

LAND USE SURVEY  
OF  
KING COUNTY  
WASHINGTON

COMPLETED 1940

SPONSORED BY  
ROY B. MISNER  
COUNTY ASSESSOR



Carl W. Smith, WPA State Administrator, presenting Roy B. Misener, King County Assessor, with the final Permanent Record.

A CHRONICLE OF THE  
**LAND USE SURVEY**  
OF  
**KING COUNTY, WASHINGTON**

A W. P. A. PROJECT\*

SPONSORED BY THE COUNTY COMMISSIONERS

<b>JOHN C. STEVENSON</b>	<b>1936-1937</b>
<b>LOUIS A. NASH</b>	<b>1936-1939</b>
<b>JACK TAYLOR</b>	<b>1936-1941</b>
<b>TOM SMITH</b>	<b>1937-1943</b>
<b>RUSSELL E. FLUENT</b>	<b>1939-1945</b>

REPRESENTED BY

**ROY B. MISENER**, County Assessor  
**Charles D. Bridges, Jr.**, Chief Deputy Assessor.  
**J. Harold Sparkman**, Chief Land & Improvement Deputy.

**Carl W. Smith**, State Administrator W.P.A.

PROJECT SUPERVISORS

<b>Roy Dodge</b>	<b>1936</b>	
<b>J. M. Towne</b>	<b>1936-1939</b>	
<b>A. C. Klotz</b>	<b>1939-1941</b>	<b>(Author-Editor)</b>

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superseded by  
WPA No. 4075—October, 1936  
WPA No. 5614—October, 1937  
WPA No. 2541—November, 1938

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Renton Chronicle  
1941

## ACKNOWLEDGEMENTS

### TAXPAYERS

The project is deeply grateful to those of our taxpayers who accepted this Land Use Survey as a worthy WPA endeavor—To our Official Sponsors.

JOHN C. STEVENSON  
LOUIS NASH  
JACK TAYLOR

The Board of County Commissioners who appropriated the original contribution making this project possible—To

TOM SMITH and  
RUSSEL FLUENT

Their Successors, who granted additional appropriations to continue the work under the direction of their Representative

ROY B. MISENER

County Assessor, who sired and fathered the project through courts, high water and low budgets—To the

ASSESSOR'S STAFF

For continued cooperation and helpful aid—To

OTTO MITTELSTADT

County Coroner, for vacating his Inquest Room for the Project Photographic Laboratory—To

RALPH STACY

King County Treasurer, for access to his department records day and night and space for project workers—To

EARL MILLIKIN

County Auditor, for office space, furniture and ready access to his office records—To

CARROLL CARTER

County Clerk for space and access to his office records—To

HARRY SISLER

County Engineer, for printing project maps, undoubtedly often delaying his own work—To

WILLIAM B. SEVERYNS

County Sheriff, for office space and storage of excess furniture during quota fluctuations—To the

## A C K N O W L E G E M E N T S

CIVIL SERVICE COMMISSION	for use of their Class Room—for project instruction—To the
SEATTLE SCHOOL BOARD	for use of schools for Field Offices—To the
COUNTY-CITY BLDG. SUPERINTENDENT AND STAFF	elevator operators, janitors, maintenance and garage men, for additional work caused by so large a project.

This cheerful cooperation of all departments in great degree contributing to the final success of the project.

## FOREWORD

Mr. Roy B. Misener, being duly elected King County Assessor, assumed office in January 1935, to find, as he stated: "Many inequalities of taxation and an antiquated and inefficient system of records," and . . . . "The correction of these evils was made possible by the Federal Work Projects Administration and a special appropriation by the King County Commissioners."

The use and expenditure of these monies was incorporated into a WPA project of King County, Washington and was called the LAND USE SURVEY, which project first began to function in February 1936.

The author of this report assumed status as Project Supervisor July 11, 1939. Statistics and project history prior to that date have been obtained from the project files, correspondence of the Area Supervisor, Mr. H. C. Sampson, and the writer's personal knowledge, as sponsor's representative, since the inception of the project.

The "Building Appraisal Manual" by the State of Washington Tax Commission and "Tax Equalization" by the sponsor's representative, Roy B. Misener, are authority for the statements and claims appearing in this report for descriptive purposes, and in most cases are, though not necessarily, the opinion of the author. Some may be of a controversial nature—for instance, the original sponsor's contribution was made available through an "Emergency Appropriation." The emergency of the necessity of this project was attacked in Superior Court by opponents—proponents claiming opponents had been Tax Dodgers or Tax privileged, who did not want to lose their special considerations.

The above two authorities are mentioned to eliminate the necessity of repeated references to these sources as well as copious footnotes throughout the report.

The above-mentioned claim of "tax inequalities" by the sponsor's representative (hereafter called the sponsor), the County Assessor, is substantiated by the State Tax Commission's statements: "Similar evils are prevalent throughout the state . . . ." and . . . . "restricted appropriations to County Assessors, coupled with pressure of time under which they must operate, tend to increase, rather than diminish, these evils;" and . . . . "inequitable assessments generally result from three causes: inadequate basic data, improper use of basic data and the widely varying ideas of different appraisers as to true value."

Logically, the eradication of these three predominant causes, plus the desire, would tend to produce equitable assessments.

## F O R E W O R D

The Washington statute makes it mandatory that County Assessors "Assess each piece of property at 50% of its true and fair value."

These values at all times being the responsibility of the Sponsor, the words "assessment," and/or "appraisal," in referring to WPA technique, are figures of speech only, but because the Sponsor-determined valuations were based on WPA Field enumerating, and computations were made by WPA mathematicians, the Project was vitally interested in both the reasons for and result of the final dollar and cent answer.

Frequent requests for results of findings have been received, and while this history is being prepared, calls have come from the Seattle Public Library for two copies for use of students of real estate taxation, from the assessor-elect of Multnomah County, Oregon, a prospective sponsor and others. In preparing an all-inclusive, understandable report, valuable to school students, prospective sponsors, and laymen, many explanatory exhibits have been shown, superfluous to the technical expert, whose indulgence is requested.

It must be readily understood, this project required much pioneering work, particularly in three ways.

First: Pioneering wholesale assessments, necessitated much trial and error procedure.

Second: Pioneering the arrangement of these assessments into a new set of active office records, and the method of upkeep required many adjustments to meet efficiency demands, while conforming to prevailing statutes and custom based on the "old records."

Third: Workers gathered from all walks of life—new to this developing project were trained, not only to become familiar with the old records, and their specific duties, but also were given additional training, as the pioneering opened new and unfamiliar problems.

Those interested need hardly be reminded that this pioneering work was of necessity costly, and gratitude is expressed to WPA and its sponsors for continued appropriations, enabling this project to reach completion.

From February 1936 to July 1939, an average of 600 workers was gainfully employed, but as final methods of procedure were established, less than 200 workers successfully carried the work on to completion, this report portraying the work of the 200, rather than the 600 workers, though labor costs and related overhead of the 400 extra workers is included in the total expenditures, and must be considered in the project analysis.

