	.0138
Households (000)	18.4	6.4	3.5	8.5
"Consumer Spending Units"(000)	19.5	7.2	3.9	8.4
<u>Effective Buying Income 1960</u>				
Total Net Dollars (\$000)	109,824	41,757	22,861	45,206
% of USA Income	.0306	.0117	.0064	.0125
Income per capita (\$)	2,019	2,245	2,137	-
Income per Household	5,969	6,525	6,532	-
Income per "Consumer Spending Unit"	5,632	5,800	5,862	-
Cash Income per household	5,545	5,899	5,933	-
<u>Retail Sales Estimates 1960</u>				
Total Retail Sales (\$000)	73,608	43,578	10,510	19,520
% of USA Retail Sales	.0335	.0198	.0048	.0089
Retail Sales per household \$	4,000			

TABLE 87 BUYING POWER: EARNINGS IN 1959 (FROM WAGES, SALARY, COMMISSIONS, BONUSES) BY OCCUPATION AND BY PLACE OF RESIDENCE IN GRAYS HARBOR COUNTY (MEDIAN EARNINGS, FOR ALL INDIVIDUALS 14 AND OVER WHO HAD EARNINGS)

Source: Bureau of the Census, Statistical Profile of Aberdeen, Wash., SP-7, March 1962

	<u>STATE</u>	<u>COUNTY</u>	<u>ABERDEEN</u>	<u>HOQUIAM</u>	<u>REST OF COUNTY</u>
<u>All men with earnings</u>	\$5,245	\$4,911	\$5,153	\$4,932	NA
Professional, managerial	\$6,782	\$6,206	\$6,548	\$6,561	NA
Craftsmen, foremen &c	\$5,657	\$5,530	\$5,518	\$5,345	NA
Operatives &c	\$5,024	\$4,856	\$5,015	\$4,812	NA
Laborers except farm	\$3,798	\$4,141	\$4,068	\$4,155	NA
<u>All women with earnings</u>	\$2,330	\$1,873	\$2,055	\$1,877	NA
Clerical &c	\$3,116	\$2,959	\$3,140	\$3,000	NA
Operatives &c	\$2,067	\$2,189	\$2,284	NA	NA

TABLE 88 WHOLESALE TRADE IN GRAYS HARBOR COUNTY -- ESTABLISHMENTS, SALES, PAYROLL, AND PERSONNEL, INCLUDING MERCHANT WHOLESALERS AND OTHER OPERATING TYPES OF WHOLESALER, BY PLACE OF LOCATION
Source: 1958 Census of Business (BC58-WA47) Table 102

	<u>TOTAL GRAYS HARBOR COUNTY</u>	<u>ABERDEEN</u>	<u>HOQUIAM</u>	<u>REST OF COUNTY</u>
<u>Total wholesale establishments</u>	78	43	15	20
Sales (\$000)	25,870	16,170	6,986	2,714
Payroll, entire year (\$000)	1,663	1,191	350	122
Payroll, workweek ended nearest November 15(\$)	35,066	25,395	7,159	2,512
Paid employees, workweek ended nearest Nov. 15	388	254	103	31
Active proprietors of unincorporated businesses	44	24	8	12
<u>Merchant wholesalers</u>				
Establishments	54	36	11	7
Sales (\$000)	15,523	11,544	3,661	318
<u>Other operating types</u>				
Establishments	24	7	4	13
Sales (\$000)	10,347	4,626	3,325	2,396

See also Table 21 on page 51 and comments on page 52.
The wholesale establishments now operating in Grays Harbor County are mainly of the following types:

(1) Petroleum bulk plants. These are genuinely "wholesale" in the sense the layman uses the term; that is, they sell in large quantities to a retailer who keeps the stock on hand to sell it in smaller quantities to the consuming public.

(2) Wholesalers of items locally produced, such as fish, meat, lumber. Most of these differ from ordinary wholesaling in that they do not only distribute, they also process part or all of their stock (fish wholesalers filet, package, sometimes smoke the fish; meat wholesalers age and cut the meat; several of the lumber wholesalers are connected with mills).

(3) Specialized companies that are wholesalers in the sense that they sell only "to the trade" for resale, but not in the sense of operating on a large scale. These include supply houses for parts used by various kinds of repairmen. Some of these sell both wholesale and retail (paint) sometimes only wholesale (electronic parts). Several specialize in certain kinds of parts or equipments used by loggers and mills.

TABLE 89 BANKING IN GRAYS HARBOR COUNTY

Source: Bureau of the Census, Statistical Profile of Aberdeen, Washington, SP-7, March 1962; Washington Appraisal Service, Business Area Study for Aberdeen Washington, December 1960

	<u>ABERDEEN</u>	<u>TOTAL COUNTY</u>
Number of banks	2	7
1945 deposits & savings (\$000)	24,537	
1949 " "	30,113	
1954 " "	42,078	
1959 " "	52,803	
1960 time deposits (\$000)		20,551
" demand deposits (\$000)		24,503
" total deposits (\$000)		<u>45,054</u>

TABLE 90 RETAIL SALES ESTIMATES IN GRAYS HARBOR COUNTY 1960

Source: Sales Management Magazine May 10 1961 page 582

<u>KIND OF STORE</u>	<u>TOTAL GRAYS HARBOR \$000</u>	<u>ABERDEEN \$000</u>	<u>HOQUIAM \$000</u>	<u>REST OF COUNTY \$000</u>
TOTAL SALES	73,608	43,578	10,510	19,520
Food	21,926	12,912	3,623	5,391
Eating & Drinking Places	5,851	2,897	1,097	1,857
General merchandise	6,417	4,882	664	5,546
Apparel	3,496	2,815	568	113
Furniture & Household appl.	3,107	2,352	505	250
Automotive	10,958	7,746	150	3,062
Gas stations	5,608	2,526	1,250	1,832
Lumber-Bldg.mat.-hardware	5,413	1,834	456	3,123
Drugs	2,492	1,397	526	569

TABLE 91 RETAIL TRADE ESTABLISHMENTS IN GRAYS HARBOR COUNTY
BY KIND OF BUSINESS, 1958

Source: 1958 Census of Business, (BC58 RA47) Table 104

<u>Kind</u>	<u>Number</u>	<u>Sales</u> (\$000)	<u>Payroll</u> Entire Year (\$000)	<u>Paid</u> Employees Week near- est 11/15	<u>Active</u> Proprietors of Unincor- porated Business
TOTAL RETAIL TRADE	674	67,072	6,780	2,156	723
<u>Lumber, building materials, hardware & farm equipment group</u>					
Total	36	4,879	585	129	33
Lumber & bldg materials	9	1,865	205	45	6
Heating, plumbing, paint, electrical	6	598	141	27	6
Hardware stores	13	1,233	141	41	11
Farm equipment dealers	8	1,183	98	16	10
<u>General merchandise group</u>					
Total	31	5,484	705	252	29
Genl merch. exc. variety	25	4,364	507	156	25
Limited price variety	6	1,120	198	96	4
<u>Food stores</u>					
Total	126	20,292	1,156	396	138
Grocery & delicatessens	108	19,013	1,004	324	121
Meat & fish markets	5	769	46	15	6
Fruit & vegetable mkt	-				
Candy, nut, confectionery	3		5	4	
Other food stores	10		101	53	
<u>Automotive dealers</u>					
Total	28	9,265	1,227	289	23
<u>Gasoline service stations</u>					
Total	80	4,995	290	128	98

Table 91 continued
Retail Trade Establishments by Kind of Business, 1958

Kind	Number	Sales	Payroll	Employees	Active Proprietors
<u>Apparel & accessory stores</u>					
Total	29	3,243	456	143	26
Men's & boys'	7	684	86	21	5
Women's	12	1,786	285	100	11
Family clothing	1				
Shoe stores	8				
Other apparel	1				
<u>Furniture, home furnishings, equipment</u>					
Total	22	2,970	410	100	22
Furniture	10	1,993	296	63	11
Appliance, radio, TV, music	12	977	114	37	11
<u>Eating & drinking places</u>					
Total	172	5,342	1,000	429	207
Eating places	94	3,226	804	322	106
Drinking (alcoholic)	78	2,116	196	107	101
<u>Drug stores</u>					
Total	22	2,229	240	79	23
<u>Other retail stores</u>					
Total	96	8,095	711	211	92
<u>Nonstore retailers</u>					
Total	32	278			

TABLE 92 RETAIL SALES OUTLETS IN ABERDEEN AND HOQUIAM 1960
Source: Sales Management Magazine May 10 1961 page 581

<u>KIND OF STORE</u>	<u>ABERDEEN</u>	<u>HOQUIAM</u>
TOTAL NUMBER OF STORES	283	128
Food	43	29
Eating & drinking places	73	30
General merchandise	24	10
Apparel & accessories	19	8
Furniture-household-appliances	12	3
Automotive	20	1
Gas stations	34	14
Lumber-building materials-hardware	10	6
Drugs	8	6

TABLE 93 SELECTED SERVICES: TOURIST SERVICES IN GRAYS HARBOR COUNTY, 1958

Source: 1958 Census of Business (BC 58-SA 47) Table 104

	<u>HOTELS, MOTELS, TOURIST COURTS, CAMPS</u>	<u>MOVIE THEATERS</u>	<u>OTHER AMUSEMENT</u>
Number of establishments	105	7	43
Number with payroll	31	7	7
Receipts, all establishments \$000	1,649	304	575
" , estab. with payroll \$000	1,151	304	397
Payroll entire year \$000	360	82	104
Payroll, week nearest Nov. 15 \$	6,044	1,109	1,838
" for fulltime employees "	5,683	1,041	1,338
Total employees	150	42	45
" fulltime employees	133	35	18
Active proprietors of unincorporated businesses	109	3	43

The information in Table is obviously far from complete. For one thing, the Census of Business, taken in November, could not reach the seasonal tourist establishments. Below are some indicators concerning one type of seasonal tourist service.

TABLE 94 CHARTERBOAT SPORTSFISHING IN GRAYS HARBOR COUNTY
Source: Port of Grays Harbor, Statistical Information to Support Restoration of the Grays Harbor South Jetty, February 1962

	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>
Charter boats in fleet					138
Average value per boat					\$13,432
Charter boat trips made	21,713	9,844	10,016	18,566	20,202
Av. no. passengers per boat					7.9
Total passenger trips					79,798
"Kickerboat" trips	9,600	7,000	6,100	5,800	6,500
Total angler trips	111,600	85,300	87,000	90,500	95,000
Salmon caught by anglers*	157,000	83,000	101,000	75,000	103,000
Catch per angler trip	1.41	.97	1.17	.83	1.08

TOURISM IN GRAYS HARBOR COUNTY

Statistics compiled from data gathered in a recent survey of Motels and Trailer Parks in Grays Harbor County produced some interesting facts on Tourism in this area.

But first, let us review the recent figures issued by the State of Washington in late August, 1962, giving the record number of visitors counted at state-operated parks and combined recreational areas in the year 1961 to be 273,484,442. This was an attendance increase of 5.6 percent over the previous high in 1960. These visits included 21,000,000 overnight stops.

To review the great tourist potential of Grays Harbor County and to recount in part what is available here, the following figures are interesting and noteworthy. Of the total 100 miles of ocean beaches in the State of Washington, Grays Harbor is fortunate enough to have 50 miles, or half of the fine beaches of this State. These beaches will be within 2½ to 3 hours drive, over a new Freeway nearing completion, for the more than three and a half million people in the Seattle-Tacoma-Portland metropolitan areas.

Why do great numbers of people come to Grays Harbor County? The attractions are many and varied. The finest fishing, hunting, clam-digging, boating, picnic areas, beauty of scenery, and beach pleasures are all available in this compact Pacific Ocean coastline.

Additional figures and facts available reveal that boat mooring rentals have increased steadily in number, from a 1952 income of \$7,000 to \$55,000 in 1960, as shown by the records of the Port of Grays Harbor. In other fields of sports, "spot" checks indicate a steady rise. On one weekend of the deer season, hunters in a single area, the Humptulips Valley, were found to number 3,300. Many others come to participate in the hunting of approximately 3,000 pheasant and grouse taken each year in the Chehalis Valley. There are also around 600 elk and 3,000 deer taken in scattered areas of Grays Harbor County. Fishermen take an estimated 7,000 to 8,000 steelhead from the Chehalis, Wynooche, Satsop, and Humptulips Rivers during the winter season.

Motels and Trailer Courts

Wherever there are large numbers of people coming into an area, there are certain accommodations and services that are needed. Perhaps the most important of these are shelter and food. To ascertain what is available in Grays Harbor County to provide shelter for the tourist, a detailed field survey of the Motels and Trailer Courts has been made and the following data compiled:

1. Grays Harbor County can offer the tourist a variety of accommodations, both motels and trailer courts, with 163 separate locations. Of this number, 125 are motels only, 16 are combinations embracing cabins, motel, and trailer spaces, and 22 are strictly trailer spaces only. These 163 available tourist accommodations occupy a total of 2,289 acres of land, all in Grays Harbor County. Of this acreage, the 125 motels occupy 1,897 acres, and the combination operations 137 acres, while the trailer courts occupy 255 acres.

2. In the 125 motels and 16 motel-trailer combination operations, the combined number of single motel rooms and cabin units totals 1,495. Of these, 959 units have kitchens. There are 13 motels with no kitchen units. If the 1,495 units were filled to capacity, there is space for 5,556 indoor overnight guests; this is based on the number of double and single beds permanently in the rooms, and does not embrace the number of rollaway beds or cribs that could be added.

3. In the 22 trailer-only parks and the trailer portions of the 16 motel-trailer combinations, there are (as of September 1, 1962) spaces for 1,061 trailers with additional ground for more spaces available in most. Since the average trailer carries 3.5 people, this means that approximately 3,713 individuals could visit Grays Harbor County in a single night, sleeping in trailer courts alone.

4. Additional to the above, there are at the present time 815 established camping spaces (tents). A low estimate of 2 persons to a tent would mean 1,631 more people.

Summarizing the above, Grays Harbor County can accommodate 10,900 people in organized areas in a 24-hour period:

Motels and cabins can care for	5,556
Trailer courts can care for	3,713
Camping spaces can care for	1,631
	<u>10,900</u>

Condition of the Motels and Trailer Courts

Most of the modern motels and trailer courts have been established in the last five years. These motels are of the modern "joined room to room" type. Many of the cabins and motels, however, date back to the early days of tourism in Grays Harbor County.

Consequently, the extent and type of improvements, and their condition, were found in the survey to be extremely varied.

The field survey found 40 percent to be in "New" or "Good" condition, 40 percent "Fair," and 20% "Poor."

Those receiving the lower classifications could easily be reclassified if they were modernized. In fact, in some cases the classification could be raised if the units were merely repainted, and if the surrounding areas were cleaned up and landscaped to make them more attractive.

Rates Charged by the Motels and Trailer Courts

Motels. Rates to the tourist coming to Grays Harbor for motel and cabin accommodation fall into four general divisions. These are as follows:

61 places rent in the \$ 4 - \$ 8 bracket
49 places rent in the 8 - 12 bracket
17 places rent in the 12 - 16 bracket
and 14 places rent in the 16 - 30 bracket.
These figures are based on accommodations for 2 persons during the tourist season. Most operators drop these costs by \$2 or \$3 in the winter.

Trailer Spaces. Of the trailer courts and combination areas including trailers in their operation, our survey showed the following charges for trailer spaces:

16 places rent overnight space for \$1.50,
3 places rent overnight space for 1.75,
and 15 places rent overnight space for 2.00.

Seasonal Operation of Motels and Trailer Courts

Due to the drop of tourist business during winter, information on seasonal operation was gathered from owners:

6 operations stay open 4 months out of the year			
6	"	5	"
9	"	6	"
4	"	7	"
3	"	8	"
5	"	9	"
130	"	12	"

Almost all operators expressed a desire to stay open the full year if business warranted. A small percentage would voluntarily close, for a vacation trip of their own or other relaxation.

Employment in Motels and Trailer Courts

Employment figures were surprisingly low, the reason being that most operators do their own maintenance work. Of the total of 423 people working in motels and trailer courts, 358 made up owner-family groups, with the remaining 65 being employees. In nearly all operations, the employees were hired only for the peak of the season.

General Comment

It was encouraging to discover how much is available in our county in daily accommodations for tourists. At the peak of the season, we can lodge overnight a number of tourists equal to approximately 20% of the county's regular population. Tourism is indeed big business in Grays Harbor County.

The field survey covered only direct shelter facilities. The money spent here by that number of tourists, not only for lodging and food, but also for direct services such as boat rentals and fishing supplies and permits, and for indirect items such as gasoline, drug-store items, and many other essentials, will be found to be a sum so large as to be a major part of the county's economic base. Better hospitality, improved facilities, more universally gracious hospitality, are but a few of the attributes we can improve upon and dispense to visitors for the good of all our people in Grays Harbor.

GRAYS HARBOR PLANNING AREA

COMPREHENSIVE PLAN REPORT #3

for

**GRAYS HARBOR REGIONAL
PLANNING COMMISSION**

In Cooperation with the
**U. S. HOUSING and
HOME FINANCE AGENCY**

GRAYS HARBOR PLANNING AREA

COMPREHENSIVE PLAN

REPORT # 3

This Report was prepared for the Grays Harbor Regional Planning Commission, under the general supervision of the Washington State Department of Commerce and Economic Development, and was financed in part through an urban planning grant from the Housing and Home Finance Agency under the provisions of Section 701 of the Housing Act of 1954 as amended.

Prepared by

Vernon S. Cotter
Planning Consultant

February -- 1963

COMPOSITION OF THE GRAYS HARBOR REGIONAL PLANNING COMMISSION

<u>Entity</u>	<u>Representatives</u>
City of Aberdeen	John Gauntlett 1960-63 (chairman 1960-62) Dan Henry, 1960-61 W. M. Murphy, Jr. 1961- Herb Nelson 1962- (secretary 1963-) Robert Street 1960-
Town of Cosmopolis	Merle Atkinson, 1960-61 Harry Harmon, 1960-62 Herman Jorgenson, 1962- Charles Moulton, 1962-
City of Hequiam	Emil Englund, 1960-62 E. J. Murnen, Jr., 1963- Jack Norkool, 1962- W. H. Schuh, 1960-62 (vice-chairman 1960-)
Town of McCleary	Loleta Trimble, 1960-62 Barney Caldwell, 1962-
City of Montesano	Bob Larson, 1960-61 Lloyd Metke, 1960-
Town of Oakville	Mayor W. O. Simmons 1960-
Town of Westport	Mayor Bjarne Nilsen 1960-
County of Grays Harbor	George Jewett 1960- Lester O'Day 1960- Don Smith (Treasurer 1962-)
Port of Grays Harbor	E. W. Clocksin, 1963- Ray Heinke, 1961- (chairman 1963-) W. J. Murphy, Jr. 1960-61
Public Utility District #1	Dan McGillicuddy 1960- (chairman 1962) J. J. Stein 1960- (treasurer 1960-61, secretary 1961-62)
School Districts	Blanche Pennick, 1962-
Grays Harbor Chamber of Commerce	John Forbes 1960-61 (secretary 1960-61) Jack Bigelow 1962-
Elma Chamber of Commerce	Howard Ranum 1960-
Montesano Chamber of Commerce	Byron E. Scott 1960-

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FOREWORD

The Grays Harbor Regional Planning Commission (composed of representatives from seven cities, the County, the Public Utility District, the Port District, School Districts and civic groups) and its Consultant have been actively engaged for the last two years in the development of Comprehensive General Plans for each of the seven cities and parts of the unincorporated area of the County.

This joint program has been supported by contributions from the above agencies amounting to one-half (in 1961) to one-fourth (in 1962) of the project cost, while the other one-half (in 1961) to three-fourths (in 1962) was in the form of matching grants from the Federal Urban Planning Assistance Program (HHFA).

The purpose of Federal financial assistance for local planning is to offer ultimately a means to curtail and prevent creation of urban blight, traffic congestion, inadequate and hazardous school and park locations, mixed incompatible uses of land, lowered values with rising costs -- all of which can be traced to lack of orderly growth and to inadequate community facilities to meet the growing needs.

The plans submitted to the cities and the County, and reproduced in this report, provide the necessary basis to accomplish the desired end. These plans, plus the planning process, are of immeasurable value to our communities as they provide the understanding of the problems that will come with future growth, and a means to reduce tax costs.

In the last part of 1961, preliminary plans of Major Streets and Highways, Existing Land Use, and Proposed Land Use, were submitted to the participating cities and the County. This called for review and comment by the public and the local agencies. After many months of study and deliberation by the agencies, suggestions were made, the plans were adjusted, and have been presented to these same agencies for joint public hearings by the planning commissions and councils. The next step is up to the local agencies. They should hold their public hearings and make their recommendations to the legislative bodies of their respective communities for final adoption of the plans.

M a k i n g t h e P l a n s W o r k a b l e

Once the General Plans are adopted, they are to be used as a guide for new development of the respective cities and areas. The Plans are not an end in themselves. They will have meaning only to the extent that they are used to direct private and public development.

The Plans should be studied, and understood, so that they will have the support of the citizens and public officials. This can be accomplished by public hearings and meetings where the citizens are informed by the planning commission and city officials.

To achieve the desires of the community, the planning commission has two specialized tools to use in effectuating the Plans:

One, a Zoning Ordinance for the regulation of land use to fit the desired plan for long-range development. (Some of the cities in this area were zoned many years ago; but this was done without benefit of any land use inventory or of any master street plan to provide traffic circulation. This existing zoning does not meet the development needs of the communities in many cases, nor the requirements established under State Laws.)

Two, a Subdivision Ordinance which controls the division of land to fit the intended use based on the Master Land Use Plan. It sets minimum standards for lot size, streets, and the circulation of utilities and traffic, to fit the proposed use.

As future development takes place, certain capital improvements will become necessary. Without a carefully studied, well understood plan accepted by the community, it is difficult to program these improvements. Where public funds are concerned, making a guess can lead to many problems and make day-to-day operation more expensive to the taxpayer. With a plan, a schedule can be determined year by year, or a five-year program can be established; each project can be coordinated with the plan and funds scheduled in such manner that more projects can be completed, those needed first are completed first, and tax money is saved.

Objectives and Principles

To protect private rights while considering public health, safety and welfare.

To provide for efficient and economical ways to move people and things within the area by an adequate plan for streets and highways.

To guide future development in an orderly manner, by stages, according to a pattern, so that each community may have balanced land use.

To encourage a diversified economic base, and encourage desirable public and private investments in land and improvements.

To prevent and eliminate urban and rural blight and slums, and encourage development of good urban and rural character making the area attractive to people, commerce, and industry.

To create desire for a more pleasing appearance of rural and urban areas, and incorporate into their development basic principles of good design.

The identity of each area should be protected and preserved, either by natural or by controlled order.

All land uses should be located on land best suited to their needs, and in such a way as to be benefitted by adjacent land uses, not depreciated.

Existing and proposed land use should be compact, functional, and with ample area to meet needs; and should be protected from encroaching non-compatible uses.

Every community should be encouraged to develop into a self-supporting physical, social, and economic unit so far as practicable.

Proper relationships should be established between open areas, developed areas, building bulk, light and air space, in all future development programs of land use.

The development of civic, cultural, and other public and quasi-public buildings in harmonious and functional groupings should be encouraged.

L a n d U s e P r i n c i p l e s

The General Land Use Plan provides for an efficient and orderly pattern of living and working areas as dictated by the natural terrain of the locality. Through adoption and application of sound basic development principles, such as have been provided to the cities and the county through this planning program, future development can be helped and guided into an orderly and unhampered pattern of growth.

The agricultural base of the area should be preserved by locating urban growth on the least productive type of soil whenever practical, especially as good soil in this county is limited. Agricultural land should be protected from scattered urban encroachment.

In all residential areas there is need for a variety of population densities and building types. This is caused by diversity in family sizes, age groups, income levels, and individual preferences. Areas of high density should be located near the center of activities; areas of low density will be, by their nature, in the outer periphery of the community.

The central business district is and should continue to be the center, not only of commerce but of social, civic and related activities of the community. Neighborhood and residential community shopping facilities should be related in size and location to the area and population to be served.

Wholesale, storage, truck terminal and other distributive uses should be located adjacent to the main highways and railroads, and as near as possible to the commercial and industrial areas that they serve.

The size of industrial areas should be determined on the basis of present and future needs. Industrial areas must be located on land suitable for their use, and adjacent to transportation and utilities; and should be located within convenient commuting distance of the labor force.

C i r c u l a t i o n P r i n c i p l e s

To be effective, transportation facilities should be designed and located in proper relation to the demands made upon transportation by land use. They should be located where they will assist in stabilizing the long-range land use plan.

To be functional, the street and highway system should be developed in such a way as to provide separate but integrated facilities for the various types of traffic movements. Major streets should bound, not divide, land use areas where possible.

Major street and highway plans prepared for the cities and county to provide the necessary circulation should be adopted as part of the official plans of the agencies.

Off-street parking and loading facilities are a must in areas of high-density land use. Street parking and loading areas provided within the street right of way are far from being adequate for present-day use.

P u b l i c F a c i l i t i e s P r i n c i p l e s

Elementary schools should be located in the center of the neighborhood areas. Junior and senior high schools should be located adjacent to major thoroughfares.

The present trend is to design the neighborhood park as an integral part of the elementary school area. Residential community parks and recreational areas should be planned adjacent to or near the junior or senior high school.

Large-scale parks should be provided in locations which will best serve the region's recreational needs. Sufficient areas, adjacent if possible to rivers or lakes, should be acquired and kept available for present and future population.

Public and private land used for recreation should complement each other as there is a need for both kinds of facilities.

The expansion of urban areas increases demand for many public services -- streets, water, sewer and drainage facilities, and services from police, fire department, engineer, library, and city hall on many problems. Additions to these services should also be considered in the long-range planning of the communities.

Applying the Principles to Achieve the Objectives

It is proverbial that general principles do not decide particular cases -- the point being that a given principle may be true in itself but irrelevant to the factual situation of a given case. Hence in applying general principles it is first necessary to know the facts of the case. This is especially true in planning. Premature generalizations are always a mistake, but in planning they are an expensive mistake. Comparisons between communities are helpful but no two communities are quite alike and the differences are as important as the similarities; thus the plan that fits one community is a misfit for another.

Sound generalizations are those with a solid foundation on the facts. This is the kind of generalization that the present conclusion has attempt to formulate, as the conclusions from two years of field work. Such conclusions then become the assumptions on which the plan is based.

Many of the facts from which the following conclusions have been drawn are recorded in Report #1, "Population Trends in Grays Harbor County" (1961) and in Report #2, "Land Use Analysis and Economic Base Study" (1962). However, not all the facts can be put on paper. Nor can all of them be learned even from observation if that observation is carried on as an outsider. Hence one of the techniques pursued by the planning consultant preparing the present Regional Comprehensive Plan is to live in the area being studied. The generalizations arrived at about Grays Harbor are based on two full years of residence, with constant personal contact with hundreds of people in all parts of the area, involving two-way exchange of information and ideas. Thus it was possible to become well acquainted with that part of the factual situation of the community that consists of the attitudes, un verbalized assumptions, desires, and habits of its population.

The importance of this is that no plan is any use unless it is realistic. No plan is realistic unless it is based on the real potential of the area. Part of the real potential of the area is the people who must carry it out -- and a plan that will not be carried out is not a good plan.

General Conclusions

about the Grays Harbor Area

The following general conclusions have been formulated after two years of full-time work in the Grays Harbor Regional Planning Area (and thirty-four years of professional planning experience).

1. Present and Immediate Future

The Grays Harbor Regional Planning Area has proved to be a true region, although with some tendency to subdivide into eastern and western sub-regions. The eastern sub-region consists of the river valleys above tidewater. The western sub-region consists of the harbor rim. However they constitute a single region in that they have most of their problems in common.

— In particular, the cities and unincorporated area surrounding the harbor constitute a single economic and sociologic unit despite being politically and in many ways psychologically divided. Indeed, they are so interlocked that none of them is now a complete city -- that is, with a self-sufficient balance of residential, commercial, and industrial land use; and no workable plan can be made for any of them without studying the others.

The contiguous urban grouping of Hoquiam-Aberdeen-Junction City-Cosmopolis-Central Park taken together does constitute a complete city with balanced land use (with Aberdeen as its Central Business District; Hoquiam, Junction City, and Cosmopolis as its outlying industrial districts; and Central Park and the southward-facing hill slopes behind the cities as the outlying residential districts). A merger of these separate political entities would have obvious advantages. The only reason such a merger is not recommended as part of the Comprehensive Plan for the region is that this Plan is limited to the realistic and realizable, and two years of study have led to the conclusion that such a merger is not realizable in our generation.

Part of the reasons for the separatism are merely historical and in process of being outgrown, but part are matters of living economics. Any suggestion of a merger rouses so

many antagonistic forces as to threaten destruction of cooperation in every form. Cooperation is the urgent need. Therefore it is better to defer the whole subject of merger, and work instead on achieving cooperation in every way short of merger.

As indicated above, the Grays Harbor region under study has most of its problems in common. It also has a generally similar population; that is, in any part of the region the population is similar in such characteristics as age distribution, educational level, distribution of groups of foreign origin, and to large extent occupation and industry; and indeed the population is rather freely mobile within the county. For many purposes, Grays Harborites think of themselves by that name, as loosely one community.

That community is stagnant at present, with some signs of development but also signs of decline. The population has stayed nearly level for twenty years. All experience of other communities indicates that such a situation never continues the way it is; stagnation is not stability; a community in that situation is already on the way downhill.

This community is not smugly satisfied with the situation. That is a good sign.

But the community tends to be defeatist about the situation. That is a bad sign.

Under the general term defeatism are summed up a group of related attitudes often encountered. Over and over again, Grays Harbor residents say "We can't expect the population here to grow." -- "Our young people leave here as soon as they get out of school so who is there to plan for?" -- "The different towns and interest groups here are so jealous of one another and so 'nationalistic' that any program accepted by one will automatically be rejected by some other just because it was accepted by the first." -- "People here have never been able to stick together on anything for long, so how can you expect them to work together for the length of time involved in the planning process?" -- "People here will only take an interest in public affairs that touch them personally. Unless a problem hurts them, they don't care about solving it." All these attitudes may be summarized as "What's the use of trying?" *

* The extent of this articulate defeatism here, and at the same time the existence of a latent sentiment toward overcoming it, can be seen in the fact that there has been a wide demand for reprints of a letter printed in the Aberdeen World in January 1963 (in the Dear Jan column) signed "Just 16," beginning "Don't you get rather tired of hearing every-one complain all the time?..I've been told to always expect the worse in life and make the best of it when it gets here. WHY?" The demand for reprints suggests that many Grays Harbor people agree with "Just 16."

Because of these attitudes, it is a realistic necessity for any general plan proposed for the Grays Harbor community to be not only aimed at objectives on which general community feeling is able to unite as desirable -- but also to be a plan that in its early stages starts out with very simple, very specific, very short-range steps to be taken. Through taking these steps and having the experience of success in them, community leaders will gain confidence in the possibility of taking other steps -- as well as gaining skill, experience, and deeper understanding of the planning process.

Hence the emphasis, in the detail sections of this Plan, on such small and immediate steps as the subdivision ordinance, land-use zoning, review of street systems with a view to closing unneeded streets, and setting improvements standards. As part of a long-range plan these may appear to resemble the proverbial lady who said she went from Boston to Los Angeles "by way of South Boston." But in reality they have great importance. They are the entrances by which inexperienced community leaders -- and all the community leaders here are inexperienced in planning, since planning is new here -- can enter the planning process, not as listeners or even as talkers but as problem-solvers. And that is of great importance. A community new to planning, even if it whole-heartedly understands and accepts a long-range plan, necessarily looks at it and says "Where do we begin? How do we take hold?" This is where; this is how.

THERE ARE TWO PARTS TO ANY PLAN.

ONE IS THE PLAN ITSELF.

THE OTHER IS THE HANDLE TO PICK IT UP BY.

Hence also the emphasis on special planning studies that need to be undertaken in the near future. These give opportunity for bringing into the planning process the people who can at present be interested in only one locality or one special subject. As they participate in one problem, and as its implications and relationships are found to extend out, their horizon widens.

There is furthermore a two-way value in this participation in special studies by people having local knowledge or specialist knowledge. Not only do they learn, they also contribute. This was well exemplified in the progress of the Freeway Studies made in 1961-62 under this project.

2. Long-Range Future Potential of the Area

The General Comprehensive Plan for the Grays Harbor Regional Planning Area is based on the following general conclusions as to the kind of community this can realistically be expected to become by 1980, and the trends it may be taking at that time.

a. General nature of the community

The general type of community will not be much changed. This will be true partly because of the objective realities of the Grays Harbor natural-resource situation, and partly because of the subjective realities. Grays Harbor has always been and still is dominated by the forest industry. The subjective reality is that the community is not in revolt against that fact or its consequences. (There are individual complaints against individual companies but that is a different thing.) The community does not want a plan to transform it from a forest-industry manufacturing area into something else, but wants a plan that if possible would make it the best, proudest, and pleasantest kind of forest-industry manufacturing area.

The difference in sub-regional orientation that already somewhat divides the eastern part of the area from the western will continue, and may become more marked, because of two objective facts. One is that the eastern part will be more affected by shortened travel time to Seattle-Tacoma. The other is that development of agriculture -- already mainly concentrated in the eastern valleys -- will continue to be a major factor there, whereas this will necessarily continue to be a minority activity in the harbor area. This divergence, being along functional lines and not involving any necessary conflict of interests, will be a healthy one, a natural diversification. The boundary of the subregions will be quite close to Montesano, the county seat.

The present "functional specialization" of the towns will to a large extent remain, because it is to a large extent based on objective facts. As an example, Westport will necessarily continue to be a fishing and resort town, and will not become a heavy-industry manufacturing town nor a commercial center, because of the compulsion of the objective facts that Westport has a beach, has a boat basin

close to the fishing banks, does not have railroad or big ship access, and is not located conveniently for shoppers from outside its immediate vicinity. As another example, Aberdeen will continue to be the commercial center because it is the center -- located at the intersection of the T formed by the population concentration at the head of the harbor, where residents of any part of the area must cross on their way anywhere. Hoquiam and Cosmopolis will continue to be heavy manufacturing towns; objectively because they are located where highway, railroad, and deep-water channel are close together, and have large level industrial sites to offer with cheap power and good quality industrial water; also because they have less commercial or tourist potential than their competing neighbors. These things will also continue to exist because each of the towns of the Grays Harbor urban complex is by now old enough to have formed its own character. (In this context, it is certainly true that "character is habitual mode of behavior.")

The only thing that could radically alter the characteristic pattern of the Harbor towns would be a large influx of population, such as might occur if a really large industry moved to the Harbor and produced the type of sudden overwhelming breakup of old community patterns seen in, for instance, the Benton-Richland area of Eastern Washington. There are no signs at present of such an event; but in our present period of a trend toward industrial decentralization, the possibility must not be ignored, particularly considering Grays Harbor's physical advantages in the way of industrial water and industrial sites. Hence the frequent repetition in this report and its predecessor of the comment "One large industry could change all this." As for Montesano, Elma, McCleary, and Oakville, their smaller size would make it easier for even a comparatively small industry to make any of them unrecognizable by 1980.

Influx of tourist population has a lesser effect on a community's character but does have some; and this is taken into account in the General Plan.

b. Industry

By 1980, forest products primary manufacturing will not have greatly increased. The limitation is raw material. This especially applies to manufacturing whose material is

Douglas-fir. Existing pulp mills will probably again expand, because their raw material (hemlock) is not in short supply, and because there are economies in enlarging an existing pulp mill rather than building another one from scratch. There may or may not be development of existing plants by adding converting facilities; this will be affected by market and transportation factors.

In general, forest-industry companies that own industrial sites on Grays Harbor, or have plants here already and own additional unused land, will show a tendency to cling to this ownership unused, from now till 1980 and possibly till 1990 or 2000. This is not merely dog-in-the-mangerism, but relates to the fact that some of these companies are the big industrial tree-farm operators, and are planning ahead fifty years to the time when the second-growth on their re-stocked tree farms will come into raw-material production, so that they are setting aside land now for use at that time. It is not impossible that, with a good active planning program in process, that some of these companies as a matter of public relations would cooperate in a beautification program for such land.

There will probably be increased diversification in manufacturing industry. Such increased diversification would be highly desirable because it would decrease the unhealthy dependence of the region on the boom-and-bust lumber and plywood market. But with so many cities aggressively competing for industries, Grays Harbor's obtaining any such industries will take a sustained campaign; and as before noted, such a sustained campaign has not been part of Grays Harbor's habitual mode of behavior till now. This is not said to discourage Grays Harbor -- but to challenge it. Grays Harbor has great natural advantages; it has something to sell. Its leaders, furthermore, have become aware that Grays Harbor has its eggs too much in one basket, and they desire diversification. To get it, they will have to take many of the steps touched on in this Comprehensive Plan and proposed for the immediate next stage in planning, such as Industrial Water planning -- not only the Wynooche Dam but coordination of that water with the Humptulips, and with other water sources both present and potential; and a coordinated industrial water distribution system to serve industrial sites on both sides of the harbor so that water will be available wherever an industry may pick a site. Industrial sites survey -- determining, with engineering assistance, just what sites we have where, and what kind of industry they would suit; and then obtaining follow-up to contact those industries and do the selling job.

Implementing of the Land Use Plan through zoning based on it; in order that an industry looking for a site can be assured of zoning protection for its initial and subsequent development.

If diversification is successfully achieved, one of its results will be a marked decline in the attitudes of defeatism previously mentioned. The reason for that is that the defeatism is quite largely an outgrowth of a boom-and-bust economic base. People are afraid to invest in the future when they have repeatedly had experience of having their expectations cut out from under them by market circumstances beyond their control. When the economic base is stabilized by broadening, that painful lesson will cease to be administered. Some people will not unlearn it; but the younger ones, and the active leaders, will.

Another effect of diversification, which may in fact precede diversification (and should do so) will be a rise in the standards of Grays Harbor people as to what they would like their community to look like. The increase in tourist influx will of course tend to raise the standards in parts of the area that must attract tourist dollars. The presence of a few modern industrial plants, with landscaped surroundings, will help raise the standard of expectation by showing what is possible; just as the presence of the Cosmopolis sewage-treatment plant (about which tourists often ask "What is that beautiful building with the landscaping around it?") has shown what is possible in types of public facility not usually associated with esthetic values. A factor already operating to raise standards is transportation improvement, because Grays Harbor residents making visits elsewhere see their own cities with new eyes on their return, realizing perhaps for the first time that a city approach does not necessarily have to be lined with unpainted, deteriorating buildings; that an industrial waterfront can be made into a view that is an asset to motels and restaurants; and that if shoestring lumbermills cannot afford to landscape the vacant shorefront adjacent to their rafting areas, perhaps service clubs could undertake as projects the turning of these from eyesores into eye-refreshment.

There may, and should, and perhaps will be diversification in the form of increased fish processing. This is dependent on increased fish. That in turn is dependent on a long-range, persistent, carefully planned and coordinated program, involving all Grays Harbor and not Grays Harbor alone. The first parts of the program have already been

planned by the State Department of Fisheries and consist of small steps, in the way of stream clearance at specified logjams on specified streams, and construction of small fishways at other specified locations. A long journey begins with one step; and that is the first step toward rebuilding Grays Harbor's fisheries resource into the goldmine that it could become. The challenge to Grays Harbor that this presents is especially great because the fishing industry is a minority interest. However, it would serve the sportsman as well as the commercial fishing industry; and since part of the habitual character of all Grays Harbor is a love of outdoor recreation, especially fishing, the challenge may be met. At any rate this objective has in its favor that it does form part of the atmosphere of community desire.

A type of diversification that may be possible would be in the direction of component assembly for the big industries developing in the Puget Sound metropolitan area. These assembly plants must be in quick transportation reach of their suppliers and their market, and the Freeway will bring Grays Harbor within the possible range for their location. Since they are clean quiet industries, competition for them is heavy and Grays Harbor would have to make an effort.

Diversification is not likely to be extremely wide. There are many industries that will never come here. Grays Harbor will continue to be resources-based, and the major resources will continue to be forest, fish, the beaches (tourism) and good water.

c. Population

Grays Harbor population can be expected to increase very slowly for a time, then faster. The increase will follow industry. Hence a more rapid increase must be expected after the tree-farm raw materials begin to mature. But within the planning period, though the population will be greater, the population density will not be greatly increased, at least as to permanent population; summer and weekend population will increase very greatly indeed, producing great density of transient population in the tourist locations.

Though a policy against "suburban sprawl" should be followed to the extent possible, the possibility of enforcing any control measures will be poor in Grays Harbor. There

are too many parts of the county where a man can dig his own well, install his own septic tank, and be within reach of an existing road and an existing power line. Furthermore the trend toward moving to hillsides with a view and to suburban locations with more exposure to "the great outdoors" is very strong here, involving powerful desires.

This does have one good side in the Grays Harbor community situation: Already, the chief dynamic force toward breaking down 'nationalism' in the Harbor area is the type of case where (to take a random but genuine example) a man works in Hoquiam, lives in Central Park, and sends his children to high school in Aberdeen.

d. Commerce

The pull toward metropolitan Puget Sound for shopping will be stronger than at present due to shortened travel time. On the other hand, increased resident and tourist population will make it possible for Grays Harbor to offer wider selection, and the pressure of the Puget Sound competition will force local stores to keep up to date at all times; so that the net effect should be that Grays Harbor retailing will keep at least its present relative position.

e. Agriculture

The past record of agriculture in the Grays Harbor planning area has shown a tendency downward in number employed and in acreage of cropland, though not in production. There are positive factors which are likely to reverse this trend. One is the growth of markets through the rapid increase of population in the Puget Sound and Portland metropolitan areas. A second is the existence in this county of approximately 30,000 acres of good land (grades II and III) for growing vegetables; these two factors combine to give excellent long-range potential for growth here of a type of intensive agriculture that combines well with the suburban-commuter type of nonfarm rural residence also seen developing in the Chehalis Valley. An intensive type of cattle raising (both beef and dairy) can also be expected to continue developing. The pattern of part-time farming seems to fit many local living habits and desires and will probably be a permanent part of the Grays Harbor way of life.

f. Tourism

This is potentially one of the great recreation areas of the country.

A survey carried on by the present consultant in 1962, confined to the single item of establishments furnishing tourists with lodging for the night, disclosed that there is overnight accommodation here for practically 11,000 persons per night. The county is so huge, and the motels and trailer courts are so scattered, that no one had had any idea that the extent of such facilities was so large.