## F O R E W O R D

- Ques. What is a Land Use Survey?  
Ans. Just what it says—a survey and inventory of Land Usage.
- Ques. Why was this survey conducted in King County?  
Ans. To enable the County Assessor to equalize Real Estate taxation.
- Ques. How was this survey conducted in King County?  
Ans. Summarized:—by creating a WPA project, to deliver to the County Assessor a complete inventory of land usage and building information, enabling his staff to determine equitable assessments comparable to all similar properties. The WPA also constructed a modern set of office records, containing this inventory of Land Uses—the entire report is the answer to the question.
- Ques. Was this survey intended to determine the acreage of pasture, stump, agricultural, orchard, unimproved waterfront, building sites with creeks, community grocery stores, etc. in King County?  
Ans. No,—this was a survey of land uses by individual ownership, or segregation of land,—actually an individual survey of land usage of some 500,000 parcels of land in King County.
- Ques. Did not 500,000 individual surveys develop into many duplications of endeavors and tend to become unwieldy?  
Ans. The Land Use Survey gathered and controlled the data of 500,000 individual surveys and a carefully prepared base routine greatly eliminated possible unwieldy tendency.
- Ques. An individual survey of a vacant lot, farm or residence is comparably of minor character, is it not?  
Ans. Yes. Each individual survey was comparatively simple. Standard questionnaires for enumerating land use and building information was indeed of simple character. But, determining the appraisal value and maintaining similar assessments for similar properties, and variable assessments in proportion to the variation of property value, became, comparatively speaking—of major character and necessitated this major WPA project.

Before going into the technical phase of this taxation program in King County, the author feels that a brief topographical picture of the county will be in order, especially in view of the fact that within its confines are more than 700 lakes of no mean size, sixteen major rivers (which figure does not include countless tributary creeks and streams), three large islands, one mountain range, and the entire western portion of the county extending far into Puget Sound, the second deepest harbor in the world.

## F O R E W O R D

The north boundary line takes in Township 26 North; the east, the summit of the Cascade range; the south, the White River and the west, Puget Sound—a total of 2151.92 square miles. Incorporated cities cover 84 square miles, the largest of which is Seattle with a 1940 population of 368,302.

Thus it may readily be seen that due to such a wide diversification in the County's topography, transportation of the field crews was a major item. It was, on occasion, necessary for the field enumerators to cross over the actual boundaries of the county and return, in order to enumerate the more remote settlements. The most distant occupied region from the Project's center of operations (Seattle) is 92 miles by auto road, of which 23 miles were in an adjoining county.

King County is crossed by three transcontinental railroads and two transtate highways in a continuous link to the middlewest. Much of the unrecorded agricultural land with its resultant settlements was found in the mountain passes to the east, the bulk of the population being centered in the more fertile western portion of the county.

In traversing the mountainous areas a great deal of the traveling was done on foot, along abandoned logging roads and mountain trails—in several instances it was necessary to hire boats to make the requisite contacts and observations.

From the above it may be concluded that King County could well be taken as a fitting example or starting point, for other counties throughout the nation should they find themselves in a position to, or desirous of, instituting a similar tax recovery project—the county, covering as it does, all phases and problems incident to the mechanics of ferreting out taxable real estate. As, with the possible exception of the Florida everglades we have involved: 1, a major city; 2, a heavily timbered mountain range; 3, innumerable rivers and streams, thousands of acres of low-lying, rich agricultural land and many miles of deep-sea waterfront.

Since the inception of taxation, its equalization has been the goal sought by government officials, and many methods have been and are being used with varying degrees of success. But, through this FIRST tax equalization program, made possible with Federal funds through the Work Projects Administration, King County developed its own technique conforming to local statutes and to WPA rules and regulations.

## Chapter I

# History

The Land Use Survey was officially opened February 11, 1936 and satisfactorily completed September 3, 1940. (See Figure 1).

The Federal Government contributed \$1,889,301.57 and the Sponsor \$583,729.76, a total of \$2,473,031.33, to eradicate the three basic evils of tax inequalities in King County, Washington, and to replace an antiquated and inefficient system of records in the County Assessor's office .

The three basic evils of tax inequalities are:

- (1). Lack of basic data.  
Eliminated by the detailed inventory of land usage in King County, parcel by parcel.
- (2). Improper use of basic data.  
Overcome by installing a new, modern set of records.
- (3). Personal element entering into appraisals.  
Personalities were eliminated by computing all assessments from a mathematical standard.

Project procedures were concentrated on the eradication of tax inequalities and avoidance of their recurrence.

A private contract for photographing King County from the air was let by the Sponsor. These pictures, landmarks of record and known field surveys, were to be the basis of WPA construction of property identification (P.-I.) maps.

One valuable expected use of these maps was to assist WPA enumerators to orient themselves in the field, particularly in the suburban areas where landmarks were few and hard to find. But more of aerial pictures and mapping later.

### PIONEERING

As urban areas with many platted sub-divisions and definite street intersections could be enumerated, because maps were available, work was started in the City of Seattle. Main and field offices and a photographic laboratory were immediately established and needed equipment estimated and ordered. Personnel, both sponsor and WPA were hired, given preliminary training and assigned.

Individual forms were prepared for each segregation of property, and bound with rubber bands to a map showing lot and property lines, then assigned to field crews for enumerating. These forms, "Field Sheets," included both land and building information—buildings having greater proportion than vacant lots in the City of Seattle.

H I S T O R Y

KING COUNTY WASHINGTON

201 County-City Building  
Seattle, Washington

OFFICE OF COUNTY ASSESSOR

ROY B. MISENER, Assessor  
C. B. BRIDGES, JR., Chief Deputy

Mr. A. C. Klotz  
Supervisor WPA Project No. 2541,  
201 County-City Building,  
Seattle, Washington.

September 3, 1940

Dear Sir:

Today, I accept delivery of the permanent record cards for the balance of King County. This completes the revaluation phase of your work. The maintenance will henceforth be conducted entirely with county personnel.

It is proving a greater success than anticipated. Your Field inventories have not only enabled my office to equalize valuations but are also proving a great source of revenue.

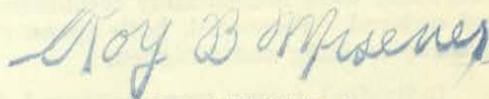
The portions of your project, completed and accepted by me in the past, have enabled my staff to test the all round desirability of these new records, and the ease of maintenance precludes the possibilities of King County again being mired in the gumbo of omitted taxes.

I am particularly gratified with these records in daily use, serving the public. My counter clerks report the photographs and building inventory are used with invariable success against the age old plea, "My taxes are higher than my neighbor's, who has a better place than I."

The entire tax rolls of King County now being prepared for 1941 will contain the equalized value of the Land Use Survey.

Upon completion of the alphabetical index of fee ownerships, I am sincere in stating King County will have an Assessor's office, second to none in the nation.

Sincerely Yours,



ROY B. MISENER, Assessor

AUTHOR'S NOTE—The final paragraph refers to a different step of the "Land Use Survey" still in operation. Because of the distinct individuality of the work, this will be reported upon later.