A survey of other existing tourist and recreation facilities will have to be made in order to determine where future expansion will be needed, and what public facilities will have to be provided to serve tourists where. This should be done soon.

Another point which must be studied carefully in the near future is how the influx of tourists can be channeled so that in their enjoyment of the outdoors they will not increase fire hazard in the forests.

What is the General Plan?

A major portion of the subjects discussed or decided upon by a City Council or a County Commission are concerned with physical policy. The legislative body must decide the use of various properties; when and where to buy public facility sites; when and where to build or improve buildings, streets, and facilities for water, sewer, and drainage. Citizen planning commissions have been appointed to help in this job by advising on all issues affecting the physical development of the community. Through years of experience, it has been found that the job can be done properly only by means of the preparation, adoption, continuing review, and carrying out of a long-range comprehensive planning program.

Under Washington state law (RCW 35.63 and RCW 36.70) the section (320) titled Comprehensive Plan provides:
"Each Planning Commission shall prepare a comprehensive general plan for the orderly physical development of the area."

The general plan has three functions:

1. It enables the city or county, through the legislative body and planning commission, to consider alternatives and to determine a definite set of policies that will govern future development and a general design that expresses these policies.

2. It permits the legislative body and planning commission to review all construction projects and their relation to all present and future development.

3. It enables public agencies and private property owners to relate their projects to the plan or to request changes in the plan.

To accomplish the above, the general plan must be long-range, comprehensive, and general.

The term long-range might mean from 25 to 50 years into the future; for practical consideration, 25 years is a moderate time on public facilities projects.

The term comprehensive means that all physical elements, both public and private, are included. The reason that a

general plan must be comprehensive is that all physical elements, both public and private, are interrelated; and all planning problems too are interrelated and cannot be considered on a piecemeal basis.

The plan must be general; only approximate sizes and locations of various elements are provided. The plan should be plain and understandable so that it will have public support.

As conditions change, so do policies, and the general plan can become ineffective if it does not reflect the best knowledge and thinking of the legislative bodies. The general plan can be changed and should be kept up to date.

There should be no confusion between the general plan and the zoning ordinance. The latter is a law, governing the use of land and the location and maximum size of structures. The Zoning Map is based on the general plan but must reflect the present conditions; that is, the zoning plan is a short-time approach, while the general plan is the long-time approach to the future development.

A c k n o w l e d g m e n t s

The consultant takes this opportunity to thank the many people and agencies who have been cooperative in helping to prepare this report; and in particular to thank Mrs. Anne Cotton, Mrs. Mabel Cotter, Mr. Peterson and Mr. Thalacker, without whose help this project could not have been completed.

The form of the report results from the program as set up by the State Department of Commerce and Economic Development, which called for the factual data and land use analysis to constitute one report (which is the report numbered #2) and the recommendations based on the data to constitute a separate report (which is this report numbered #3).

The General Land Use Plan

The General Land Use Plan is shown on the following page, in map form, indicating graphically the five general types of land use in the Grays Harbor Regional Planning Area as a whole.

On the map, land use shown as "open land" includes all forest land (including cutover land that should be restocked) and open undeveloped land to remain as such. The latter includes some marshland needed to take care of river overflow at times of freshet for prevention of floods.

"Agricultural" includes both cropland and grazing land, mostly in the eastern part of the county with small pockets elsewhere. Note some tideland proposed to be diked and filled for farm land.

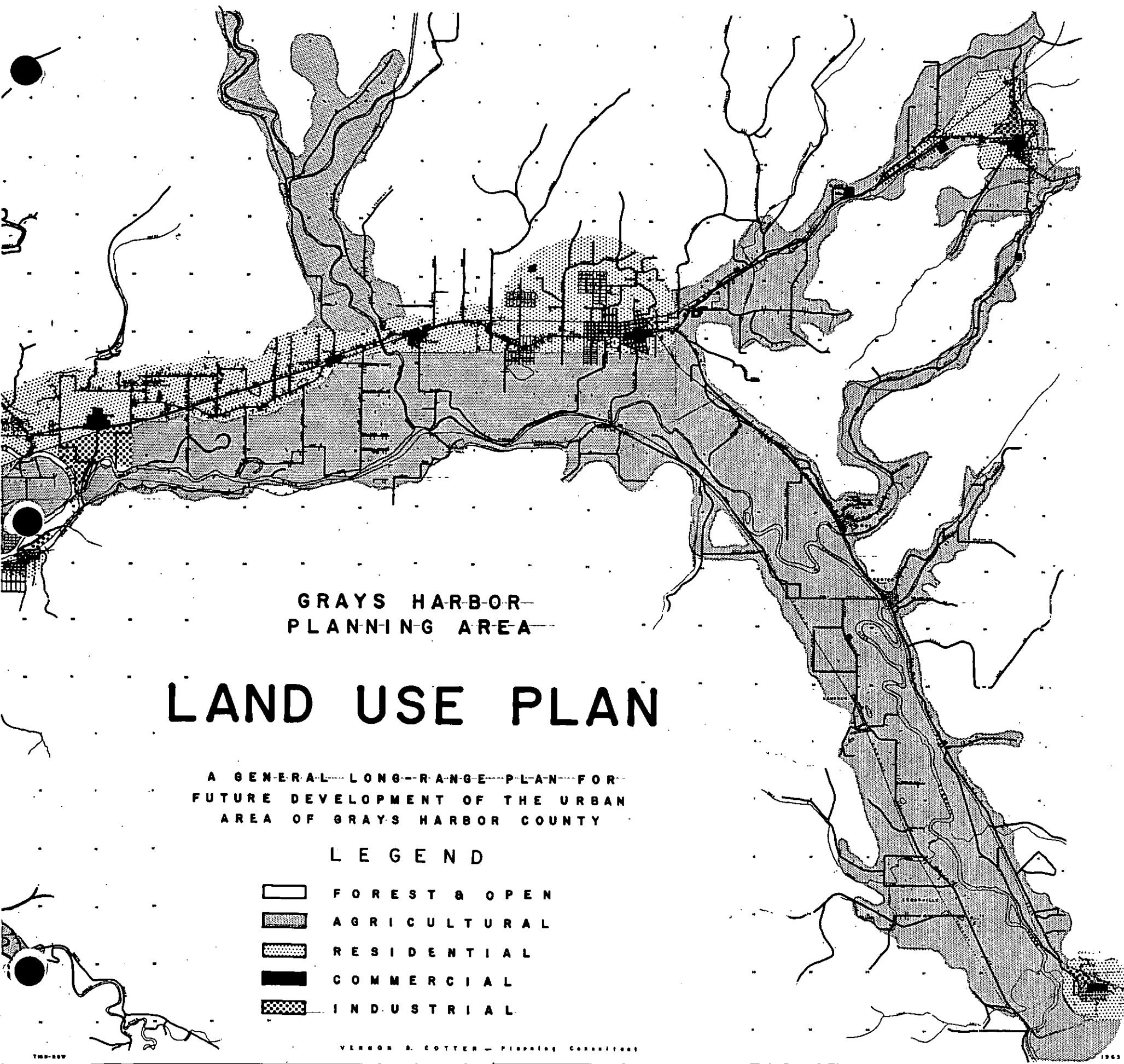
"Residential" proposes additional areas covering projected population growth up to possibly fifty years from now.

"Commercial" areas are based on present use, expanded to take care of double or treble the present population.

"Industrial" area proposed is quite extensive -- but the area shown is ideal for industrial expansion, served by good highways, railroads, and with deepwater frontage either now existing or easily provided. Note location of harbor tidelands proposed for diking and filling. Because the area has a reliable natural resource -- timber -- which is forecast to increase in volume, not in the immediate future but in the long-range future; and because the area has ample electric power and industrial water resource, the extensive areas shown for industrial land use under this Proposed Land Use Plan are regarded as realistic. A detailed industrial sites survey is recommended.

In some locations, industrial land use is shown directly adjacent to residential. This reflects present land use in parts of the lowlands settled in days before the automobile. Residential demand and value in those border areas has long been declining and except for elderly people the occupants are rather mobile. These border zones should receive detailed planning study.

(For park and other public land uses, see the Preliminary Public Facilities Plan, following page 58.)



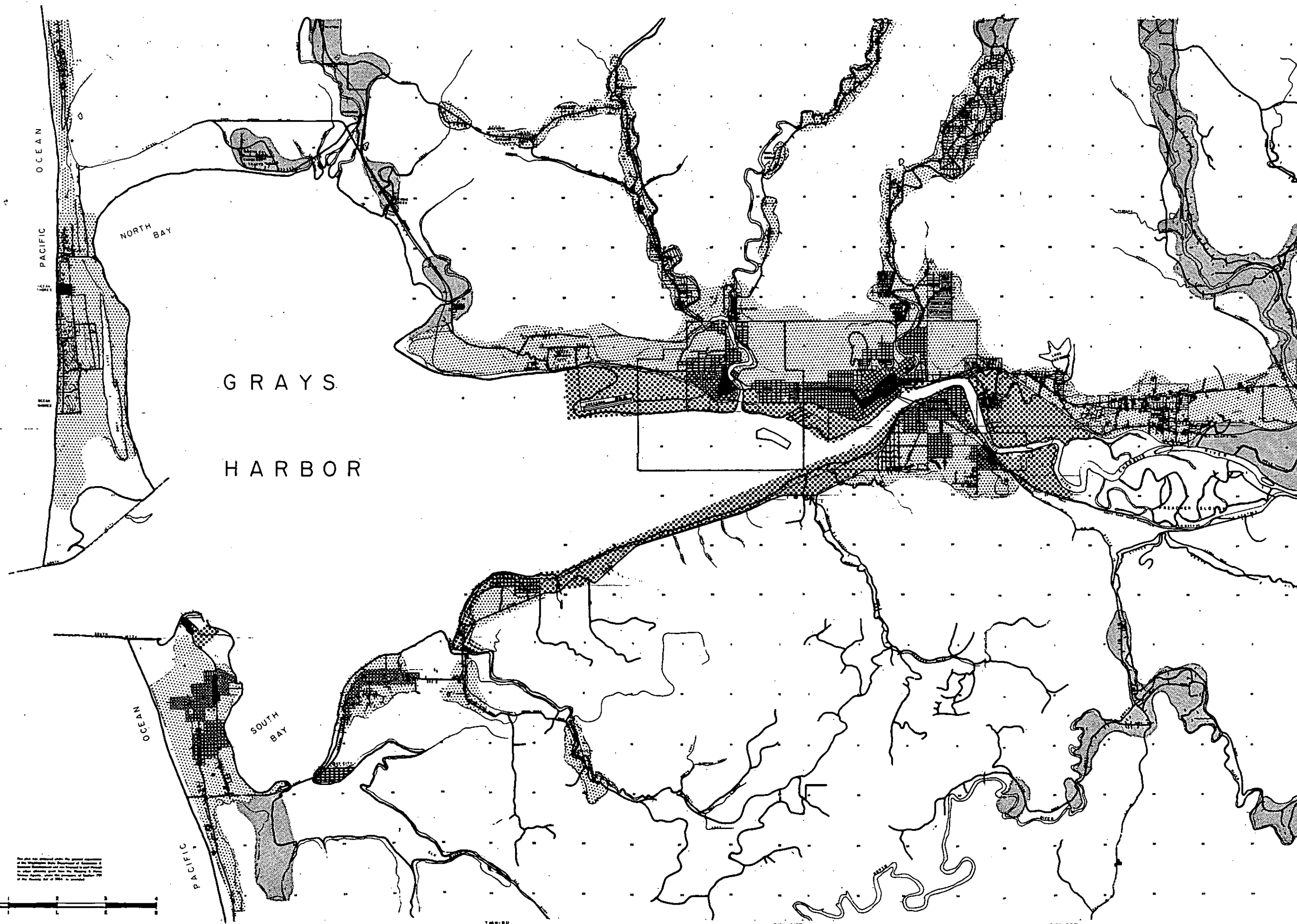
GRAYS HARBOR
PLANNING AREA

LAND USE PLAN

A GENERAL LONG-RANGE PLAN FOR
FUTURE DEVELOPMENT OF THE URBAN
AREA OF GRAYS HARBOR COUNTY

LEGEND

- FOREST & OPEN
- AGRICULTURAL
- RESIDENTIAL
- COMMERCIAL
- INDUSTRIAL



P l a n n i n g A r e a

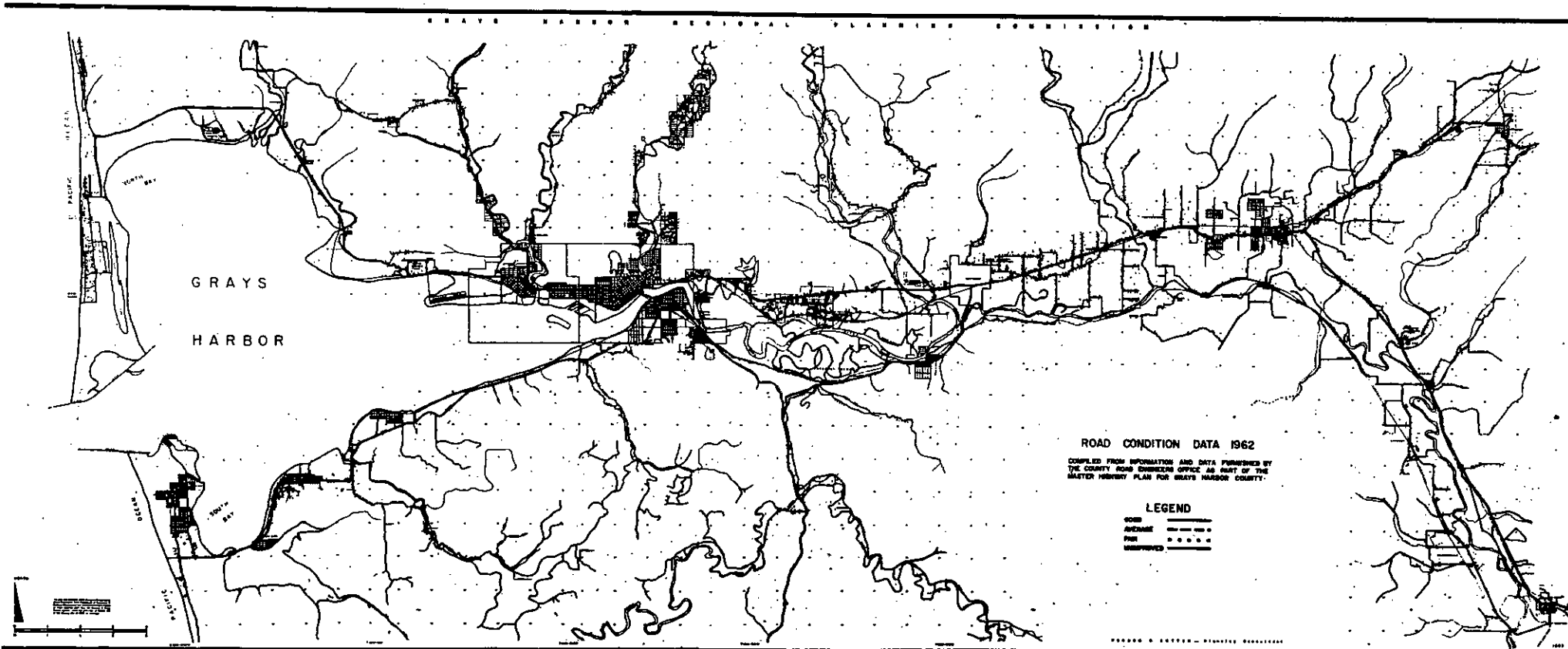
The Grays Harbor Regional Planning Area is a strip eight townships long east-west, and three townships wide north-south, in the southern part of Grays Harbor County. In this section, the term Planning Area is used as a convenient designation for the unincorporated county portion, excluding the cities. The airline distance east to west is 48 miles, with a road distance of about 60 miles, which gives some idea of the planning problems confronting the County Commissioners and County Planning Commission.

As the map shows, the northern and southern portions of the Planning Area are divided from each other by a water barrier. The westernmost 15 miles of this are unbridged. Water surface (bays and rivers) occupies some 89,243 acres of the gross Planning Area, or about 20 percent.

Forest, agricultural, and open land occupy some 347,419 acres within the Planning Area, or a little over three quarters of the total. This includes all the tree-covered land on each side of the Chehalis Valley, and all the farm land of the county except for possibly two or three percent.

Developed area amounts to 8,330.87 acres, divided according to use into 1,868.83 acres of residential (of which 450 acres is in farm residence, allowing 1/2 acre per farm, and the rest in more than a dozen urbanized districts of various sizes), 282.52 acres in commercial, 1495.92 in industrial (1,240 of this being railroad) and 514.53 in public uses. Subdivision of land will increase as this region is made more accessible by completion of the Freeway from east to west through Grays Harbor County; we have people interested in locating as permanent residents in the rural areas, and we have people interested in locating as vacation and weekend residents in the recreational parts of the county, particularly the beaches (Ocean Shores is an example of this trend). The County Planning Commission is well aware that its job has only started, and that it will need continuing professional help as the problems continue to multiply.

Streets. Street right-of-way in the Planning Area covers 4,170 acres, or 50 percent of the developed area. This includes county roads but not private logging and other service roads. The average for street right-of-way in incorporated urban locations in Washington is about 25 percent. By use of the Subdivision Ordinance, with review by the County Planning Commission, savings in street area can save a considerable amount of gas tax funds, with better roads at half the maintenance cost.



C e n t r a l P a r k (u n i n c o r p o r a t e d)

F u t u r e L a n d U s e P l a n

Central Park is a fast-developing residential area about half way between Montesano and Aberdeen. In the course of the Regional Planning project and as part of the planning process, the County has established a Zoning District which includes all of this area plus some agricultural land at the east end. The gross area of this district, which is called the Central Park Area, amounts to 6,033 acres. Of this, 4,402.19 acres are forest land, 871.45 acres are in agricultural (including cropland and pasture land), 68.86 acres are water, and the remaining 690.50 acres are in urban use.

The General Land Use Plan for Central Park is shown on the Planning Area Map for the county which is found in the preceding section of this report.

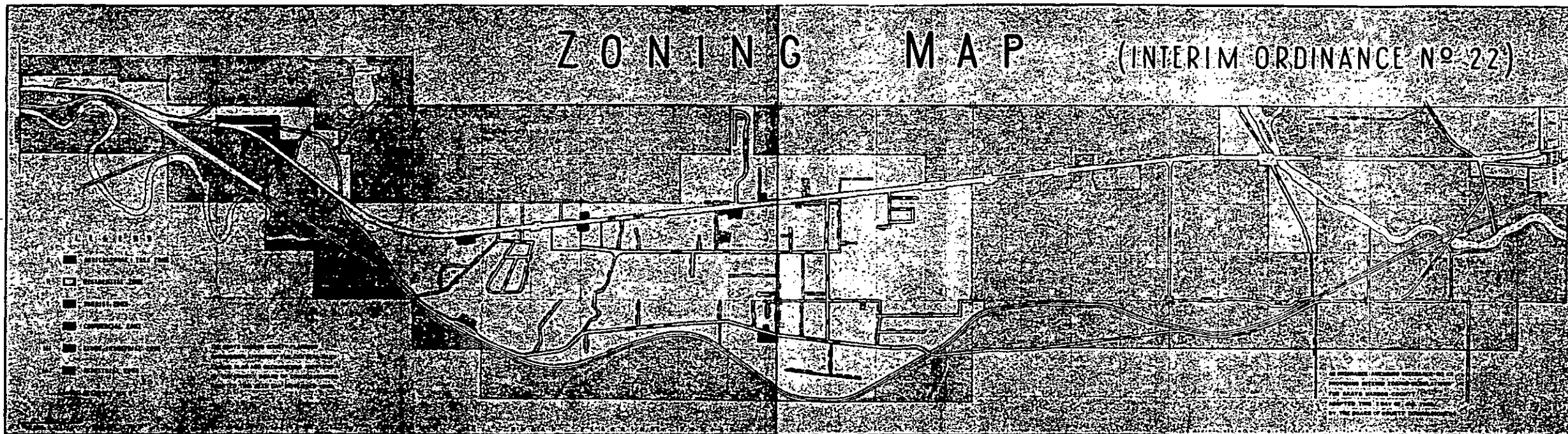
Agricultural Development

Within the Central Park district, the 871 acres in intensive agricultural development and pasture is not evenly distributed but most of this use is in the east end, especially in the river-bottom land of the Wynooche Valley. The soil there is a sandy loam, ideal for vegetable crops. This good bottom land should be reserved for future agricultural use, especially as Grays Harbor County does not have an overabundance of good soil, and this is suitable in both soil-type and location for truck farming.

Under the present Interim Zoning Ordinance of the county -- as under the average zoning ordinance -- there are no restrictions to prohibit the division of land into small lots for sale. Such division causes the first breakdown of an agricultural district, by increasing the population density of the land and bringing in non-compatible land uses. Therefore this problem should receive special study so that a solution can be found before subdivision starts in the area. By agreement of the land owners not to sell for subdivision into smaller parcels this could be controlled; but getting such agreement would be difficult, as it is a very restrictive requirement to put on one's land, and as farmers in general are very independent by nature this does not appeal to them.

ZONING MAP

(INTERIM ORDINANCE No 22)



Future Residential

The development of Central Park as a residential suburb of the harbor cities is moving very fast.

The first stage of this development is on the flat, or rather rolling, portion of the land. The present urban development of 690.50 acres is almost entirely on the flat area, there being less than a dozen dwellings located now in the hill area to the north. The Land Use Plan provides a possible addition of 759.50 acres for the first stage, making 1450 acres; an estimate of the total population of this area at the time of 100 percent development of the first stage would be around 20,300 persons. A possible second stage development moving into the hill area will, however, probably overlap with the first stage.

At this point, future development in Central Park could very easily go either of two ways: (1) the high-value residential area, with large lots on an economical but adequate street-pattern, with minimum restrictions to provide the necessary protection; or (2) the other way, which has already started in some spots, with no restrictions on buildings, with narrow lots, poor street design requiring excessive street maintenance -- all of which in the end produces future slum areas.

The County Planning Commission is aware of the present and future problems and are taking some steps, as part of the planning process, to make this area one of the nicer residential districts of the county.

Future Commercial

Present Commercial development in Central Park is quite scattered, and has not developed in any pattern to date -- unless highway ribbon development can be termed a pattern.

Commercial land use in Central Park shown on the map of the Land Use Plan merely records the distribution under the Interim Zoning Ordinance, which does not propose any new Commercial areas but does provide space for expansion of present facilities. Hence the spotty distribution; it reflects the logic of events. Because this is obviously unsatisfactory, it will be more apt to provoke the careful follow-up planning study that should be made than would an

arbitrary recommendation that might superficially look good. A soundly-based recommendation must wait until after the Freeway route west of Montesano is set. As soon as that is decided, at any rate to the extent of a corridor, studies should be made to determine the effect the Freeway will have on through and commuter traffic through Central Park, and these can be used to study the effect of the traffic shifts upon the commercial development and determine where future centers should be located to serve Central Park as new growth takes place.

Present commercial land use occupies 39.27 acres or 5.69 percent of the developed area. This is a little above the average for rural areas, and should suffice for commercial needs for some time.

Industrial Development

Present Industrial use amounts to 15.92 acres or 2.04 percent of the developed area. Of this, 3.34 acres are in light industrial and the remaining 12.58 acres in heavy industrial use. The two heavy industrial areas provided in the Zoning District Map, based on present land use, are located one in the east and the other in the west end of the district. The small area at the east end contains an auto wrecking yard, with a trucking terminal across the highway from it. The area at the west end, adjacent to the city of Aberdeen, has been used as a shingle mill and lumber storage yard for many years.

As with Commercial development, so also with Industrial development, the location of the proposed Freeway will have a bearing on future plans. As the Freeway becomes more clearly defined, so can the future industrial plans for the area become more precise; this will mainly involve land adjacent to the railroad.

Parks and Recreation

The present land used for park or playground purposes amounts to 2.53 acres, additional to 4.7 acres of school land of which they are using part as a playground. The local Lions Club has purchased a parcel of land to be developed for park and playground use, but this will possibly remain as private property. The largest open semi-public

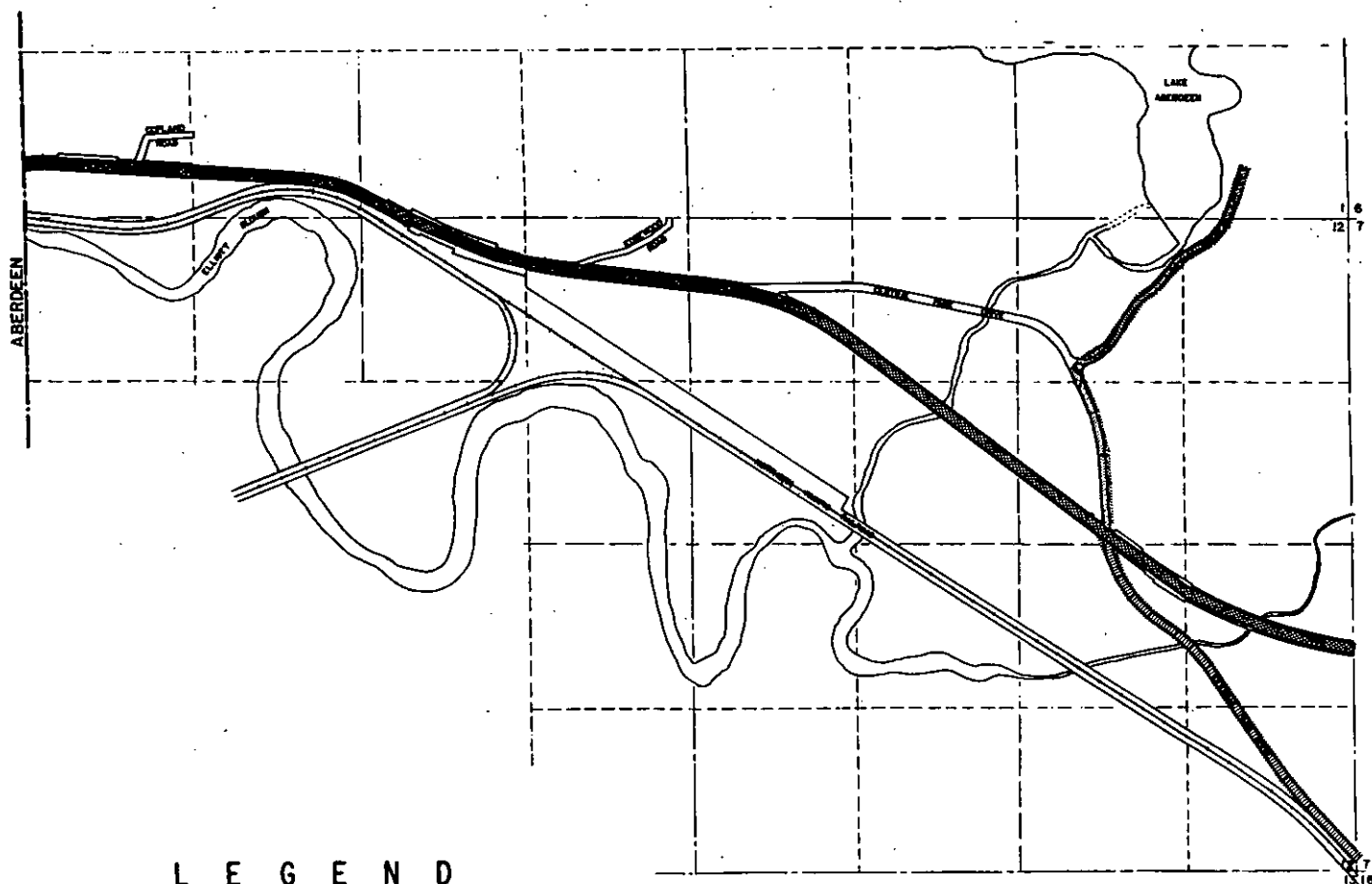
use in the area is the golf course near the west end. In long-range planning for the area, at least two parks should be provided, of not less than ten acres each (and this should be an absolute minimum). One of the suggested parks should be in the west half of Central Park. The other should be in the east, and should be in or near one of the small ravines which cut through the area.

Streets

Within the Central Park area, the present street and alley system occupies 296.41 acres or 42.93 percent of the developed area. This is a very high ratio of street area to usable land, considering that in the average city of this state the ratio is about 25 percent; so that there is half again as much street as needed, and 20% more annual maintenance cost from now on than needed. If the balance of the vacant land (5273 acres) is developed in this haphazard manner, the taxpayers will be paying for maintenance on about 1000 acres of street area over and above what is needed. There are better uses for 1000 acres of land in that area. There would be a protest if that much land were taken off the tax rolls to be maintained for park use, but that would actually be cheaper than taking it off the tax rolls for unneeded street use.

The Major Street Plan for Central Park proposes an adequate minimum circulation pattern of Major and Secondary streets. These would be the major traffic-carrying streets to serve present and future development, and are shown on the next three pages. Local streets required in addition to these could be guided by the standards established in the Subdivision Ordinance, and considerable savings could be made, not in reduced street width, but by better street design in the original layout of each subdivision, preventing duplication of right-of-way to serve the lots.

Present street layouts almost make it impossible to establish any through north-south or east-west streets to provide circulation. Hence Major and Secondary streets must be considered for future development. The present State Highway and the old Central Park Drive are the only through east-west streets now available. Karjala Road is shown as a Secondary to be extended eastward eventually to connect with Clemens Road. The north-south streets are Solki Road, Hill Road, Clemens, Wynooche, Devonshire and Craig, plus a proposed Secondary street about half a mile east of Hill Road, the exact location to be determined when this area is subdivided.

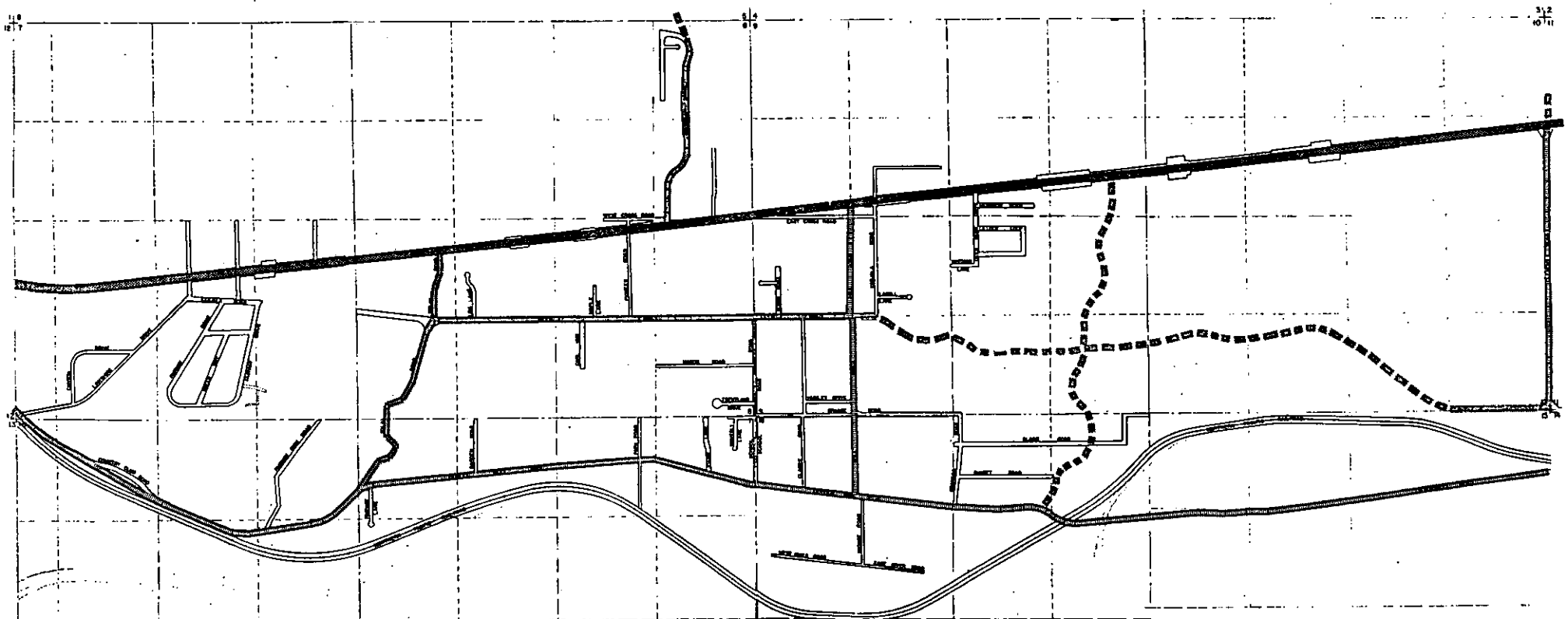


L E G E N D

	EXISTING R/W	PROPOSED R/W
FREEWAY		
STATE HIGHWAY		
MAJOR STREETS		
SECONDARY STREETS		



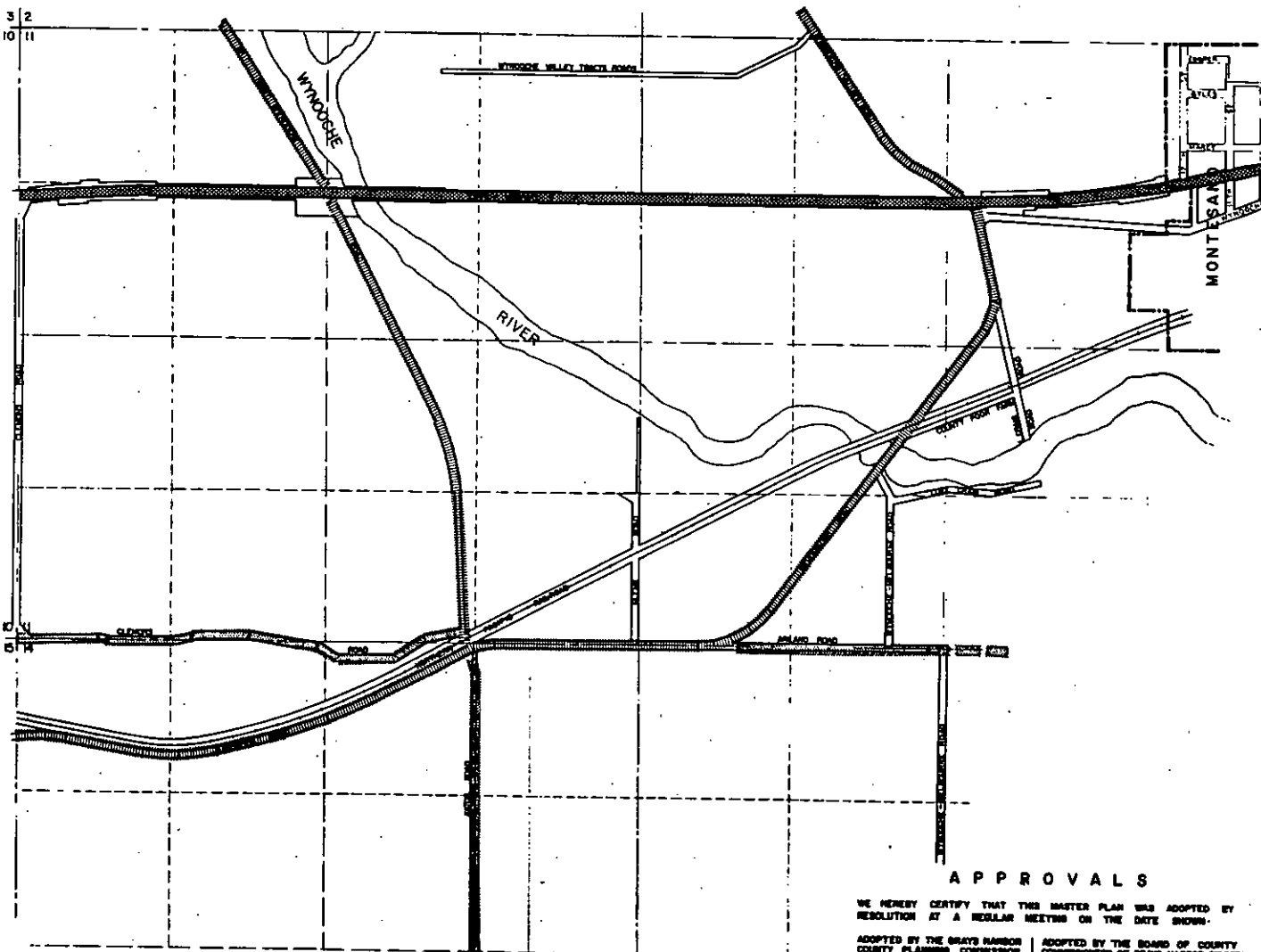
MAJOR STREET PLAN



701 - URBAN PLANNING PROJECT

CENTRAL PARK AREA

3 2
10 11



APPROVALS

WE HEREBY CERTIFY THAT THIS MASTER PLAN WAS ADOPTED BY
RESOLUTION AT A REGULAR MEETING ON THE DATE SHOWN:

ADOPTED BY THE GRAYS HARBOR
COUNTY PLANNING COMMISSION
ON THIS _____ DAY OF _____ 1962

CHAIRMAN

SECRETARY

ADOPTED BY THE BOARD OF COUNTY
COMMISSIONERS OF GRAYS HARBOR COUNTY
ON THIS _____ DAY OF _____ 1962

CHAIRMAN

SECRETARY

In discussing the Proposed Land Use Plan for Central Park, mention was made of further planning studies that should be made after the Freeway location is determined. A third planning study should be made for Central Park, and should be made before the Freeway location through that part of the county is settled. The Freeway may have some adverse effect on this area if detailed studies are not made soon, at least soon enough to help locate the Freeway and make the necessary arrangements for easy access to and from it and also for the means of crossing from one side to the other. With the many ravines that cross under the present highway, some provision might also be made to use one (or more than one) of these ravines to cross over or under, in order not to isolate either the north or south side from the other.

T o w n o f M c C l e a r y

F u t u r e L a n d U s e P l a n

McCleary at the present time is a one-industry town, and will continue as such until the town's people make persistent effort to induce other industry into the town. Processing or remanufacturing of the basic materials already produced by the Simpson Mill would be one means of providing additional payrolls for McCleary.

The 1960 population count was 1,115 persons; and with the 1980 estimated population being projected at 1,280, it will be some time before there is much change in the over-all picture of McCleary. The town and all its people will have to put on a real, active campaign of selling and promotion to attract new people and industry.

Future Residential

The Land Use Survey of the Town of McCleary shows a well concentrated residential growth around the Central Business District.

Future growth will take place in the vacant tracts to the south, with most of the development to be expected in areas where the public facilities are available. Some study should be given to the future annexation of the developed tracts along Larson Road.

It will be some time before extensive development can be expected to take place in the section south of the Freeway.

The Proposed Land Use Plan provides for 452.64 acres of future single-family residential land, and 37.74 acres of multiple residential, making a total of 490.38 acres, or 78.71 percent of the total area, in future residential use. This is above the average of residential area for towns of this size, but with future industrial growth, this ratio may be changed.

If the Master Plan is followed, when the town reaches 100% development the following total single-family residential development would be possible:

452.64 acres, times 4 lots per acre, times 3.5 persons per average family, would equal 6,337;

TOWN OF MC CLEARY

APPROVALS

WE HEREBY CERTIFY THAT THIS MASTER PLAN WAS ADOPTED BY RESOLUTION AT A REGULAR MEETING ON THE DATE SHOWN

ADOPTED BY THE TOWN OF
MC CLEARY PLANNING COMMISSION
ON THIS ____ DAY OF ____ 1962

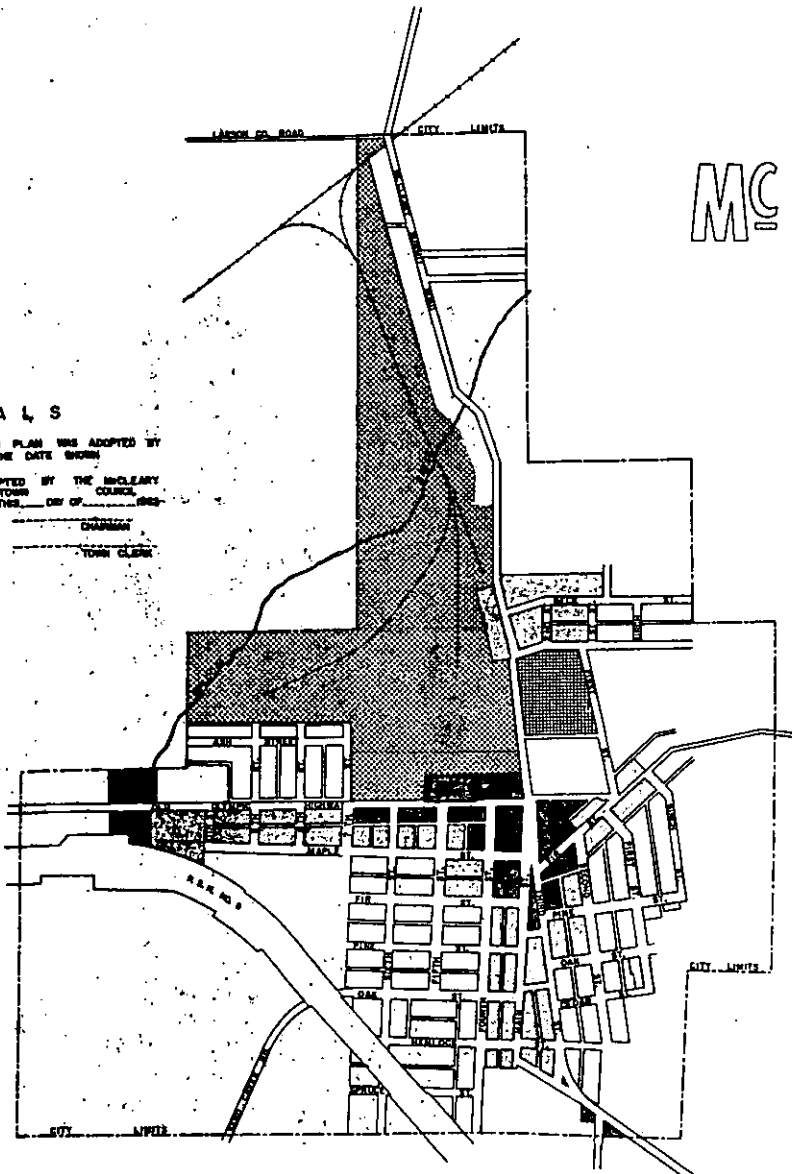
CHAIRMAN

SECRETARY

ADOPTED BY THE MC CLEARY
TOWN COUNCIL
ON THIS ____ DAY OF ____ 1962

CHAIRMAN

TOWN CLERK



LEGEND

- RESIDENTIAL (1 TO 12 PER ACRE)
- RESIDENTIAL (12 OR MORE PER ACRE)
- COMMERCIAL & PARKING
- LIGHT INDUSTRY
- HEAVY INDUSTRY

LAND USE PLAN

0 400 800 1200 1600
VERNON SCOTTER
Planning Consultant

GRAYS HARBOR REGIONAL PLANNING COMMISSION

If the Master Plan is followed, when the town reaches 100 percent development the following total residential development would be possible:

452.64 acres in single-family residential, times 4 lots per acre, times 3.5 persons per average family, would equal 6,337 persons;

37.74 acres in multiple-family residential, times 4 lots per acre, times 4 families per lot, times 3.5 persons per family, would equal 2,113 persons;

making a total of 8,450 as the ultimate residential population within the present city limits of the town, based on the Land Use Plan.

The present zoning ordinance has been helpful in keeping non-conforming uses out of the residential sections, but some such uses are creeping into the area now. Possibly a review of this problem now may eliminate future problems arising from the procedures followed under the old ordinance.

The present zoning plan should be reviewed and compared with the Proposed Land Use Plan. The differences should be noted, and steps taken to revise the zoning map so that it will be useful in guiding future growth, along with the ideas developed in the Master Land Use Plan, when that is approved by the Planning Commission and Town Council.

With the proposed new Subdivision Ordinance adopted, future subdivision of land for residential development under the proposed regulations can encourage better street design, longer blocks, less waste of valuable land, and a more efficient use of public funds in future street maintenance.

Future Commercial

McCleary's business does not have the traffic problems today that many cities are having. This can be avoided in the future too, if plans for new development are made and followed.

The proposed Land Use Plan for McCleary provides for 17.62 acres in commercial uses, or 2.83 percent of the total land area of the town.

The full use of the existing business blocks to develop a concentrated business center, with adequate public parking

facilities at a ratio of 4 to 1 or even 5 to 1, should be planned for now, so that acquisition and development can be programmed. (4 to 1: 4 parking spaces, of 250 square feet each, per 250 square feet of store space).

The plan also shows a small neighborhood commercial area along the old Olympic Highway to the west of the city center. This commercial development has already started, and it is therefore better to recognize it and provide for it so that it can be controlled and not spread all along the highway.

Future Industry

McCleary is fortunate in having an industry that had the foresight to acquire enough land so that its operation would have sufficient room for expansion in years to come.

The more the area is diversified in its industry, the less effect a fluctuation in lumber prices would have on the town. The promotion of new industry for McCleary is a major job for local interests. The type of industry that would use the basic materials produced in the area would be more likely to be successful.

Future industry should locate in the northern part of the town, where it would have access to the railroad and easy access to the highway.

The Proposed Land Use Plan suggests 106.66 acres for heavy industry and 8.34 acres for light industry, making a total of 115 acres or 18.46 percent for future industrial land use within the town.

Future Parks and Schools

The existing park of some six acres is ideally located in the center of town to serve all the people. The area devoted to park use amounts to 6.20 acres or about 2.74 percent of the developed area. This is a little below the national standard recommended for cities; but this park when fully developed will provide for all types of recreation that will serve the recreational need of the town. Full development of the park is essential so that more people can use the facilities. The development should follow a well-designed general plan or layout of all features needed. Some special

recreational features should be provided for the teenager who has very little to do out of school hours or after graduation.

Present school facilities occupy 4.13 acres or 1.82 percent of the developed area. School enrollment in 1962-63 amounted to 247 pupils, with 193 in the Kindergarten-through-6th-grade, and 54 in the 7th-8th-9th grades.

There has been a small drop in enrollment since the 1952-53 school year which was 290. The low of 242 was in 1957-58, gradually increasing this year with prospects of more for next year due to new development.

The school district staff now totals 19 faculty members, with 11 certified teachers. The school district operates only one school bus at this time.

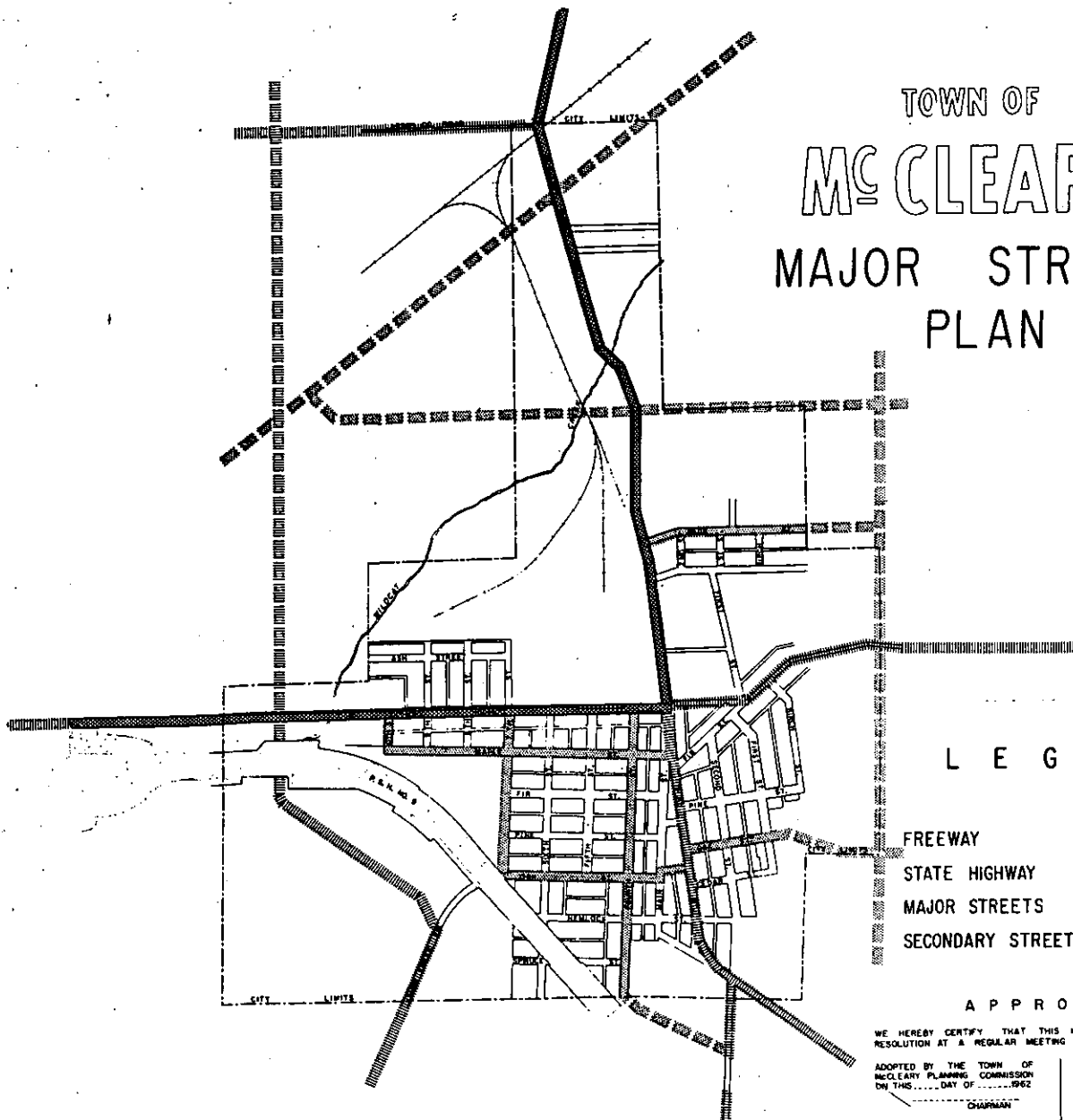
Streets

Existing street and alley right-of-way in the town occupies 82.20 acres or 36.39 per cent of the developed area.

Under the Proposed Land Use Plan, when the town area is fully developed, a saving in valuable land could be had if the Master Street Plan is adopted and followed, and the Subdivision Ordinance is adopted which would eliminate unnecessary street and alley area in new subdivisions. By following this procedure, street area in the portion of the town now undeveloped can be reduced to about 25 percent. Even then there will be an additional 98.48 acres in streets. This will make a total at that time of 180.68 acres or 29.00 percent of the total town area in streets. The reduction would amount to 7.59 percent reduction of the year-by-year maintenance costs to the taxpayers, costs which continue from now on. This is only one of many ways to use and follow the Master Plan of Land Use for long-range development and savings.

The development of the Master Street Plan was based on the Preliminary Street Plan and on the proposals submitted in the Six-Year Street Plan to the State Highway Department for the Gas Tax Funds. The adoption of this plan should proceed as fast as possible, and become a part of the Master Plan of the Town of McCleary.

TOWN OF MC CLEARY MAJOR STREET PLAN



L E G E N D

	EXISTING R/W	PROPOSED R/W
FREEWAY		
STATE HIGHWAY		
MAJOR STREETS		
SECONDARY STREETS		

A P P R O V A L S

WE HEREBY CERTIFY THAT THIS MASTER PLAN WAS ADOPTED BY RESOLUTION AT A REGULAR MEETING ON THE DATE SHOWN

ADOPTED BY THE TOWN OF MC CLEARY PLANNING COMMISSION ON THIS.....DAY OF.....1962	ADOPTED BY THE TOWN OF MC CLEARY TOWN COUNCIL ON THIS.....DAY OF.....1962
CHAPMAN	CHAPMAN
SECRETARY	TOWN CLERK

VINCENT S. LUTHER
PLANNING CONSULTANT

GRAY'S HARBOR REGIONAL PLANNING COMMISSION

Town of Oakville

Future Land Use Plan

Oakville's population has fluctuated many times over the past fifty years, between a high of 469 (in 1930) and the present low of 377 (in 1960). The flood of new population coming into the State of Washington will spread over the whole state, and Oakville will receive a share, with a 1980 estimated population projected at 450.

The first impression a newcomer gets of a town is a lasting one. If this impression is good he may return or at least stop; where if it is bad he will not stop or return.

The citizens of Oakville can do much to make Oakville inviting to the public. By cleaning up and painting the old buildings along the highway, and removing a few, people traveling through the town would receive a better impression.

By planning ahead for future growth, Oakville can realize many important social and economic benefits.

Future Residential Development

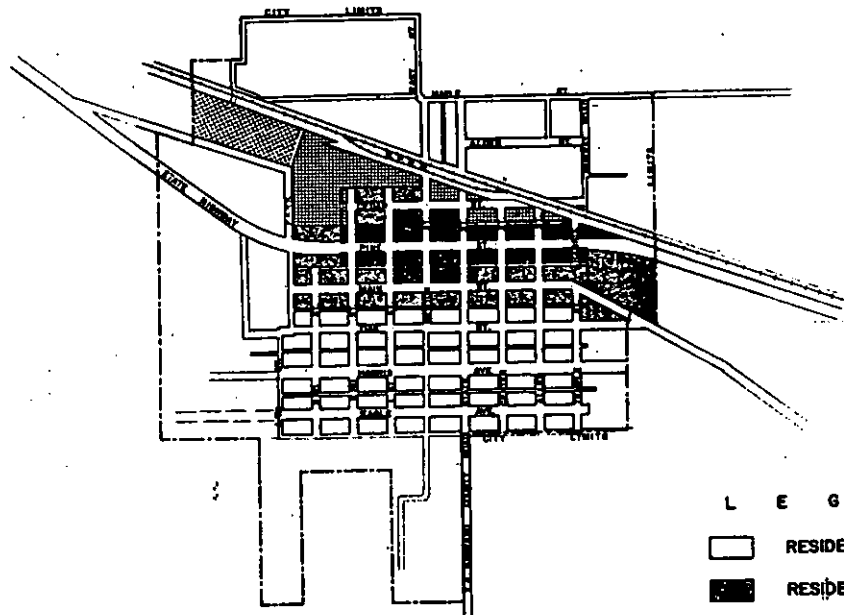
The Land Use survey shows that there are numerous vacant lots and even large tracts of vacant land within the town. Present development is in the medium-to-low value bracket, with a few higher-value homes scattered through the residential section.

The area to the north of the railroad tracks could develop into a high-value area, as a couple of high-value homes have just been built there, to take advantage of the fine view of the Chehalis Valley.

The proposed Land Use Plan for the town shows two residential districts, one to the north and one to the south of the tracks, totaling 154.26 acres or 55.66 percent of the town area. The proposed plan encourages development as close to the center of town as possible. This will eliminate costly extension of existing public facilities that now serve the town.

Oakville has no restrictions now on building density. The proposed plan provides for 19.41 acres or 7.00 percent as multiple-family residential, with the remainder as single-family.

TOWN OF OAKVILLE



LEGEND

-  RESIDENTIAL (1.5 or more acres)
-  RESIDENTIAL (1/2 or more acres)
-  COMMERCIAL & PARKING
-  LIGHT INDUSTRY
-  HEAVY INDUSTRY

LAND USE PLAN

APPROVALS

WE HEREBY CERTIFY THAT THIS MASTER PLAN WAS ADOPTED BY RESOLUTION AT A REGULAR MEETING ON THE DATE SHOWN

ADOPTED BY THE TOWN OF
OAKVILLE PLANNING COMMISSION
ON THE _____ DAY OF _____ 1962

CHAIRMAN

SECRETARY

ADOPTED BY THE OAKVILLE
TOWN COUNCIL
ON THE _____ DAY OF _____ 1962

CHAIRMAN

TOWN CLERK

0 400 800 1200 1600
VERNON S. COTTER
PLANNING COMMISSIONER

GRAY'S HARBOR REGIONAL PLANNING COMMISSION

Based upon the Master Plan, the Town of Oakville could accommodate the following number of persons within its present city limits:

In the single-family residential: 134.85 acres at 4 lots to the acre and 3.5 persons to the average family = 1,890;

In the multiple residential: 19.41 acres times 4 lots to the acre times 4 families to the lot times 3.5 = 1,087;

making a total of all residential land use, when completely developed, of 2,977 persons in the residential portion of the town.

In developing residential as well as other types of use, most cities have found that some regulations are necessary and have established setbacks, density, and type of use, so as to guard against overcrowding and to assure that each building will have adequate light and air space -- which is also a fire protection, both to the building itself and to adjacent buildings.

Future Commercial Development

The central shopping district of Oakville is still free of the traffic congestion and parking problems that many cities have. However, future State Highway plans for Route 9, from Highway 99 to Elma, may make some changes in the traffic pattern of the shoppers in Oakville.

Present commercial land use occupies 3.09 acres. The proposed plan would provide for an ultimate of 11.88 acres, or 4.29 percent of the town area. This would provide enough land for commercial use to serve more than double the proposed population.

An idea that should be considered for the future commercial area would be to develop more of a shopping center, provide parking space for a large number of automobiles at the ratio of at least four to one, maybe close off a street or two for a mall. This would be designed as something to attract shoppers from adjacent towns. This idea should be in keeping with the need and also the financial ability of the Town of Oakville.

(Four to one parking ratio: four parking spaces @ 250 square feet per 250 square feet of store floor space).

Future Industrial Development

The present industrial development occupies 4.31 acres of the town and is located adjacent to the railroad and near the highway. The proposed plan provides for 17.90 acres, or 6.46 percent of the area within the town. This is below the average for small cities; therefore it should be reviewed at intervals to check possibilities for industrial expansion.

A thing to consider relative to Oakville's possible industrial future: the Oakville district is noticeably drier than the harbor part of the county, and might therefore be suitable for wood products that require lower humidity for processing.

Another possibility: There are a number of agricultural crops grown in the valley, such as peas, corn, and berries, that have to be canned, frozen, or packaged for distribution. This processing could be done in Oakville.

Both the above are feasible industrial development projects for the town of Oakville; but this type of thing is not automatic. The town will have to make an effort to attract industry to the area, and things will be needed such as water and sewerage facilities to supply industry's requirements.

Future Park and School Needs

The Town of Oakville is short on park area, with only one small piece of land consisting of 0.86 acre, or 0.79 percent of the developed area, used for playground, outside of the school playground. The average recommended for small cities is around 12 percent. The trend in many cities today is to develop playgrounds and schools adjacent to one another so that the facilities can be jointly used, and costs can be reduced.

One other idea that might be investigated in acquiring a city park site would be to acquire an area along the Chehalis River of 20 or 25 acres, or more depending on topography. The site should be large enough to provide space for picnicking, bathing, baseball diamonds (full size and a smaller one for younger boys), small children's play area, meeting hall space, and plenty of public parking. Such an area would furnish projects for all civic organizations and create much public interest.

The present school facilities of the Oakville School District occupy some 14 acres or 12.92 percent of the developed area. The high school and elementary school buildings are both located on the same school site, with a total of 15 classrooms.

The 1962-63 enrollment amounted to 275 Pupils: 126 in the kindergarten through 6th grade, 98 in the 7th to 9th grades, and 51 in the 10th to 12th grades. The school staff amounted to 24, with 17 certified faculty members. The 1962-63 school district budget was \$158,873.45. Four school buses are operated to serve the school district, which is much larger than the Town of Oakville.

Future Street Development

The proposed future street plan of Oakville was submitted in preliminary form to the Town Council over a year ago. Some changes have been made, as discussed at the Town Council meetings, and the final plan has been submitted to the Council for their adoption. This plan takes care of the circulation problems within the town and will extend outside of the town limits for approximately one half mile.

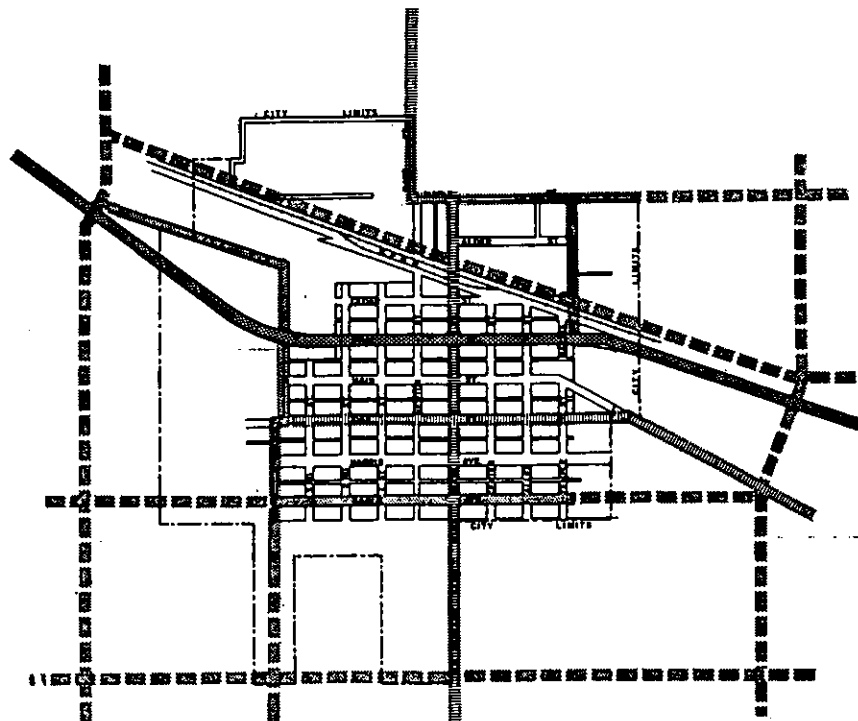
This plan will be useful when the Oakville Town Council has to determine where and what number of access connections will be needed to the proposed state Freeway in the connecting link between Elma and Highway 99. Decision on exact location of this Freeway is some time in the future, but the Council should be studying the problem now and especially the effect of by-passing the town.

This would be assigned to a Planning Commission if Oakville had one. A Planning Commission could be quite helpful to the Town Council in their recommendations.

The present street system occupies 59.43 acres, or 54.62 percent of the developed area. If in future subdivision development street right-of-way could be reduced to 25 percent, by the help of the Subdivision Ordinance and Master Street Plan, the total street area at the time of 100% development of the town could be kept down to 101.80 acres or 36.48 percent of the total town area.

MAJOR STREET PLAN

TOWN OF OAKVILLE



L E G E N D

	EXISTING S/W	PROPOSED S/W
FREEWAY		
STATE HIGHWAY		
MAJOR STREETS		
SECONDARY STREETS		

A P P R O V A L S

WE HEREBY CERTIFY THAT THIS MASTER PLAN WAS ADOPTED BY RESOLUTION AT A REGULAR MEETING ON THE DATE SHOWN

ADOPTED BY THE TOWN OF
OAKVILLE PLANNING COMMISSION
ON THIS _____ DAY OF _____, 1962

CHAIRMAN
SECRETARY

ADOPTED BY THE TOWN OF
OAKVILLE TOWN COUNCIL
ON THIS _____ DAY OF _____, 1962

MAYOR
TOWN CLERK



GRAYS HARBOR REGIONAL PLANNING COMMISSION

C i t y o f M o n t e s a n o

F u t u r e L a n d U s e P l a n

Montesano's population increased 158 persons from the 1950 census figure of 2,328 to the 1960 census figure of 2,486; a gain of 6.7 percent in the ten-year period. The projected 1980 population of Montesano has been forecast as 3,300, which would involve an addition of about 233 families.

The 1961 Land Use Inventory showed that near the center of the city the development is quite solid, with little vacant land, while a few blocks out there is considerable vacant land. Actually, the total city area is fifty percent vacant. New development is taking place in the northwest part of the city.

New construction should be encouraged within the city where streets, sewers, water and utilities are already available, so as to reduce the cost of expanding these services.

The proposed Land Use Plan suggested by the planning program will hold the present pattern of development better than the original zoning plan adopted many years ago. That original plan was adopted without the development of a land use plan or any planning study as required by the State Law. That first plan divided the city into large blocks of residential, commercial, and industrial, which have little or no relation to the present actual land use.

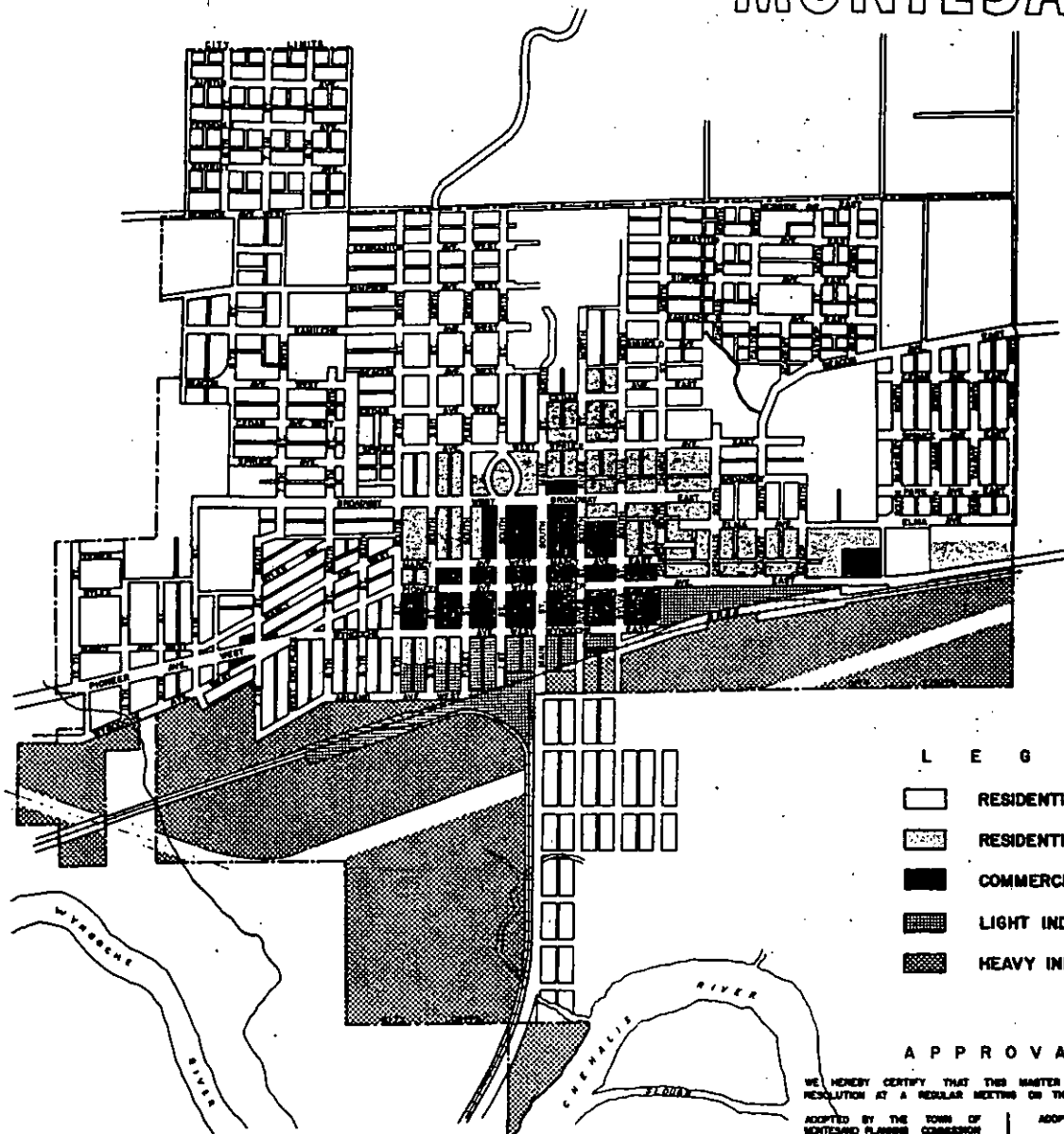
Future Residential Development

The proposed plan provides for 257.64 acres of single-family residential land and 64.26 acres of multiple residential land, making a total of 321.90 acres, or 37.60 percent of the total city. This is about the average percentage for Washington cities.

This percentage will increase as additional residential areas are annexed to the city. There are two areas, to the northwest and northeast, that should be considered as additions to the city in the near future, because they are developing into medium-to-high value areas and will soon need city services.

LAND USE PLAN

CITY OF MONTESANO



LEGEND

-  RESIDENTIAL (1.50 A.C.)
-  RESIDENTIAL (2.00 A.C.)
-  COMMERCIAL & PARKING
-  LIGHT INDUSTRY
-  HEAVY INDUSTRY

APPROVALS

WE HEREBY CERTIFY THAT THIS MASTER PLAN WAS ADOPTED BY RESOLUTION AT A REGULAR MEETING ON THE DATE SHOWN.

ADOPTED BY THE TOWN OF
MONTESANO PLANNING COMMISSION
ON THIS _____ DAY OF _____ 1962.

CHAIRMAN

SECRETARY

ADOPTED BY THE MONTESANO
TOWN COUNCIL
ON THIS _____ DAY OF _____ 1962.

CHAIRMAN

TOWN CLERK

0 500 1000 1500 2000
VERNON S. COTTER
PLANNING CONSULTANT

GRAYS HARBOR REGIONAL PLANNING COMMISSION

Based on the Master Land Use Plan, with the ultimate 100 percent development, the residential land would be divided into two portions:

(1) the single-family residential area of 257.64 acres, figured at 4 lots per acre, times 3.5 persons per average family, would make 3,607 persons;

(2) the multiple-family residential area of 64.26 acres, at 4 lots per acre, times 4 families per lot, times 3.5 persons per average family, would make 3,598 persons;

or, a total ultimate residential count of 7,205 persons within the present Montesano city limits.

In general, the present residential area has remained free of non-residential land uses, with a few exceptions. With the proposed Land Use Plan and a revised Zoning Ordinance, the home owners could be protected from the intrusion of commercial and industrial land uses as future development takes place.

Future Commercial Development

Montesano's central business district is feeling the traffic congestion that many cities are facing.

Part of this problem is caused by the heavy flow of traffic on Pioneer Avenue, which is only a two-lane street. And the other part is caused by the lack of city owned and operated public parking spaces.

The few parking lots now in operation within the central district are privately owned, and as business develops these lots will be needed for future expansion of business buildings. Curb parking provides only about one-fourth of the needed parking.

With the opening of the new Freeway, through traffic will move thru Montesano via an east-west line some 1400 feet south of Pioneer Avenue. With the proposed interchange to be located on Main Street, easy access will be available between the Freeway and the Montesano Central Business District. But the desire to turn off the Freeway into Montesano will have to be created. The answers to the questions of "Why?" and "For what?" will have to be supplied by the city, the merchants, the property owners, and civic organizations, in such a manner as to make the Central Business District attractive to the passing motorist, because tourist use of Montesano's shopping facilities will not be automatic. The City Planning Commission should be working now on detailed studies of the Central Business District to determine the impact of the

Freeway and of the new Shopping Center on future business and parking needs.

The proposed Land Use Plan shows a total of 28.71 acres or 3.35 percent in commercial land use, an addition of 3.58 acres over existing commercial use.

Future Industrial Development

The 25.13 acres of Industrial activity in Montesano is located along the railroad, which occupies an additional 21.33 acres within the south part of the city, making a total of 46.46 acres.

The proposed Land Use Plan provides for a total of 206.35 acres, or 24.10 percent of the total land area.

This industrial area is all south of the railroad tracks, with some light industry proposed for the area between the tracks and Wynooche Avenue. This industrial area will have easy access to the Freeway and the present highway, with possibility of railroad spurs at many points. The present highway divides the residential from the industrial, and that separation can remain if the Land Use Plan is followed.

Future industries should include the type of plant to extend the processing of existing basic materials and food products that are raised in this valley.

Future Parks

The city park area amounts to 4.97 acres, divided into three kinds of park. One is a scenic park treatment along the existing highway entrance coming into town from the east. Second, opposite that, is an area developed as a playground; and the third is an area in the center of town where a small block is developed with lawn and many flowers.

Another area near the High School is being used for park purposes but it is not city property at the present time.

The ratio of land in park to the total is 1.16 percent. This is below the average for small cities, which usually amounts to from 10 to 12 percent of the total area, for park and recreational purposes.

Schools

The general location of the three schools in Montesano is good, in that they are near the center of the population. The school district does maintain seven school buses that bring children in from the outlying sections.

These three schools now occupy 17.65 acres, or 4.13 percent of the developed area of the city. This is below the amount recommended by school authorities, which is 6-10 acres for each elementary school and 20 or more for each high school.

School enrollment in Montesano has steadily increased, from 708 in 1943-43 to 996 in 1962-63. The school staff has also increased, from 31 in 1943 to 53 (with 43 of them certified faculty members) in 1963. Present school enrollment breaks down as follows: Kindergarten through 6th grade, = 513; 7th through 9th = 233; 10th through 12th = 250; making a total of 996 enrolled. The school budget amounts to \$375,000.00 this year, for Montesano School District #124.

Streets

Within the present city limits of Montesano, street right-of-way amounts to 191.87 acres, or 44.95 percent of the developed area.

When the vacant areas are developed under the use of the proposed Subdivision Ordinance, and the Master Street Plan is adopted to determine what streets are needed, savings could be made in street areas so that the total city street area would only amount to 299.19 acres, or 34.95 percent of the total city area.

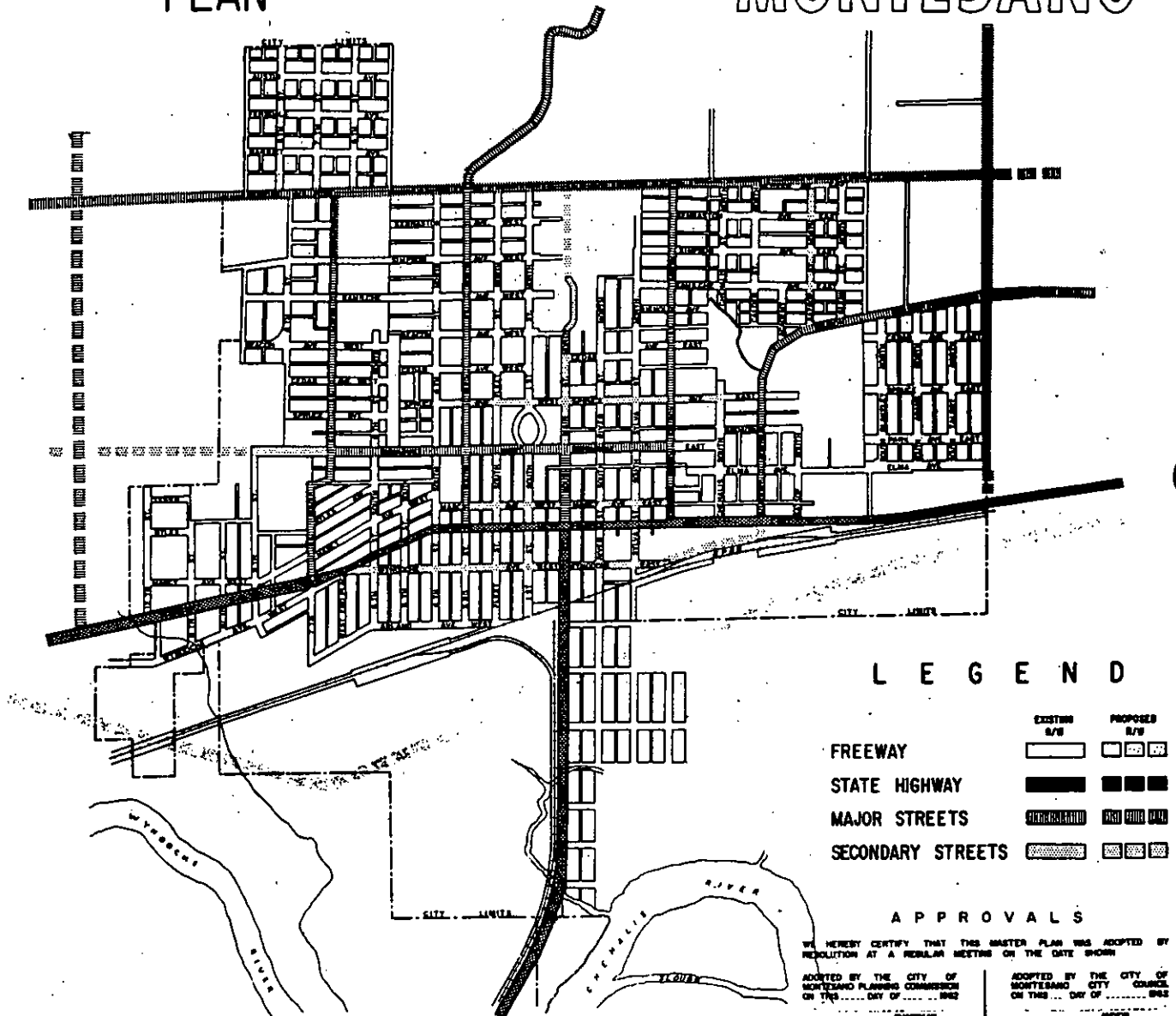
The saving of ten percent in yearly maintenance cost to the taxpayer, that this would bring about, would be a nice savings; plus almost 20 percent in all new subdivisions.

This is worthy of study by the City Planning Commission and the City Council, and is possibly one of the few ways that cash savings can be directly credited to your planning program and your use of the Master Plans.

The proposed Major Street Plan will be found on the following page.

MAJOR STREET PLAN

CITY OF MONTESANO



0 400 800 1200 1600
VERNON S. COOPER
PLANNING CONSULTANT

BRAYS HARBOR REGIONAL PLANNING COMMISSION

Major Street Plan

The Major Street Plan provides for the State Highways, #410 and #9 (to Raymond). Highway 410 now goes through Montesano on a narrow two-lane right-of-way, forming a bottleneck during peak traffic. Added to that, the left turns of the westbound traffic cause additional delays and even accidents. This problem, however, will be solved to some extent when the Freeway is completed through Montesano as far as the Wynooche River.

In the Major Street Plan to provide circulation within the city, the east-west Major streets are McBride, Beacon, and Broadway (except its west end). The east-west Secondary streets are Spruce, Marcy, Wynooche Avenue, and the west end of Broadway.

The north-south Major streets are, first, an un-named street just west of the city limits line, then 7th Street, 3rd Street (the main route to Lake Silvia), Church, Academy, and finally Nelson Street at the east city limits. The Secondary north-south streets are Main and Satsop Streets.

This plan of Major and Secondary streets will serve as the main circulation pattern of the city. It will provide adequate access not only to the present development but also to future development for some time to come.

C i t y o f A b e r d e e n

F u t u r e L a n d U s e P l a n

The 1960 population count for Aberdeen was 18,741 persons. The estimated 1980 population projection for Aberdeen prepared by the Consultant on the regional planning project for Grays Harbor was 23,000 persons. This figure could be changed by the addition of one major industry.

The 1961 Land Use Survey revealed the fact that there were few vacant lots or tracts of land in the older portions of the city. In the northeast and northwest portions of the city there are large open areas in the hills suitable for residential development. The portion of the city south as the Chehalis River known as South Aberdeen is only half developed; it is predominantly residential in character, except for a few mills along the river waterfront. South Aberdeen was subdivided many years ago, but improvements have only been completed in a few tracts, and at the present time there are many problems that have to be taken care of such as sewer lines, drainage, filling, and street improvements that were left for the city to construct. In the hill area at the south edge of the city, development is just beginning, with some high value homes constructed, which is setting a good trend.

By the adoption and use of the Master Street Plans and the new Subdivision Ordinance, the Planning Commission can encourage a more efficient use of land, with better street layout to serve the needs. Savings in land area devoted to street right-of-way can be reduced considerably and overall maintenance costs reduced, resulting in savings to the taxpayer.

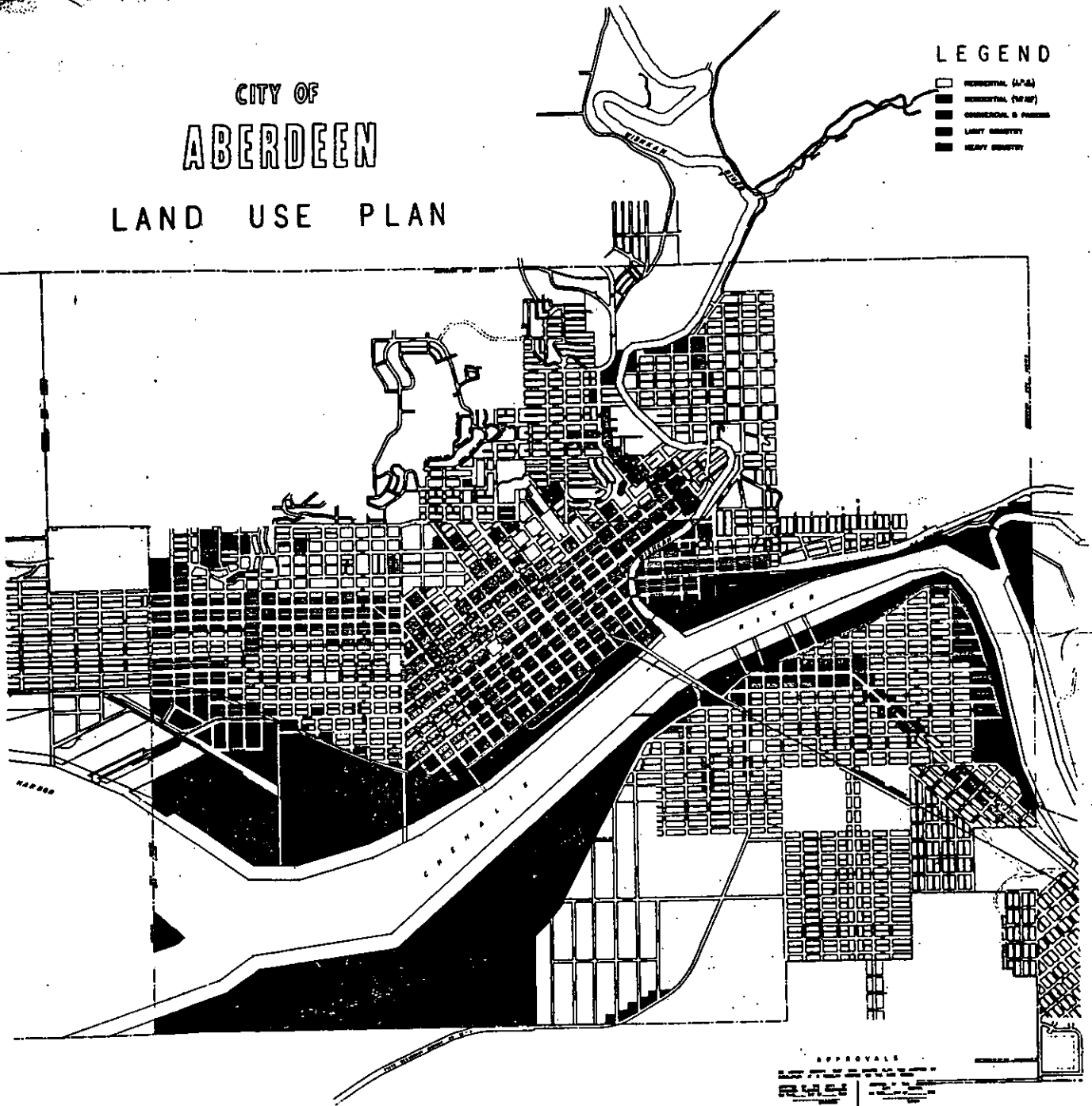
Future Residential Land Use Plan

The Land Use Plan provides for a total of 3,813.02 acres of single-family residential land use, and 240.86 acres of multiple-family land use. Some of this is located in the area now developed and some is not. Of the total proposed area of 3,813.02 acres, 695.69 is already in use, leaving a balance of 3,117.43 acres. Of this balance, 1,517.43 acres are in the portions of the city now developed, and approximately 1,600 acres remain at present as vacant undeveloped land.

CITY OF ABERDEEN LAND USE PLAN

LEGEND

- RESIDENTIAL (L.P.D.)
- RESIDENTIAL (H.P.D.)
- COMMERCIAL & PUBLIC
- LIGHT INDUSTRY
- HEAVY INDUSTRY



APPROVALS
 MAY 17 1964
 1964
 1964

MAPLE & BENTLEY ENGINEERS

GRAY HANCOCK REGIONAL PLANNING COMMISSION

If this land is developed under the procedures recommended, and follows the Master Plans, a saving of some 315 acres can be accomplished over the present methods; plus the savings to the taxpayer on approximately 228,000 linear feet of 60 foot roadway, both construction and continued maintenance costs from now on.