Figure 1

## H I S T O R Y

A simplified building classification chart was provided for project workers by the sponsor. Each building, when enumerated, was first classified and reproduced on paper from this classification chart, and then given "age" depreciation. There being some 140,000 buildings in the city, an entire year was used in this first enumeration.

"Not at home," irregular buildings and "case by case" appraisals were removed from their normal position in this rubber band, for special routine. Because of these loose leaf, or individual, appraisals passing through the only available spaces in sixteen rooms, many appraisals were temporarily misplaced and the sponsor was unable to prepare the 1936 tax rolls from these new values.

Also, the aforementioned, "simplified" classification chart, while entirely satisfactory for regular buildings (the great majority) did not provide for "irregular" buildings and was revised. And because the Field Appraisal sheets were prepared from an erroneous "Field Book," rather than the standard office records, some of the legal descriptions described the wrong lot, and to correct these evils, individually minor, but collectively major, it was deemed necessary to re-enumerate the City of Seattle. Thus, while much of the first year's production must be charged to "pioneering," real benefit was actually derived.

Three specific beneficial operations, in addition to a revised classification chart, were incorporated, viz:

- One: Re-checking the field appraisal sheets for accuracy and available legal descriptions, which eliminated errors in "spotting."
- Two: Field appraisal sheets were bound into folios by Blocks, or other suitable working units, thus eliminating "loose sheets."
- Three: A control was set up to catalog, index, route and dispatch these Field folios, and the project began to bear fruit.

### **AERIAL SURVEY**

As aforementioned, aerial photographs, furnished by private contract, were to augment and aid the project in preparing new records for the County Assessor's office. As pictures became available, comparisons of actual photographs with available maps, (rural areas in particular) showed many discrepancies; variations, duplications of section corners, lost reference points, erroneous surveys, etc. The photographs were proportionately distorted as the flight of the photographer and uneven terrain varied in distance. In recovering this distortion, other irregularities were encountered in the available old maps and landmarks of record which demanded additional and/or new methods of procedure than those included in the original project authorization.

This was solved by instituting an Aerial Survey project which was an engineering field survey and included the recovery of section corners, establishing new landmarks and reference points as needed, which, while a separate project, was vitally interested in, and closely related to, the

## H I S T O R Y

Land Use Survey. No legal descriptions could be completely re-edited and no new maps were available for field enumerating work, as the construction of P.-I. maps was transferred from the Land Use Survey to the Aerial Survey project. On the other hand, all aerial survey preliminary office research work was done by the Land Use project and because of these inter-related duties, new routines were incorporated, using time and money that must be charged to "Pioneering" and "Total Cost."

Revaluation work during the preparation of these maps by a different project was not held up, but confined to incorporated towns and other heavily populated communities where definite landmarks were already of record in the sponsor's office.

But as these heavily populated communities were completed, and it was realized that more time was required to prepare maps than to appraise properties for taxation purposes, it was the sponsor's desire that the revaluation be done with available maps, if possible, rather than wait for new property identification maps.

To fulfill the sponsor's desire, the "Aerial Survey" including this mapping, was transferred to the "Division of Operation" of WPA, and the re-valuation phase and preparation of new office records was continued under its Research and Records Division.

Therefore, figuratively speaking, although the construction of the new P.-I. maps remained part and parcel of the Land Use Survey for over three years, actually only "old" maps (already available) were used—their actual use to be discussed later.

It is presumed the story of aerial photography and mapping of King County will be told upon the completion of the Aerial Survey Project.

### STENCILS

A justification of the sponsor's claim that the Assessor's office was using an antiquated method of operation, was the preparation of office records in longhand, often almost illegible and undecipherable. Some 500,000 properties were involved—this figure definite only a few days at a time—as new sub-divisions and daily segregations of acreage were offset by consolidation of lots, vacations of unplatted properties and condemnations for highways, rights of way, etc., continuously changing the total.

Individual parcels of county real estate were listed by their entire legal land description on the annual tax rolls and at least every six years each piece of property re-entered on the Assessor's office abstract.

To eliminate this antiquated method of longhand writing, with its recurrent evils and tremendous clerical expense, a typewritten stencil department was instituted, and stencils, complete with fee ownership, legal description and taxing district were used in the preparation of office records.

These stencils were prepared without noteworthy incident except for interdepartmental relationship. Copies from longhand descriptions of years resulted in admitted errors, and many incorrect descriptions of

## H I S T O R Y

land, due to wrong surveys and transfers of title, were disclosed by the new aerial photographs.

As the new stencils should be correct, all legal descriptions were to be re-edited—unifying, simplifying and correcting errors following the preparation of the maps.

Because the description, "Lot 1, Block 1, of So and So Addition," could not be improved, stencils for platted properties were immediately prepared, with the hope the aerial maps would be completed by the time the longer and more intricate acreage descriptions were ready for production; but this not being the case, the stencils were prepared from legal descriptions "as is," and corrections later made as encountered.

### TIMBER CRUISE

A cruise of timber was included in the original project proposal, but available skilled personnel on the Sponsor's staff handled the cruise, WPA workers being used as clerical help and delivering supplies.

Sponsor's spot checking of some 200,000 acres of privately owned timber in King County resulted in a detailed cruise of 68,402 acres, cruises of record proving satisfactory for the balance. In this detailed cruise, 1,002,919,000 board feet, never before assessed or reported "logged off," were found and placed on the tax roll.

Correspondence on file proves the custom of timber owners reporting: "Will cut out timber in Section so and so, this year," and the Sponsor's office striking the assessment from the roll, noting: "For Field check." But in these cases evidently neither was done, the timber remaining on the land and the record remained "logged off"—causing much of the omitted timber taxation.

### COMPARATIVE ANALYSIS

Taxes are based on value. Values are determined by appraisals. The Land Use Survey gathered the data as the basis of these appraisals. The Sponsor furnished charts, graphs and prices, from which the actual dollar and cent answer was computed by WPA workers. Building values were based on the reproduction cost, less depreciation, Land values were determined on front foot or acreage basis. ]

To prove the accuracy of the Sponsor-furnished monetary factor, a "Comparative Analysis" department was incorporated, which included the gathering, computing and analyzing factual sale data, with the project determined values. Records of actual sales were taken from the County Recorder's office and sale prices checked with buyer and seller, by correspondence, telephone and personal contacts, to determine if prices quoted had unknown influences. Rentals, leases and other means of determining actual dollar and cent values were computed for the Sponsor, and definitely substantiated the assessed valuations of the project.

This department gathered much valuable information, but, as its findings opened up new avenues of desired statistical information the project's primary purpose—tax equalization and new records—was delayed.

## H I S T O R Y

Decision was rendered January 1939, that the "Comparative Analysis" department had fulfilled its original aim and had outgrown the presidential authorization. This particular phase of the work was then entirely stopped.

### PRELIMINARY LAND

During the early days of the project, permission being denied WPA employees entering buildings to be appraised, confined the personnel to helpers only, and caused tremendous expenditure of Sponsor's funds for Deputies to get this information, particularly in heavily populated communities where "land" data was negligible.