Based on the long-range Master Land Use Plan for ultimate 100 percent development, the single-family residential area of 3,813.02 acres would accommodate 53,382 persons. This was arrived at by the following method: 4 lots per acre, times an average 3.5 persons per family.

In the multiple-family residential area of 240.86 acres, it was calculated as: 4 lots per acre, times 4 families per lot, times 3.5 persons per family, equals 13,488 persons.

This makes a total for all residential land of 66,870 persons. This ultimate development is possible fifty years from now based on an improved industrial development program.

Future Commercial

The Aberdeen Central Business district has a number of problems, such as:

1. Some streets are narrow, permitting only two lanes of parking and two lanes of travel.

2. Street parking space is very limited.

3. Public off-street parking spaces are limited to 16 spaces off the alley behind the Library. Only a few stores have provided their own parking and these spaces are used to capacity.

4. Traffic is fed into the city over four bridges in close proximity.

5. Traffic is of mixed types --
home to work,
home to shopping,
through traffic to the beaches,
logging trucks hauling from out of town to mills,
trucks hauling chips, plywood, and lumber from
mills to out of town destinations,
with lots of local and inter-city wholesale and
service trucking.

6. The main highway is narrow, and commercial activity is reducing travel over it to a snail pace between Aberdeen and Hoquiam.

7. Most stores are in buildings over 35 years old and lack all modern facilities.

In the last fifteen years, shopping habits have changed a lot, due to increased use of the automobile. Today, no one walks over two blocks to shop. One result is that the trend is to the shopping centers, with multiple-choice buying at a one-stop location, because such centers offer this along with adequate parking at a ratio of over four to one. (Four parking spaces, @ 250 sq. ft. each, to each 250 sq. ft. of store floor area.) Cities also have to change with the times and modernize to keep their central business district attractive so that they can compete with other areas.

The present commercial development occupies 99.08 acres, and the proposed plan provides for 175.42 acres, or 76.34 more acres for future commercial and parking area.

This would bring the commercial area to 2.54 percent of the total city area. This is a little low, but not enough low to cause inflation in commercial land values.

Future Industry

Industry today has a different outlook on site location. Today, industries want more than twice the amount of land they sought in the past.

The trend in industrial use of land is toward a nicely designed office building located in the center of an acre of lawn, well back from the street, with adequate parking for employees and customers; with the plant located in back of the office, with lots of room for movement of stock, movement and storage of materials, truck loading, and circulation through the entire plant site, with easy access to the highways, Freeways, and railroads.

Future Zoning plans should include protection for the industrial areas as well as for the other zones. This would permit farming of the open areas but would prohibit residential or commercial use in the areas set aside

for industry. Future small industry should be encouraged to fill up the vacant land between other industries located along the railroads and highways where public facilities are now available.

The proposed plan provides for 852.30 acres of heavy industry, and 213.94 acres of light industry, making a total of 1,066.24 acres in industrial area or 15.42 percent of the total city area. This is a little above the average but not out of line due to the natural resources available in this area.

Schools

The 1961 Land Use Survey indicated that 70.92 acres of land was used for school purposes. This amounts to 3.34 percent of the developed area of Aberdeen. The schools now occupy eleven separate buildings.

The school district operates and maintains the school buses. In 1943 there were seven buses in use; due to the increase in pupils, the school district now operates sixteen buses. There has been a steady increase in school enrollment from 3,598 in 1943 to today's enrollment of 5,846. This has necessitated an increase in the number of faculty from 169 in 1943 to 314 in 1963, with 278 of the faculty certified. The present budget of School District No. 5 (for the year 1962-63) amounts to \$2,767,316.

Based on the past twenty years, the school enrollment would be approximately 7,600 by 1980, but many things could easily increase this estimate.

Parks

Park land in Aberdeen is divided among four major park areas, one south of the Chehalis River and three north of the river. These park areas occupy 17.42 acres, or 0.82 percent of the developed area.

This is far below the average of most Washington cities which is about 12 percent. On that basis, Aberdeen should have some 829 acres of park area. But due to the general location of Aberdeen, with so many natural recreational areas close by, there has not been the demand on city parks that there has been in other parts of the state.

By the use of the proposed Subdivision Ordinance, land that is not suitable for development could be reserved for future recreational use. Most of the close-in undeveloped land that is used for recreation today will be used for other purposes as the city develops, and as it becomes unavailable must be replaced. By the use of the Master Plans as a guide for future development, needed park areas could be determined, and reserved well in advance of development, at less cost to the taxpayer and better site locations acquired on an acreage basis.

Major Street Plan

The present street and alley system within the city occupies 952 acres or 44.72 percent of the developed area. This is almost 19 percent higher than most Washington cities, which average around 25 percent in street right-of-way. You may ask what can be done about this now--if anything? The answer is yes, something can be done about the excessive area devoted to public street and alley right-of-way; but it will not be automatic.

Two tools are available, and both are needed for the job. One is to adopt the Master Street Plan. The other is to adopt the Proposed Subdivision Ordinance. With these two tools, the City Planning Commission is equipped to go to work.

In the future development of some 1,600 acres of vacant residential land within the city, much can be accomplished by the use of the Master Street Plan to determine the main arterial roads and needed right-of-ways. By the use of the Subdivision Ordinance, the City Planning Commission can review the preliminary plats to see if they conform to the Master Plans for the type of use, conform to the standards now required for good subdivisions such as eliminating bad street arrangements, double frontage, badly-shaped lots, and waste of valuable land. By the use of the above methods in the development of the vacant residential land, about one hundred acres can be saved or put to other public use.

Another saving would be accomplished by reviewing existing subdivided land in order to vacate as many as possible of the useless street right-of-ways that are not usable as streets; but care should be taken in doing this, and in particular, utility easements should be reserved where they may be needed by the city in future.

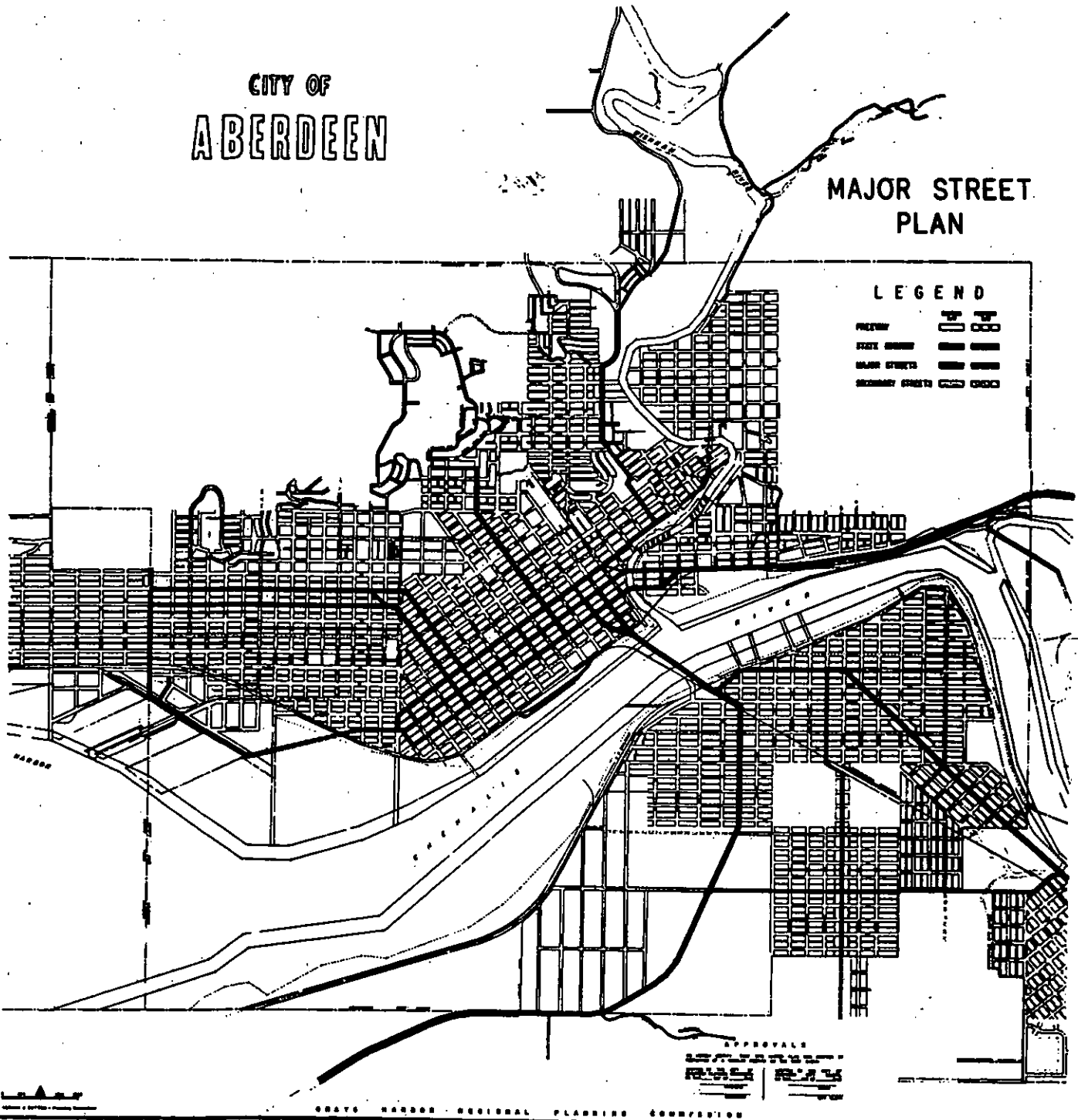
The Master Street Plan is shown on the following page.

CITY OF ABERDEEN

MAJOR STREET PLAN

LEGEND

FREEWAY		
STATE HIGHWAY		
MAJOR STREET		
SECONDARY STREET		



This Master Street Plan was prepared from the Preliminary Plan presented to the City of Aberdeen over a year ago. The plan is also based on the Six Year Plan submitted to the State Highway Department for use in allocating the State Gas Tax Funds, and was prepared in cooperation with the City Engineer.

The Major Street Plan provides for a street circulation pattern to serve all parts of the city. As reproduced on the preceding page, the State Highway is shown in a cross-hatch pattern, with the Major City Streets in a vertical line cross-hatch and the Secondary Streets in a dot stipple pattern, while all other local streets are shown by double line.

Due to the topography of the City of Aberdeen, major access streets in a north-south direction are limited; while most of the east-west streets are in the flat or bottom land of the valley and provide an easier means for through connections.

The North-South Street Pattern: At the west city boundary, Myrtle Street is shown as a Major Street. The adjacent group -- Oak, Duffy, Scammel, and Division Streets -- are shown as Secondary Streets. Park Street is shown as a part of the State Highway, with Alder and Summer Streets shown as Major City Streets parallel to the State Highway.

Next is the Broadway-Eleventh-Bel Aire combination of streets, as a Major arterial to serve the hill area. North "F" and Arnold Streets serve as Secondaries.

Next is "B" Street as a Major to serve the west side of Wishkah Valley.

In the eastern part of the city there are two Secondary street combinations: Market-Young to serve the east side of Wishkah Valley, and the Fleet-Clinton combination to serve the hill.

These Major and Secondary streets will provide the needed north-south circulation for the north side of the Chehalis.

In South Aberdeen, the north-south circulation streets are Boone Avenue, shown as a part of State Highway 13-A, with Harding Road and the Blakely-Decatur combination as Secondary streets. The Evans-Lawrence streets serve as a Major collector street for the hills on the south.

The East-West Street Pattern: At the north end of the city, Ninth Avenue is the first east-west Secondary street, followed by Third Avenue, Sixth Street, Third Street, First Street, and State Street, all Secondaries north of the Chehalis River.

In the Central Business District, Market Street is shown as a Major, with Wishkah and Heron as part of the State Highway system; and, as already mentioned, State Street as a Secondary.

On the south side of the Chehalis River, part of Curtis Street is shown as State Highway, and the remainder as far as Decatur is shown as a Secondary. Cushing and Harriman are Secondaries. Huntley Road is shown as a Major Street from State Highway 13 west to Boone Street (which is State Highway 13-A to Westport); the western extension of Huntley is shown as a Secondary street as far as Harding.

This completes the east-west Major and Secondary Streets provided for in the Major Street Plan.

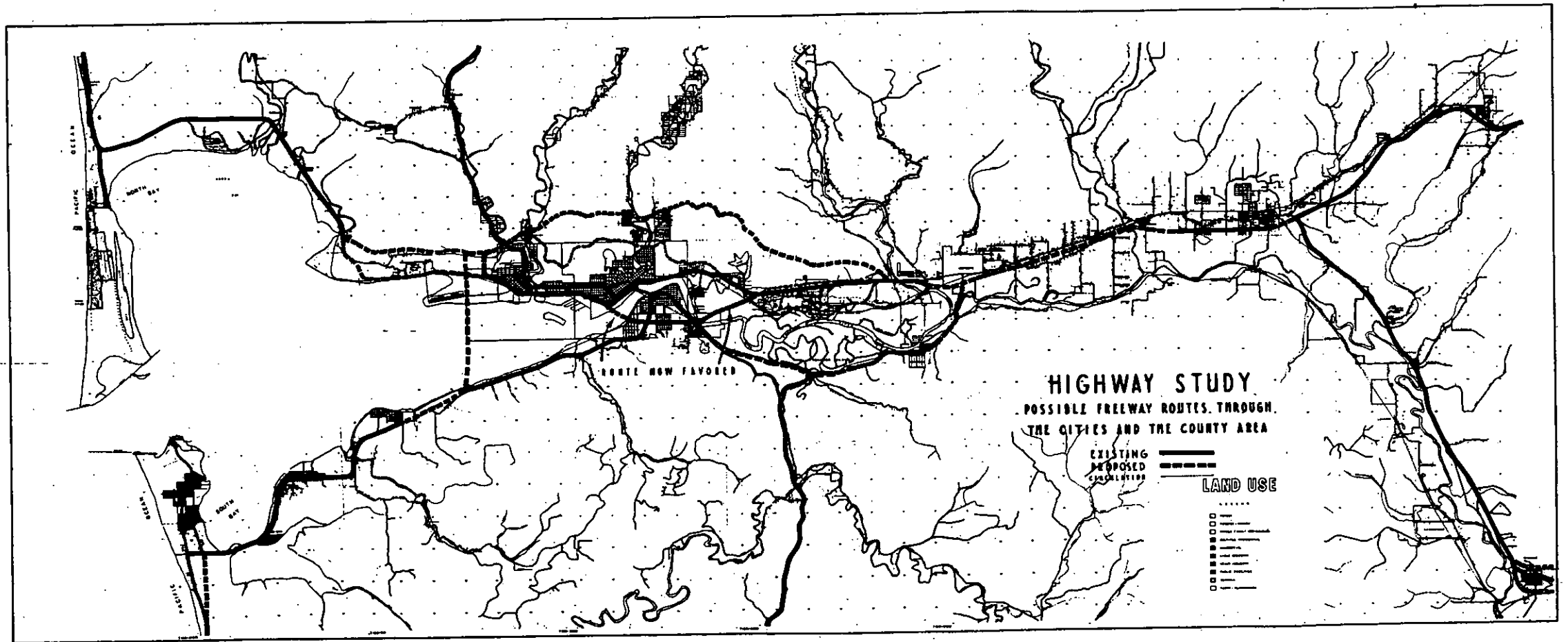
The next step in the development of the Major Street Plan is to adopt the plan officially as the long-range pattern for street and highway development for the city. In this manner, adequate street right-of-way can be reserved for all future street development.

Proposed Freeway (Aberdeen-Cosmopolis-Hoquiam Area)

It will be noted that the Proposed Freeway is not shown on any of the Aberdeen-Cosmopolis-Hoquiam city maps. The general location or corridor has only been proposed at this time. The city planning commissions are studying the various proposed routes now, but have not made any final decisions or recommendations to their respective councils. The City Councils have attended many of the Highway meetings and have informally reviewed the various proposals, but they are not in a position to accept or reject any plan at this time.

The City Councils will forward their approval and/or recommendations to the Grays Harbor Regional Planning Commission, which will then assemble the recommendations, will formulate a joint recommendation of the cities, county, Port District, Public Utility District, and civic groups, and forward this to the State Highway Commission and Department. This procedure has been adopted by the Regional Planning Commission and is working.

In fact this is the first time that these cities and the County have ever sat down around a table to discuss any of their mutual problems. This is a major accomplishment in this region noted for the conflicts between various agencies. If the Regional Planning Commission can develop this cooperation and interest in long-range planning, the program has been a success.



Out of two years study, the Freeway location through the Harbor urban area has settled down to basically the outline shown on the present study map. Almost any section of this could be built independently of the others and still be serviceable, as shown on the map on the following page. Some variation is possible in some sections, so long as continuity is preserved, and in those sections alternate "A" and "B" recommendations may be prepared.

Construction from the East county line to Elma is completed; and from there to the Wynooche River is substantially set. This section goes south of Elma paralleling the railroad track and joining the present highway just to the east of the Wynooche River.

From there west, approximately six alternatives were studied. The one shown as preferred has still to be refined, and is still under study by the city planning commissions concerned, but has met with much more general support than the others. It would parallel the present highway to a point just west of the golf course; thence it would head southwest to a point near the north city limits of Cosmopolis. It would cross the river on a new bridge (which would be openable but would not require a bridgetender on duty). It would cross via Farrel Street to the railroad track and then turn northwest to cross the Harbor on another new bridge to Division Street. Thence it would parallel the railroad track to a joining with the proposed Hoquiam Freeway link.

This is an appropriate point to acknowledge the valuable contribution made by local residents to the formulation of the Freeway route. Working meetings of the Regional Planning Commission Highway Committee were held with various special-interest groups, such as merchants, loggers, truckers, manufacturers, and the Chamber of Commerce highway committee; the whole number of suggested routes were presented and discussed. By contrast with the difficult in arousing interest for abstract discussion of plans or planning, or for discussing problems of individual cities in region-wide meetings, these meetings on a specific unsolved problem were heavily attended and full of active and fruitful discussion. As the fruit of a long series of such meetings, in which the professional and the layman with local knowledge each had points to make, a solution suddenly crystallized to a problem that at one stage had seemed to be insoluble. The process is described because it offers some guidance as to the type of planning method that has succeeded in Grays Harbor and can be expected to succeed again: namely, instead of any issue that could produce alignment pro and con, it was work together to find an answer to a question that could not be answered yes or no.

C i t y o f H o q u i a m

The City of Hoquiam entered into its own planning program about a year before initiation of the Regional planning project, and its Comprehensive Plan has been completed.

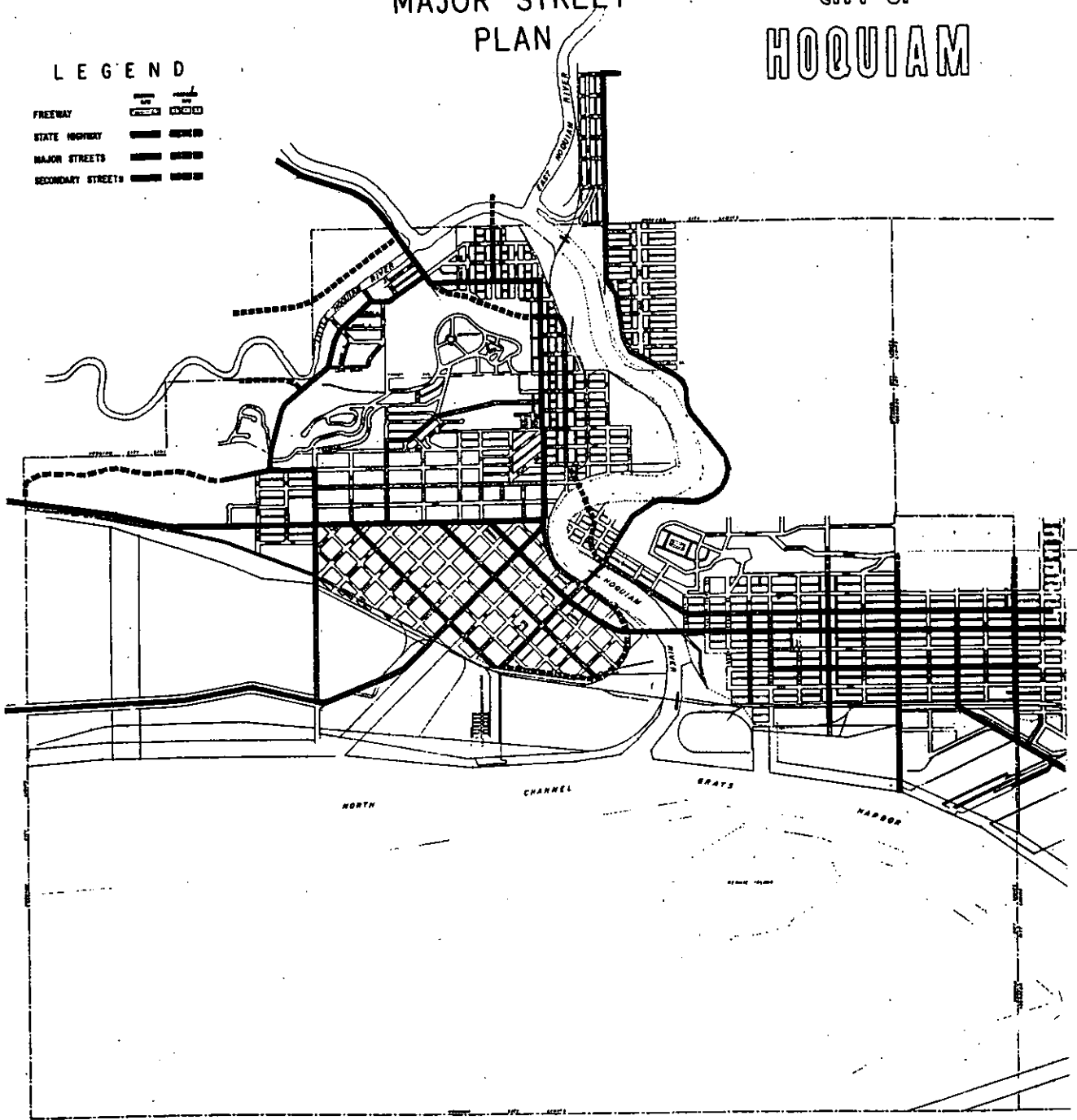
Therefore the only study given to Hoquiam in the Regional Project has been such as is necessary for Regional planning purposes; the street plan on the following page was prepared early in Phase I of the Regional project, not as a duplication of any work of the City of Hoquiam planning project, but in order to have city plans of like scale and subject so that Aberdeen, Hoquiam, and Cosmopolis plans would match when placed side by side for study of Highway problems.

MAJOR STREET PLAN

CITY OF
HOQUIAM

LEGEND

FREEWAY		ROAD BY HOQUIAM	
STATE HIGHWAY		HOQUIAM	
MAJOR STREETS		HOQUIAM	
SECONDARY STREETS		HOQUIAM	



APPROVALS

APPROVED BY THE CITY OF HOQUIAM
ON _____ 19____
ATTEST: _____
CITY CLERK

GRAYS HARBOR REGIONAL PLANNING COMMISSION

Town of Cosmopolis

Future Land Use Plan

Population in Cosmopolis has changed back and forth a number of times, with a peak of over 1,500 at the height of the logging boom, which however was not too far above the present 1960 census count of 1,312 persons. With the prospect of industrial additions and some new subdivision development in the hill area, the estimated 1980 population projection is 2,000.

The 1961 Land Use Survey indicated a vacancy of 410.78 acres, or 55.02 percent of the gross area of Cosmopolis. This vacant land is available for many types of land use.

All new development should follow an accepted plan so that property values can be maintained and so that new development can be located in its proper place in relation to all other development.

Future Residential

Present residential land use totals 62.22 acres or 26.43 percent of the developed area of the town. This use is divided into two kinds: single-family residential occupies 55.14 acres or 23.42 percent, and multiple-family use occupies 3.01 acres or 3.01 percent.

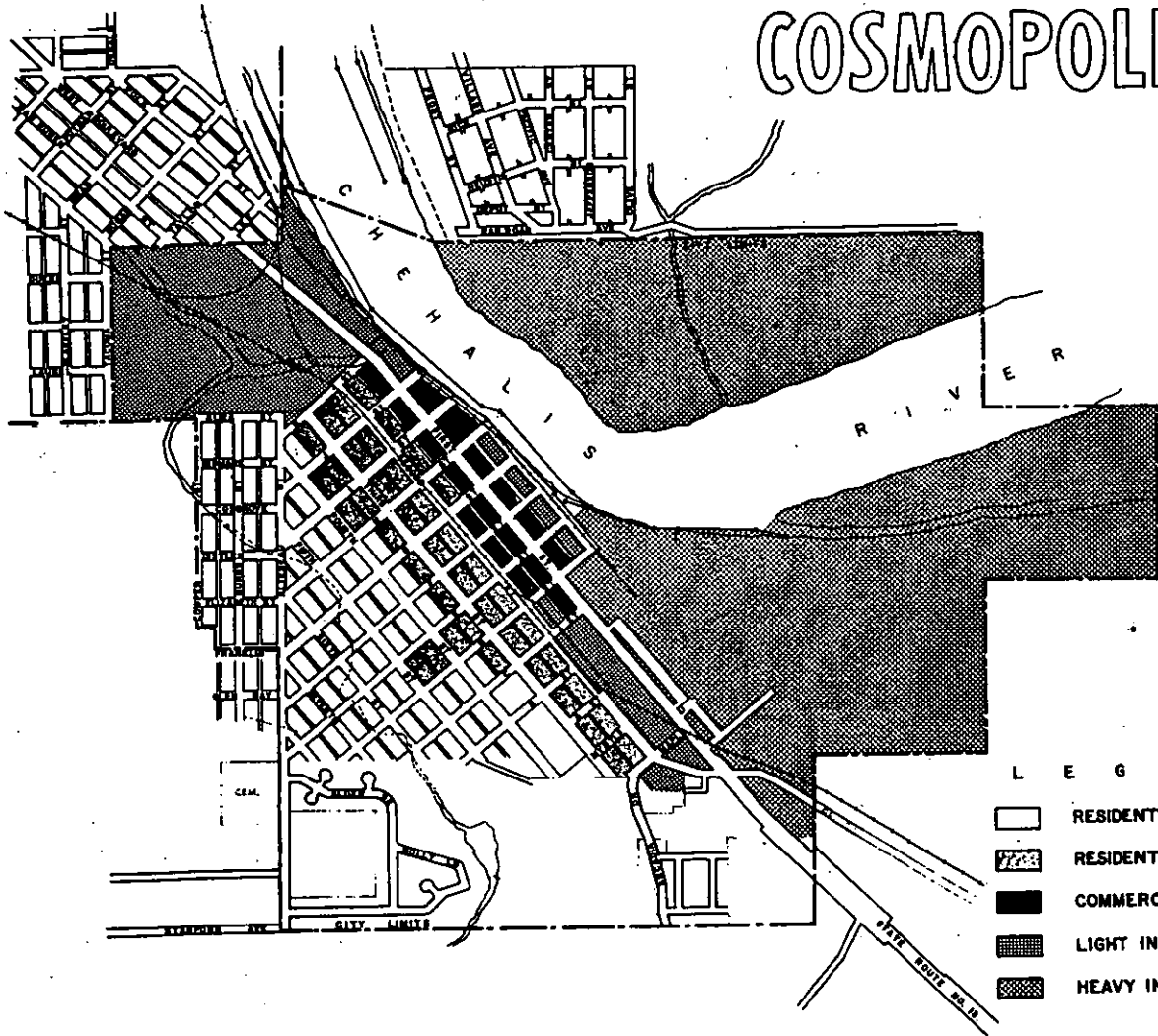
The Proposed Land Use Plan suggests a total of 343.46 acres for single-family residential, and 66.12 acres for multiple residential, making 409.58 acres or 54.86 percent of the total town area for residential land use.

This is a little above the average for Washington cities, but it will be needed as present industries expand and new industries locate on Grays Harbor.

If the Town of Cosmopolis were to be developed 100%, with this full growth based on the Master Land Use Plan, the following would be possible:

The single-family residential area, 343.46 acres, would be subdivided into 4 lots per acre, and with 3.5 persons per average family, the single-family acreage would accommodate 4,808 persons;

TOWN OF COSMOPOLIS



LEGEND

- RESIDENTIAL (1/4 TO 1/2 ACRE)
- RESIDENTIAL (1/2 OR MORE PER ACRE)
- COMMERCIAL & PARKING
- LIGHT INDUSTRY
- HEAVY INDUSTRY

LAND USE PLAN

APPROVALS

WE HEREBY CERTIFY THAT THIS MASTER PLAN WAS ADOPTED BY RESOLUTION AT A REGULAR MEETING ON THE DATE SHOWN

ADOPTED BY THE TOWN OF COSMOPOLIS PLANNING COMMISSION ON THIS ____ DAY OF ____ 1962

CHAIRMAN

SECRETARY

ADOPTED BY THE COSMOPOLIS TOWN COUNCIL ON THIS ____ DAY OF ____ 1962

CHAIRMAN

TOWN CLERK

0 400 800 1200 1600
VERNON S. COTTER
PLANNING COMMISSION

GRAY HARBOR REGIONAL PLANNING COMMISSION

In the multiple residential area, 66.12 acres times 4 lots per acre times 4 families per lot times 3.5 persons per family, makes 3,703 persons; making a total, for complete development of the residential area of Cosmopolis within present city limits, of 8,511.

This estimate would possibly apply fifty years from today, when the industrial and employment peaks have been reached.

Future Commercial

The present commercial land use in Cosmopolis occupies 3.20 acres or 1.46 percent of the developed area. The long-range plan suggests 11.90 acres or 1.59 percent of the total town area.

This is slightly below the average for small cities, which usually runs between 3.5 and 4.0 percent in commercial use. The reason for suggesting this smaller amount of commercial land use is that Cosmopolis is so close to the large Central Business District of Aberdeen that Cosmopolis's business district will always be considered as a neighborhood shopping area, and as such is limited in type of merchandise sold and type of professional and service establishments attracted to locate in it.

Future Industrial

Industrial Land Use now occupies 79.83 acres or 33.81 percent of the developed area of Cosmopolis. The Proposed Land Use Plan provides for 325.06 acres or 43.54 percent of the total town in industrial use, to include a large area now vacant on the north side of the Chehalis River.

This comparatively high percentage is recommended because Cosmopolis is already an industrial town, having the large Weyerhaeuser Company plant in operation with plans for future expansion (if enough industrial water is made available for their operations).

Light Industry is also proposed, in the amount of 69.67 acres, in a part of town served by the highway and railroads. This is suitable for warehousing, trucking, and contractors yards, but is too small in area for any large industry. The railroads now occupy some 26.81 acres within the town.

Future Parks

The Town of Cosmopolis does not have a developed city park. This is unusual, for cities of almost any size have reserved some area for public use other than the school playgrounds.

The town, being attractively located on the Chehalis River, should have some public waterfront area that could be used for fishing, boat-launching, or just for sitting and looking at the River in a quiet lawn-and-flower-covered spot.

Another suggested location for a park would be up in the hills near the private golf course.

By the use of the Subdivision Ordinance, some areas could be reserved for public use that are not suitable for home development. Some effort should be made soon to acquire approximately 20 acres for the long-range park development program, for the present and future residents of Cosmopolis.

Schools

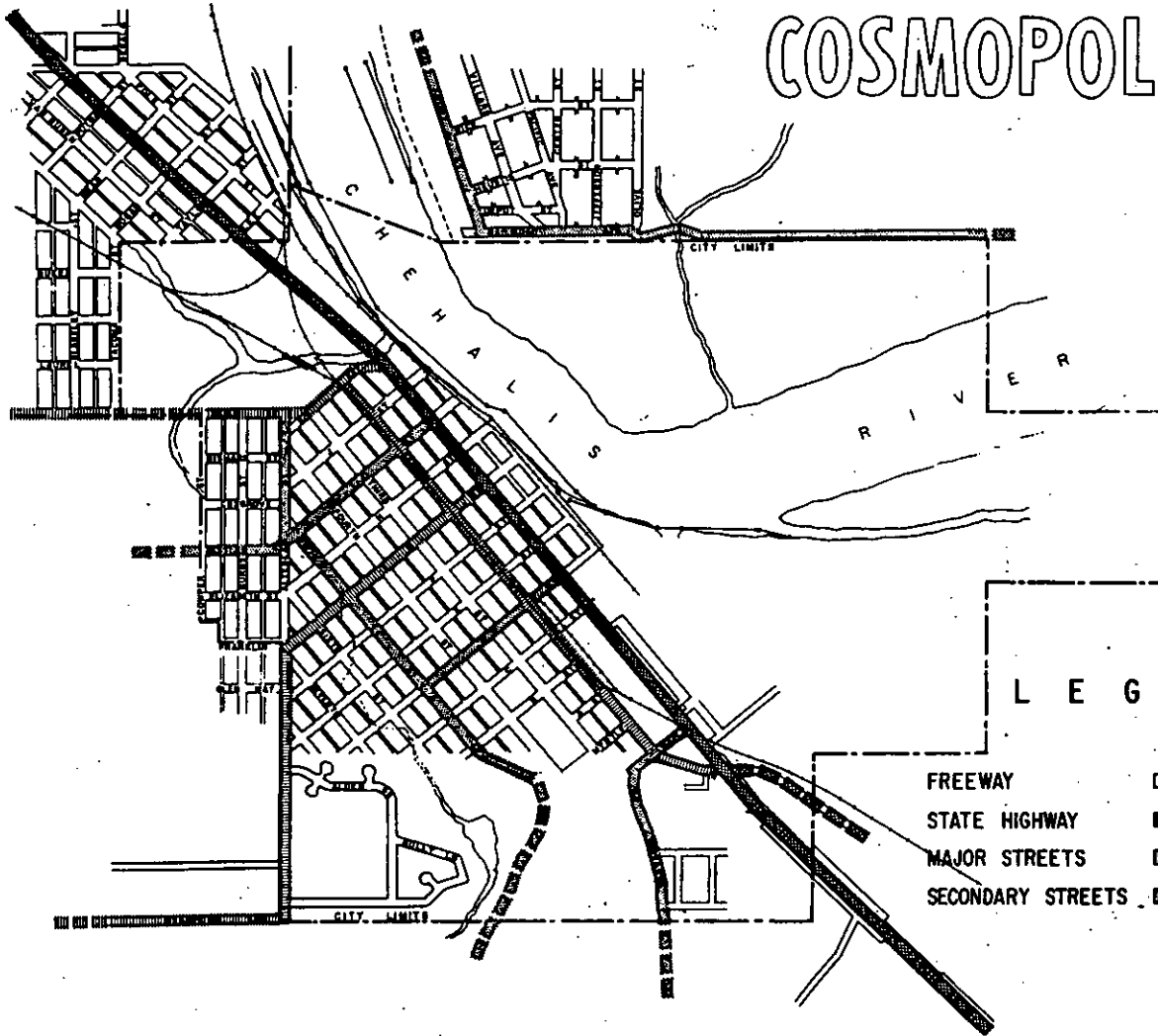
The school area in the town now amounts to 4.78 acres or 2.03 percent of the developed area. The present 1962-63 enrollment amounts to 326 pupils, with 249 in Kindergarten through 6th grade, and 77 in the 7th through 9th grades. These pupils attend school in two buildings. The school staff totals 20, with 13 of this number certificated faculty members. The 1962-63 School District #99 budget is \$146,610.73.

In the long-range program of school planning, thought should be given to ultimately locating a High School south of the Chehalis River, to serve both Cosmopolis and South Aberdeen.

Streets

By the 1961 Land Use Survey, it was determined that the area devoted to street and alley right-of-way in Cosmopolis was 81.51 acres or 34.62 percent of the developed area. This is about the average of many small cities, but is a

TOWN OF COSMOPOLIS



LEGEND

	EXISTING S/W	PROPOSED S/W
FREEWAY		
STATE HIGHWAY		
MAJOR STREETS		
SECONDARY STREETS		

MAJOR STREET PLAN

APPROVALS

WE HEREBY CERTIFY THAT THIS MASTER PLAN WAS ADOPTED BY
RESOLUTION AT A REGULAR MEETING ON THE DATE SHOWN

ADOPTED BY THE TOWN OF
COSMOPOLIS PLANNING COMMISSION
ON THIS _____ DAY OF _____ 1962

CHAIRMAN

SECRETARY

ADOPTED BY THE TOWN OF
COSMOPOLIS TOWN COUNCIL
ON THIS _____ DAY OF _____ 1962

MAYOR

TOWN CLERK

VERNON E. COTTER
PLANNING CONSULTANT

GRAYS HARBOR REGIONAL PLANNING COMMISSION

little more than needed to serve a compact town such as Cosmopolis.

By the use of the Master Street Plan and the close check established by the Subdivision Ordinance, future street area should be reduced to less than 30.00 percent of the town.

This should be easy to do, as large parcels of land should be reserved for future industry; and the new development will be in the hill area to the south, where better subdivision can readily be required by using the Subdivision Ordinance.

T o w n o f W e s t p o r t

F u t u r e L a n d U s e P l a n

Westport has experienced a steady population growth from 272 in 1930 to 976 in 1960, the increase in the last decade being 33 percent. This is the largest increase percentage-wise of any town in Grays Harbor County. The 1980 projected population estimate is approximately 1100.

The general character of Westport today is that of a summer resort area, with the attractions of boating, sport and commercial fishing, clam digging, scenic areas, large sandy beaches suitable for bathing, picnicking, and sunbathing. These features are attractive to city dwellers, three and a half million of whom live in the Seattle-Tacoma, Spokane, and Portland metropolitan areas, who seek recreation.

With the completion of sections of the Freeway, this area is coming closer and closer to the large metropolitan population which seeks recreation not only in summer but at all times of year.

Along with the natural attractions, something has to be done to provide the necessary public facilities and services this group of tourists will require. Private money will provide some at a profit but some will have to be provided by public funds. The number of visitors will depend on how easily-available and how attractive these recreational necessities for their use are made. There should be numerous large parking areas, sanitary facilities, camping and picnic areas, and commercial and motel establishments to supply their wants.

Future Residential Land Use

The Proposed Land Use Plan suggests a more concentrated grouping of land uses than has been the trend. The opening of new residential areas should be controlled in order to reduce taxpayer costs for public services and facilities.

The plan proposes 1,218.78 acres, or 59.63 percent, for single-family use, and 115.43 acres or 5.64 percent for multiple-family use, making a total of 65.27 percent of the town area for residential land use.

TOWN OF WESTPORT LAND USE PLAN

- LEGEND**
-  RESIDENTIAL (L.D.S.)
 -  RESIDENTIAL (H.D.S.)
 -  COMMERCIAL & PARKING
 -  LIGHT INDUSTRY
 -  HEAVY INDUSTRY

APPROVALS

WE HEREBY CERTIFY THAT THIS MASTER PLAN WAS ADOPTED BY
RESOLUTION AT A REGULAR MEETING ON THE DATE SHOWN

ADOPTED BY THE TOWN OF WESTPORT PLANNING COMMISSION
ON THIS ____ DAY OF _____ 19__

ADOPTED BY THE WESTPORT TOWN COUNCIL
ON THIS ____ DAY OF _____ 19__

CHAIRMAN

SECRETARY

TOWN CLERK

This is above the average proposed for most cities of this size; but because Westport is and will continue to be a recreational and largely seasonal type of town, its future may be expected to be different from most cities.

If the Master Land Use Plan is followed, when the town reaches 100% development, the potential would be:

Single-family residential area 1,218.78 acres, at four lots per acre and 3.5 persons per average family, equals 17,063 persons;

Multiple-family residential area, 115.43 acres, times four lots per acre, times four families per lot, times 3.5 persons per average family, equals 6,464 persons;

or a total of 23,527 persons in all residential land use.

With the high vacancy of land now existing, Westport will have land available for some years to come, but this new development should be guided. A Zoning plan should be adopted to establish certain areas for residential, commercial, industrial, and public uses, which will follow the Proposed Long-Range Land Use Plan submitted in preliminary form last year and now revised and submitted in final form for adoption. The need for zoning is apparent by the scattered pattern of land use that exists today. The adoption of a Zoning Ordinance will protect existing investments and will decrease the loss of values that can occur from incompatible land uses coming into the area.

Future Commercial

The proposed Land Use Plan provides for 48.48 acres of commercial land area, or 2.37 percent of the total town area, to be set aside for future commercial use.

By establishing regularly defined areas for commercial land use, the new developer or investor will know where to locate. The advantages of locating in a well-defined commercial center are many, as can be seen by the success of the "Shopping Center" throughout the country, where one business helps another. The idea of one-stop shopping, with ample parking, to take care of all the day's shopping, has proven quite successful with tourists as well as residents.

The proposed Land Use Plan would tend to concentrate the commercial area as much as possible, so that it would not spread any more than it is now. The proposed Tourist Zone would take care of the Motel and Trailer accommodations and at the same time permit them to expand for future business in an orderly pattern.

Future Industry

The proposed plan provides for 47.40 acres of light industry in two industrial areas, one near the old city area and the other at the dock. The area near town would serve for contractor storage yards and like services, while the other would serve the needs of the fishing industry. Sufficient space is provided for boatbuilding and repairs, canning, freezing and packaging of salmon, crab, oysters, bottom fish, and other catches locally delivered.

Heavy industry is not proposed in the Westport area due to lack of railroad, industrial water and sanitary facilities to serve some types of heavy industry.

Future Schools and Parks

The present school facilities provided for Westport and adjoining communities by the Ocosta School District are new and quite attractive, with space for expansion.

Detailed school expansion plans would come under a separate project, outside the project through which the present report is being prepared. Future long-range plans for schools in the South Beach area should include Westport, Markham, and Grayland; future school growth will depend on what the residents of all these do to make this area inviting, so that full time residents will want to locate in the vacationland along the beach and in the South Bay.

Future park plans for Westport are needed now, so that steps can be taken on a planned program of acquisition and improvements. This is the closest ocean beach to the Seattle-Tacoma Metropolitan Area, and is becoming closer as the Freeway nears completion. Larger crowds can be expected as the beaches become more accessible. Future plans for providing for transients will have to include large open areas with easy access, lots of parking spaces (far more than has been provided anywhere in this area so far), public facilities such as beach shelters, sanitary facilities, picnic and camping areas with arrangements for cooking, and game areas for baseball, volleyball, badminton, and other outdoor games. These facilities will have to be planned for many more people than just the local residents; and proper planning of them will be for the benefit of the residents as well as the transients.