To use WPA personnel and conserve sponsor's funds, the "Preliminary Land Department" was incorporated, manned entirely by WPA, and, outfitted with available maps and legal land descriptions, work was started in rural communities.

Land usage was gathered in detail and buildings photographed and accurately spotted on map and copies attached to the pertinent Field report, enabling the Sponsor's department to "follow up" with speed. But about the time this procedure began to bear fruit, project operations were curtailed because of temporary lack of funds, both of Sponsor and the Federal Government.

When new appropriations were available, permission was granted WPA workers to enter and enumerate all buildings—previous contacts having been made by the Sponsor. As this Preliminary Land department had operated in a rapidly developing community in which many "current changes" were made during the temporary shut-down, and as the balance of the project was to be carried out under a different method, this preliminary land department work was used only for checking purposes, the WPA re-working the entire area.

### SUMMARY

While part and parcel of the Land Use Survey, the aforementioned operations will not be discussed in "Project Procedure," as they can be classed as separate projects with individual methods of operation, one or all incorporated in other Land Use Survey projects, or omitted, without jeopardizing satisfactory accomplishments. And, while they use time and money, all served their purpose in this project and cannot be correctly computed in dollars and cents, for example:

The Preliminary Land Department expended over \$15,000 for labor, without concrete evidence of production, and while on the surface this appears wasted, it was far from the actual fact, as photographs of buildings were used in the final work; the maps having buildings were used, and most important, the "training" of orienting sites in the field from legal descriptions, could not have been obtained in Class Room instruction.

The revaluation work and installation of new records progressed in conjunction with the Aerial Survey, Stencil, Comparative Analysis and aforementioned project phases until about July 1, 1939, when these figuratively-speaking off-shoots were completed and/or deleted from the Land Use Survey, and the final project procedure established.

## Chapter II

# Project Accomplishments

As this Land Use Survey was an individual survey of some 500,000 pieces of property, each tract complete in itself, and related to adjoining properties only insofar as equalized assessments were produced, such a large number of pieces obviously prohibits individual inclusion in this report. However, a few of the outstanding examples of previous tax inequalities will be portrayed, augmented by general over-all results.

Equalized assessments and new office records of these appraisals were completed September 3, 1940 (see Fig. 1). Old assessments were discarded, each becoming a NEW appraisal, comparable only to similar real estate in King County. Figures 2, 3, 4 and 5 are a few examples of this inequality, of which there are many of record. Figure 6 is only one of many entirely tax free examples.

As many taxpayers in the past, and I presume will in the future protest individual exorbitant taxes, reductions of great amounts were limited; tabulation of the City of Seattle buildings showing that 45% had been over-assessed, 45% under-assessed, and 10 per cent remained constant.

The decentralization of business from the City-center to community centers and the popularity of new residential sections were specifically located and proven by this project. These reflected land value findings necessitated wholesale adjustments, but while districts and individual lots were lowered and raised, the over-all land values in the City of Seattle remained unchanged.

Subsequent to this state's four year moratorium on tax foreclosures, 19,402 parcels of land in 1937 and 17,119 in 1938 were taken over by King County for delinquencies, becoming exempt from taxation—the annual average up to and including 1932 having been about 3,000.

These foreclosures resulted in a \$47,158,486.00 reduction in real property assessments for the entire state. King County, one of the 39 counties, having in its confines 29.28% of the State's taxable real estate value; its proportionate share, roughly \$14,000,000.00 with its resultant loss of revenue, has been more than offset by the findings of the Land Use Survey in two major ways, i. e.:

First, by making available to the Sponsor an inventory of all taxable properties, precluding illegal omissions or exemptions.

Second, this method improved the locating of newly created values and enabled the Sponsor to determine the taxing body, local or state, of trans-state property.

Adjustments and decisions conforming to the statute "Use of real estate, rather than ownership to be the basis of exemptions" were made

## PROJECT ACCOMPLISHMENTS

possible through the complete field enumeration. For example: a long abandoned cemetery now used as a pasture, was again placed on the tax roll—offsetting this, parsonages, though not adjacent to the place of worship, were allowed exemptions.

Office references and comparisons were facilitated by visible records of lot appraisals, segregation by segregation, complete by quarter sections—and, this detailed inventory, plus photographs, was particularly useful to the "Board of Equalization" in allowing or rejecting petitioner's claims of unjust taxation.

The Board of Equalization consists of the three County Commissioners and three Seattle Councilmen, who have the power to change the Assessor's valuation, and each year since the inception of the Land Use Survey, the results of the project have been formally endorsed by the Board of Equalization, and during this Board's 1940 session, less than 2/10 of 1% of the taxpayers protested their assessments, and only 5 per cent of these were considered legitimate, and reductions granted.

The establishment of tax equalization and new records was the primary purpose of this project and revenue was not originally considered, but in making this detailed inventory of county real estate, multiple tax discrepancies (predominantly under-assessed or omitted, rather than over or duplicated) were discovered—and in the adjustments, the project became self-liquidating as shown by the following statistics:

- (1) CITIES OF SEATTLE, KENT, RENTON, AUBURN AND ENUMCLAW—LAND VALUES—No change.
- (2) AGRICULTURE AND SUBURBAN LANDS. Notwithstanding a 25% reduction in unimproved or uncultivated, and a 10 per cent reduction in improved or cultivated lands granted by the Sponsor, resulting in a \$10,000,000.00 assessed value (50% of true value) decrease in previously correctly lands. Corrections of the improperly recorded land usage resulted in a gross gain of \$11,900,000.00 assessed valuation.  
Net gain—agricultural and suburban lands, \$1,900,000.00 assessed valuation.
- (3) TIMBER. Spot checking of some 200,000 acres of privately owned timber resulted in a detailed cruise of 68,402 acres, disclosing 1,002,919,000 board feet which was made of record for the first time.  
Net Gain—Timber, \$681,148.00 assessed value.
- (4) BUILDINGS ONLY—CITY OF SEATTLE. Previous to this survey there were 113,676 buildings of record in Seattle. The land Use Survey showed 146,567, new construction not included.  
Net Gain, in Seattle—\$2,199,556.00 assessed value.
- (5) BUILDING ONLY, KENT, RENTON, AUBURN and ENUMCLAW. Previous to this survey, buildings of record in these towns were 2,667—the Land Use Survey showed 10,070.  
Net gain in Kent, Renton, Auburn and Enumclaw—\$549,700.00.
- (6) BUILDINGS ONLY, BALANCE OF KING COUNTY: Previous to this survey there were 41,802 buildings of record—the Land Use Survey showed 67,071.  
Net Gain, buildings only in balance of King County, \$6,149,595.00.\*



FIG. 2

THIS BUILDING ERECTED IN 1932 HAD BEEN ASSESSED TO THE ADJOINING VACANT LOT, SAID LOT REVERTING BACK TO KING COUNTY FOR DELINQUENT TAXES; WHILE THE OWNER OF THE BUILDING WAS ONLY TAXED FOR AN UNIMPROVED LOT.



Fig 3.