One reason for planning such an extensive program of recreation for the beach area is to convince other agencies -- city, county, state and federal governments -- of the need for such a program, and to enlist their support.

Schools

Westport is the only incorporated town within Grays Harbor County that does not have a school within its limits. Westport is served by Ocosta School District #123, and the school site is located about a half mile south of the city-limit line.

All of the school facilities are new, built within the last few years, and are located in a good site with possibilities of future expansion. In the 1962-63 year there are 614 pupils enrolled: 318 in Kindergarten through 6th grade, 156 in the 7th-9th grades, and 140 in the 10th-12th grades. The area served by Ocosta School District takes the place of about four old schools in the past, and children are now transported to school in four busses. The school district budget amounted to \$323,285.55 for the 1962-63 year, with 31 certificated faculty members. By comparison, in the 1942-43 school year there were 394 pupils and only 13 certificated faculty.

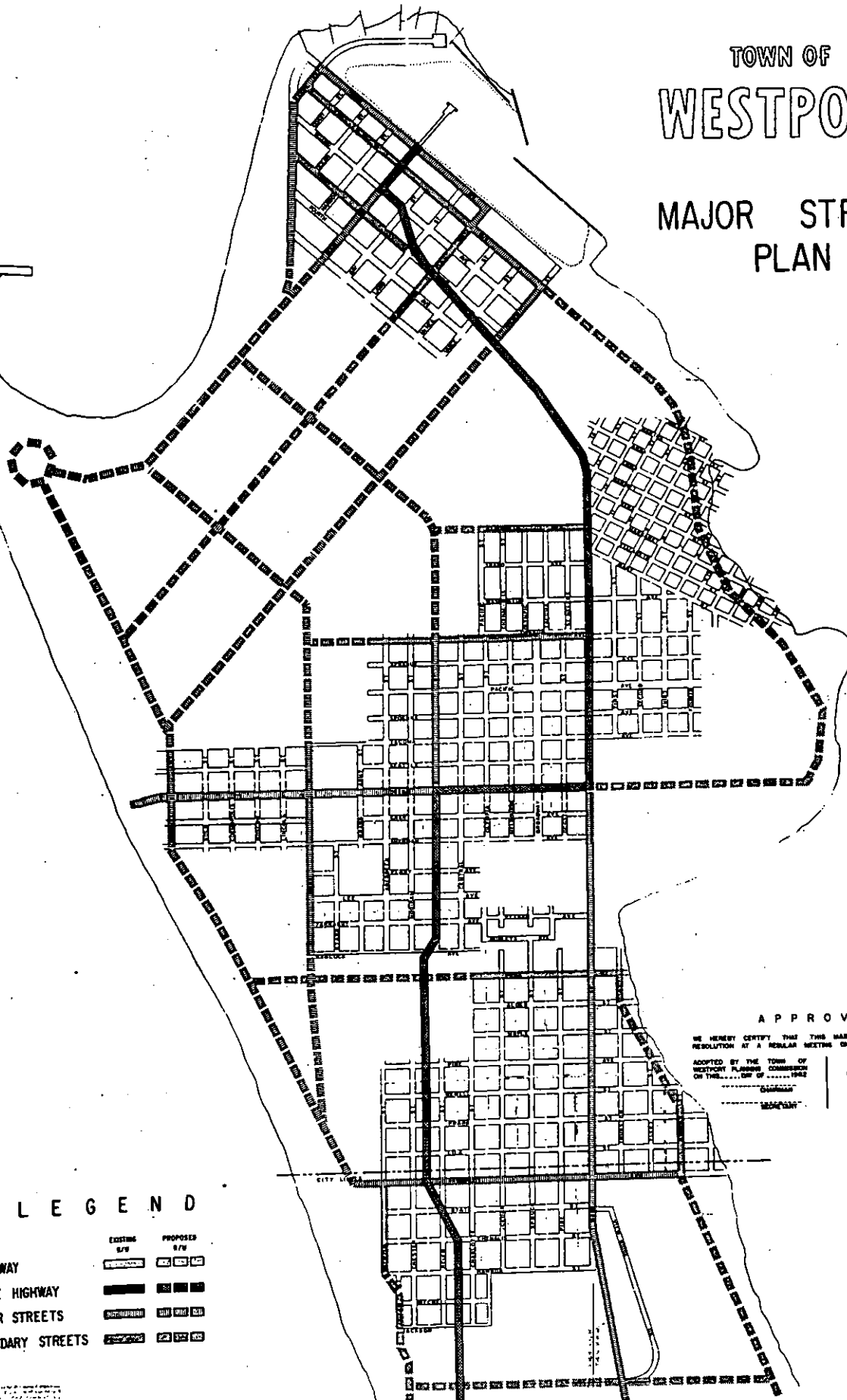
Streets

The present street system of Westport is the result of promotional beach subdivision platted as much as fifty years ago. In many cases the blocks are almost square with alleys which have never been opened or improved. The present street system occupies 296.89 acres which is no less than 72.61 percent of the developed area.

Since some of the tourist visitors to Westport are residents of nearby metropolitan areas who are prospects for the purchase or rental of summer homes in the area, it is likely that additional subdivisions will be developed in the 1,635.14 acres within Westport's city limits. By the use of the Subdivision Ordinance and the Master Street Plan, future street right-of-way can be kept to the minimum needed to serve the property and provide for all the necessary public facilities. By platting this undeveloped area under the Subdivision

TOWN OF WESTPORT

MAJOR STREET PLAN



LEGEND

	EXISTING S/W	PROPOSED S/W
FREEWAY		
STATE HIGHWAY		
MAJOR STREETS		
SECONDARY STREETS		

APPROVALS

WE HEREBY CERTIFY THAT THIS MASTER PLAN WAS ADOPTED BY
RESOLUTION AT A REGULAR MEETING ON THE DATE SHOWN:

ADOPTED BY THE TOWN OF
WESTPORT PLANNING
COMMISSION
ON THIS _____ DAY OF _____ 1962

ADOPTED BY THE TOWN OF
WESTPORT COUNCIL
ON THIS _____ DAY OF _____ 1962

CHAIRMAN

TOWN CLERK

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Ordinance, street area can be reduced to 25 percent of the total, and a savings of 769 acres can be achieved, using the Master Plans as the guide in this new development.

This operation is not automatic. It requires considerable study and review by the town planning commission (if one is appointed) and the town council.

As a comparison: Ocean Shores has developed some 1,432 acres, which are served by adequate roads that amount to 330 acres or only 23.10 percent of the developed area. This results in a 49.51% savings to the taxpayer from now on in the maintenance of all this roadway, a savings which could be put to many uses in the operation of the town. Furthermore, the acreage saved is kept on the tax rolls, broadening the tax base.

Future Major Street Plan

The Major Street Plan for Westport is a long-range plan to provide adequate access for future as well as present development on Chehalis Point within the town limits of Westport.

The plan proposes a number of future streets in the undeveloped sand area. The sand area has unlimited future development possibilities for vacation and weekend homes, and access should be planned now.

On the plan are about four north-south streets that will be important for circulation. One is the existing State Highway 13-A, which parallels the coastline from the "Y" at Cohasset Beach north to Ocean Avenue, then east to Montesano Avenue and then along Montesano Avenue and Dock Street terminating at Front Street and the sports fishing basin. The other three are classed as Secondary Streets; they include Cribbens Street on the west, Surf Street, extension of Forrest north and Montesano-Main Street south of Ocean Avenue.

The east-west Secondary Streets, starting from the north, are First Street, Third Street, Elizabeth Street, and Park Street, plus a road to parallel the Bay front. The Major Streets shown are Dock Street, Front Street, Wilson, Oregon (North) Avenue, Ocean Avenue, plus a Major Street to parallel the Ocean shore on top of the sand dunes, and plus the last Major connection just south of

the city limits line shown as Prospect Avenue.

These Major and Secondary Streets will provide the necessary circulation throughout the town.

As they will carry the bulk of the through traffic in Westport, the right-of-way and improvement standards of these streets should be given special consideration during the planning stages and before being accepted by the Town Council.

The experience of the City of Aberdeen with Summer Avenue provides an example of the type of problem created for a city when this is not done.

By the adoption and use of the Subdivision Ordinance, through the review provided, by the Council or by the Planning Commission (if Westport had one), it would be possible for the city to make major savings in land area of streets and street maintenance costs. This very same process is taking place in cities throughout the nation and can be applied here to the advantage of the city taxpayers. Care must be taken, with a review of each individual street, and easements must be retained for utilities and drainage.

PUBLIC FACILITIES PLANNING

Public Facilities Planning is an important part of the long-range Planning program. It is necessary, because this process is the only way that all projects can be considered by the community in the light of their need, cost, priority, and conformity to the Master Plan.

PUBLIC FACILITIES PLAN

The Public Facilities Plan presented here is a preliminary plan to show the general location of the various public facilities.

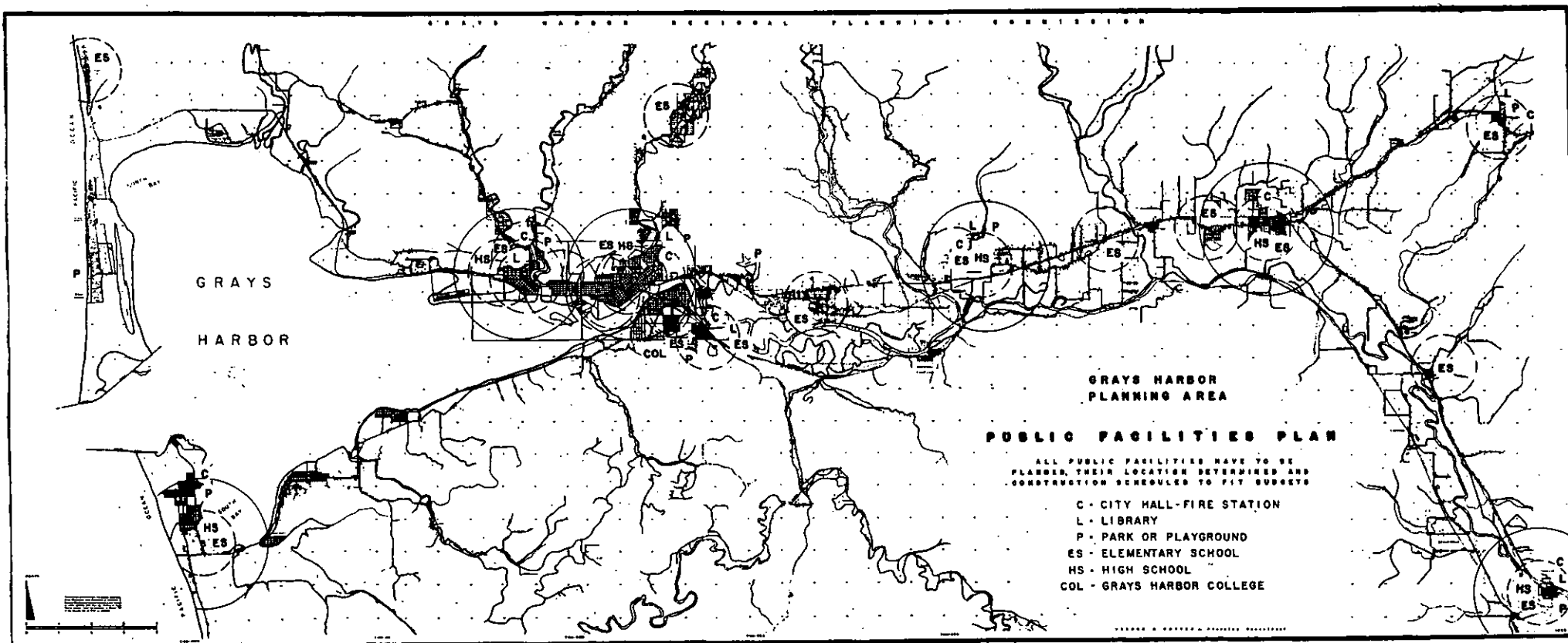
Its first purpose is to bring to the attention of the various Planning Commissions, Councils, Commissioners, Water Districts, School Districts, and other districts, the number and variety of public projects that have to be considered in the development of a comprehensive plan for a city or county area.

This shows the necessity of considering all projects and plans and their priority in construction; so that their need, cost, and the ability of the area to pay for the project can all be considered before any tax money is spent.

By this prior review of all projects, the Planning Commission or District can make their recommendations to the Council, Commission, or Board -- which can make a better decision, based on the added study and consideration given to the problem or project by representatives of the area with local knowledge.

The second purpose of this Preliminary Public Facilities Plan is to make initial recommendations as to new facilities that will become needed to serve future population, or in some cases to serve present population more efficiently. Such recommendations can only be general. Various public facilities have been suggested in the text that follows for the cities and the county area, but the details of these proposals are not within the scope of this project and will have to be developed by the individual agency to fit the specific needs of the areas.

The Public Facilities Plan is shown on the next page.



P u b l i c F a c i l i t i e s

In this discussion, the term public facilities is used to mean activities or structures that are constructed or supported by the public tax dollar.

For convenience, some useful minimum standards are grouped together in tabular form at the end of this report. They will be found very helpful in considering specific problems, and especially in judging the suitability of specific proposed sites.

M c C l e a r y

In McCleary, the town now has a new town hall building which also houses the police, fire station, and library. This is a nice compact arrangement of the town's public services. The facility is located in the center of the town and just across the street from the park.

The park, a little over 6 acres, is only partly developed at this time. Long-range development plans should be prepared and approved now so that steps can be taken for its complete development in the most economical manner.

The Town has a major drainage problem in the town hall area, and in fact the town hall has been flooded a number of times. The drainage program should be completed so that steps can be taken to correct the flood problem.

The Town should develop plans for a domestic water supply for at least double its present population.

Some good thinking should be given at the same time to a future supply of industrial water.

Along with these plans should also be studies on methods of how the new sewer treatment plant's capacity could be increased.

Existing school facilities are adequate for the present 247 pupils but plans should be developed for an increase as the town population doubles. Also the possibility of adding high school classes should be considered. If these plans are developed now, economical programs can be planned

years in advance, and many savings can be made that would be almost impossible in a hand-to-mouth expansion.

McCleary's present cost-per-pupil is very close to the State average, even considering McCleary's special problems of transportation and location. This is based on a report in School Management Magazine for December 1962 which stated that the average cost to educate a public school pupil in 1962 was \$394.70; that \$335 was spent for instruction, \$14.70 for transportation, and \$45.00 for school construction.

O a k v i l l e

Oakville has a number of problems, and the Council is trying to solve as many as possible; but as funds are limited, some public facilities cannot be completed as soon as they are needed.

Oakville needs a new town hall, because every city or town needs to have some central point where the citizens can discuss town problems, a community center so that people can look up to the city for guidance.

At present, meetings are held in the small Library, which has limited space. Moreover, it is needed for Library purposes, and judging from experience elsewhere, pressure on the public library will increase as the children now in the lower grades reach high school; the present enrollment in kindergarten through 9th grade is 224, with 51 in grades 10 through 12, and with students tending to stay in school through high school more than formerly, it is apparent that high school enrollment will soon increase quite markedly. Oakville library use is already much higher than average; 1962 circulation was 8,395 items. Washington State average circulation per capita is 5.6, so for the relatively small population that uses Oakville's library the per capita figure is far above average.

The future of Oakville may depend a lot on whether the town would be able to provide the necessary public facilities for a cannery or similar type of new industry. These facilities would have to include a sewer treatment plant, a good supply of domestic water, and whatever supply of industrial water the particular industry might require.

Oakville's school facilities are adequate for present use but would be strained if the population doubled. School transportation is an exceptionally costly item because of the number of miles some of the pupils are transported. The average cost per pupil is almost half again the state average. This is not a true comparison, because many things have to be considered, such as operational cost and interest rate on a high school bonded indebtedness.

Not only here in reference to Oakville, but throughout this discussion, such comparisons are made only to show the special nature of problems faced, and not to criticize any school district operation. Where these problems exist, the need for long-range overall planning and programming of public funds, which helps get the most for the tax dollar, becomes not merely desirable but urgent.

P o r t e r

The small unincorporated community of Porter (School District #116) has 20 pupils in Kindergarten through 6th grade, and 8 pupils in grades 7 through 9, a total of 28. Present facilities can take care of the 28; but with the trend toward increase of population in unincorporated areas of this county, the number of pupils is likely to increase in this school district -- increasing the problems. The location (see the Public Facilities Plan) is about half way between Oakville and Elma, and would be able to serve any development within a three or four mile range.

The pupil cost of this type of small school is high compared to state average, but as most of the children are in the lower grades (K through 6) they cannot be transported as far as older students.

As the valley develops, the general location of this school will serve the Chehalis Valley well.

E l m a

Elma School District #137 has 1,156 pupils enrolled, with a higher proportion of its enrollment in upper grades than in many of the Grays Harbor schools, -- 484 in K through 6th,

345 in 7th through 9th, and 327 in 10th through 12th grades, for the year 1962-63. The district maintains four school buildings, staffed with 47 certified and 19 non-certified, and it operates 12 school buses. Due to the large number of pupils and economic operation, the unit cost per pupil is almost identical with the state average.

Present facilities are located on minimum size school sites. Future plans for the Freeway through this area will create some problems as to school bus routes and may limit expansion of the present school sites. Therefore long-range plans should be prepared as soon as possible. This will enable their consideration along with other public facilities within the Town of Elma.

B r a d y - S a t s o p A r e a

Three elementary schools are located in small communities (unincorporated) between Elma and Montesano. These are Hunters Prairie, District 27, with 58 pupils; Olympic View District 114, with 101 pupils; and Satsop District 104, with 59 pupils for the 1962-1963 school year. All three are one-building schools. The Hunters Prairie and Olympic View schools each operate one school bus to pick up the school children.

These schools are already beginning to feel added pressures as commuter-type residential development is beginning in their vicinity. They are well located in relation to present growth and are in the area proposed for future residential development expansion in the Chehalis Valley. As school enrollment increases, expansion of these schools will be possible and desirable.

The only semi-public recreation area between Elma and Satsop is a private golf course.

M o n t e s a n o

Public facilities in Montesano are improving. The city has a new sewage treatment plant, the city hall has been modernized, and a new city yard and related buildings are under construction. The city has a new county library

building within its limits which is an architectural asset, especially compared to the many buildings in poor condition, and fifty or more years old, that line the main streets.

One public facility as to which the city does have a major problem is water, in that there is no water reservoir high enough to furnish the desired pressure during the dry summer months. Long-range plans are needed to provide not only the necessary domestic water but also a supply of industrial water which is lacking at the present time. There are many types of industry looking for locations that need sufficient water for their operations; but new industry considering a site wants to be operating within a year of choosing the location, which means that industry will not wait until plans for a water supply are developed and put into construction.

The Montesano park system has a good start with four small parks, but the city is low in park area compared with other Washington cities. Long-range plans should be developed so that future park areas can be acquired by gift or purchase at an acreage price rather than wait till all vacant land is subdivided.

Montesano School District #124 has an enrollment of 996 pupils for the year 1962-63. Due to the large number of pupils it has been possible for the unit cost per pupil to be kept slightly below the state average of \$394 per pupil, indicating an economical approach to the many school problems.

The schools occupy two sites. One, the newer elementary, could be expanded west into an area that is now undeveloped. The other, the combined elementary and high school, would have difficulty expanding without crossing major streets. In developing long range school expansion plans, site selections should be made while property values are reasonable.

Studies and plans should be developed now to expand the sewer and water trunk systems to the east and west of the present city to take care of new development that has already started. In this way, construction work can be put on a one or five year program and funds set in the budget for these future needs.

With Montesano the county seat of Grays Harbor County, the County facilities are located within the city of Montesano, and it will be convenient to mention them at this point. The present county court house is structurally good but the various county departments are crowded, with no vacant space

for even one more desk in some of them. The county jail has four times the number of prisoners it was designed for, and does not meet the standards recommended for this type of institution. This is due partly to the crowded conditions, partly to the age of the building. A recent inspection report by visiting experts pointed out deficiencies in design which might under some circumstances be dangerous.

A new county building should be planned. It should have facilities adequate to take care of future needs of this county with a population double the present, which should happen by the year 2000 and might happen much earlier if one large industry were to move in. Space should be provided in the county building to accommodate other public agencies (state and federal) which need better facilities now and which should be near the county offices so that the general public would not have to go all over the county to locate the various departments.

Montesano also has another problem shared with the county. It was mentioned above that Montesano lacks a supply of industrial water. So does the county area. This might be handled by a water district of the city plus some of the county (to be determined by study), with the water source either the Wynooche River or the Satsop River; in fact both should be considered. Montesano could stand a good industrial payroll, and would be aided by one even if the actual industrial plant were located in the adjacent county area. Without any industrial water, prospects for new industry are slim.

All of the above problems can be solved. Plans have to be made, costs have to be estimated, and budgets have to be studied, to see how these needed improvements can be developed.

C o u n t y

For discussion of county public facilities problems located within the city limits of the county seat, see above.

The complete list of needed public facilities items in county unincorporated territory would be too long to catalog here. Some of the items at the top of the list are roads, bridges, drainage structures, soil erosion control, beach improvements, and added public structures and services to meet the demands of the growing population of the unincorporated urbanized districts of Grays Harbor County.

C e n t r a l P a r k

Central Park (unincorporated) has a number of public facilities problems.

The area lacks design in its street system. The Plan proposed for the area under the present project is only the start to provide the minimum amount of circulation. This circulation involves not only automobile traffic but water, sewer lines, and electrical service. Local street design needs much study. Local and major street connections to the future Freeway also require careful study to arrive at any practical solution. All those affected must be taken into consideration: the traveling public (who pay the highway bills), the landowners, the businesses and industries who will all use the Freeway once it is constructed.

Central Park does not have a sewer system now, but as the area develops, this will have to be provided for by a sewer district. Plans should be developed soon to provide the most economical system to serve the potential 20,000 population that this area could accommodate when fully developed. Water supply, sanitation, schools, parks and playgrounds should be planned before development, so that land acquisition cost for these purposes can be reduced to a minimum. Lake Aberdeen and Lake Silvia, though near by, will not provide the needed park area.

School facilities in the Central Park area are adequate for the present, but as the population increases, more school rooms will be needed. Studies should be made to determine the extent of building expansion needed for this, and the amount of land needed for playground purposes. Property values are rising in this area due to the demand for good building sites; therefore the school district should program their land acquisition as soon as possible, so as to keep land costs to the minimum.

C o s m o p o l i s

Cosmopolis has a number of public facility projects that need to be completed. The city hall, library, police, and fire station are now all housed in one small building. Plans should be developed, providing ample space for each

department so that it can operate efficiently. Long range development plans should be prepared for public buildings and also for parks, so that land acquisition costs can be studied and balanced against advantages of site location, in order that land cost can be kept to a minimum consistent with effective serving of the needs.

Some problems have developed in the present method used to supply domestic water. Added source and storage will be needed to serve new development in the hills.

The possible industrial water needs for the additional industrial land proposed in the Land Use Plan. Where it is to come from, and how much is available, should be part of the long-range development program.

Future subdivision plans and their relation to the major street system constitute another important part of city growth. Through this type of future planning, savings in major trunk lines for sewers and water can be made; also in a storm drain system, to handle excess flood water from present and future development in the hill area.

The present school facilities accommodate 326 pupils, with 249 in Kindergarten through 6th grade and 77 in the 7th through 9th grades. The school district maintains two school buildings and operates two school buses. Cost of school district in District 99 is a little over the unit average for schools in the State of Washington.

The only recreation area is a private golf club in the south part of town. Other recreational areas are necessary for complete development. In particular, some kind of recreational facility is quite urgently needed for young people below driver's license age, for after school hours and evening.

A b e r d e e n

Aberdeen has growing pains, like most cities in the west. These pains are caused by increased demands on public services and facilities, though population has not been increasing. The city lacks funds to make the needed improvements. Broad long-range public facilities plans should be prepared now, so that future development plans can be worked together.

The City Engineer has a number of major problems under

study and a number of these are in final plan stage; but with daily administrative work, immediate sewer and drainage problems, and emergency industrial water problems, it is impossible for the engineering department to find time to do much long-range planning. The Council is aware of most of these problems and should work out a method whereby a five or ten year program on public facilities could be prepared. This long-range plan could then be used as a guide on future expenditures.

The following is a partial list of public facilities projects that need Aberdeen city attention:

1. City Hall (and parking area)
2. City Library (and parking area)
3. City Fire Station - expansion of present service, with training tower
4. Industrial Water System
5. Domestic Water trunk System
6. Sanitary and storm drain trunk systems
7. Major street improvements
8. Secondary street improvements
9. Study of Freeway traffic effect on one-way street system
10. Traffic control (signals, stop signs, etc.)
11. Public parking lots for the central business district
12. Public parks in new areas

This list could be added to now, and will have to be added to as the city grows; but the important thing is that the Council, in their administration of the affairs of the city, know the importance of each project listed here and of the many unlisted projects, and that their decisions be made upon knowledge and understanding of the facts of each project, its relation to all other city projects, and its priority in the list of total projects.

The Public Facilities Plan shows the elementary schools with their spheres of influence. Many of these circles (the small circles on the map) overlap; but in high density development, and with natural barriers such as rivers, this overlap may not be too important. The larger circles are spheres of influence from the high schools and indicate general area served, but these are very approximate. In rural areas the range of influence is increased by bus service; in Aberdeen it is increased through use of the high school by students from outside the city limits.

Also shown on the plan is the general present location of Grays Harbor College. This facility, which is only a few years old and has already reached an enrollment of 700, is also facing growing pains. It already needs more space for nearly every function -- more classrooms, more faculty office space, more library, much more parking space. The topography of the site is an esthetic advantage but creates problems in expansion.

One consideration that must be taken into account in long range planning for Grays Harbor College is the special responsibility of such a community college in providing technical training for young people who hope to enter the dominant local industry -- in this case forest products. There are many branches to that industry: some of them are expanding, some contracting; those that are expanding are those requiring the highest degree of technical knowledge. Providing technical curricula is costly -- cost per pupil can easily reach five times that of providing liberal-arts courses. As a rule industry is glad to cooperate in working out technical training.

The college authorities, who have just completed preparations for installing a two-year electronics curriculum, are cognizant of the difficulties and of the responsibility. But the problem is not theirs alone. It is one that must be tackled in order to stem the trend of Grays Harbor's young men to leave the community seeking jobs elsewhere.

Hoquiam

Hoquiam has the same problems all the other cities of the region have: drainage, water supply, old public buildings in need of replacement or re-siting, ill-considered original street layout. It also has additional special problems, such as being cut in half by the Hoquiam River with inadequate bridges. The fact that large school enrollment does not automatically produce low per-pupil cost is well brought out by the fact that Hoquiam's special problems have required a per-pupil cost of \$423 per pupil compared with the state average of \$394.

The important thing in Hoquiam is that the city officials and citizens are aware of their problems and taking steps to correct the situation, by joint effort of the city council, planning commission, citizens' urban renewal committee, and the public. Hoquiam has a head start on

the rest of the harbor. They have established an Urban Renewal Project, set up an Urban Renewal Office, hired consultants and engineers to work on the projects. Their Comprehensive Plan is just being completed. By the development of long-range plans, and then making the proposed projects into realities, the city can make itself more inviting to the prospective resident, business, or industry seeking a location.

Some of Hoquiam's problems are regional in scope and can only be solved on a regional basis. One of these is obviously the highway problem. Tourists originating from east of Hoquiam pass through to the beaches west of Hoquiam. Log trucks bringing raw materials from the forests north of Hoquiam pass through to the Port Docks or to destinations in Aberdeen or Cosmopolis (over and above those destined for Hoquiam's own mills). For this reason, Hoquiam representatives have taken active part in planning the Freeway on a Regional basis.

Another Hoquiam problem with Regional aspects is industrial water. Hoquiam has its own domestic water supply, with a nominal reservoir capacity of 9 million gallons and a daily consumption at peak periods of between 2 and 3 million; but it buys its industrial water from Aberdeen. The contract calls for 40 million gallons per day and the full contract amount is now being delivered, to serve Hoquiam's existing industries. Aberdeen can supply no more from present developed sources. In other words, Hoquiam's present water-using industries cannot expand their operation, and no new industry interested in locating in Hoquiam can be promised any industrial water.

Coordination of the water supply from the various potential sources has become a must. A regional study should be made to determine the amount, quality and location of potential industrial water that could be developed for the present and future users in various parts of the region, in order to work out a program whereby each location can be served most economically and adequately, if possible with interties between the sources in case one source of supply is interrupted. By this means Hoquiam as well as the other cities can be better served, because one of the real attractions of the Grays Harbor region for industry in future will be the natural resource of high-quality water.

(Note: Hoquiam elementary schools are not all shown on this regional preliminary Public Facilities Plan, as the scale of the map would not permit. For this and other Hoquiam information, see the city Master Plan being prepared by the consultant for Hoquiam.)

W e s t p o r t

The Westport area has a number of public facilities problems that are the responsibility in some cases of the Town of Westport, in some cases of the Port of Grays Harbor, and in some of both. The Port District operates the Westhaven area (Fishing Base) where it has a program of badly-needed improvements including such items as street opening, dock facilities, storage and warehouse facilities, dredging, filling, provision of parking areas and tourist comfort stations, and many others.

The Town of Westport has a number of public facilities that need to be developed, such as: street improvement, street vacation, sewers for city and beach areas, drainage, parking areas, beach access, beach development, park development and acquisition, long-range domestic water supply system, and future public buildings for police, fire station, and library.

A long-range approach to these problems would help, both for the acquisition of land now that would be higher-priced later, and for the actual construction of facilities in the order most needed. The financing of the development could be studied on an overall development program of five, ten, or twenty years, rather than on a day-to-day basis which results in higher costs to the taxpayer.

N o r t h a n d S o u t h B e a c h e s

The chief public facilities of concern in the beach areas are schools to serve resident population, sanitary facilities to serve transients and prevent a health problem, and park facilities to serve both transients and residents. In the beach areas that are feeling most tourist impact now, and will feel the additional impact when the Freeway and the Megler Bridge are completed, immediate study and programming are essential.

The problems for the schools will be slower-moving because the increase in permanent residents will be slower. The facilities of Ocosta School District, which transports pupils from Westport, Grayland, Cohasset, and Markham, should be planned with a view to serving double the present population by the year 2000. Ample land should be acquired soon, and a program established which can be followed with minor adjustments each year as needed. Similar programming should be done by North Beach schools. Expansion of the Ocean City school can be easily accomplished.

Minimum Standards for Use in
Considering Proposed Public
Facility Site Locations

<u>Kind of Facility</u>	<u>Population Density of Area</u>		
	<u>Low</u>	<u>Medium</u>	<u>High</u>
Community Centers	Every 5,000 population	Every 10,000 population	Every 25,000 population
Neighborhood Centers	Every 2,500 population	Every 5,000 population	Every 10,000 population
Schools			
Elementary	2½ mile radius	1 mile radius	½ mile radius
High	5 mile radius	3 mile radius	1 mile radius
City or Town Hall	1 each center	1 each center	1 each center
" Library	10 mile radius*	5 mile radius	2 mile radius
" Fire Station	5 mile radius	5 mile radius	2 mile radius
" Police or Sheriff Station	1 each center	1 each center	Main Stations
Parks			
Small	1 mile radius	½ mile radius	½ mile radius
Medium	5 mile radius	2 mile radius	1 mile radius
Large or Regional	10 mile radius	5 mile radius	2½ mile radius

* Supplemented by Bookmobile

Neighborhood Recreation Center (under 10,000 population)
(may adjoin elementary school)

Small child playlot	0.35 acre
Elementary school age playlot	0.40
Hobby and science area	0.30
Hard court games	0.75
Sports field	Provided by school
Swimming pool	0.25
Family-picnic area	1.75
Parklike area for free play	0.75
Neighborhood center building	Provided by school
Quiet area	0.50
Senior resident area	
Grass	0.60
Paved	0.10
Building space	0.10
Off-street parking	0.40
Landscaping - allow 30% of site	1.88
Total =	8.13 acres

Community Recreation Park (more than 10,000 population)
(may adjoin 7th-12th grade school)

Small child playlot	0.35 acre
Elementary school age playlot	0.40
Field for sports	1.00
Paved area for games	1.50
Game and dancing paved area	0.15
Family group picnic area	4.00
Grass area for free play	2.00
Special event area	1.00
Community center building	0.75
Regulation swimming pool	1.00
Natural park area	3.00
Senior citizen area	
Grass	2.20
Paved	0.10
Building space	0.10
Off-street parking	1.25
Landscaping - edge and site screening - allow 25% of site area	4.70
Total =	23.50 acres

The above information may be used as a guide for working use in developing needed recreation facilities, which should be included in the Public Facilities program. Topography should be considered as well as size; some facilities require flat land, while others fit into uneven topography to their advantage.

GRAYS HARBOR PLANNING AREA

SUMMARY

REPORT #4

for

**GRAYS HARBOR REGIONAL
PLANNING COMMISSION**

In Cooperation with the

U. S. HOUSING and

HOME FINANCE AGENCY

VERNON S. COTTER

PLANNING CONSULTANT

This summary report has been prepared as a guide to the members of the various planning agencies in their study of the basic data contained in Reports #2 and #3. The series of reports contain many cross-references, plans, and statistics that will be useful in action programs.

The reports also bring out the necessity of more action by local officials in following through on the proposals made so that a more economical type of development can be foreseen in the future. The mistakes made in the past do not have to be repeated in the future. Such mistakes increase the cost of local government.

Grays Harbor will have to take advantage of all their assets -- and they have many -- to compete with other regions, or even to maintain their present position in the highly competitive markets of commerce and industry. The effort has to be made by the citizens of each community to make this region more attractive to the prospective individual resident or industry to locate here. A region either moves ahead or goes backward; there is no in between. Local people have too much invested in Grays Harbor to let it stagnate. The planning reports of this project contain many suggestions and a program of action that can be used as a tool in the building of a better and more attractive place for present and future residents of Grays Harbor.

I wish to thank the many people, and especially the members of the Grays Harbor Regional Planning Commission, who have given help, loyalty and support in the preparation of these plans and reports.

Respectfully submitted,

Vernon S. Cotter

I n t r o d u c t i o n

A Comprehensive Plan, in a general way, provides for the amenities that are needed to encourage future orderly physical development in an area, suitable to bring about healthy future growth of the community. The first parts of the Comprehensive Plan for the Grays Harbor Region of Washington have been prepared in form for approval by the city and county planning commissions, city councils, and board of county commissioners, and are now under consideration by those bodies.

The plans proposed have resulted from intensive study of past and present land use, traffic and transportation, economic base, and population, with consideration of their trends and estimated future prospects.

The land use plans, major thoroughfare plans, and preliminary public facilities plan are interrelated parts of the general Comprehensive Plan. They propose that general areas in the region be set aside for development of agricultural, forest, residential, commercial, and industrial use, that street and road patterns of circulation be developed to channel the different kinds of vehicle traffic without mutual interference and without bottlenecks, and that programs be instituted for acquisition and development of land for future public uses, particularly for schools and parks. This pattern of design has been determined in cooperation with industry, commerce, land developers and local officials who have a thorough knowledge of past and present growth and conditions of the region; appreciative thanks is due for their cooperation. The carrying out of the plans in future years will promote the following:

1. Preservation of the region's major economic base, the forest, through continued tree farming, with manufacture of forest products. This includes provision of industrial water and industrial sites so that new products can be manufactured here as soon as raw materials and markets warrant.

2. Reservation for agricultural use of our good farm land, which is quite limited in this region.

3. Development of low-density residential use expanded into the hill area in some communities and into the suburban area from Central Park to Elma, where present development and land subdivision make any continued farm development impractical, and where cost to the taxpayer of providing public utilities will not be excessive. The quality and stability of residential development in both newer and older sections will be enhanced by the protection given through enactment of the proposed subdivision and zoning ordinances.

4. Stabilization of central business districts of the cities through implementation of the land use plan by proposed zoning, and also through the effect of the major street plan and proposed highway improvements which will take truck and non-stop through

traffic off city streets. Commercial land use will also be benefitted by the possibility of more adequate parking through use of the proposed zoning ordinance, and of better neighborhood shopping centers through use of the proposed subdivision ordinance. Strip commercial development along highways will be prevented as these controls come into effect.

5. Stimulation of industrial development of the region, by provision of spacious and suitable industrial area in the harbor district, adjacent to deep water channel, railroads, highways (including future Freeway access), and utilities. Much of this district has been occupied by industry in the past or is occupied by it now. The badly needed supply of industrial water is well along in engineering and planning stages, and may be a reality soon. Industry as well as other phases of community life will be benefitted by provisions of the land use plan and major thoroughfares plan and implementing controls, because companies will be able to invest in industrial sites now, to be used later when industrial water and new technological developments and markets make construction of new plants timely. New companies will also be more attracted to the region as zoning and subdivision controls give protection to industrial uses in their proper place as well as protection to other uses in other places.

6. Maintenance of access to active open-air recreation by provision for a system of neighborhood, community and regional parks decentralized throughout the planning area.

7. Encouragement of effective educational services at minimum taxpayer cost by coordination of location of proposed schools throughout the region.

8. Renewal of older sections of the cities to modern and higher standards of design and construction.

9. Protection of the natural beauty and natural resources of the region from destructive influences.

10. Improvement of access to, from, and through the region, for all forms of transportation of persons and things, through separation of different kinds of traffic and adequate provision for each.

11. Increase in the general attractiveness of the region as a place to live and work, thus bringing in more visitors, more permanent residents, more new industry, under conditions through which additional population and industry can flourish.

The proposals are not revolutionary, but suggest practical and economical ways to improve the region. By following the proposals made in the plans, and taking the necessary steps to promote action programs by citizens and official groups, much can be accomplished.

E c o n o m i c B a s e

o f t h e G r a y s H a r b o r R e g i o n

The following sketch of the Grays Harbor economy, drawn from the Economic Base Data in Report #2 of this series, is divided into three sections for convenience. The first is the summary of forecasts for future economic activity levels in industry, commerce, and sportsfishing tourism--to the extent that sound forecasting is possible with an economy having practically no immediate developmental trends and having innumerable "ifs" and "buts" in its economic base.

1. F o r e c a s t s

Industrial forecast. Predicting future development for any area with a population increase of only 1.5% for the past decade would be unreliable. For this region, where the economy is based almost entirely on forest products, the only certainty is that there will be the uncertainty of the forest industry. That is, there will continue to be the wide fluctuations of price, production and employment, continuing to produce difficult labor relations. There will also obviously continue to be depletion of the virgin timber resource tributary to Grays Harbor County, with some remaining uncertainty, gradually decreasing, as to when and to what extent the second growth will be able to replace it for all mill purposes. Development of secondary fabrication will depend on markets, which will depend on the rate of increase of the Northwest metropolitan-area population more than anything else; on this, numerous studies have been made and it is the most reliable part of the foundation for predictions. Pulp and paper and their secondary products (rayon, cellophane, etc.) seem the most likely prospects for further development; but expansion of production facilities on a world scale, and development of competing products using other raw materials, have made this business so tightly competitive that local expansion in the near future is a completely unanswerable question. The whole thing sums up: when the companies know they can get the materials, and think they can sell the products, they will build the additional plants; and not until then; and any forecast other than that would be a gambler's guess.

True, it would be possible to draw a line on paper that would look very plausible. Such a line could be a projection based on data in Report #2 as follows: Take the sustained-yield-per-acre conservative figure of 570 board feet per year (page 103), multiply by the figure for manufacturing payrolls that are generated by each thousand board feet, \$43.00 (page 108), and apply to the number of acres of each species at each stage of growth (page 99). This would supposedly give a projection of what forest-industry payrolls in the region would be at each interval of years in advance, which could be compared with present payrolls

as given in Report #2 page 56. The trouble is that such a projection would be unrealistic. There are many other factors involved -- for instance, there is no production experience yet on the new silvichemicals that would enable projection of their labor costs, water consumption, or anything else about them, except that they may come to Grays Harbor if and when the region has adequate industrial water. As the present consultant wrote in December 1961, in the Over-All Economic Development Program for Grays Harbor County:

"Grays Harbor is pinned to an industry whose whole past history is one of sudden rapid technological changeovers. ... Based on the past tendency to these major shifts -- and based on our knowledge that there is heavy competition by recently-introduced metal and plastic products -- we can forecast with certainty that there will be more shifts.

"We can forecast with fair certainty that these shifts will not be in the direction of the simpler types of wood products. A recent study by the Stanford Research Institute indicated that...total national consumption of direct wood products will not rise above present levels in the next 15 years despite the population explosion.

"We can also forecast with fair certainty that the steady rise in per capita consumption of pulp and paper products will not be reversed... Based on this, we can forecast also that the development of wood chemical products will continue, since these utilize byproducts of the pulp process and since large pulp manufacturers are actively encouraging research for such new products. ...with ultimate developments possibly as far-reaching as those that have occurred in petroleum chemistry.

"We can further forecast, then, that Grays Harbor will be helpless to adapt to these coming shifts unless Grays Harbor develops additional supplies of industrial water. Every technological change in the industry in recent years that has proved usable for Grays Harbor has been in the direction of more use of hydraulics. ...

"Turning from products to technology, we can forecast continued pressures, in this highly-competitive industry, to increase production efficiency. ...

"At the forest end...Grays Harbor already has high standards...made possible by the large scale of the tree farms.../and/ progress will continue...." (OEDP pages 30-32.)

For further discussion of the complexities of Grays Harbor's industrial potential, with extensive data and analysis, see the OEDP as a whole. (Copy available through Aberdeen Public Library, or in U. S. Department of Commerce Seattle field office library.)

Commercial forecast. Most commerce here is distribution for local consumption. It follows population growth, therefore; and population growth in this region must follow industry, for if the young people could find jobs locally they might remain, but with the continuing high unemployment rate, and no visible prospect of anything better, they have to look elsewhere for work, and they leave the region. Therefore the population growth of the region must be expected to be far slower than that in more active parts

of the Northwest. Therefore the population growth of the region must be expected to be far slower than that in more active parts of the Northwest. For instance, in the near future, based on past trends and visible possibilities, it is forecast to reach about 60,000 in another ten years. Most of this increase will be in the child age-group, involving little increase in family buying-power.