Prior to the Land Use Survey, these buildings were paying identical taxes, based on an assessed valuation (50% of full value) of \$270.00. One is solid concrete, has three fireplaces, five complete baths, additional plumbing throughout the house and a six car garage.

The other has two rooms and no plumbing.



FIG. 4

The upper building, built in 1931, had been recorded as a fuel bunker and the assessed value was \$520.00.

The lower building, a store built in 1904, was assessed at \$650.00. Project findings, and proper depreciations changed the values to \$12,370 and \$520, respectively.

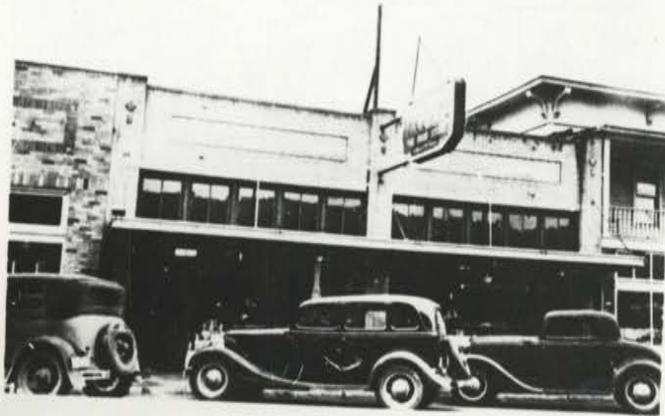


Fig 5.

The above three pictures are of adjoining buildings on the "Main Street" of a smaller town in King County. Prior to this project, building #1 was assessed at \$50.00, #2 at \$610.00 and #3 at \$1480.00. In accomplishing "Tax Equality" building #1 was increased, #2 remained constant and #3 was lowered.



Fig. 6

While 90% of the buildings and multiple lots and tracts needed and were adjusted, many buildings had never been listed and therefore were untaxed. The omission of these taxes had been a great loss of revenue to King County. An outstanding example is portrayed above.

Using the actual value and allowing regular depreciations from 1914 (date of construction) and the millage levy for the years this lot was recorded as vacant, \$21,913.05 was due our sponsors.

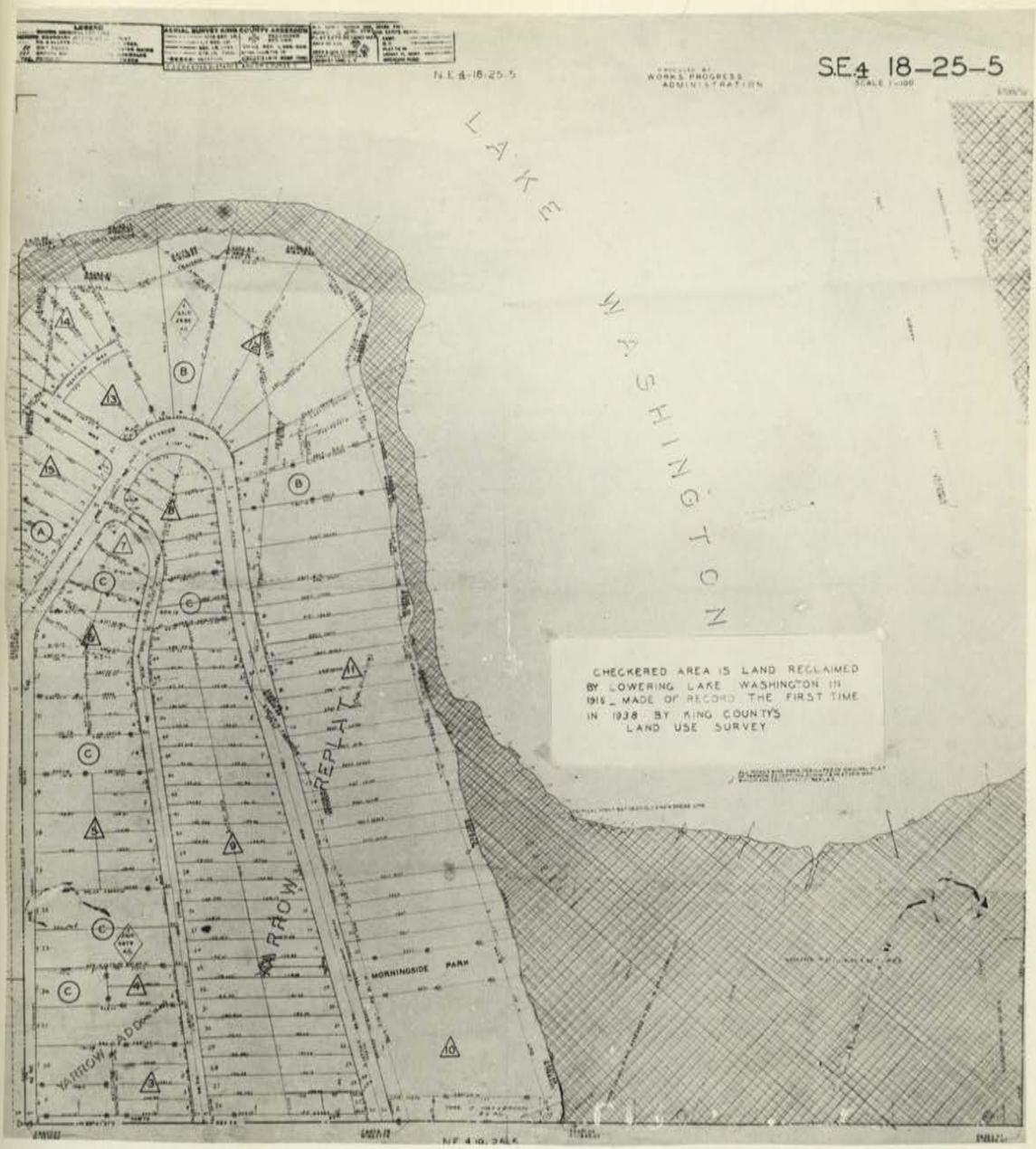


Figure 6 A

## PROJECT ACCOMPLISHMENTS

\* The proportionate gain of unrecorded buildings in suburban areas, as compared to urban properties is not truly reflected, as old records had lumped assessed valuations of "House, barn and three sheds," but as many of these sheds were deemed of no value by the Sponsor, the project enumerated only the house and barn—recording two buildings only, but giving the old record credit for five buildings. A more accurate picture of the "never before assessed" is reflected in the financial increase.

The foregoing data is recapitulated as follows:

Description	Gain In Assessed Value
Suburban Lands .....	\$1,900,000.00
Timber .....	681,148.00
Buildings (City of Seattle) .....	2,199,556.00
Buildings (Kent, Renton, Auburn and Enumclaw).....	549,700.00
Buildings (Balance of King County) .....	6,149,595.00
TOTAL .....	\$11,479,999.00**

At an average millage levy of 50 mills, \$573,999.95 added annual revenue will be due King County, and as portions of this increase have been levied during the life of this project, the total expenditure of \$2,473,031.33 (to September 3, 1940, completion date of revaluation work) is rapidly being repaid.