The one positive possibility in commerce is the tourist customers, which would also mean some increase in jobs to serve those customers. Highway improvements will bring more tourists. On the other hand, it is true that highway improvements will also cause more Grays Harbor residents to make trips to the Seattle metropolitan area for comparison shopping. Thus the other most favorable factor for Grays Harbor merchants is the Seattle parking problem.

Summing up: the consultant's forecast for retail trade is that the merchants by running as hard as they can will be about able to stay in the same place. But they will have to modernize ruthlessly, and they will have to put pressure on the competitor across the street to do the same; because the real competition will not be the other local merchants but the big-city ones, and Grays Harbor stores will not be able to sell to customers unless they can attract them into Grays Harbor shopping districts.*

Sportsfishing and tourist-industry forecast. Here we really get into the world of "if."

It is not that tourists are unpredictable. On the contrary. The thing that past experience reliably shows (see State Department of Fisheries annual reports, and the OEDP for Grays Harbor prepared by this consultant) is that the tourist industry here is raw-materials-oriented like all the rest of industry here. When there are salmon, or when there are clams, tourists come all at once by the thousands. When there aren't, they either don't come or don't stay. But salmon and clams are in short supply. Moreover, highway bottlenecks place a saturation ceiling on tourist visitors. Hence the following series of ifs:

If highways from the metropolitan centers all the way to the North and South Beaches are improved to eliminate bottlenecks, there will be tourist increase to the new saturation level of

* See the intensive study of Hoquiam retailing in the report "City of Hoquiam Comprehensive Plan Part Two" (1963), available in Hoquiam Public Library. The present consultant can confirm the applicability of the general conclusions there to all Grays Harbor retailing.

those highways (which will mean a maximum potential increase of roughly 37,000 cars per weekend*), if

there are attractions to bring them, which in terms of past trends means

if there are more clams and salmon, which in practice can only be the case

if the measures recommended by fisheries specialists are put into effect** and

also if the tourists receive a friendly and efficient welcome in terms of places to stay, things to do, and courtesies received from all with whom they come in contact.***

Failure in any one of these ifs will cut down the number of tourist visitors and shorten the stay of those who do come.

In summary:

The forecast for tourist growth is that the increased potential that will be made possible by planned highway improvements will be unrealized at the present production levels of fish sought by sportsfishermen. That is a limiting factor: if no available fish, no sportsfishermen. Since the recommended programs for increasing the supply of these fish have not yet been put into effect or programmed for starting, no forecast can be put into figures as to how great the effect will be or when it will begin to be felt.

* This is a potential maximum, not average, potential figure. The reasoning assumes that the provision of four uninterrupted lanes of moving traffic all the way would double the present peak capacity; which for the North Beaches is now that of the Simpson Avenue Bridge (15,200), and for the South Beaches and Westport is that of the two-lane highway section just southwest of the Chehalis Bridge (13,000). See Report #2, Table 55 page 87.

** See detailed program of fish farms and stream clearance, complete with cost estimates, prepared by the State Department of Fisheries in 1962 for the Grays Harbor Regional Planning Commission for an ARA technical-assistance project application -- which was turned down.

*** Not that Grays Harbor's welcome is especially bad. Rather, that it could be so good. The consultant wishes that every Grays Harbor resident who meets the tourist public could spend at least a weekend in Victoria, B. C. in order to experience what can be done in the way of public relations without hard sell.

2. Portrait of the economy

The Grays Harbor region can reasonably be called homogeneous, as to those matters which define a region: that is, it has its main problems in common. Yet it would be equally reasonable to take the other side and say that the Grays Harbor is non-homogeneous. It certainly is exceptionally complex.

Classified as Grays Harbor is on the boundary between urban and rural types of economy, it is in a relatively small class of its own. Normal urban considerations cannot be applied to urbanization that is necessarily, because of the nature of its industry, spread so thin. Normal rural considerations cannot be applied to an economy that is dominated by modern manufacturing and transportation and their related commercial services, rather than by agriculture and its related services.

In Report #1 of this series ("Population Trends in Grays Harbor County," 1961), an attempt was made to compare Grays Harbor with other Northwest communities of similar population size, and in particular with other medium-size ports. The results were not instructive except in a negative way, in that they did afford a warning of Grays Harbor's exceptional characteristics.

In preliminary work toward preparing Report #2, comparative data were examined comparing Grays Harbor with other regions, and also comparing Grays Harbor's present with its own past. These were in the end excluded from the report. The trends they purported to show were in fact non-existent. For example, a comparison of 1950 with 1960 was abandoned because, due to the post-World-War-II temporary boom in lumber markets for home construction, 1950 was artificially high; so that the comparison would give an entirely mistaken impression of a downward trend -- which does not really exist. Comparison was also sought to be made with some other region that would be as similar as possible in as many points as possible, so that different trends in development might be isolated; but no such region could be found, and in the end it was concluded that in this case the differences are more significant than the similarities.

A full-scale economic review analyzing the economic potential of the region, its opportunities and its economic bottlenecks, had just been prepared,* and its duplication under this planning project would have been inappropriate. Therefore, the presentation in Report #2 was devoted to furnishing a complete portrait of Grays Harbor, in all its economic complexity and diversity. The statistical data were selected and arranged so that for the most part their arrangement would supply its own emphasis and the contents would be self-explanatory. Generalizations were avoided in most cases, with the intention that the able layman for whom the report was prepared could and would formulate his own conclusions. It was believed that, since full and precise details about Grays Harbor's economic base have never been gathered

* The OKDP previously quoted. (-5-)

and clearly presented before, the natural curiosity any intelligent man or woman has about his or her home town would focus attention on detail figures probably better than on a summary, which could only contain main facts and conclusions that they already know. This has proved true. For the benefit of others, however, a digest of the economic base has been requested, and is here presented:

Physical Facts. The great physical dynamic force in determining Grays Harbor's economic base is the Pacific Ocean. Not only is the deep-water ocean-facing harbor a primary economic factor (both in facilitating transportation, and in cutting off transportation between one side of its mouth and the other), but the soils, minerals, and climatic influences are all oceanic. Until the end of the last ice age, most of the planning area was part of the ocean floor, with resultant effects on mineralization, soil fertility, and unstable rock formation. (See Table 11, page 40)

The numerous "micro-climates" within the region are more affected by distance from the ocean than by altitude or exposure (Tables 13-19, pages 42-47). In general the climate is mild (milder as you get near the water) and damp (dampier on west-facing slopes near the water). The highest annual rainfall in the continental United States occurs on the mountain slopes of Grays Harbor's watershed, which makes this potentially (though not now) one of the country's few regions with industrial water to spare.

The combination of geology and climate produces a type of natural vegetation rarely found, whose technical name is "temperate-climate rain forest." On this continent it is found only on the Olympic Peninsula, of which Grays Harbor and the Chehalis Valley form the neck. Not only is this land forested, but (a) it grows forest intensively, and (b) when cleared, it is best planted back for more forest, being unsuited to almost anything else.

This is brought out, more concisely than it can be put into words, on Table 12, page 41 of Report #2. For the United States as a whole, the Department of Agriculture classifies 34% of the land surface as forest land, in the sense that its highest and best use would be for forest growth. In the State of Washington as a whole, it is not surprising to find the figure higher than the national average -- namely, 55.8%. For Grays Harbor, it is 92.5%.

Moreover, this Grays Harbor forest land is high quality. This is revealed by the fact that only 1.7% of forest land in Grays Harbor County is classed as unproductive, against 7.2% of the state's and 9% of the country's. The comparison becomes most striking when only productive, or "commercial," forest land is being compared: this is 25% of the national land surface, 48.6% of the state, 90.8% of Grays Harbor County.

The second great land use category is agricultural land. This term is used to embrace (a) cropland (21% of the nation's land surface) and (b) pasture and rangeland (36% of the nation's land surface; total of the two, 57%). For the state of Washington,

the combined percentage is 34.6%. For Grays Harbor County, it is 4.5%.*

To these last figures might be added the amount in farm woodlands which are pastured but which the Department of Agriculture classes as forest land because they are better suited to forest than to agriculture. For the state, this figure is 7.3%. For Grays Harbor, it is only 1.6%. This low figure will surprise those who are more familiar with the east-of-the-mountains forests where the same land is used for range pasture and tree growth at the same time; while after clearing it is often quite adaptable for pasture or even crop use. No explanation is needed, however, for those who have seen for themselves that tree growth in Grays Harbor can be so dense as not to leave room for cattle to walk between the trees, much less for sun to reach the ground; and that cleared land will support practically no growth but blackberry and vine maple until thickets of young trees spring up again. The technical explanation is that in nearly all Grays Harbor County the shales and sandstones are so recent as to be undecomposed, and except in small pockets the forest-produced humus is too acid and too lacking in trace minerals to support abundant crops or high quality pasture grasses.

In a sense, this classification of Grays Harbor land represents as formidable a shaping force for the region's economy as does the 30-foot ship channel. Both are facts, that can be made the best of or the worst of but that cannot be much modified by any human action, and that will condition future physical and economic development as they have conditioned the past.

General Economic Facts. (See Report #2 pp 48-68, Tables 20-38). This section of Report #2 covers, first, the over-all range of Grays Harbor economic activity seen in its entirety; second, the labor force considered in the same way; finally an indicator table (placed at this point in the economic base survey because of the relation of "manpower" to other forms of power) on electric power.

It may be logically objected that there is too much of this and it is too detailed. The consultant believes that this objection is based on an underestimate of the intelligence of, and an overestimate of the information previously available to, the planning commission members and councilmen who are the report's audience. With summaries these men are familiar. With details they are not. So the musical-instrument manufacturer has more than a hundred employees! -- we never knew it was so important; they must sell to far wider markets than we ever dreamed. So there are 80 gas stations in the whole county! -- seems like a lot more; evidently we aren't as over-gas-stationed as it looks when you're following the state highway through town.

* A study just completed (1962) by the Soil Conservation Service and the County Agricultural Extension Agent found 30,000 acres in the county graded average or better for vegetables. This sounds large till you reflect -- 30,000 out of a million and more!

The tables in Report #2 also are planned to serve a long-range reference purpose. They provide information on who works where at what, and how much he is paid; on how this compares with the state as a whole; on how it has fluctuated in recent years; on what industries account for most of the activity on Grays Harbor, and what are minor, and what are non-existent; on the extent of self-employment and of Government employment; on the extent of part time employment; on seasonal fluctuation; on capital expenditures and value added; on the age, mobility, and native languages of the labor force; on the occupations of men and women unemployed.

All of this information is from time to time useful for planning commissioners and local legislators when problems arise for solution; and oddly enough, as it gets older its value will increase, because as future census reports and other statistical reports come in, the data here can be compared with them directly, on the identical basis used by each standard source -- which fortunately or unfortunately is not the same for different sources. Unfortunately, in being sometimes confusing; fortunately, in that each one tells something that the others do not.

Thus, for the planning commission member, city council member, or county or district commissioner, Report #2 in all its detail is a working tool. The present brief report should not be substituted for it. The use of this present report will mainly be for those who are attempting to gain an idea of the Grays Harbor Region from scratch.

For such a newcomer, the general economic data set forth in Tables 20-38 of Report #2 may be looked at from a different point of view and the following highlights extracted:

To the outside reader specially interested in the economic base, the most important item will probably be the available labor force. We will start there. Grays Harbor is a region where there are considerably more unemployed than there are statewide (8.1% against 6.6%), but where the unemployed are evidently not merely marginal since the number of unemployed men classified as "crafts-men and foremen" -- by definition a competent group, whom employers have promoted in the past -- is nearly 2/3 as many as the number of unemployed who are classified as "laborers except farm and mine." The largest single unemployed category, taking men and women together and all parts of the county together, is the intermediate one of "operatives," but there are some unemployed at every level including professional and managerial. This fact hints (correctly) at much of the unemployment being the result of "temporary" mill shutdowns. In 1952 an economist wrote of Grays Harbor as having "a stranded labor supply,"* and the phrase is apt.

* Edwin J. Cohn Jr., INDUSTRY IN THE PACIFIC NORTHWEST AND THE LOCATION THEORY, New York, Columbia University, 1954; p 78.

About 8% of the population is foreign-born -- nearly all of this group being adult and in the labor force -- and most of the foreign-born do not have English for a mother-tongue. However, the large blocs are the Norwegian, Finnish, and Swedish, who are present in such numbers (in both first and second generations) that the problem of finding foremen who speak their language is minimal. The only "minority group" racially speaking that is present in sufficient numbers to be statistically perceptible is the American Indian.

The labor force shows no undesirable tendency to cling to a single spot rather than move to a location convenient to a job, though it does tend to stick to Grays Harbor County; in fact, only half the county's population lived in the same house in 1960 as in 1955, though most lived in the same county.

Nearly one-third of the adult women are in the labor force. The most interesting thing about this to the person concerned with labor-force availability is that they are not confined to traditional white-collar and service occupations. As with the men, the largest group of them work in manufacturing. They do show more tendency than the men to be employed in food manufacturing.

There is evidently a great deal of under-employment and seasonal employment in Grays Harbor County; only 52% of those who worked at all in 1959 worked a full year. (Table 28 page 58.) It is true that on the surface this compares fairly well with the state as a whole, for which the percentage was 55%; but the state figures are affected by inclusion of a large number of summer harvest workers in agriculture such as do not exist at all in Grays Harbor County. The true under-employed in this county are the very substantial number who worked more than 13 weeks but less than 48 weeks -- 5,899, which is more than 25% of the total. Those who work 13 weeks or less (that is, summer vacation length or less) very often would not take full-year jobs if offered; those who work 14 to 48 weeks usually would. Though there is some indication of a summer peak in Grays Harbor employment (this shows up especially in service occupations, related to the tourist trade) there is not nearly enough summer peak to account statistically for the extent of under-employment. There is practically no "Christmas rush" peak at all. It must therefore be that the layoffs are scattered throughout the year.

One group in the labor force that employment statistics inevitably minimize is the census category "Agriculture, forestry and fisheries." The problem is that most people working in that category work for themselves or on some other basis by which they do not show up in Department of Employment Security figures since they are not covered by unemployment insurance. As later tables in Report #2 indicate, there are about 600 full-time farmers and about an equal number of fishermen making their homes in Grays Harbor County.

Directly following the information on manpower in the Economic Base portrait of Grays Harbor comes information on other kinds of power. This information is bound to be incomplete because the most important industrial fuel on Grays Harbor is usually not bought or sold: waste wood. For instance, one mill employing 225 men gets its fuel entirely from the bark and shavings of its own logs (Report #2 page 111). It is, however, striking to notice in Table 38 on page 68 that electric power consumption has tripled in the last twelve years, in a region where neither population nor economic activity has been increasing, and where only the pulp mills have felt the influence of automation. (The shingle mill that recently changed over to electric power did so in 1963, so that its power consumption does not show up in the figures.)

Transportation Facts. This has been placed first of the specific subjects in Report #2, because transportation is the heart of Grays Harbor's existence.

Summarizing the contents of the tables that deal with the harbor itself, it is first of all obvious that this is much more of a port than most even of its own residents ever realize. It has a mile of ship berthing space plus two and a half miles of fishing-boat berthing space. In addition to the public Port Terminal, five industrial plants maintain their own big-ship docks. The harbor also has an enormous log-ferry traffic.

Grays Harbor's lumber/plywood/shingles exports, by sea alone, have been as much as a quarter of the state total, and as much as a tenth of the total for Washington/Oregon/British Columbia -- and this not merely as a matter of ancient history, but as recently as World War II. (Table 43 page 75.) In some recent years, half of its exports have gone to foreign destinations. Outbound it sends forest products. Inbound it receives mainly petroleum products, by tanker or ocean-going barge -- which means that the same vessel cannot both bring and take away a cargo from Grays Harbor; this is an economic handicap.

Finally, the figures on the harbor's past history, while they reveal no particular trend of either deterioration or development, make plain that Grays Harbor could handle double or triple its present cargo volume; because it did so, in the boom decade of the 20s, with much smaller ships and much less cargo-handling mechanical equipment.

A somewhat similar picture is evident in railroad carloadings (Table 50, page 81). Less than a third as many cars come in loaded as go out loaded; the rest must travel empty one way. Again, forest products dominate the outbound. No estimate is available for lumber shipments, but they are in first place, and the second-place item (plywood) accounts for only 5% of the total according to railroad-company estimates. There are three railroad companies serving the region, with shared facilities, and most shipments move from plant sidings rather than main terminals, loaded straight into the cars from the plant door.

Air traffic to and from Grays Harbor is modest. (Table 51, page 82.) It follows the booms and busts of the local economy, and it fluctuates seasonally as well, but it does not go very far either side from an average of a dozen outbound passengers a day, and it has not increased over the years since the end of World War II. Grays Harbor people certainly travel; but evidently not by air from Bowerman Field.

Highway travel, on the other hand ---- ! Grays Harbor not only moves its passenger traffic in and out of and through the region almost exclusively on motor-vehicle wheels, -- it also moves vast quantities of its raw materials and freight by motor vehicle. There is hardly a main highway junction where the traffic counts show less than 20% trucks (see Table 52 page 83); and at the big log-truck counting points the percent rises to as much as 35% trucks. At one point (the junction of State Highway 9 with FAS 248, north of Hoquiam), by traffic count, in 1961 an average of 358 log trucks passed per day; that is one every two minutes spread over a 12-hour maximum trucking day.

Those with local knowledge can trace the comings and goings, the traffic jams and the bypasses, through Tables 53-55, pages 84-87; it is noticeable that the tourist counts fluctuate wildly from year to year as if by whim (but we know from annual reports of the State Department of Fisheries that their fluctuations are closely correlated to the availability of clams and salmon). It is also noticeable that all traffic funnels to certain bottlenecks, of which the most important are the bridges (or, at the Chehalis Bridge, the bridge approaches). In 1959, the Simpson Avenue Bridge managed to carry a daily average of 15,200 vehicles on its narrow two lanes, at a 20-mile top speed. If every man, woman and child in Hoquiam got into their cars daily to cross that bridge, they would not add up to that much; indicating once more that Hoquiam's bridges are more than local city problems.

Leaving transportation, we come to the various kinds of raw materials production; the second most important fact about Grays Harbor's economics, for this region is raw-materials oriented.

Agriculture. Grays Harbor is not, however, agriculture-oriented. Tables 56-65A, pages 88-96, are as extensive as they are in order to dislodge the almost universal assumption that a rural region must be primarily a farming region.

In summary, this is a region where farms are few; small; bring in little income; occupy less than 10% of the county's land, with only half the land they do occupy being real farm land. These farms have a high investment in equipment and livestock (particularly in cattle), and very little employed labor; they are mostly part-time farms; and they are mostly very odd farms, no less than two-thirds of them being classified by the Census of Agriculture as "Miscellaneous." (This does not mean "General." There are only 15 "General" farms in the county.)

Strikingly, the migratory agricultural labor so characteristic elsewhere on the Pacific Coast is completely unknown here. The 1959 Census of Agriculture shows only 7 farms in the county as having hired two or more workers during the entire preceding year; and there were only 97 hired farm workers in the county who did not work 100 or more days of the year. Only about 25% more was spent on labor than on gas, oil, and machine rental, omitting machine purchase; in fact, if a fair per-year allowance for machine purchase were included, the figure for mechanical "labor" would exceed that for hired human labor by a good deal.

This gives us a portrait of a type of farming that is thoroughly modern, and rather intensive, but not large-scale in either acreage or capitalization. It is often the farmer's secondary occupation; in fact it is combined with some other job more often than not. The chief "crop" is milk, the second is beef. Next in importance of cash income come the vegetables (with crops shifting back and forth among different vegetables from year to year, indicating that the farmers keep up to the minute on markets and varieties) and cranberries. The problems of the cranberry grower are hinted at by the fact that in consecutive years, per-acre production varied 250%.

Fisheries. A second great raw-materials resource of the region is also food; namely, the fisheries. (Report #2 Tables 66-69, pages 97-98; see also statistics and discussions in annual reports of State Department of Fisheries.) A thousand commercial fishing boats a year, of which 420 are locally based, use the harbor. Most are small, with a crew of more than two being a rarity. They are somewhat specialized as to types of equipment used. They bring in a large and variable assortment of whatever fish may in a given year be out there, with salmon always the star. Among shellfish, the big items are crab, oysters, and razor clams; only the first, however, taken by boat. There are 14 oyster "farms" in the harbor. (They really are farms. They plant seed, tend and rake the beds, and harvest a crop. The seed, or "spat," is imported from Japan because the Pacific oyster spat does not mature in these waters, and arrives a shipload at a time; see Reports of Port of Grays Harbor from 1947 on.) Razor clams grow "wild" on the beaches.

Forests. But the great natural resource is the forests. Tables 70-74, on Pages 99-104 of Report #2, describe forests that can only be characterized as fantastic. Every detail is meaningful to the forest-bred Grays Harborite, who knows what MBM stands for almost as soon as he knows what ABC stands for. But to the newcomer, the hundreds of thousands of acres and the billions of feet board measure are staggering. One comparison may help convey the unimaginable extent of Grays Harbor forests and forestry:

The average size of tree farms in the state of Washington is about 6,000 acres; which is about double the national average;

The smallest of the ten certified industrial tree farms in Grays Harbor County is 6,000 acres, and the average is 75,000.

In other words, ten tree farms operate three quarters of a million acres.

More than half of the tree-farm acreage is in young second growth. No up-to-date information is available on restocked acreage, but at the time of the 1951 inventory about 10% of the cutover total had not been restocked, the majority of this being recent. At that time, the private operators were considerably ahead of the National Forest on percentage of restocking; but then, oddly for the West, the Federal Government is decidedly a minority forest landowner in Grays Harbor County. The Quinault Indian Tribe is an important one, however.

One remarkable feature noticeable in the forest data is that though this is a region of industrial forest giants, it is not dominated by any one giant. There are at least three with an allowable cut of more than a hundred million board feet a year apiece.

Since a standard estimate is that every thousand board feet of logs produces \$43 in manufacturing payroll, plus another \$20-25 payroll of commerce and services secondary to that manufacturing, it will be evident that wood is Grays Harbor's bread and butter.

Manufacturing. (See Report #2 Tables 75-81, pages 104-111.) Just as the forest ownership is in the hands of large-scale operators, but not dominated by any single one or two, so is Grays Harbor manufacturing. Arrangement of manufacturing plants in order of size shows that the big ten industrial plants are all forest-related. The first six industrial branches include, along with the big plants, numerous little ones. (According to Table 75, 250 employees and up is big on Grays Harbor; evidently forest-industry operating units do not employ great numbers at one job site.)

The trouble is -- as Table 78-A makes plain -- the forest-products industry is not full-time employment, except for the pulp and paper branch. The average work-week of men in logging and the mills is only 34.8 hours.

Table 76 fills out the picture by showing what types of industry do not exist on Grays Harbor. More than two-thirds of the total number of operating establishments involve forest products, whereas there is nothing at all in such industries as tobacco and textiles and apparel, rubber, plastics, leather; practically no chemicals, or petroleum, or metals manufacturing.

Tables 80 and 81, and the narrative pages following, reveal very little about actual production figures (a better indicator of volume produced is the Port's figures on exports) but they do reveal something else: manufacturing companies in the forest products field hate to give out production figures. As all data confirm, this is a highly competitive field where companies hesitate to reveal present activity -- much less future plans. (In the latter connection, see appendix of Army Engineers Report on Survey of Wynoochee River, Washington, under Economic Analysis -- the letters from companies.)

Buying power. Turning from production to consumption, Tables 82-92, pages 112-119, analyze the region's buying power and what is done with it. To begin with, there is \$105 million of it. Second, \$70 million or 67% is in wages and salaries -- a relatively high percentage for a "rural" region. Grays Harbor residents have a trifle under their national pro-rata share of per capita income (which means that they have distinctly less than the state average; nationwide averages are always lower because of the low incomes of the southeastern states), but they spend a trifle more than the national average on retail sales.

Retail trade. This is not a region of great variety in commercial establishments; the population, of course, would not support it. Noticeably, Aberdeen has well more than double the number of individual stores that Hoquiam has, and in some fields the disproportion is greater -- for instance, Aberdeen has 20 automotive retail outlets other than gas stations; Hoquiam has 1. The two towns together have half the county's gas stations, and two-thirds of the county's drug stores, also two-thirds of its furniture and appliance stores, but for some reason barely half of its building materials and hardware stores; to make up for that, they have 27 of its 29 apparel stores. Plainly, most Grays Harbor shopping is centralized; and its main tendency is to centralize in Aberdeen. (Report #2 Tables 90-92, pages 117-119).

Wholesale trade. To the extent that there is now a wholesale distribution center in Grays Harbor County, Aberdeen is that center; but a comparison of total wholesale sales (\$25,870,000, Table 88) with total retail sales (\$73,608,000, Table 90) shows that either there is something out of the common in local retail mark-ups or much of the wholesale distribution comes here from some other center. The latter is the truth of the matter; wholesale deliveries are made direct to retailers by truck from Puget Sound wholesalers. (See Report #2 Table 88, page 116, and Table 21, page 51.)

Services/Tourism. The last section of the economic base data deals with services -- intangibles. Most of these business establishments are small. One thing observable about them is that most of their trade is not with the local residents. The presence of another Grays Harbor industry thus discloses itself -- tourism. Therefore pages 120-24 of Report #2 deal with that industry.

Remarkably little is known about the extent of tourism here, because the region is so vast that most of the activity is outside the horizon of any one observer or agency. The consultant had to do a special survey in order to achieve even indicator figures. He used as his indicator the provision of lodging for the night for tourists, through motels, trailer courts, and camping spaces. He found -- to his own and everyone else's surprise -- that Grays Harbor can accommodate 10,900 transients overnight in organized areas -- a number equal to 20% of the county's permanent population.

3. Economic Trends

It may reasonably be objected that the presentation of the Economic Base Data in Report #2 reveals no significant trends. To that, it may reasonably be retorted that this is what you have to expect when there are no significant trends. Grays Harbor's economic base is not developing, it is not deteriorating, it is not at present changing. It fluctuates widely, but a smoothed-out curve would be practically level for the entire generation 1934-1963.

Employment Trends: Level over a long period, with violent short term fluctuations. Tied to the boom-and-bust wood products industry; slightly cushioned by the slower fluctuations of the pulp-and-paper industry. To be exact, 46.6% of employment is directly in forest products manufacturing. Using the formula of 74 related indirect jobs to each 100 direct jobs (see Army Engineers Wynoochee Dam Report appendix, brief by Grays Harbor Chamber of Commerce, last page) would give an additional 34.4% of employment as being in jobs dependent on the primary industry; or a total of 81.0% of Grays Harbor employment. This proportion has remained substantially constant except when it was temporarily disturbed by a World War II increase in metal-products manufacturing. The Stanford Research Institute estimated in 1957 (see Fortune Magazine June 1957) that over the next 20 years demand would remain almost unchanged; increases due to population increase being balanced by shifts away from wood to metal and plastics. (Report #2 pages 52-76)

Transportation Trends: Fast upward trend in road transport; trend in shipping toward use of larger ships. Road transport trend now artificially restricted by highway bottlenecks; prospect of shipping trend being soon restricted by ship-channel depth. No trends visible in air or rail transport. The chief highway bottlenecks are the older bridges (though if they were improved the two-lane sections of highway would then be bottlenecks). The 1961 traffic counts showed traffic volumes over the Wishkah Bridge and Chehalis Bridge rising, while that on the Simpson Avenue Bridge had declined 10% from a 1959 peak; but this is almost certainly another example of a temporary fluctuation. In shipping, recent years have brought ships to the harbor whose loaded draft is greater than the channel depth; and as this reflects continuation of a trend toward deeper ship drafts that has been steady, it must be reckoned with. In rail transport, "piggyback" has not yet affected Grays Harbor. (Report #2 pages 69-87)

Agriculture Trends: Some trend perceptible toward an intensive-pasture type of beef-cattle production, especially on part-time farms; also some trend toward increased vegetable production; both small-scale. Other tendencies variable and confusing. Farms decreasing in total number and total acreage, but not in production or in value (somewhat more acres per farm, higher value per acre). Mechanization far advanced, continuing slowly. (Report #2 pages 88-96).

Fisheries Trends: Long-term downward production of fish other than shellfish, but with great fluctuation. No clear trends as to shellfish; possibly slightly downward. (Report #2 pages 97-98)

Forest Trends: The long-term downward trend in virgin timber availability, and the long-term upward trend in second-growth timber availability, are both active, with the former still dominant. (Report #2 pages 99-103)

Manufacturing Trends: None visible. Latent possibilities in silvichemicals still inactive. Production fluctuations market-related (see above under Employment Trends). This is a region already far advanced, compared to other forest regions, in secondary remanufacture, with further shifts waiting for population increases in market areas within economic transportation reach. (Pages 104-111)

Commercial Trends: Long-term downward wholesale trend may have levelled off; not clear. This was due to development of wholesale distribution centers in the Puget Sound metropolitan area with movement of consumer goods thence direct to Grays Harbor retailers, thereby displacing Grays Harbor wholesale handling. No retail trends visible, except some recent continuation of tendency to concentrate all but neighborhood-type retailing in Aberdeen; but this may be a temporary fluctuation and may reverse itself with modernization of central business districts in Hoquiam and Montesano. (Report #2 pages 116-119, also pages 51-52.)

Tourist and Sportsfishing Trends: Starting a decade ago, trend was rapidly upward till checked by limited availability of fish; a limitation due to highway saturation also being felt. (Pages 119-124)

Special note on trends - - -

Suggested action

Only one of the unfavorable trends can be affected at all by local action, and some comment and recommendation is therefore offered in connection with that one; especially as it is closely involved with the orderly physical development of the region, which is the realm of the Comprehensive Plan.

This is in relation to fisheries: notably as to sportsfishing and its part as a tourist attraction, but commercial fishing is also important to the regional economy and is subject to the same remarks.

The number of sportsfishing boats has increased steadily since 1950 and will continue to increase in proportion to increases in adult population of the nearby metropolitan areas if fish are

available for the sportsmen to catch. In any year when salmon are scarce during summer months, the whole tourist business in the region staggers; sportsfishing is the glamor tourist attraction of the region. (Clamming is also a large-scale attraction, but does not seem to contribute as much to the economic base, because tourists attracted by "clam tides" do not spend as much; in fact, traffic counts suggest that most of them do not even remain overnight.)

To predict the future of the fish catch is beyond the scope of this report, considering that even state and federal fisheries specialists will not attempt such projections. The most that the State fisheries biologists will say is that Grays Harbor could sustain more fish than it now does.

We can, however, state with firmness that if certain things are done, the result could produce more fish; and the result of more fish would be more tourism and more commercial fisheries income as well for the Grays Harbor region. For a more extended analysis, and a discussion of action programs, see the OEDP previously cited. Basic things that can actually be done here and now, that have been recommended by the State Fisheries Department, to improve fish catches for this region, include:

A. Construct and operate more fish farms (and where appropriate more hatcheries) such as the proposed fish farm on Beardslee Slough in the South Bay of Grays Harbor; also potentially at sites on the Humptulips, Wishkah, Wynooche, Cloquallum, Quinault and Chehalis Rivers.

B. Clean out the old log jams and accumulated debris in the tributary spawning rivers so that fish will be able to reach natural spawning grounds; supplement with small fish-ladders.

C. Adopt and enforce effective regulations to control stream pollution, involving better methods of taking care of domestic and industrial waste now draining into rivers through ground-water circulation.

D. Promote better control of flood waters, conserving excess water for release during dry months so that water levels will be sufficient for summer and fall salmon runs to get upstream.

E. Develop better controls of seasonal fish catches in the bay and rivers to permit more escapement so that fish may get upstream to spawn. This involves not only regulations but possible development of new types of gear; also shark controls, etc.

F. Organize a vigorous selling campaign for the State Department of Fisheries research and development projects in this region (some of which are listed above) to increase the number of available fish.

L a n d U s e P l a n

The Land Use Plans for the cities of Aberdeen, Cosmopolis, McCleary, Montesano, Oakville, and Westport, and for the unincorporated suburb of Central Park, and the General Land Use Plan for the Grays Harbor Regional Planning Area as a whole, will be found in Report #3 of this series, pages 19-58. Related land use data will be found in Report #2, pages 1-39.

In the present report, there follows a summary dealing principally with the General Land Use Plan.

On the next page, as a statistical introduction to that summary, will be found a pair of tables comparing present land use with proposed land use under the plan. These are set up on a standardized basis that can also be used in making comparisons of land use in this region with other regions of the state and nation. The normal use of such comparisons is to reveal an area's deficiencies in one kind of land use or another. Then, if there is found to be a need for corrective measures, steps can be taken by planning commissions or other agencies concerned to develop action programs to accomplish the desired results.

At the foot of this page will be found some statistical data that may be an aid in comparing local information with other local, state, and national figures. These are limited in their applicability because they deal only with cities; they are not applicable to unincorporated areas, much less total regions, and therefore have only a very limited relevancy to Tables I-A and I-B on the next page; however they are useful in comparing the information in the city tables in Report #2 (pages 1-39) with other cities. All figures below are percentages of "Total Developed," not of "Gross" -- that is, they exclude water surface and vacant land within city limits.

<u>Land Use</u>	<u>National Average for U. S. Cities 50,000-100,000 Population</u>	<u>Average of 50 California Cities Under 50,000</u>	<u>Average of 33 Oregon Cities Under 50,000</u>
Residential	37.16%	42.06%	35.4%
Commercial	2.58%	3.73%	4.1%
Industrial	9.64%	7.76%	11.4%
Public	17.35%	12.34%	18.8%
Streets	<u>33.27%</u> 100.00%	<u>34.11%</u> 100.00%	<u>30.3%</u> 100.0%

TABLE 1-A LAND USE INVENTORY, GRAYS HARBOR REGIONAL PLANNING AREA

Area: Total regional planning area (including incorporated)

Date of Survey: July 1961

Source: Vernon S. Cotter - Consultant

<u>LAND USE</u>	<u>ACRES</u>	<u>PERCENT OF GROSS</u>	<u>PERCENT OF TOTAL DEVELOPED</u>	<u>REMARKS</u>
Grand Total (Gross)	463,143.	100.00		
Total Developed (Gross minus Water, Agr., Forest, Vacant)	13,803.43	(3.00)	100.00	
Total Residential	3,566.69	0.77	25.84	low
Total Commercial	483.32	0.10	3.50	average
Total Industrial	2,437.41	0.53	17.65	abv avge
Total Public*	895.94	0.19	6.49	average
Total Streets	6,420.07	1.39	46.52	abv avge
Agricultural, Forest & Vacant	356,454.91	76.96		
Water - Bays & Rivers	92,883.56	20.06		
		100.00	100.00	

* Does not include public beach frontage.

Above in Table I-A is the actual distribution of land use for the entire Grays Harbor Regional Planning area, including both incorporated cities and towns and unincorporated county territory. Below in Table I-B is the distribution of land use for the same area as proposed in the General Land Use Plan (see Report #3, map following page 19). Compare also with land use tables in Report #2 pp 1-39.

TABLE 1-B PROPOSED LAND USE, GRAYS HARBOR REGIONAL PLANNING AREA

Area: Total regional planning area (including incorporated)

Date of Survey: July 1961

Source: Vernon S. Cotter - Consultant

<u>LAND USE</u>	<u>ACRES</u>	<u>PERCENT OF GROSS</u>	<u>PERCENT OF TOTAL DEVELOPED</u>	<u>REMARKS</u>
Grand Total (Gross)	463,143.	100.00		
Total Developed (Gross minus Water, Agr., Forest, Vacant)	71,047.	(15.34)	100.00	
Residential	41,961.	9.06	59.	average
Commercial	1,945.	0.42	3.	average
Industrial	7,688.	1.66	11.	average
All Public	19,453.	4.20	27.	average
Agricultural	52,335.	11.30		
Forest & Vacant	283,257.	61.16		
(Subtotal, Agr., Forest, Vacant)	(335,592)	(72.46)		
Water - Bays & Rivers	56,504.	12.20		
		100.00	100.	

Steps Taken in Preparing the Land Use Plan

1. As soon as the Land Use Inventory map for each city (or the county area) was finished, it was taken to meetings of the respective city planning commissions or city councils or both, and detailed review was made with them block by block, discussing present and future use. Some members took a very active part and made fruitful contributions. Others were less active.

2. At the same time, population trends in the area were studied, along with such indicators of growth trends as building permits, new water and telephone connections, school enrollments, etc., and these too were discussed with local planning groups with a view to the Plan.

3. First sketches of the preliminary land use plans were made.

4. Preliminary approximations of land use analysis figures became available and were used as one of the tools.

5. Also at this stage, economic base information was assembled by the consultant and studied, for his own use, as "homework" in preparation for determining economic trends in the area and thereby allocating land for commercial and industrial uses realistically.

6. Trends and development possibilities revealed by this study were discussed with local officials and planning commissioners in terms of their local knowledge.

7. The Preliminary Land Use Plans were then made in map form at 400' = 1' for the cities and Central Park area and presented to the respective public bodies. In several cities they were posted in public buildings, side by side with the Land Use Inventory map, where they attracted attention of passing citizens and provoked discussion.

8. Over the following six months or more, the preliminary plans received further discussion in the respective localities and in the Regional Planning Commission. (Since the knowledge and suggestions of local groups had already been taken into account before the Preliminary Plans were formally prepared and delivered, changes proposed at this stage were few.)

9. As a check before preparation of the Final Land Use Plans, percentages of proposed land use were checked for each plan and compared with existing percentages, and with those of other cities of similar size; they were found to be in line, with only such variation as reflected special local development possibilities and needs.

10. Final coordinating review was made between proposed land use and proposed major thoroughfares. Since the two had in fact been coordinated throughout, this merely entailed consideration of the effect of new major thoroughfare proposals developed during the last few months during Freeway planning.

11. The Final Land Use Plans in map form were then prepared, in form for adoption by the local agencies: that is, with the necessary forms for certifying approval by city planning commissions and adoption by city councils (or county authorities, for unincorporated area).

12. The completed plans in map form were delivered to the respective local bodies, along with a short review of the plan, explaining its use, and the benefits which could accrue to the community from its adoption and use as a tool, and the fact that it should first be approved by the planning commission and then forwarded by them to the city council for adoption.

13. These plans are now in various stages of review and adoption by the local agencies.

Land Use Plan

The following discussion deals particularly with the General Land Use Plan in map form printed in Report #3 of this series following page 19. The summary explanation on page 19 of Report #3 covers the points requiring explanation for those on the spot, but the following background material is offered for the use of others, who may have the plan in map form before them without local knowledge.

1. Forest and Open. The land recommended on the General Land Use Plan for these uses is in them now.

The land proposed for Forest is now in the production of trees, in various stages: a little in virgin growth, much in second growth at seedling or sapling or pole-timber stage, some in cut-over land scheduled for re-seeding to forest, and a comparatively small amount in cut-over land now in pasture use that has proven ill-suited to pasture. The recommendation is based largely on U. S. Forest Service Special Report #111, a study of Grays Harbor forest lands made at the time of the last complete inventory a decade ago, confirmed by tree farm representatives and by resident foresters employed by the state and others. Some of the land, publicly owned, will be held in tree-growth primarily to protect the watershed. For the remainder, forest growth is the best economic use. Most is already under tree farm operation.

The land proposed as Open is now vacant, or is covered with slow-growing and scanty tree growth. Soil condition, or inaccessibility, or flood exposure render it uneconomic for any active use. The recommendation that it be left vacant is based on its being classified by the Department of Agriculture in Class V (poor) or VI (sterile) and being unsuited by its location for any urban use; or, where it forms part of the Chehalis River flood plain, on its being needed to receive freshet overflow and prevent flood damage. Some of the Open land, such as that shown in the southwest corner of the county, is well suited to game preserves, particularly for migratory waterfowl; some is held for that purpose now.

2. Agricultural. The land recommended on the General Land Use Plan for agricultural use was determined by the following considerations:

- a. Suitability for agriculture demonstrated by its now being in that use;
- b. Soil graded I, II, or III by survey (completed 1962) made by the local Soil Conservation Service representatives;
- c. Accessible location in the valley floor.
- d. In addition, some tidelands were recommended for agricultural use after draining, based on recommendations by the County Agriculture Agent, and on these lands being analogous in accessibility, type of silt deposit, and suitability for diking and filling economically, to lands already filled and drained and now in intensive pasture use.

The extent to which the amount of land recommended for agricultural land use is conservatively realistic may be measured by the following comparisons: The recommended amount is 52,335 acres. In 1951, the U. S. Department of Agriculture reported that 65,960 acres in Grays Harbor County was classifiable as farmland including stumpland pasture (see Report #2 page 1) but not including farm woodlands (Report #2 page 41). In 1959, according to the Census of Agriculture, the total land in farms in the county was 99,529, a decrease from 118,217 in 1954; both of these figures did include farm woodlands (Report #2 pages 41, 88); in fact, of a total of 8.2% of the county area that was owned in farms, only 4.5% was actual agricultural land of any grade, and the other 3.7% was forest land. The 1962 Soil Conservation survey confirmed the indications of these actual-use trends, finding that approximately 30,000 acres of land can be classified as I, II or III for crop (vegetable) purposes, on a scale where I is high and III is average. The proposed land use in agriculture includes nearly all that 30,000 (there is a little farm land in the county outside the planning area, but only a few hundred acres) plus about 25,000 suitable for other farm uses, including both cropland and pastureland. It might be explained that intensive cattle-raising, including both dairy and beef cattle, is the chief income-producing branch of agriculture in the planning area, with a trend toward increase. It is conducted on a basis of year-round pasturage, including some part-time pastures. Thus a good deal of land will continue to be needed for grazing -- though the pasturage here is intensive compared with that of open-range, "rodeo-type" cattle raising in the eastern part of the state.

A natural dividing line between the agricultural district in the good bottom land of the Chehalis Valley and the proposed rural non-farm residential district in the northern part of that valley will be provided by the Freeway line through the eastern half of the Planning Area as far as the Wynooche. This line, recommended during Phase I of this planning project, and now partly completed and partly in the engineering stages, follows along the edge of an alluvial gravel bar.

Distribution of good farm land in the Planning Area is spotty, especially in the western half of the region. This makes a certain spottiness of recommended agricultural land use inevitable. The most striking example of this is in the scattered coastal cranberry bogs. These are not clearly differentiated on the small scale map as published in Report #3. The intention is that this agricultural land use should continue on the highly-specialized, and quite rare, pockets of land suitable for this crop.