\*\*AUTHOR'S NOTE—The \$11,479,999.00 is the net increase in assessed valuation (50%). The gross increase would include \$14,000,000.00 for tax foreclosures (absorbed during the project) and a \$10,000,000.00 reduction in land assessments, totalling \$35,479,999.00 assessed valuation, or over \$70,000,000.00 full value of real property was inventoried, identified and properly placed on the tax rolls of King County FOR THE FIRST TIME BY THIS LAND USE SURVEY PROJECT.

### SUMMARY

This project prepared 630,000 typewritten stencils for the one-half million segregations of County property. (Lengthy descriptions cannot be put on one stencil, the longest description requiring 27 units).

12,704 Field folios were assembled by geographic units, with a Field report for each segregation, prints of aerial pictures when available and property identification map with improvements spotted thereon, complete with land usage and building data. A photograph of buildings is attached to the corresponding appraisal form and successfully used in current Field work, upon acceptance by the Sponsor.

All land assessments were computed by acreage and usage, and entered on Section and Quarter section maps, furnishing the Sponsor with a visible, complete and concise control.

Approximately 200,000 photographs were taken of buildings (garages and sheds excepted), developed by the project and two prints made of each negative—one copy attached to the Field folio and one vulcanized to the Permanent Record Card with each negative identified and filed by legal description.

569,583 Permanent Record Cards had to be prepared to cover the 500,000 parcels of real estate because of multiple buildings on one tract, which Record Cards were delivered to the sponsor, furnishing his office with a complete new modern system of records.

## PROJECT ACCOMPLISHMENTS

Data of real estate activity for 1936, 1937 and 1938 was gathered, computed and prepared in analytical form, furnishing the Sponsor's office with a cross check of appraisals.

Ownerships of real property are being listed on individual cards, complete with names, addresses and legal descriptions and filed alphabetically. Dual ownerships will necessitate some 600,000 cards to cover the half million pieces of King County properties and will be reported upon when completed.

## Chapter III

### Project Procedure

Under Chapter I "History," report is made of the various project phases related only indirectly to the primary purpose (equalization of taxation) of the King County Land Use Survey. To conduct these various phases, each one of which might have been an individual project in itself, an average of 600 workers was required. But as these tangents were completed, deleted or postponed, a personnel of less than 200 carried the primary purpose of the work through to completion. The present chapter is dedicated to the modus operandi of this less than 200 workers, whose efforts were confined to the re-valuation of real property (land and buildings) and the following chapter to the preparation of "Permanent Record Cards" containing the inventory gathered in the re-valuation work.

Exhibits, which will include testimonials, photographs and charts, will be used for vivid descriptive purposes, with footnotes added to prove the feasibility of the procedure outlined—or perhaps suggest an alternate routine. Naturally the technique used is based primarily on WPA rules and regulations, plus the desires, demands or mandatory duties of the Sponsor.

The functional line of authority and the flow of project work, representing the foundation of the undertaking, are graphically charted in Figure 7.

#### INSTRUCTIONS

Recognizing that fluctuating quotas of WPA are an ever-present operating problem and that experienced personnel is not always available for a project of this nature, a definite outline of instructions was prepared and portions given to the personnel as their department assignments required.

An outline of instructions, satisfactorily used in the King County Land Use Survey, is given as Appendix "A".

This instruction did not attempt to be a training school; and, as outlined, was confined to teaching the fundamentals of the Sponsor's routine. Additional project operating instructions were given in detail to the workers as the departments were established, both verbally and by bulletin.

As all records are kept by legal land descriptions, all workers must have some knowledge of these descriptions and Sponsor's abbreviations and terminology. To supply this demand a mimeographed form of abbreviations and explanations proved valuable. A few samples follow:

## PROJECT PROCEDURE

### ABBREVIATIONS

ABST ..... Abstract	HINTER ..... Hereinafter
AC ..... Acre	.....
ACCDG ..... According	MDR ..... Meander Line
ADD ..... Addition	MGN ..... Margin Line
ADJ ..... Adjoining	M/L ..... More or Less
ADM ..... Administration	.....
AFDT ..... Affidavit	PLW ..... Parallel with
AFT ..... Affiant	PK ..... Park
ALG ..... Along	PG ..... Page
APT ..... Apartment	.....
ARE ..... Aerial	R ..... Range
ASS'D ..... Assessed	RL ..... Registered Land
ASSM'T ..... Assessment	R/A ..... Right Angle
AUD'S ..... Auditor's	.....
.....	TD ..... Tide
BAAP ..... Beginning at a point	TGW ..... Together with
BAL ..... Balance	T.P.O.B. .... True point of beginning
BDRY ..... Boundary	.....
.....	W ..... West
E ..... East	WLY ..... Westerly
ET AL ..... And others	W. D. .... Warranty Deed
.....	.....
HID ..... Herein described	
HTFR ..... Heretofore	

This enables the instructor to confine the "school," as outlined in Appendix A to a "training period" and not a project in itself. For example, the abbreviation bulletin is just one chart to be used in Lesson II Breakdown (2) of Breakdown (F) as outlined in Appendix A.

Some workers will need a thorough knowledge of these abbreviations, others practically none at all, but all project workers, with the exception of time keepers and janitors must have some knowledge of legal descriptions, building construction, use, terminology, etc., in various degrees.

A satisfactory general breakdown chart (Fig. 8) of a Section of land was available and often referred to by project workers. Additional legal description charts will be found under heading "Field."

A booklet by the National Committee of Wood Utilization, prepared by the United States Department of Commerce, on "How to Judge a House," proved very satisfactory. It is written in simple, understandable style, and provides a building Terminology as encountered in residential construction, and hand books are available for other types of construction, in all recognized libraries and were referred to as needed.

From this booklet were composed additional mimeographed forms for further instruction. A synopsis follows:

# PROJECT PROCEDURE

## THINGS TO LOOK FOR IN THE APPRAISAL OF A HOUSE

### I. LOCATION

1. Is the neighborhood attractive?
  2. Are the streets paved?
  3. Is it a new development?
  4. Are there any restrictions as to stores or apartments, and how long imposed; if no restrictions exist are there nearby lots which may attract commercial establishments objectionable to resident?
  5. Are the adjoining homes well maintained, or have they a slovenly appearance?
  6. How far is it to the nearest car or bus line?
  7. Are there objectionable noises from cars, whistles, etc.?
  8. Are there nearby stores, schools and churches?
  9. Are there parks or playgrounds in the vicinity?
- . . . . .

### II. THE SITE OF THE HOUSE

1. Is the property graded so that surface water will not run into the cellar windows of the basement?
  2. Does the lot next door drain away from the lot in question?
  3. If there is a masonry wall, are there seep holes to let the water through the wall instead of backing up behind it? Examine this wall for cracks and bulges—it may mean an early repair bill.
- . . . . .

### III. THE HOUSE

1. Architecture should be simple, permanent design. Good design means simplicity and honest expression, no ostentation. Good architecture is good taste. Good architecture is sound economy, that is, all design features should have a utility basis if they are included to furnish convenience, or to add structural value, or to balance the general scheme of design.
  2. Exposure—(a) porches, open or closed, should have sun exposure (b) bedrooms should be located to receive the prevailing summer breezes (c) trees should be located, depending on climate, to shade the house in summer or act as wind break in winter.
- . . . . .

### IV. THE FOUNDATION

1. Are foundation walls at least six inches above the ground and below frost line so as not to heave and crack during freezes or thaws?
  2. Are there vertical cracks which may indicate a settlement of structure?
- . . . . .

As the sponsor was doubtful of ever getting started, owing to the filing of six applications before acceptance, charts and bulletins were not prepared in advance, but were incorporated in project work as needed. Obviously much thought, time and research were given to the preparation of these graphs and bulletins. The majority and most common were prepared or furnished by the sponsor, and the balance prepared by the project.

# PROJECT PROCEDURE

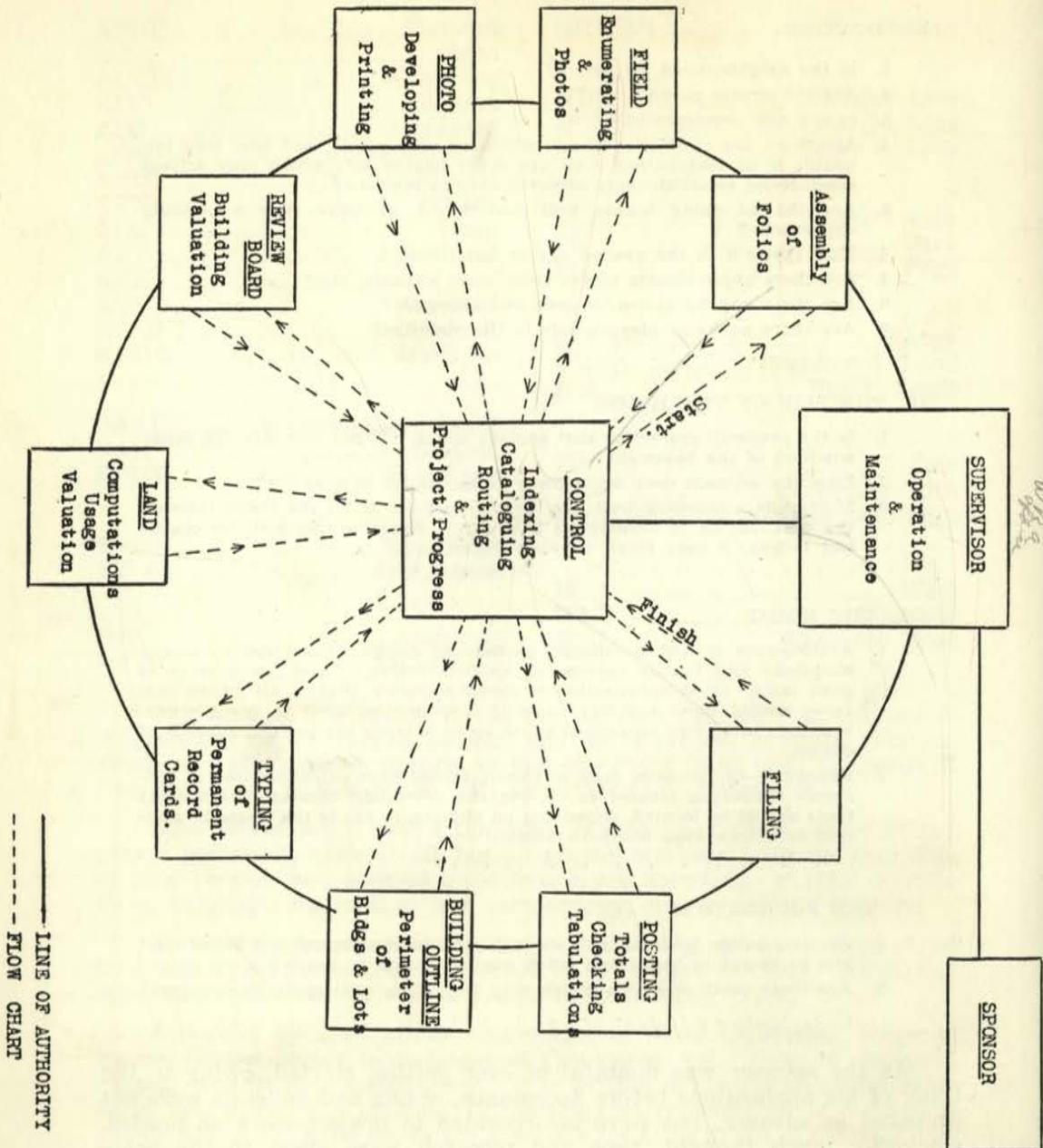


Figure 7

*Change 115-112*

# PROJECT PROCEDURE

## A SECTION OF LAND, 640 ACRES

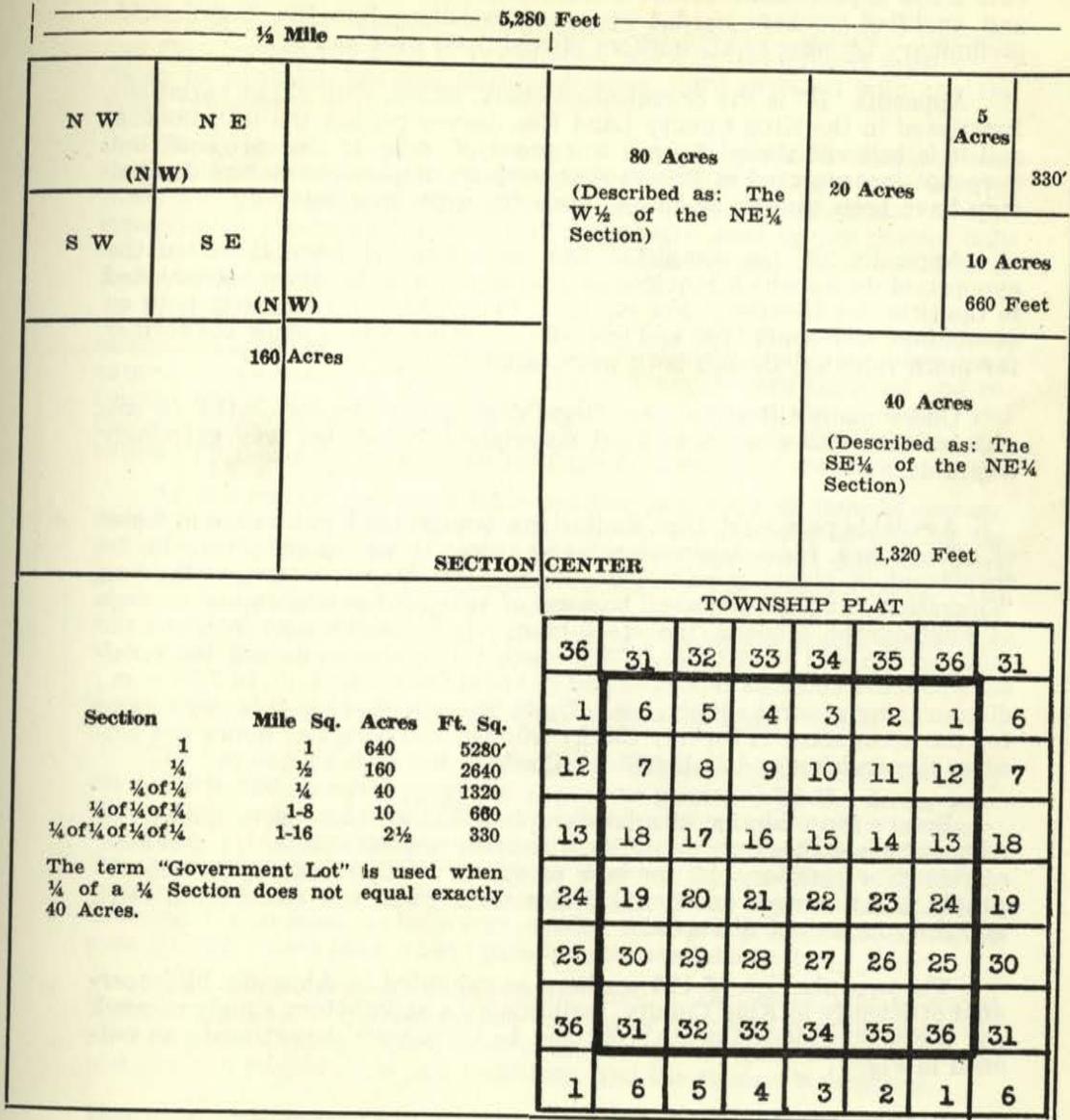


Figure 8

## PROJECT PROCEDURE

### ORGANIZATION

Possibly personnel should be considered before training, in which case these departments should be reversed, but as even the most skilled and qualified workers needed some aid in fitting into the "new" field, preliminary training of all workers proved itself over and over.

Appendix "B" is the organization chart, which, with slight variations functioned in the King County Land Use Survey project the last months, and it is believed these changes will prove of value in new projects, but were not incorporated in this project because of possible disruption that may have been caused, or lack of time for experimentation.

Appendix "B" is complete with departmental break-down of the synopsis duties which required extraordinary qualifications not included in the title classification. For instance, the project operated with both an accountant who could type and one who could not, which made the former far more valuable, though both were satisfactory.

Under many titles the term "legal description" appears,—this to emphasize that above average legal description knowledge was extremely desirable.

Available personnel, time limitations, transportation, location and size of office space, room arrangement and access to equipment must also be considered in planning an organization. For instance, under heading "Operation and Maintenance," because of space for machines and storage of mimeograph stencils, the stock-room clerk would also operate the mimeograph and variatyper. This stock room also contained the sponsor's supplies and was kept open and guarded from 8:00 a. m. to 5:00 p. m., discouraging general admittance. There was also space in this stock room for the accountant (Property Clerk) who worked irregular hours and acted as Supervising and Relief Stock Clerk.

Before consolidation of mimeograph and stock room clerk duties, our mimeograph stencils were cut by whomever was available, the foreman, secretary or sponsor. If, for lack of space or other reason, the mimeograph was removed, additional duties were given the stock room clerk and the routine not disrupted.

The organization of 176 workers as exhibited in Appendix "B" operated efficiently in King County, maintaining a satisfactory supply of work for succeeding departments, confined to the eleven departments as outlined in Fig. 7.

It must be understood, department No. 1, "Assembly" was instituted and had completed a workable portion before department No 2 was created. Likewise department No. 1 was entirely finished, returned their tools, before the permanent record was totally prepared and filed for the sponsor.

## PROJECT PROCEDURE

### SPONSOR'S RECORDS

With supervision determined, personnel and training provided for, we may enter immediately into the working procedure.

We stress the fact that the sponsor's office is a "GOING" concern, and that his records used in preliminary work by the project must at all times be available for immediate reference, until replaced with the finished products.