3. Residential. Land shown for residential use on the General Land Use Plan includes both city and unincorporated territory.

As the land use analysis in Report #3 (pages 1-39) brings out, there is a great deal of nominally-developed land in the region not in actual use. In the unincorporated planning area, for example (Report #2 page 5) there is more than 8,000 acres nominally

developed, only a quarter of which is in actual occupancy. The explanation is that this is an old region, as western regions go. It has supported a larger population in the past than it does now; and it has twice expected and prepared for a big boom that never came. Hence more land has been platted for residential use than is now occupied for the purpose; in fact, some subdivisions never existed except on paper, and others were developed only to the extent of a dozen houses per square mile.

What has determined actual residential development location on Grays Harbor, as opposed to paper development, has always been transportation. Thus, in the beginning, the residential districts were in the lowlands, because that was the land cleared and accessible. Then, as better roads and increased ownership of automobiles has made hillside residence practical, the trend of residential land use has shifted to the highlands and the rolling land of the suburbs; while pre-existing lowland plats have remained half occupied, and sometimes less. This trend must be expected to continue.

A special note may be added at this point about the possible effect on residential land use of the Freeway route now favored through Aberdeen and Cosmopolis. Whereas in the "commuter zone" extending some 15 miles east of Aberdeen the Freeway will stimulate more intensive residential development by shortening travel time to city jobs, in Aberdeen and Cosmopolis it will of course not have that effect; but it will not have a negative effect either. In South Aberdeen and Cosmopolis, this Freeway corridor would pass through land nominally residential, but would take out only about a dozen existing houses and would have little effect on the surrounding neighborhood. The reason is that the Freeway line follows the edge of a marsh which has prevented both residential development and east-west travel. Access to the major north-south streets will continue to be accomplished in the neighborhood in the same way as at present, using existing streets as service roads. In main Aberdeen, the Freeway line would pass along the railroad, parallel to it, through the edge of an old residential district. The houses here are 30 to 50 years old; and though moderately well maintained, the type of foundation used at the time of their construction did not produce long-lived residential construction, so that they are not readily salable any longer, and an increasing vacancy rate with consequent increasing deterioration can be expected. Hence the Freeway here would divide the industrial use on one side from existing residential use on the other side with probably as little destructiveness as is possible in taking a limited-access highway through a built-up district anywhere.

Things considered in determining the proposed future pattern for residential land use in the cities included: present habits of use as revealed by the land use inventory; present trends of residential construction; limitations imposed by topography, property divisions, and the economic base of the region; and probable trends in residential distribution that may result from proposed changes in the major thoroughfares pattern.

Additional factors influencing trends in land use were taken into consideration in allocating land to proposed residential land use in the unincorporated area. These might be summarized as an incompatibility between residential and agricultural uses which exists in some locations. Where incompatibility exists, local conditions have been carefully investigated and the solutions are "on a casework basis."

For instance, in the South Beach area, where the incompatibility is due to contradictory physical needs in land drainage, neither residential nor agricultural is entitled to the preference over the other; the beach home-owners and the cranberry-bog farmers will just have to put up with each other; and zoning and subdivision regulations will have to be enforced to prevent additional causes of friction.

In the Chehalis Valley and its tributary valleys, the incompatibilities are more complex. Suburban development is appearing now in the midst of farm use. Indications of an advanced and irreversible shift toward rural nonfarm residential use were found to be: substantial, present subdivision with actual occupancy of new homes (as opposed to paper plats); substantial abandonment of farm use in the neighborhood, or splitting of former large farms into smaller, possibly part-time farm units (contrary to a general trend in the county toward larger acreage per farm); and transportation improvements bringing the district within commuter range of large employment centers. Where these things exist, tax rates increase, especially as the school population increases; assessed valuation increases; road traffic increases; the volume of sewage for disposal increases; water supply available for farm use decreases. Where this pattern was found, the shift toward non-farm residential was considered to be well advanced, and the land was classified for residential use no matter how suitable it might also be for agriculture.

However, where the shift is not now apparent, other tests can be applied in determining whether the long-range recommendation should be for agricultural or for non-farm residential use. The principal test used was soil quality. Residential development can use the poorer soils. Therefore, where Grade I (excellent) and II (good) soils are found, as in the Wynooche Valley, it is being recommended that residential development be excluded, no matter how attractive for residential purposes the locality may be.

It is not, of course, being recommended that farming be eliminated from suburban districts shown on the General Land Use Plan for residential land use. Where small farms can continue to maintain themselves economically, they need not be excluded unless and until population density makes their maintenance a nuisance. Zoning regulation is then the tool to use. If a given farm or type of farm produces flies, odors, noise, or untreated garbage to the detriment of public health or neighborhood peace, the county has ordinances for minimum controls. But in the Grays Harbor unincorporated

planning area, the "weekend farm" represents part of the established pattern of life which deserves encouragement, not blanket deterrence.

4. Commercial. As already mentioned, the region formerly supported a larger population than it does now. Hence commercial districts are already well established, and present commercial operation could take care of double its present business volume without much plant expansion. The commercial areas shown on the Land Use Plan are tied closely to existing commercial use, with some provision for expansion, but with the intention of

- a. Preserving present central-business districts;
- b. Providing neighborhood services for existing and new neighborhood residential developments;
- c. Discouraging strip commercial zoning along highways;
- d. Encouraging development of neighborhood service shopping centers at Freeway interchanges that connect with residential districts (for instance at the possible Boone Street interchange in South Aberdeen; perhaps also at the possible Cosmopolis interchange, but the latter might also pull the Cosmopolis central business district toward it, instead);
- e. Encouraging development of tourist services at Freeway interchanges that connect with commercial districts (for instance in Elma, Montesano, possibly Cosmopolis, possibly main Aberdeen).

Point 4-c, above, will require implementation by future city and county uniform zoning to eliminate strip commercial use now found in many parts of the region. Elimination is necessary, because such strip commercial development creates loss of land values, congestion of highways, and production of additional development problems for entire surrounding districts.

5. Industrial. The proposed industrial land use can be summarized as follows:

- a. In or adjoining each town, adequate industrial area to provide manufacturing space
 - (1) to serve local consumer needs (construction contractors, machine shops, etc.) and
 - (2) to process locally-produced perishable raw materials (vegetable canneries at Oakville, fish packing plants at Westport, etc.)
- b. Throughout the tidewater portion of the region whether inside or outside of city limits, spacious industrial area to provide manufacturing space for
 - (1) the regional raw materials -- principally forest products -- in present and anticipated future volume;
 - (2) possible decentralized processing and assembly plants related to major industries in the Puget Sound and Columbia River metropolitan centers, when continued shortening of travel time to those centers makes such development feasible.

Thus, the Land Use Plan proposes that most industrial land use be located surrounding the bay. In many locations, where harbor deepwater frontage is concerned, industrial is given the preference over other possible types of waterfront use because of the presence of the deepwater ship channel, which is a decisive controlling factor wherever it exists. (See also the discussion on waterfront parks under Public Facilities in this report.) The present federal project ship channel extends to Montesano; hence the larger acreage in industrial use proposed for Montesano than for the other valley towns.

The bayfront proposed industrial land is already quite largely in one kind of heavy industrial use or another, though much of this is not visible to the transient observer. Only the plant buildings are visible. The related service areas frequently are not. Good examples of this are the log-booming grounds and leaching ponds along the South Shore. All the bayfront proposed industrial land has deepwater frontage. That on the north shore has big-ship access, while that on the south shore faces on a secondary channel deep enough for ocean-going barges, log tows, and fishing vessels.

All proposed industrial land without exception is now served by highway (with only short access roads needed), domestic water, domestic waste disposal, telephone, and power lines with capacity of 69 KV or more. (The 250-KV line will be completed as far as Aberdeen by 1965.) All proposed industrial land except that at Westport is served by railroad. All proposed industrial land in the Chehalis Valley and on the North shore will shortly be served by pipeline gas fuel. (No completion date has been set by the company involved.) With completion of plan now pending (included in the next phase of the regional planning project) for industrial water distribution to supply present and future needs, and implementation of the first stages of that plan to coincide with completion of the anticipated Wynooche Dam, all bayfront proposed industrial land will be within service reach of industrial water.

All proposed industrial land is divided by major thoroughfares or natural barriers from any land uses with which it might be incompatible, except at a few localized points (referred to in Report #3) where the incompatible land use is already breaking down and where an intermediate belt of land use compatible with both is therefore feasible. In this connection, the historical background is relevant. These are locations where residential and industrial land use join now. Industrial use in these locations is not a newcomer whose arrival has injured the residential. The industrial use was there first. Historically, residential use in the harbor and valley towns developed as close to industrial use as it could get, with a pattern of "living over the store" in relation to the industrial job. This has been broken down by the automobile and good roads. Such residential use is now spotty and low-density, and where it shows marks of deterioration will soon disappear. Where, however, it is vigorous and shows no awareness of incompatibility, a healthy condition can be maintained by careful use of

the zoning ordinance to establish gradually a belt of attractive light industrial use between heavy industry and residential; in some locations this belt will occupy land now industrial, in others it will occupy land now nominally residential.

It is perhaps desirable to mention that the large industrial area proposed just east of Junction City, at the head of the harbor, would be divided by the Freeway route now favored, but that this is not expected to create any problem. Except along the riverfront, this land is now entirely vacant with no expectation of development. The Freeway access that could readily be provided on this route at the northeast end of the proposed Chehalis-Cosmopolis bridge would give road access to this area for the first time, opening it up for development. There would be room on each side of the Freeway for a number of large industrial sites.

A few other special points may be noted: The proposed industrial area at Westport is needed for fish processing and for boat repair; hence the lack of railroad service and of industrial water will not be too important. -- The proposed industrial area on the South Shore has had some spot checks of the subsoil which indicate a firm gravel outcrop, making this the only part of the Grays Harbor lowlands where heavy industrial plants could be built without friction supported pile foundations. -- The Port of Grays Harbor, as a by-product of its necessary dredging activities, has a program for gradually diking and filling tidelands; hence the industrial land shown on the General Land Use Plan which is now under water.

In the future, there may be some newly-arriving industries that will want to locate in undeveloped land outside of that recommended for industry in the General Land Use Plan -- most likely to the east of it. This would come under county jurisdiction and be controlled by the county zoning ordinance. If such should be the case, it would be the duty of the county planning commission to protect the rights and interests of adjacent land use. There often seems to be a strong and persuasive case to be made of letting some company locate exactly where it pleases as long as there are no immediate neighbors to object; but decisions made on the basis of this kind of salesmanship have a way of being regretted later, when the disadvantages of such spotty development come to be experienced and the indirect costs begin to mount. In the case of Grays Harbor there would be no excuse for it, because ample industrial area is being provided without need for spottiness.

All of the foregoing has been thoroughly discussed at various times with local city and county officials and planning commissioners at their individual planning meetings; and their contributions to the background and to the recommendations have been incorporated in the plan and are here appreciatively acknowledged.

Major Thoroughfares in the Grays Harbor Region

Major thoroughfares planning for the Grays Harbor Regional Planning Area has included two separate sub-elements. Though inter-related, they involve largely different traffic, different problems to be solved, and approval by different authorities.

The first sub-element consists of the Major and Secondary Street Plans for the local urbanized area; prepared under this project in form for approval by the cities and county.

The second consists of planning ~~part of the~~ Olympia Freeway, a highway whose purpose is primarily to serve traffic with origin and destination outside the Grays Harbor urbanized concentration, and the approval of which rests with the State Highway Commission rather than with any local body.

1. Major & Secondary Street Plans

The first sub-element has been completed.

a. During the first phase of this regional planning project, Preliminary Major and Secondary Street Plans for the respective cities were developed, in coordination with the Preliminary Land Use Plans being prepared at the same time, and were presented to the agencies involved for their review and study. They were developed with the cooperation and approval of the various city and county engineers and other officials who have the responsibility of providing and maintaining the street system.

b. Both before and after formal presentation of these plans, they were discussed at many public meetings of the councils, of the local planning commissions, and of the regional planning commission.

c. After a year's consideration, during which time some changes were suggested by the agencies and incorporated into the plans, and during which time also the consultant made certain adjustments that would better mesh local street systems with possible Freeway alignments, the Final Major and Secondary Street Plans were completed in form for adoption by the various local authorities. These plans will be found, in map form, considerably reduced in scale for publication, in Report #3 of this series. The originals have been delivered to the cities and county.

In this planning, it is necessary to work closely with local engineers and officials, both because of their local knowledge, and because of the necessity of coordinating planning done under this "701" project with planning they are required to do for immediate construction and maintenance programming in order to obtain state

gas-tax money. Their planning has dealt with immediate pressing problems, including designating certain streets as major and secondary in establishing expenditure priorities, but has little to do with the type of problem being solved by the regional planning project, under which proposed plans have been developed on a long-range basis to provide a continuous flow of local and through traffic. There has been no duplication or conflict; one plan helped the other.

Standards used in development of the Major and Secondary Street Plans for the communities have been incorporated in the proposed Subdivision Ordinance also prepared as part of this regional planning project (see Section 6.08 of the Subdivision Ordinance, "Dimensional Standards"). See also "Design Standards for Major and Secondary City Streets in State of Washington," #237, Association of Washington Cities and University of Washington, issued April 1962.

The local street patterns proposed were based on existing street systems plus necessary future additions, to provide the pattern needed to give adequate circulation for people, goods and utilities. Existing streets designated as part of the pattern were selected on the basis of their suitability for needed circulation and their meeting (or being capable of development to meet) the following standards:

Major Streets. (Arterial connection to Freeway, state highway, or city center.) To provide for daily traffic volume of 10,000 to 40,000; 4 to 6 lanes. Minimum right of way not less than 80 feet, recommended up to 100 feet; roadway width may vary to meet traffic conditions, recommended minimum 54 feet.

Where the above standard cannot be met on a single street without removing extensive existing development -- as is the case in the Aberdeen central business district, for instance -- the major street pattern is set up to spread the above, or split it, by adoption of a one-way street couplet using parallel adjoining streets.

Where, in the smaller cities, anticipated traffic volumes will be below the 10,000 mark after completion of anticipated highway improvements, the designation "major street" has been retained in order to indicate the importance of the street relative to the "secondary" streets, and also to obtain uniformity of nomenclature between this plan and the so-called "Six Year Plan" of the cities for gas-tax money.

Secondary Streets. (Arterial or connector street to local streets). To provide for daily traffic volume of 1,500 to 15,000. Minimum right of way 60 feet, with 80 feet recommended; minimum roadway width 44 feet.

Local Streets. All other through streets. Recommended minimum right of way 60 feet.

In preparation of the preliminary plans in the first phase of this project, the following were taken into consideration:

- topography;
- present and proposed land use;
- existing rights of way;
- present and probable future trends of traffic flow in all parts of the planning area;
- and the local knowledge of the engineers and officials.

In the second phase, the plans were reviewed by the consultant using the above and additional material that had become available. More information on land use, on the economic base, and on possible Freeway alignment became available, for instance.

Traffic counts and estimated future traffic projections prepared by the State Highway Department were used as authoritative; particularly since their soundness of projection is confirmed by the trends shown in such other indicators as drivers' licenses, passenger vehicle licenses, and truck licenses. The traffic counts are contained in the annual reports of the department; plus a special 1961 Central Park count. Projections are contained in department special reports prepared in 1953 and 1957. The 1953 report also supplied the practical-capacity analysis for each major intersection in Aberdeen, Hoquiam, and Cosmopolis, which was used in both the local and Freeway portions of the planning. Without these counts, forecasts, and related studies, thoroughfare planning in Grays Harbor County would be far more costly.

Special attention was given to certain factors anticipated as expected to create additional future traffic, both local and long distance. Among these factors were two of especial importance having to do with future land use, and two others having to do more strictly with traffic. The special land use factors were

- a. Trends in tourist development, which will affect local traffic to the extent that local shopping and other service facilities are developed to attract tourists to leave the highways and enter the cities;

- b. Future industrial development, which to the extent that it adds jobs, or moves jobs from one part of the area to another, will cause additions to or shifts in commuter, shopper, and local-recreation traffic.

The special traffic factors were

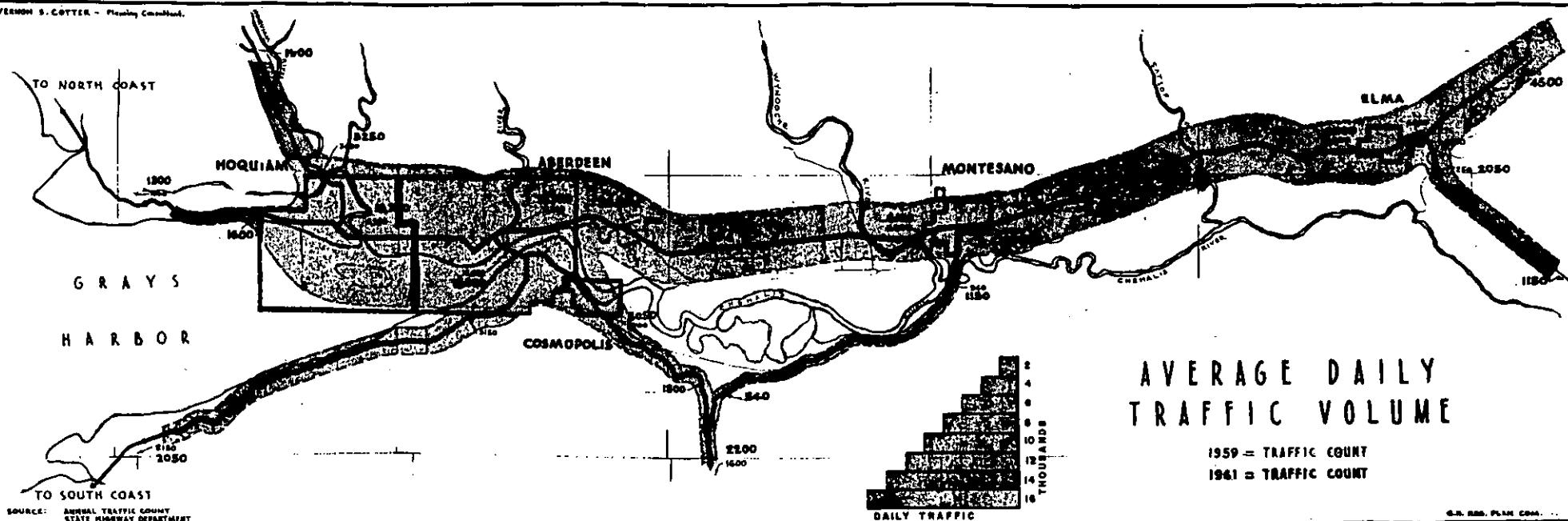
- a. Anticipated improvements in Highway 101 coastwise, including the Megler-Astoria and Quinault Bridges, and

- b. Anticipated shifts in distribution of origin of truck-carried raw materials whose destination is the Grays Harbor mills.

The results of these further studies supported the recommendations in the preliminary plans. More details were worked out in connection with meshing local street systems with freeway alignments. As indicated, the land use plans and major thoroughfare plans were coordinated at all stages.

TO SOUTH COAST

SOURCE: ANNUAL TRAFFIC COUNT
STATE HIGHWAY DEPARTMENT



The proposed Major Streets are basically the main streets of the cities now, and the proposed Secondary Streets are basically the connecting or by-pass streets used as such now. Thus the local Major and Secondary Street Plans are self-explanatory to those with local knowledge; description of each will be found in Report #3. An unusually small number of proposed additional streets will be involved, compared to most cities. The explanation is that the street pattern of Grays Harbor cities -- which is more than two generations old -- was laid out in the expectation of a boom, and was laid out so lavishly that these cities have 30% more street area than average for cities of their size. Thirty years ago, nearly all these towns had not only more population than they have now, but more than is forecast for them again by 1985. Their industrial and commercial land use also was more intensive than now. Thus, the major street framework they have inherited is more spacious than most cities. Although pavement widths are narrow on some streets, the actual existing right-of-way of all the streets proposed for major or secondary arterials is 60 feet or more, with one exception noted just below under Montesano; and by use of the subdivision ordinance and one-way couplets, bringing the remaining major streets up to 80-foot right of way can be handled gradually. Anticipated traffic with local origin or destination could well be handled by proper development and regulation of existing street right-of-way, with a very few additions to give complete traffic circulation, and with construction of the recommended truck route to get the log trucks off city streets as far as possible.

If measures discussed later are taken for removing the burden of tourist and truck traffic from local arterials, there will remain potential bottlenecks in only three towns. These are as follows:

a. Montesano. There is one short stretch on Pioneer Avenue, a present and proposed major arterial, where right of way is only 40 feet wide. This is being handled at present by making this stretch a no-parking street, giving as much moving-traffic lane width as the remainder of the street now has. There will be a massive reduction in traffic on Pioneer Avenue after the Freeway reaches Montesano; and as far as can be forecast at this time, that reduction will ease the peak-load problem.

b. Cosmopolis. If Megler-Astoria bridge completion stimulated traffic through Cosmopolis on Highway 101, there will be a short bottleneck. The probability is that Highway 101 tourist traffic will prefer the scenic bypass via Tokeland; in that case the bottleneck will not develop.

c. Aberdeen. If the Freeway as ultimately built is in a location that will only take care of Aberdeen's tourist and log-truck burden, Aberdeen's traffic problems will still not be entirely solved. The two principal additional measures have already been extensively studied, in the Regional Planning Commission and elsewhere; they are the one-way grid extension, and completion of the truck route from

the Port Docks. A third will be improvement of secondary arterials proposed under the plan to a standard that will make traffic willing to use them. A fourth is provision of much more off-street parking.

Intersection capacity and street capacity in Aberdeen are nominally ample for local traffic. Traffic counts (See Report #2 pages 83-88) for Aberdeen as for other parts of the planning area show much annual fluctuation but little long-term rise or fall if through tourist traffic is excluded. However, local traffic does have marked peak-hour distributions: one related to peak shopping hours, one related to peak go-home traffic. One reason these create a difficulty is that traffic destination desires at both these times involve numerous left-hand turns and much north-south traffic cross-wise to the main east-west traffic movement.

The extension of the one-way grid has sometimes been thought of as a temporary stopgap to serve "foreign" traffic until the Freeway can be built. Even present "domestic" traffic, however, is enough at the peak hours to need such extension; and the increases forecast in population and intensified motor vehicle use during the planning period are enough to indicate that the one-way grid will need to be retained after Freeway completion.

An important reason for this is that due to the topography of Aberdeen, the only practical way to institute progressive signalization is by using one-way streets. A one-way couplet by itself would only increase intersection capacity by 15%-20%; progressive signalization by itself could not be installed to an extent that would increase intersection capacity materially; but the combination has been found already in downtown Aberdeen to increase it 65%-70% (except when restricted on weekends by highway bottlenecks).

Proposed extension of the one-way grid is a matter that must be worked out between the city authorities of Aberdeen and Hoquiam. Two local Aberdeen problems not yet solved, and outside the scope of this planning project, are (a) how to finance the improvement of Sumner Avenue that would be necessary if the one-way grid is extended to Simpson and Sumner, since Aberdeen bonding capacity would not permit it; and (b) how to solve the internal problems involved in making a decision whether to widen Park to a two-way link between the Simpson-Summer section and the Heron-Wishkah section of the one-way grid, or alternatively to make Park one-way southbound and Alder one-way northbound.

The westward extension of the one-way grid to Division Street along Heron and Wishkah should be put into effect as soon as the truck route from the Port Dock can be built. Its western terminus will depend on the final engineering location of the truck route, now under study by Port and city engineers. The recommendation for arterial extension westward of Heron and Wishkah, and for construction of the Port truck route shown as a dotted line on the Major and Secondary Street Plan, is elastic within a couple of blocks.

It can and should be adjusted to accommodate both the truck route and any slight relocation of the recommended Freeway interchange.

However, the truck route location cannot wait for the Freeway alignment decision. Even if it had to be shifted later it would still have to be built now. It will not only relieve Simpson and Park of the thunder of the log-trucks bound to and from the Port Dock, it will also relieve Simpson of a large amount of rush-hour go-home traffic originating from the East Hoquiam and port-vicinity mills.

It may be mentioned in this discussion of purely local traffic that when the Freeway is constructed, if it is constructed along the general line that has been recommended, it will take some go-home rush-hour burden off Aberdeen streets, even some that is technically local in both origin and destination: in that the proposed interchanges would give almost direct access to three of the largest local industrial plants, two in Hoquiam and one in Cosmopolis, as well as to those in the Port vicinity, in such a way that their go-home traffic would not have to go through the Aberdeen central business district.

Unincorporated area. The Central Park problem is discussed in Report #3 pages 22-25. In the remainder of the planning area, the network of county roads is as adequate as the terrain will permit. This is not a region where there is any problem of farm-to-market roads; all but 15 of the farms in Grays Harbor County at the time of the last Census of Agriculture were located on hard-surface roads. In addition to roads publicly dedicated, there is throughout the planning area, except in the marshlands, a network of private roads serving the tree farms.

2. The second sub-element of the Major Thoroughfares Element of the Comprehensive Plan for the Grays Harbor Regional Planning Area is the one whose urgency historically brought about the establishment of the Regional Planning Commission and the present regional planning project: the Freeway.

It has of course not been completed. Its completion will require probably two more years. However, Phase II brought it to a measurable intermediate stage, with in fact better progress than had been hoped, in that a corridor line was found which would not only meet the through traffic needs with minimum damage to the Grays Harbor cities but would even mesh in with the recommended arterial streets for the Aberdeen-Cosmopolis-Junction City portions of the urban complex in such a way as to give excellent positive assistance to the region's own traffic problems, giving excellent access for wholesale-delivery and raw-materials trucks, and relieving intercity rush hour traffic.

"The Freeway." The Olympia Freeway is a federal-aid Principal State Highway. Its main purposes, accordingly, involve service to

long-distance traffic rather than to local Grays Harbor traffic. It will be the only east-west freeway alignment possible north of Portland, to give service between the east-of-the-mountains and the coast; and it will be the completing freeway circulation link between Highways 99 and 101, to serve tourists in the summer and (perhaps even more important to Puget Sound) to provide freedom for transport trucks to shift back and forth between the two main north-south federal highways as weather dictates, preventing losses from interrupted schedules and reducing damage to perishable produce.

As the future major highway entering the Grays Harbor area, the Freeway if successfully planned can be expected to provide two kinds of traffic services for Grays Harbor itself. One kind would be to improve the arterial connection between this region and the major metropolitan centers of the state; this would improve the fast connecting route for the necessary traffic generated by industrial, commercial, and personal transportation needs of the residents of the region. The other kind of service is to take care of the tourist traffic crossing the area to its western boundary, generated by the many weekend and vacation visitors who come into this region from east and south to enjoy the beaches and the Olympic Mountains, or to go sportsfishing. These benefits are not an inherent part of community services for which this Olympia Freeway is intended. Some of the Freeway alignments under consideration do not provide them, or only to very limited degree, and have only the negative merit of at least not destroying the local cities.

Most limited-access principal highways extend from one terminal to another terminal. This Freeway does not, being as indicated a link to complete circulation; its eastern end is a junction point with 99 Highway near Olympia, and its western end is another junction where traffic desires fan out in a number of directions. With the present highways, and with at least one of the possible Freeway routes, this junction is pinpointed at Heron/Wishkah--G/H Streets in the central business district of Aberdeen.

The south branch of traffic desire serves southbound 101 to Raymond and beyond to the Megler-Astoria bridge over the Columbia River (now under construction) and thence southbound the full length of Oregon and California. The southwest branch serves the south beach and Westport traffic, both predominantly recreational for tourists originating outside the region. The northwest branch serves the tourist trips to the north beaches and the summer-homes trips to Ocean Shores and similar anticipated developments. The north branch serves the north-south traffic on 101 Highway into the Olympic Peninsula for tourists, and also the raw material truck traffic from that district which is of vital importance to the regional economy.

It will be seen that part of the problem of planning this segment of the Olympia Freeway consists of finding a way to get as many as possible of these strands of present and future through traffic out

of downtown Aberdeen; which has in its present condition been well described as "a switchyard with no yardmaster."

The trouble is topography. On both sides of the Chehalis Valley you have mountains, of recent and consequently unstable geologic formation. (See Report #2 page 40.) In the middle you have river, marsh and harbor.

Consequently, there is only one general east-west route through Grays Harbor County. The railroads and the highway follow the east-west line of the Chehalis River, as close as marsh conditions permit.

The valley is narrow throughout, and at certain points pinches in to a wasp-waist. Because this narrow valley contains the cities, the industries, the old highway, two railroads, and the partly-navigable Chehalis River, plus most of the county's high-quality farm land, there is a series of difficult choices to be made in establishing the final location of the Freeway. Some of these choices are inter-dependent; it is no use planning any one segment without considering the others, because the best solution for one section may involve insuperable difficulties where it joins on somewhere else.

Nor can the difficulties be formulated as being questions of engineering desirability versus economic desirability. At some points the problem is simply one of finding a location that is possible at all.

Under Phase I of this planning project, firm recommendations were arrived at for the easternmost portion of the Freeway, through nearly half the planning area. Part of this has now been built and is in service (as far as Elma), eliminating many bad features of the old highway. Continuation of the Freeway from Elma westward past Montesano to the crossing of the Wynooche River, which also formed part of the Phase I recommendation, is now in the engineering and right-of-way purchase stage. This route bypasses the towns of Elma and Montesano but provides easy direct access to their central business districts by interchanges located on their planned major streets.

The remainder of the Freeway is still in the planning stage. This portion will extend from the crossing of the Wynooche River to a junction, just west of the harbor urban complex, between westbound and northbound traffic, in the vicinity of the Little Hoquiam River, on the north shore of the harbor.

The final plan for this section is yet to be decided. Many considerations have dictated a policy established by the Grays Harbor Regional Planning Commission of not allowing the Freeway alignment through this section to "freeze" prematurely; in particular, a policy of discouraging any identification of any "recommended line" at this stage. At the Regional Planning Commission meeting of June 27,

1963, commission consent was for the first time given to the preparation by the consultant of a map which would show the "Route Now Favored" (see Report #3, pages 45-46 and map between those pages) alone, superimposed upon the map of the planning area to show how it is coordinated with the thoroughfares plan and land use plan; but with the proviso that this is not to be done for publication of any kind, but merely to meet objections raised by the State Department of Commerce and Economic Development so that the state representatives can ascertain that there has been coordination of the various parts of the comprehensive plan. The map prepared for this purpose is labelled "Major Thoroughfares Plan." The scale is 1" per mile. It also shows the network of present and proposed state highways and county roads through the area. The suggested Freeway interchanges tie in with the proposed major arterials for the cities, and also with the proposed land use plans for the cities, as will be seen by comparison of this map with the plans in map form in Report #3.

By comparing in this way, any apparent land use conflicts and any apparent incompleteness of traffic circulation will be seen to disappear. In other words, the land use plans and circulation plans were formulated in complete coordination with the progress on solving this Freeway problem.

In fact, this could be put more strongly: the Freeway planning was the magnetizing force that led to the preparation of the land use and local-streets components of the comprehensive plan for this region. It was essential for the local agencies to have Major and Secondary Arterials plans for their respective areas so that they would be able to participate intelligently when the time should come to decide which of their local streets if any would become connecting links with the Freeway.

The route shown on the map labelled "Major Thoroughfare Plan" is the same route that was marked "Route Now Favored" in Report #3 on the map between pages 45 and 46. The alternate plans studied, none of which can yet be finally excluded, are also shown in Report #3 on that map between pages 45 and 46. The "Route Now Favored" is described on page 46 in the following words:

"The one shown as preferred has still to be refined and is still under study by the city planning commissions concerned, but has met with much more general support than the others. It would parallel the present highway to a point just west of the golf course; thence it would head southwest to a point near the north city limits of Cosmopolis. It would cross the river on a new bridge (which would be openable but would not require a bridgetender on duty). It would cross via Farrel Street to the railroad track and then turn northwest to cross the Harbor on another new bridge to Division Street. Thence it would parallel the railroad track to a joining with the proposed Hoquiam Freeway link."

The other alternate routes were not given verbal description. This

singling out of the "Route Now Favored" by marking it as such on the map and giving it the emphasis of being the only one described in words was as far as the consultant felt at liberty to go in a published report within the policies of the commission.

It might usefully be noted here, as has been discussed in detail in Regional Planning Commission meetings, that many of the proposed access points on this route can be provided with a minimum of complication at points where the Freeway must in any case be elevated, either to gain height for a bridge or due to natural topography. Junction City access would be provided at the north side of the proposed Chehalis-Cosmopolis bridge; Cosmopolis and Highway 101 South access would be provided on the south side of that bridge. South Aberdeen access could be provided at a point where an overpass would be needed to get over Highway 13-A at Boone Street. Westport escapement would be at the south side of the proposed Grays Harbor bridge, and Aberdeen industrial-commercial access would be on the north side of that Bridge where Division Street angles up to meet the west end of Heron and Wishkah Streets. This access would mesh with the proposed truck route as well as giving easy entrance to the central business district along major arterials. The Aberdeen Major and Secondary Street plan shows the Aberdeen one-way grid extended to this point to meet this possible future Freeway interchange as well as the truck route.

From Division Street westward, the route as indicated on the map would follow more or less parallel to the railroad tracks. The exact distance has not been determined but it should be sufficient to make possible industrial development and truck maneuvering on both sides of the railroad by service roads. At the western city limit of Aberdeen the Freeway would join with the proposed Freeway location now under study by the Hoquiam Planning Commission.

On the map, an access for the Port Docks and adjoining industrial district is indicated just west of Myrtle Street, which is the boundary street between Aberdeen and Hoquiam, because at the point indicated it would mesh with the street development plan of the Port of Grays Harbor. The port access from the Freeway is a matter of concern to both cities (Aberdeen and Hoquiam) and to the Port District, which means that the interchange shown is subject to considerable further consideration.

There are three important problems, or groups of problems, still to be solved in connection with this proposed Freeway route, which lie outside the scope of Phase II of the planning project but which have received discussion in planning meetings.

1. Division of the Central Park neighborhood area. The existing state highway does divide Central Park, with numerous grade crossings for cross traffic. The State Highway Department has announced intention of improving the existing highway during the current biennium by widening to four lanes, still with grade crossings. If that present highway route is to be converted into Freeway use in the

future, adequate detailed planning studies would be required in order to make sure that there would be necessary service roads parallel to the Freeway; also provision to take care of north-south travel crosswise to the Freeway, which would involve the location of two or more underpasses -- which could possibly be in the draws or ravines that are found in the area. The problem of cutting Central Park in half could be reduced by using a route through Central Park parallel with the present highway, either to the north between the existing highway and the steep hills, or south of it along and parallel to the railroad track.

2. Bridges. The route shown as favored would require a bridge over the Chehalis River at the north tip of Cosmopolis, and a second bridge across Grays Harbor between South Aberdeen and West Aberdeen. These bridges would not be cheap. The cost of their construction will be a serious matter of consideration for the State Highway Department. However:

a. The two bridges would not have to be built at once. The proposed Freeway line ties in to present highway, and present and proposed street systems, in such a way that any of the following links could be built separately and be serviceable -- and, moreover, they need not be built in consecutive order, but could be built in order of need:

(1) the section between Division Street and Hoquiam (but this would only be serviceable if it tied in with an adequate new highway bridge across the Hoquiam River; location of which is, of course, outside the scope of the present project).

(2) The section across South Aberdeen from Highway 101-South to the Westport escapement.

(3) The section from Central Park to Highway 101-South, including the Chehalis-Cosmopolis Bridge.

(4) The section across the eastern part of Central Park to the Wynooche crossing.

(5) The Grays Harbor bridge.

These are deliberately not given in geographical order, nor in proposed order of priority either. Probably the highest priority should be assigned to sections (1) and (3). The lowest priority can be assigned to the Grays Harbor bridge.

b. Any Freeway route through the area involves at least one expensive bridge, and some of the others also involve two.

c. Not all the engineering expense considerations oppose construction of these bridges. For example: construction of section (3) from Central Park to Cosmopolis, the land part of which would be cheap compared to any alternative, would rid the Highway Department of a permanent and costly engineering headache. It would rid them of the slide area (eroded both from above by rain seepage through unstable rock, and from below by a scouring current in the river) just where the present highway enters Aberdeen from the east; also the related engineering problem, that to date has found no really satisfactory solution, of giving truck access to

industrial plants in the unincorporated district of Junction City. (A South Bank alternate Freeway route would eliminate the slide-area engineering problem but without solving the Junction City access engineering problem.)

3. Cross Traffic. The proposed route keeps overpasses (or underpasses) at a minimum except where they can be easily worked in; but there are two interchanges that present overpass or underpass problems for cross traffic. These are the one at Boone Street in South Aberdeen and the one for the Port. If the Freeway is built at or near the surrounding grade level, the underpasses for cross traffic would be tunnels flooded at high tide and during every heavy rain; while if cross traffic were accommodated by overpasses, the necessary approach grade would involve cumbersome supports that would interfere with land use and other traffic. On the other hand, if the Freeway were elevated, that would involve viaduct construction carried on piles supported by skin friction, and this too would have somewhat cumbersome supports. The problem at Boone Street can probably be worked out quite readily, since that district has never developed and no existing land use would be disturbed nor expected land use prevented. The problem at the Port is more severe. It will have to be worked out in connection with the Hoquiam end of the Freeway.

The importance of this cross-traffic problem is worth emphasizing. The map of traffic flow in this report indicates the general distribution throughout the harbor region. It will be noted from this, and from the traffic counts in Report #2 pp 83ff, that the bottlenecks now are the bridges and their immediate funneling approaches. Similar bottlenecks would be created by any ill-considered funneling of cross-freeway traffic into a few underpasses. This danger must particularly be considered when planning industrial development. A freeway is a permanent blockage to most side-to-side traffic across it.

Looking at the positive side:

This Freeway route would be short and direct. It would separate the strands of traffic, completely eliminating the junction crowding. It would give greatly improved access to Junction City and Cosmopolis, and a greatly improved junction for through traffic with Highway 101 southbound and Highway 13-A westbound. From the standpoint of economic effect it would be beneficial, opening up a part of Cosmopolis that has previously been entirely inaccessible by land, giving good access to South Aberdeen while taking out less than a dozen houses, and giving excellent access to the Aberdeen central business district and industrial district without damaging either.

Right-of-way purchase would be cheap and would meet with minimal opposition in most sections. In the portion between Central Park and Cosmopolis it would pass through vacant land. In the South

Aberdeen portion it would pass through undeveloped land, nominally "residential-agricultural" but with few houses and no high-grade agricultural land. In the main part of Aberdeen it would pass through a section of low-value older buildings near the railroad tracks.

Thus the favored route would be the most desirable from the economic and sociological point of view for the cities of Aberdeen and Cosmopolis; would provide the easy access needed for tourist, industrial, commuter, and local traffic, to all points now served and several not now served; would mesh well with local land use and local street systems; and would by no means have all the weight of engineering cost against it.

It must, however, be repeated, that none of the other routes can yet be rejected.

An emphatic recommendation may be repeated here against one ~~one~~ of them. This would be the route through central Aberdeen, whether crossing the central business district or the industrial waterfront district. Of course a limited-access highway through downtown Aberdeen would be tremendously destructive to the city. This would apply whether the strip destroyed were in the industrial waterfront section between the central business district and the harbor, or in the retail business district, or in the section just north of that devoted to apartments, professional buildings, schools and churches -- in other words, anywhere in the flatlands. A 200-foot strip removed from local uses and taken off tax rolls would be more than the city's economy could stand. However, here again, it is not merely a matter of economic-sociological considerations versus engineering considerations. Purely from the engineering point of view, the flatlands route on the north side of Grays Harbor would be neither cheap nor easy. To give north-south service to local traffic would require either difficult tunnel construction below groundwater level (at least at high tide), or viaduct construction all the way through town carried on skin-fiction-supported piles. There would still be one bridge to be built to get into Aberdeen and there would be an intricate escapement design at the north end of the present Chehalis Bridge. The "switchyard without a yard-master" type of junction would remain.

The "route now favored" is a corridor, not a specific line. Nevertheless, the positive values of achieving even a corridor alignment -- or, as the Commission for good reasons would prefer it to be described, a group of corridor alignments -- already exist. Much development is freed to go ahead by the assurance of some locations where the Freeway definitely will not go. There are known cases where, in the recent past, improvements have not been made for fear that they would be wiped out and a fresh start necessitated in an entirely different locality when the Freeway comes.

Note: A chart showing comparative advantages and disadvantages of all the Freeway routes under consideration is in existence but is withheld from publication as a matter of Commission policy.

P r e l i m i n a r y

P u b l i c F a c i l i t i e s P l a n

LONG-RANGE PLAN FOR SCHOOLS AND PARKS

Introduction. The following summary of the Preliminary Public Facilities Plan for the Grays Harbor Region is limited to facilities that are normally planned on a region-wide basis in order to obtain coordination of the efforts of local authorities concerned.

A number of other pressing public-facility problems are discussed in Report #3, pages 59-71, in which they are grouped according to the local authority having jurisdiction, geographically. They are excluded from the present report because their implications are local rather than regional in scope.

Some regional public facilities are also excluded, for various reasons:

a. One type of public facility is classified elsewhere in the Comprehensive Plan. This group includes streets and highways, power lines, water lines, sewage-disposal facilities, and public terminal facilities. Streets and highways are discussed under the Major Thoroughfares title in this report and also in Reports #2 and #3; industrial water distribution awaits planning attention under the next phase (Phase III) of this regional planning project; the others are deferred to a later stage in preparation of the Comprehensive Plan. It would be appropriate to mention here that all the facilities in this group have received and are receiving planning attention outside the scope of this planning project, and to give credit to the work of the engineers of cities, county, port, and public utility district; all of which entities participate in this regional planning project as well.

b. One group of public facilities is excluded because the population and tax base of the Grays Harbor region cannot support their development within the planning period. These are such things as technical libraries, specialized hospitals, art galleries, museums, etc. Present facilities: none. Proposed facilities: none.

c. A third group consists of certain facilities which do now exist in the region but as to which no proposals for the future are being made at this time, for various reasons. They are as follows:

(1) Hospitals. These now in the region are modern and well located. Population trends do not justify more. For some hospital services, local residents now go outside the region, and will be able to do so even more readily when anticipated highway improvements come into effect. Present facilities: reasonably adequate. Proposed additional facilities: none.

(2) Public libraries. Fullest credit should be given to the local cities and the county for the regional library project just instituted on an experimental basis. This will give improved service to all parts of the region while saving money (since books like other things are cheaper in larger quantities) and retaining local autonomy and initiative. Present physical facilities: vary with locality from excellent to poor, with services good within budget limitations. Proposed additional facilities and services: recommendation postponed until completion of experimental period of regional library project, with one exception: recommendation is now made of new building for Aberdeen Public Library due to dangerously deteriorated condition of present building.

(3) The beaches. While it may sound odd to hear these referred to as public facilities, in fact they are, and of great importance, because they provide recreational service not only for the Grays Harbor Region but for the entire Northwest. Nearly all the beach area of Washington State is located in Grays Harbor and neighboring Pacific counties. Present and proposed beach parks are indicated in the present plan, but the beach problem as a whole is too large for the scope of this regional planning program. Part of it cannot be dealt with by any planning program until the legal status of the beaches is clarified as a result of cases now pending before the state supreme court. Present facilities: largely undeveloped. Proposed facilities: recommendations postponed, except for limited proposals contained in the parks section of this report.

(4) Fire protection. This is a region where fire hazard is a permanent public problem. Detailed recommendations for its solution do not come within the limited scope of this project. One reason for exclusion is that such recommendations must be coordinated to solution of problems of tourist recreation (under study by an ARA technical-assistance project during the 1963 season) and regional industrial water distribution (to be studied under a proposed Phase III of the regional planning project). Certain basics were discussed in the Regional Planning Commission in 1961-62 and might be noted here as a matter of record:

Danger of forest fires will continue to increase

as tourist use of forested land increases. Active planning for forest fire protection is carried on jointly by state and federal agencies and the industrial tree-farms. Provision of ample parks, as proposed under this preliminary plan, will help by channeling tourists away from the woods.

Fire danger from forest-industry manufacturing and storage will continue, but will be somewhat reduced under the General Land Use Plan, which will provide waterfront industrial sites having sufficient acreage to give fire-isolating space.

Fire danger in the built-up districts of the cities will be reduced by carrying out recommendations in the land use plans for the cities, which call for urban renewal programs and other measures to remove deteriorated buildings that are a constant menace to central business districts. (Hoquiam has its urban renewal program already under way.)

All firefighting agencies in the region are alert. All have expressed need for more training facilities, which might be met by a joint program for centrally-located fire tower and related training equipment, for use by all the fire departments. What this should include, and where it should be located, is a matter to be worked out jointly by the fire chiefs with other city officials.

P l a n f o r S c h o o l s a n d P a r k s

Discussion of proposed parks cannot always be separated from that of proposed schools, because of the trend toward combined school-park neighborhood facilities. Therefore both are shown together on the plan in map form. They will, however, be discussed separately, with combined facilities mentioned under both.

P a r k s

Origin of the Problem. Parks, or lack of parks, became a problem in this region only recently. Two factors have been bringing about some community awareness of the need. One is a change in the people: whereas formerly Grays Harbor was a region of bachelor loggers and millworkers living in camps or boarding-houses, the past generation has produced a shift to the married logger with his own home in or near town, who commutes to the job site. He has a family with whom he wants to go picnicking; and his children want a place to play ball or carry on other sports activities. The second factor is a change in the land use, or at any rate the land ownership. Until recently there was almost

unlimited access to recreational sites throughout the region. Now, with the specially desirable recreational areas being bought up by private owners for commercial tourist or other purposes, the problem of providing for outdoor recreation is beginning to impinge on public consciousness, and providing for this through future parks is beginning to be recognized as a matter of proper public concern.

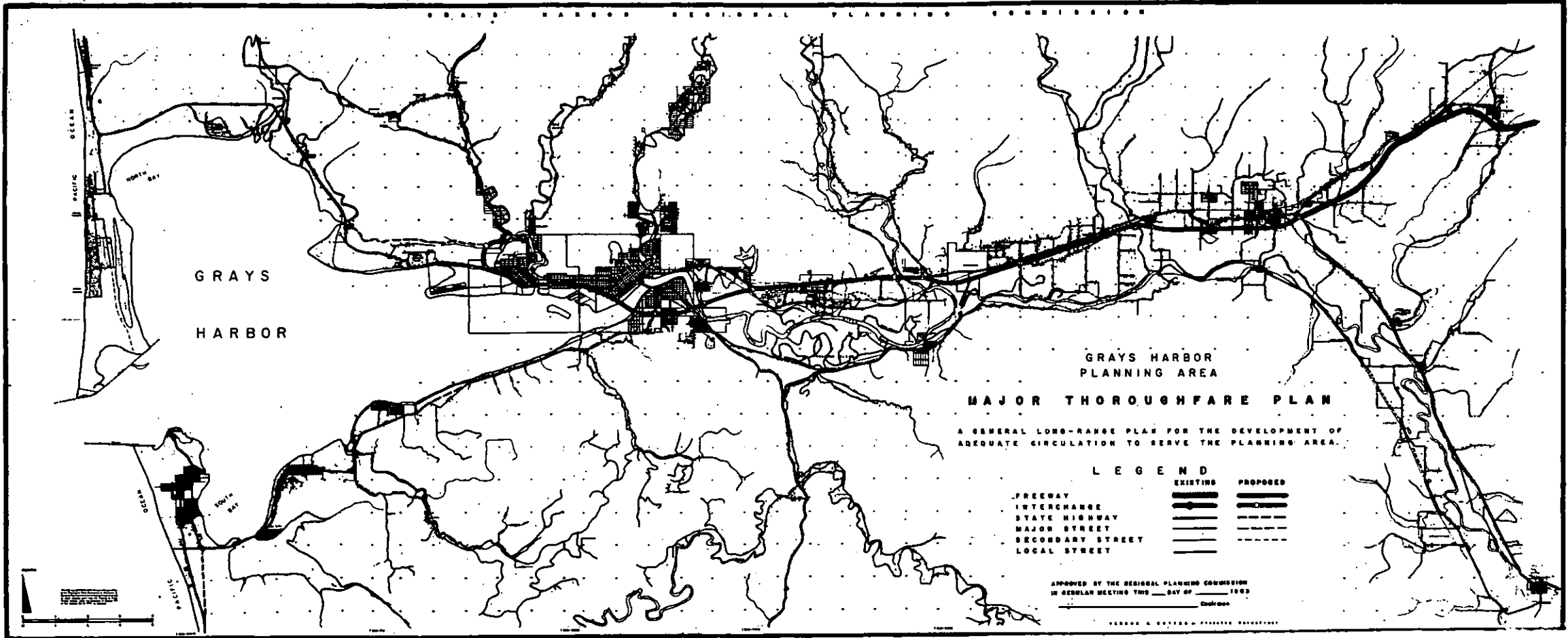
Nature of the Problem. Most of the acreage now in parks in the Planning Area (190 acres out of 279) is in state parks that give primarily tourist service, with practically no room left in them for use by local residents. Several of the cities have small parks, but the city fathers know well that these are inadequate; also they know that it would be cheaper to buy more land now than to wait till later; but they have neither cash nor bonding capacity for the purpose. The other cities, and the county, have no parks. Meanwhile, traditional undeveloped recreational area within the county is being tied up for private use and ceasing to be open to all. To indicate specific desirable sites for parks in a published report would merely be to attract the attention of real-estate promoters to them, at a time when the local entities are helpless to do anything about it.

General Recommendations. One urgent recommendation has been made by the Regional Planning Commission which can be safely published without inflating land prices: that the county cease from disposing of waterfront county-owned lands at tax auctions, in order to reserve these for park use.*

The principal general recommendation by the present consultant, however, has to do with organization for further action. Aberdeen and some others of the cities have park commissions. The county does not. Establishment of a county park commission is desirable; but many of the park problems are joint ones involving city-county or city-county-school district action. Therefore, it is recommended that there be established a regional park commission to plan, acquire, and develop parks for the region.

It is further recommended that such a regional park commission should adopt as its guide the standards established by the National Recreation Association. (The standards in the checklist at the end of Report #3 are theirs.)

* See special note on waterfront park problems on pages 47-8 of this summary report.



GRAYS
HARBOR

GRAYS HARBOR
PLANNING AREA
MAJOR THOROUGHFARE PLAN

A GENERAL LONG-RANGE PLAN FOR THE DEVELOPMENT OF
ADEQUATE CIRCULATION TO SERVE THE PLANNING AREA.

LEGEND

	EXISTING	PROPOSED
FREEWAY		
INTERCHANGE		
STATE HIGHWAY		
MAJOR STREET		
SECONDARY STREET		
LOCAL STREET		

APPROVED BY THE REGIONAL PLANNING COMMISSION
IN REGULAR MEETING THIS ____ DAY OF ____ 19__
Chairman

VERNON A. KETTERHOF, PROJECT MANAGER

Present Parks. There are four state parks now in the region: two at the beaches and two in the Chehalis Valley; total area 190 acres. They are used to saturation. There are 86.67 acres of city park, most of it not developed for active types of use. There are 2.53 acres of park outside city limits other than the state parks.

Much of the existing park area was not provided from public funds. Service clubs are doing what they can and should be congratulated. Private individuals have made generous and far-sighted gifts for park purposes for which they too should be congratulated, and others should be encouraged to follow the example.

More details about existing parks are given below under the names of the respective localities; also in Reports #2 and #3 under both Land Use and Public Facilities.

Proposed Parks - General. The sites shown on the map are only approximate, and refer to the general vicinity rather than any particular parcel of land. Suitable sites are known to exist in the locations indicated but the recommendations are not tied to them alone.

Many of the proposed parks are shown in unincorporated county territory. This does not mean that it is the sole duty of the County to acquire the land. Where the park is shown adjacent to a city or town, so that it would primarily serve that urban population, it is the city or town that should take the lead. This does not mean that the city should take sole action either; but rather that by joint agreement between agencies concerned (city or town, county, school district, in some cases the state, perhaps special park district) some practical and economical method can be developed to provide the needed parks. Perhaps service clubs and private owners also should be drawn into the planning; some of the West's most beautiful parks immortalize the names of private donors, or of those to whom a donor wished to provide a memorial. The suggested regional park commission might be the body through which all these interested could work.

Proposed Parks - General Standards. The standards quoted in Report #3 divide parks into three categories: (1) small or local or neighborhood; (2) medium or community; and (3) large or regional. The term regional may be misleading in the present context, because the park standards define a "region" as a circle with a 10-mile radius, which would be only a fraction of the Grays Harbor Region (48 miles long x 18 miles wide). To prevent misunderstanding, the term "regional" is used of parks in the following discussion only where they would in fact attract visitors from the entire region. Others that the park standards would call regional are here termed "sub-regional."

The proposed additional "neighborhood" parks are nearly all to be school-related, and are spaced as the elementary schools are spaced. In outlying districts this is not fully satisfactory because the schools are so far apart; where children go to school by bus, the objective of having a recreation area within walking distance is not met by school-related parks. For farm children, the gap is usually filled by other activities, such as those of the Four-H Clubs. For rural nonfarm children, there is apt to be an unfilled need. For this reason, in proposing "community" parks the standard based on maximum distance between parks is being used, rather than that based on population. Especially needed for these children, now and in future, is provision for the type of park space suitable for group activities, particularly organized sports. The great outdoors will continue to provide the other kinds, at least for the older youngsters.

Additional park acreage recommended in this plan adds up to 317 acres (excluding Hoquiam). It should be emphasized that this is acreage for intensive development; "passive" open space would be additional. The recommended amount, plus the existing, would be nominally enough to provide for a population of 135,000 at National Recreation Association standards. That is more than the predicted population of the region by the end of the planning period. But:

(1) If these sites are not reserved for public use now, they may be gone forever.

(2) Because of the tourists, it is necessary to provide for more than the local population; otherwise, on summer weekends the local population will never be able to get into its own parks. It is true that the state really ought to be the agency making that provision; but even those residents who reasonably object to using county funds for parks that will mainly be used by non-residents, will agree that it is at any rate worth while to get those non-residents out of local people's way.

(3) Most of these community or sub-regional parks are to be located and designed in such a way that people in their respective districts can and will use them not merely for planned expeditions but for impulse use; and to serve that purpose, they must be near in travel time. As shown on the plan in map form, the general proposed locations are chosen with that in mind. They are decentralized, to serve this strung-out, wishbone-shaped region.

NOTE ON WATERFRONT PARK PROBLEMS

A warning should be noted here against any automatic classification of all Grays Harbor waterfront land as suitable for park or other recreational use.

First, as indicated in the discussion of fire hazards, there are parts of the region's forests where any development increasing transient traffic would constitute a fire danger, no matter how attractive the lake or stream might be for a park. In other words: what use is a park if it would have to be closed to visitors, for fear of fire, every time the weather is hot and dry?

Second, as indicated in various parts of Report #3 and in the discussion of Land Use in the present report, there is some waterfront land reserved in the General Land Use Plan to be kept purposely vacant, in order to supply overflow expansion for flood periods. Sometimes such land can be used for park purposes, but the difficulty in planning park use of the floodlands here would be their physical instability; they are sandbars which do not stay in one location from one year to another. (Locations where floodlands could be used for parks are, however, mentioned in discussing proposed park locations in this report.) Some of this open floodland could be used as game preserves for migratory waterfowl.

Third, there is much waterfront land reserved in the General Land Use Plan for specific uses incompatible with recreational use. Considerable field investigation lies behind this. Summarily, the land along the waterfront reserved for industrial use is not only very good for that use, it is also rather bad for recreational use. There are two special principles involved, which might be spelled out at this point because they apply to most seaports:

a. A ship channel is a "land use" inherently incompatible with recreational use of that water or of the land directly fronting on it. This will be more easily understood by those unfamiliar with port problems if a ship channel is thought of as a marine equivalent of a federal-aid highway. It is, in fact, exactly that. In Grays Harbor, the Main Channel along the north shore is the main highway for big ships; the South Channel, close along the south shore from Markham to South Aberdeen, is the truck route for ocean-going barges and local log tows. No traffic lanes can be painted on marine highways, and the vehicles using them have no brakes. Hence it is not for the best interests of either shipping or pleasure boating to have pleasure boats use a ship channel if avoidable.

b. The second special principle applicable to seaports, and affecting decisions to locate parks adjacent to waterfrontage, has to do with tides and tidal currents. These vary so much from one locality to another that information must always be obtained (both from tide books and from mariners with

local knowledge) before any tidewater park is planned. They vary in different parts of a single harbor, depending on its shape as well as on distance from the mouth.

On Grays Harbor, tidal problems are exceptionally severe. The influence of the tide is felt up the Chehalis River normally as far as Montesano, and exceptionally even farther; and up the tributary rivers (Hoquiam, Wishkah, etc.) for a varying number of miles depending on terrain. In the main harbor, as far up as the Chehalis Bridge, the tide range is 14.5 feet (from 2.1 feet below mean lower low water to 12.4 feet above, according to the U. S. Coast and Geodetic Survey Tide Tables).

This wide tidal range has most visibly a vertical effect. Boats go aground as the tide falls. Launching boats from a ramp is exceptionally awkward, because with a 5% grade the distance the boat must be dragged will vary nearly 300 feet.

The tidal range has also horizontal effects, in that it creates exceptionally complex and variable currents. These interfere with swimming (currents carry swimmers away), rowing and sailing (currents are sometimes stronger than wind or oar power), skindiving and fishing (currents stir up sediment making underwater visibility poor), water-skiing and hydroplaning, and in general most use of planing small craft (variable currents and variable depth of water combine to produce rough water and unexpected breaker-formation).

Fourth, there are long-established marine "land uses" in Grays Harbor that make recreational use of the water they occupy, or of the adjacent waterfront, impractical. One of these is log-booming, whose presence is marked by forests of piles, and whose extent is indicated in Report #2, Table 40 on Page 72. Another is the "leaching ponds" of the pulp mills. A third is the presence of dredging "spoil areas."

Local residents grow up knowing these things. Tourists with trailered boats cannot be expected to know them. Hence, the main part of Grays Harbor should be off bounds to tourist boats, and any tidewater park location in this planning area must be given thorough study before a specific recommendation for recreational development can be safely made.

One more recommendation: wherever a waterfront park is established, whether on tidewater or fronting on a lake or river, it should be tied to a program for teaching swimming and boating safety to the youngsters of the area. Among the existing agencies in the region whose help could be enlisted for this are the Y (for swimming), the Coast Guard Auxiliary (for small-boat handling courses), the Red Cross (for first aid courses including artificial respiration), and the Sea Scouts and boating clubs. Both the Coast Guard Auxiliary and the Red Cross in the Grays Harbor region have found that an intelligent 12-year-old can profit by their classes; that could well be recommended as the base age for the program.

Proposed Parks - Specific

McCleary (see Report #2 p 13, Report #3 pp 28, 59)

The existing six-acre park, centrally located, is suitable for further development for many purposes, particularly for "senior-citizen" uses. The proposed new park (see map) would be "sub-regional" in scope, to serve residents of the neighboring valleys as well as of McCleary. One possible suggested location is to the north of town on the Larson county road. This park should be at least 20 acres, and should contain provision for picnics (both organization picnics and family picnicking), playfields with spaces for informal play and for organized sports, and also such supporting services as parking and sanitation. At a later date it might be possible to provide lighting for the sports areas, thereby lengthening evening use of the park, and making evening sports programs possible all through the Indian summer period and perhaps in spring. (See discussion of climate below under Oakville. There is no Weather Bureau recording station at McCleary, but the Oakville figures are to some extent applicable throughout the east end of the planning area.)

Oakville (see Report #2 p 17, Report #3 pp 32, 60)

Oakville is very short of public park space now, but the possibility of increasing park area is good because of the natural location of the town in relation to the river. Recreation area close to the school should be developed southwestward toward the river, as also noted under Schools later in this report.

Whether located adjoining the school or partly there and partly elsewhere, the proposed new park area to serve Oakville should be at least 20 acres in size, to provide adequate room for open playfields, picnic grounds, parking and sanitary facilities, and facilities along the river for safe swimming and children's fishing. This park would serve a sub-regional need of the southeast portion of the planning area, as well as being convenient for walking-distance use by teenagers and adults in the immediate vicinity.

It would be desirable if electric lighting could be provided for the sports fields. The Oakville climate (see Report #2 pp 43-46) is considerably dryer than most of the county; and although in winter it is also colder, the dates of first freeze are quite variable and evenings throughout October are quite warm in nearly half the years, so that they could be put to more outdoor use if a lighted park were available. The irregular warm spells of spring could also be put to use for baseball practice under the lights.

Porter (see Report #3 p 61)

There should be some neighborhood type of park for combined school, teenage and adult use of residents in the Malone and Porter farm districts. Four to six acres should be provided for picnic, playfield and parking. The provision afforded through present school facilities will be entirely inadequate to fulfil the needs to be expected within the next 10 or 15 years.

County area near Elma

A community or sub-regional recreational area is proposed along the Chehalis River near the South Elma Bridge. Some of the land at this location is subject to periodic flooding; and although flood damage here is relatively rare (once in 20 years), the type of facility provided should be planned with this prospect in mind. The park should provide the usual picnic grounds, parking and sanitary facilities, baseball field, etc., and also facilities for water sports. This location is above the head of tidewater, and provision of boat-launching ramps is practical; hence parking space should be supplied for boat trailers, bearing in mind their special maneuvering problems. This park could serve the needs of the district for many years at a very low cost if 20 acres or more can be acquired in the near future.

A second community park (20 acres minimum) will also be needed in the development of the recreational program of the district. It would have similar facilities. A suggested location would be along the Satsop River south of the present and proposed highways.

The remarks elsewhere in this report about water safety programs connected with waterfront parks are applicable here, because both the Satsop and Chehalis Rivers have probably too much current for beginners' use unsupervised.

Montesano (see Report #3 pp 36, 62-63)

Some progress has been made by the city in acquiring additional land for park as well as school use, just east and north of the high school; but more is needed.

The plan proposes a community park along the Wynooche River near the railroad. Several good potential park sites are available there at present. How long they will remain open to public use is a question. The Wynooche Dam can be expected to reduce the amount of damage from periodic flooding and also keep the summer water-level higher than it has often been in the past.

An absolute minimum of 20 acres should be acquired so that adequate space can be provided for parking, picnic, playfields, swimming, and sanitary facilities.

The State Park at Sylvia Lake is used almost to capacity during the summer by both youngsters and adults; but due to the terrain, the facilities at that site are more limited than its acreage would lead one to infer from a map. Hence it is desirable to warn again, in connection with the proposed park in the Wynooche Valley, that the 20-acre minimum means 20 usable acres, for the purposes specified; which may mean that the total number of acres in the chosen site will have to be far larger.

In this part of the region, all county land should be checked for its recreational possibilities before being sold to private parties; particularly county-owned land along the rivers.

Central Park (see Report #3 pp 23-24)

In the eastern end of the unincorporated Central Park district, a park area is proposed in conjunction with a proposed school; see below in this report, under Schools. Ten acres would be for neighborhood park use, out of a 20-acre total.

In the western part of Central Park there ought to be a second neighborhood park, of ten acres or more, with some sports-field provision. Recommendation of a location must be deferred until after the Freeway route through this area is settled.

Two existing park areas are shown on the map. One is the semi-public Lions Park, an example of local people providing a facility needed by the district; this excellent example should be followed by others. The second is the state park at Lake Aberdeen, where the fishing and swimming facilities are used to full extent during the summer by both residents and non-residents. Some excellent picnic, boating, swimming, and parking areas are provided; but here again, topography limits the amount of usable space.

Cosmopolis (see Report #3 pp 50-51, Report #2 p 34)

Two park areas are proposed. The scale of the plan in map form does not permit clear indication of location.

One would be a waterfront park of at least three or four acres. It would probably furnish boat-launching, picnic, lawn and flower area, in the general vicinity of the city hall. It would mainly be for adult and older teenage use; waterfront play by children, even those able to swim, cannot be encouraged in this part of the river because of current and the industrial uses. From Cosmopolis upstream, river space could be used for recreational boating.

The second, a community park, at least 20 acres, would be located near the golf course on top of the high plateau. Some of this terrain is rough but that adds to its attractiveness for some kinds of outdoor activity, and the rough ground should therefore be included in the proposed park along with enough more level ground to provide open playgrounds, picnic grounds, parking and sanitary facilities.

A circulation network of hiking trails, part on public and part on private land, might well be worked out in such a way that hikers following the trails would be brought back in a circle to the park or a street, thus reducing the risk of hikers becoming lost which has caused local emergency effort in recent years.

Aberdeen (See Report #3 pp 42-43, 66-68; Report #2 p 26)

The small amount of park in Aberdeen now should be increased for present as well as future use. The problem in developed parts of town is finance. In parts of town still unplatted, the problem can be solved by proper use of the subdivision ordinance proposed under this planning project, which will give the planning commission a chance to review new development in early stages and require reservations for public use.

The plan proposes three large new recreational areas within the present city limits of Aberdeen, to be community parks of 20 usable acres or more apiece. One would be in the southern part of the city, one in the northwest, one in the northeast. All would be adjacent to proposed schools; see below under Schools.

However, the nature of the terrain may make it impossible to provide this park space immediately adjoining the schools.

Experience in South Aberdeen has already made plain that walking distance between school and park must be very short indeed, particularly for the younger children, or a physical education program is severely handicapped. (See below under Schools.) But in addition to considering these sites from the school point of view, they must also be considered from the point of view of their serving other community park needs. Each site must provide large open play area, baseball and other sports fields, picnic grounds, parking spaces, and accessible space for service buildings and sanitary facilities.

In connection with the proposed community park site in the Wishkah Valley about a mile north of the present Aberdeen city limits, which may also be tied in with a proposed school, those responsible for selecting the final site will need to bear in mind the floods which recut in the valley floor. The school and the service buildings should be above the record high-water mark. The remainder could be within the flood-risk zone.

South Bay.

The preliminary plan proposes a community park south of State Highway 13-A at the Newkah River, where the natural growth lends itself well to a natural park, and where land can now be acquired at reasonable cost. Ten to twenty acres would supply a picnic ground and playfield space for local people, as well as providing a much-needed picnic ground for tourists visiting the coast on summer days when coastal fog interferes with beach picnics; at present, such visitors picnic on any private land they can reach from the highway, with consequent increase in fire hazard.

The next park area is shown on the map on the harbor side of the state highway just south and west of the mouth of the Johns River. Here, on the north side of the highway, there is natural tree growth on land with sufficient natural drainage so that with little work and cost the land could become an attractive regional park. The Johns River has little current during summer months and is well suited to recreation; the "sinker" logs under water in that river are too far upstream to interfere with boating. Beyond this point the harbor widens out into the South Bay, in which, because of the larger water surface, the tidal range is less and the currents are less treacherous. The state now has a boat-launching ramp here, the only non-mechanical means of boat launching between Cosmopolis and the harbor mouth, and this could well be the nucleus for a park of considerable size. Facilities should include very extensive parking for both cars and boat-trailers, with ample maneuvering room; also sanitary facilities, picnic grounds, tree shelter, open play area, and children's fishing. While all these facilities might possibly be provided within a 20-acre site, a much larger park acreage would be desirable here if land can be acquired. The only industrial use of the water is some oyster-growing; there may be a small amount of log transport from time to time in future. The industrial use now on land across the Johns River is a seasonal light industry employing local residents, mainly local housewives; it does not operate at all during the summer months of peak recreational use (cranberry packing). If there were at any future time a move to change this to some other industrial use, incompatible with recreation, such a problem could be handled by means of the zoning ordinance; but as the present use is based on raw materials whose production will almost certainly continue locally, no problem is anticipated. Local people might be willing to give young shrubs from their own gardens for an experiment to determine what will grow on the land between the cranberry plant and the proposed park; if rhododendrons will flourish in the vicinity of cranberry waste, a screen of the larger varieties would make this a show place 20 years from now, with little initial cost and almost no maintenance.

South Beaches.

At present the state controls the actual beach area up to the private property line. The state now provides two parks for camping and picnicking; one east and one west of the highway. Also the town of Westport provides eleven acres of city park within the town limits; this was originally intended for resident use but in summer is largely used by tourist visitors. There is a small amount of playfield development on the grounds of the Ocosta School, which should be further encouraged.

The preliminary plan proposes three additional park areas for the South Beaches. These would be classed as regional parks but should not be thought of in the same way as ordinary parks. They are to be developed for the special purpose of taking care of the large and increasing numbers of campers and day visitors who use the beaches on vacation, weekends and holidays. In order to make these proposed parks an attraction, and thereby prevent development of a nuisance condition now threatening, such parks must provide parking spaces for 500 to 1000 cars apiece; sanitary facilities in proportion; drinking water; garbage collection -- in other words the unesthetic, unrecreational service essentials. The open beach will be the picnic and play space. Because of the subsoil problems created by ground water level rising with the tide, careful engineering study will be necessary to insure that the sewage disposal at each prospective site will be adequate. Requested ARA technical assistance on this is pending. It may be found that the suggested 20-acre minimum size is not enough to provide adequate disposal field at peak times; in that case, larger sites will be necessary. Landscaping the sites will require ingenuity, because little will grow in locations so exposed to winter gales.

Hoquiam.

For details on parks and recreational facilities in Hoquiam, present and proposed, see "Comprehensive Plan Part Two," prepared for the Hoquiam City Planning Commission in 1962-63, and on file in the Hoquiam Public Library. The consultants in that report propose an additional 125 acres of parks (over and above the present 14 acres), of which approximately 80 would be passive open space and the rest would be developed for various kinds of active recreation.

North Bay.

The land between Hoquiam and the coast is generally occupied by forest, much of it under tree farm management, which gives the appearance of a regional park to the district. Two usable

park areas for active recreational purposes are proposed between Hoquiam and the coast. One of these would be near the mouth of Grass Creek, either east or west of the railroad, where safe and easy access from the highway is possible. The second park would be along the Humptulips River, where a number of possible sites would be available. Tidal range should be checked on each. Both parks should be large enough (20 acres or more developed space) to provide picnic grounds, some fishing, and boat-launching ramps, together with the necessary parking, sanitary and garbage facilities. If the sites are larger than the minimum, campgrounds might be included.

North Beaches.

Along the beaches near the tip, two large areas (20 to 100 acres) are proposed for public camping, picnicking, surf fishing and harbor fishing, with public toilets and public water supply; and, on the North Bay side, boat launching and possibly sheltered swimming. A third park is proposed on the beach farther north, near Ocean City. All three are badly needed to provide parking and sanitary facilities, and some amenities for picnicking and camping, for the many clam diggers, fishermen, and other transients who use the beaches and whose number will increase as metropolitan-area population increases and highway improvements permit.

Some type of joint operation should be provided for parking, sanitary facilities, and drinking water at every point where beach access is provided from the highway. This should possibly be a joint venture by state, county, and the Ocean Shores management.

The state now provides overnight camping on a new site of some 160 acres north of Oyehut.

In the Ocean Shores development, a golf course has been provided, now open to the public. Golf course facilities would be desirable additions to some of the regional parks discussed in this report, at locations where suitable acreage is available.

S c h o o l s

On the Preliminary Plan for Schools and Parks in map form, the existing and proposed schools are shown by symbol in their approximate location, scale permitting. In some cases, "proposed" will involve only the addition of a room, wing, or secondary building; in others, a new site will be involved. This has been discussed in Report #3.

In 1962, there were 13,118 pupils enrolled in public school in the Grays Harbor planning area. Roughly one-quarter were in high school, with the other three-quarters distributed among kindergarten, elementary and junior high. (These figures exclude 700 students in Grays Harbor College.) A small additional number were accommodated in parochial schools located in Aberdeen and Hoquiam.

Based on present ratios of population to school enrollment at various ages -- which have not changed materially for the past 20 years, and do not vary much as between urban and rural -- and based on the estimates for 1985 population, a conservative estimate for 1985 school enrollment would be around 17,000 pupils. This takes into account the fact that the fertility rate in Grays Harbor County is higher than for the state, which counterbalances the tendency for out-migration of young people at marriage age. The estimate assumes that about the same proportion will attend parochial schools in 1985 as now.

On a basis of 30 pupils per classroom,* this projected 1985 enrollment would require that 160 new classrooms be constructed; that is, additional classrooms, not counting replacements.

At this stage it is not possible to program location and timing of all these additional classrooms. Both will depend on the increase of new pupils in each respective school district; and the noticeable mobility of the population within the planning area makes it impossible to predict this except along the general lines indicated in previous reports of this series.

To summarize those predictions: population distribution in the Grays Harbor area is shifting away from the farm, but also away from the city lowlands to city highlands and to rural nonfarm suburbs. The most rapid growth is taking place in the Central Park suburb between Aberdeen and Montesano, and this will continue. In some school districts (principally east of Montesano) there is beginning to develop a simultaneous loss of farm population and increase of nonfarm rural commuter population; which will be experienced by the schools as a shift from a very stable to a relatively transient school population, making planning for the various grade levels very difficult on even a comparatively short-term basis. This will not be felt so much by the high schools, since students attend high schools in the cities even though their families may have followed the trend toward moving out of town.

For the guidance of school district members, there may be repeated here what was said in Report #3 in several places: practically everywhere around Grays Harbor, the amount of land

* Thirty pupils per classroom is not the ideal. The actual state average during half a century has gone from 31.9 to 27.8, with the Grays Harbor average going from 30.9 to 26.8. (Schmid & Miller, "Population Trends, Educational Change" p 72).

now owned and used for school purposes is below the amount recommended in state standards governing school planning. In some places it is so far below, that one would think this must be a high-land-value metropolitan center. The amount of land that the state standards recommend for elementary school sites is 6 to 10 acres (that is, about two square blocks); for high school sites, 20 acres. To some school districts, these sizes will seem absurdly large for local needs; but both Aberdeen and Montesano are all too well aware that if they had bought 20-acre high school sites to begin with, they would have saved themselves some expensive problems with which they are wrestling now. Local school authorities throughout the region should be programming the acquisition of vacant or deteriorated property adjacent to existing schools now and whenever possible. They should also be considering ways in which to use land close to school sites for combination park and school activities. In many communities, this kind of joint school-park use of land is working very successfully, to the benefit of both students and taxpayers. In many cases it eliminates duplication of buildings and equipment, reduces maintenance cost, and is a positive help in solving problems of scheduling physical education and sports activities.

Several school districts in Grays Harbor County will very properly resent the foregoing remarks because these things are exactly what they have been working on for some time. The consultant apologizes to them, and reminds them of the existence of some others which perhaps have not.

The proposals below will also be regarded by many of the school districts as merely repeating what is by now no news to them. However there may be some use in the repetition, as gathering into one place the whole region-wide problem as far as it can now be sketched out for review.

(The projections of future school facilities which follow are based upon population growth trends, ratios and distributions taken from Report #1 of this series "Population Trends in Grays Harbor County," 1961; plus data subsequently published in the 1960 Census of Population, General Social and Economic Characteristics, Volume 49C, 1962; also studies of educational trends in the state, especially Schmid & Miller "Population Trends, Educational Change," Washington State Census Board, Seattle, 1960; and the Land Use Plans as proposed in Report #3 of this series, 1963. For distribution of school-children and present school-rooms, see Report #1 mentioned above. Thanks are due school authorities for access to subsequent enrollment figures. For information on present school sites see Report #2 under the land use analysis for each area. For discussion of future schools treated along with other public facility problems of the respective areas, see Report #3, pp 59-71, under the respective areas.

McCleary. The present school location is good, being close to the center of the residential district, but the site is only a little more than four acres. (See Report #3 page 28.) Recommendations for McCleary in general order of time are:

1. Acquire land adjoining the present site, for expansion to more than double present size, in order to meet state standards.
2. Prepare a development schedule which will add needed classrooms on the basis of 1985 need for 9 more classrooms than now.
3. Choose and buy a 20-acre site, centrally located, and fronting on a major street or on the highway, in order to be able to build a senior high school when needed, which can be expected before 1985. This senior high school would serve the whole area west and north of the city. There are possible sites on the old highway just east of the railroad and west of the city limits.

Oakville. The present 14-acre school site, accommodating both elementary and high schools, will need to be enlarged to take care of future school attendance. (See Report #3 page 32.) In acquiring more land, thought should be given to the possibilities of joint use of the land for park and school activities. For this combined purpose, the land west of the school, between it and the Chehalis River, might be suitable. Land acquisition should not be delayed, because land cost in the Oakville district will probably never be any less than now. Recommendations:

1. Acquire more land adjoining the present school site, preferably on the west side.
2. Explore the possibility of the school district joining with the city or county in the purchase of land jointly for multiple use.
3. Program construction to provide one or possibly two more classrooms additional to the present 15.

Porter. No recommended action. (But see above under Parks.) The surrounding land is all either forest or agricultural; and as farm population has been static or decreasing for some time, with a relatively low fertility rate, the prospect of any material increase in pupils is unlikely. Present facilities could take care of a small increase.

Elma. The present school site is central, between the highway and the future Freeway. (See Report #3 page 61.) Acreage of the site is below that recommended by the state, and efforts should be made to bring it up to standard; but possibilities for additional land will depend on exact Freeway location. There may

or may not be a strip up to 100 feet wide available, depending on the exact right of way finally taken. If not, the school site can only be expanded eastward or westward; and expansion to the east would be comparatively expensive due to existing development.

The present 1,156 pupils in elementary and high school occupy some 48 classrooms. The estimated 1985 enrollment of about 1,925 will require 25 more classrooms at the rate of 30 pupils per room. Recommendations in order of time are:

1. Determine the best and most economical way to enlarge the present school site to meet state minimum requirements.
2. Next a program should be scheduled for expansion of the building to provide needed classrooms between now and 1985.
3. At the same time, develop a program jointly with the city for park and recreation facilities, including land acquisition for these. Such facilities would serve teen-age and adult activities. The site should preferably adjoin the high school; if this is not possible, then as near as practical, to prevent transportation problems.

Brady-Satsop. The general characteristics of Hunters Prairie, Olympic View, and Satsop school districts are similar. All three are farm areas. All three are expected to continue in agricultural use, with some non-farm residential (commuter) expanding slowly into the area, producing little increase of population during the next five years but a slow increase thereafter. The 218 pupils now attending school are in well-maintained one-building schools. Replacement of these will need to be scheduled by 1985, but not in the near future.

In the westernmost part of this district, between Brady and Montesano, an additional elementary school is proposed, to be built in about ten years and not delayed longer than fifteen. The rate of subdivision of the larger farming parcels into smaller units, and particularly into nonfarm residential lots, should be watched closely by those who will have to schedule building of this school, since the need for it will arise out of the trend toward rural residential development on the east side of Montesano. That trend is accelerating, partly due to the shift of city residents to outlying suburban locations, but also due to the fact that soil and water conditions in this part of the valley have proved more suitable to small farms (many of them part-time) than to larger general farms.

Montesano. The 996 children attending school in Montesano now go to school in two locations, one (elementary and high) north central, the other (elementary) northwest. These locations are good. The combined area is only 17.65 acres which does not meet state standards.

Considering both the estimated 1985 population for Montesano (3,600) and the trend to increase the area served by the Montesano school districts, the 1985 school attendance is estimated at 1,400, which would require about 12 additional classrooms. Recommendations are:

1. Develop a long-range plan for acquiring additional land adjacent to each of the existing school sites; and begin actual acquisition of this land.

2. Study the possibility of acquiring sites for two additional schools to be built by 1985, as follows:

- a. An elementary school site north of the highway and about a mile east of the city.
- b. An elementary school site along the Wynooche Road within a mile of present Highway #9.

3. Begin acquiring land, in area amply large to meet state standards.

4. Begin a development program to add classrooms as they become needed in the existing elementary and high school.

Central Park. This newly-developed commuter district has a brand-new 10-classroom elementary school -- which, however, occupies a site of less than 5 acres, below the state standard.

Growth in Central Park is expected to continue to be rapid, with land use becoming intensive throughout the district. This will result from the future subdivision possibilities of land now undeveloped; the future increased highway access between Central Park and the cities; the convenience of its location as a commuter suburb with sun at the driver's back both going and coming, for those employed in Aberdeen-Hoquiam-Cosmopolis-Junction City; and the trend of high-value home construction in the district. It is estimated that Central Park population, which was 1,600 in 1960, will be more than 3,600 by 1985, which means a need of 37 more classrooms by then. Recommendations:

1. Acquisition of more land adjoining the present site while land is still available at an acreage price. Land cost in this district is rising, and no time should be wasted.

2. Acquisition of an additional site, not less than ten acres, about two miles east of the present school site in the undeveloped farm land, for future elementary school construction. In addition to this ten acres, more land adjoining should be obtained for a future park; a joint purchase program should be worked out with the county.

Aberdeen. School population in Aberdeen is increasing at a faster rate than city population, as shown by Report #1, subsequent census data, and Report #3 (page 42). The 1962-63

enrollment was 5,462 not including 700 in Grays Harbor College in South Aberdeen. Most schools in Aberdeen are operating at capacity. The new high school will not produce any real relief because old buildings are having to be torn down to make room for the new one. In all cases, the site sizes are below the state standard. Real inconvenience is caused by the distances between school buildings and the nearest areas available for sports activities; due to location and small sites, no joint development of school-park areas has been possible. Recommendations:

1. The School District and the City Park Commission should work together to choose and buy sites of adequate size, and of suitable location to serve both school and park needs, in the following general locations:

a. Two elementary school sites in the northern foothill part of the city, spaced, about two miles apart.

b. A third elementary school site in the Wishkah Valley northeast of the city (outside present city limits).

c. A high school site, to be adequate to serve both South Aberdeen and Cosmopolis, in the general vicinity of Huntley Avenue and Boone Street (= Westport Highway 13-A). Exact size and location may possibly be delayed until such time as exact location of the Freeway line is determined. Engineering advice on drainage cost should be obtained before final decision on a site.

2. The School District should acquire more land for existing school sites, and other land for future school sites, as rapidly as this can be budgeted. Land will not be cheaper later.

3. The School District should explore the possibilities with the city and county of jointly acquiring sites, or acquiring adjoining sites, for school-park facilities.

4. Long-range scheduling of development of these sites should be started at once and coordinated with the programs for acquiring and developing more land for use by existing schools.

Cosmopolis. The present elementary school site, less than 5 acres, does not meet state standards. Present school attendance of 328 is forecast to increase to about 500 by 1985 (see Report #3 page 50) which would require two or three additional classrooms and considerable additional land for play area and other related facilities. For high-school recommendation, see above under Aberdeen, point 1-c.

Grayland-Ocosta-Westport. The present facilities of the Ocosta School are new and good, and additional land has just been acquired, making this school one of the few in the entire county to meet state area standards. Hence no recommendations need be made at this time regarding the school site. The 1985 population projections indicate that about 20 more classrooms will be needed by then, with the enrollment curve upward probably fairly gradual.

However, prospects of any industrial development along the South Shore in the Markham-Ocosta district should be watched by the School District, since this would increase year-round rather than merely summer population.

Hoquiam. Hoquiam is faced with the same problems as other cities in the planning area. Long-range plans are being developed by the Hoquiam City Planning Commission. For details, see reports available in the Hoquiam Public Library.

Grays Harbor City. This suburb west of Hoquiam is just beginning to develop, and its future will depend on improved highways. As a general rule, suburbs located west of an industrial district do not develop as fast as those east of one, because commuters have to face the sun both ways; but in this case, the fact that the westward suburb is more convenient to the beaches will have a favorable effect. This development will be slow to start but may gain momentum. A site is proposed on the plan in map form for a school to serve this area. Development should be watched and the land should be acquired early.

Ocean Shores. Up to now, residents of this new development are summer residents only; but the tendency of such developments is toward a gradual increase in year-round occupancy. The developers have considered school site location. In fact, this is the only development in all Grays Harbor County to give consideration to more than just the sale of lots or houses in planning. It is recommended that the School District proceed without delay to make necessary investigation of potential school sites, and make the necessary agreement for acquisition while land values are reasonable.

Ocean City. The present elementary school site is below the state-recommended minimum in acreage. Present facilities serve the present pupils adequately; but with the tendency toward new development on the north beaches, which improved highways will stimulate further, new classrooms will be needed. The School District is naturally reluctant to take steps toward expansion, because in the past enrollment has fluctuated so much. In the last decade, enrollment has swung between a high in 1952-53 of 48 and a low in 1960-61 of 26, and is now back to 44. Nevertheless, it would be wise for School District #26 to acquire additional land to meet state standards now, before the price rises, and to keep a close watch on trends in new subdivisions along the beach.

North Beaches - high school. The high school (located outside the planning area) which now serves north beach students can take care of future population for some time to come. More classrooms may be needed later but there is space on the present site to add them.