These records, kept in "Abstract Volumes" by sub-divisions or sections of land, contained a map of segregations therein, legal land descriptions, fee ownerships, taxing districts and assessed valuations. Under separate file "Building Information" cards were used by the project only for construction dates, but as many were missing and those available so inaccurate, we dismiss them from this report.

Detailing of project workers to obtain, maintain and return these abstract pages, eliminated the loss and mutilation that may have been caused by promiscuous handling. Abstract pages were collected and receipted for in the morning—receipts filed in place of the abstract, and the abstracts returned and filed every evening, forestalling possible disruption by reason of mandatory holidays or absence of workers.

As this receipt contained table number, location and name of worker, these records were immediately available to the Sponsor in serving the public, and while so used, other duties were interwoven, and the work proceeded systematically. This also applied to sub-division plats. The abstract map contained only the outline of the subdivision, and to obtain Block and Lot breakdown, the sub-division plat was procured from the Volume of Plats and receipted for, as in the abstract.

### OPERATION, MAINTENANCE AND SUPERVISION

The heading itself is self-explanatory. Supplies, janitor service, project records, time-keeping, payrolls, etc., were governed by the demands of the project, quota of workers and available office space. For instance; when the typing department operated twenty-four hours a day, two repair men were busy keeping the machines in workable condition. When the typing relaxed, it was more economical to have the repairs made on the "outside." Also more janitors were needed when the project was scattered over sixteen rooms than when space became available in two.

Under the heading of "Supervision" may, in fact **must**, also be added "public relations." Unquestionably the supervisor and assistants should be chosen for their all-round ability, knowledge of WPA Rules and Regulations, the project aims and ambitions, and the sponsor's demands.

### PUBLIC RELATIONS

The history of public relations, may prove descriptive and interesting.

Operating the largest white-collared WPA project; the first tax equalization program; expending over \$2,000,000.00; emergency appro-

## PROJECT PROCEDURE

priations and resultant law suits; charges and counter-charges of tax dodging and special privileges; claims and counter-claims of efficiencies and inefficiencies; protesting tax payers, requests for increased income by school boards, for a period of over four and a half years in 47-plus various project departments and phases—provided much publicity,

Invitations from the sponsor to the public at large to visit the scene of operations resulted in personal escort by the supervisor and assistants. Different methods of portrayal were delivered. For instance, a group of high school students were interested in the project from a different angle than the "Down Town Property Owners Association."

The sponsor, a renowned orator, also delivered the project message to luncheon groups, community clubs, church organizations and any and all interested individuals and associations. The demands were so heavy that all engagements could not personally be kept by the sponsor, and his deputies or the project supervisor substituted during his absence.

Lectures, with exhibits were later very satisfactorily replaced with a two reel silent motion picture, titled "The Land Use and Aerial Survey Projects," narrated on by the sponsor or the project supervisor.

A sponsor-furnished portable projector and screen made it possible to show the movie throughout the county, resulting in very favorable comment and publicity. When shown in a community just before field enumerating began, public reaction and acceptance of the project was gratifying, particularly noticeable when compared to the uninformed community. The project movie was augmented with short reels of project Christmas parties, picnics and dances promoting much good will.

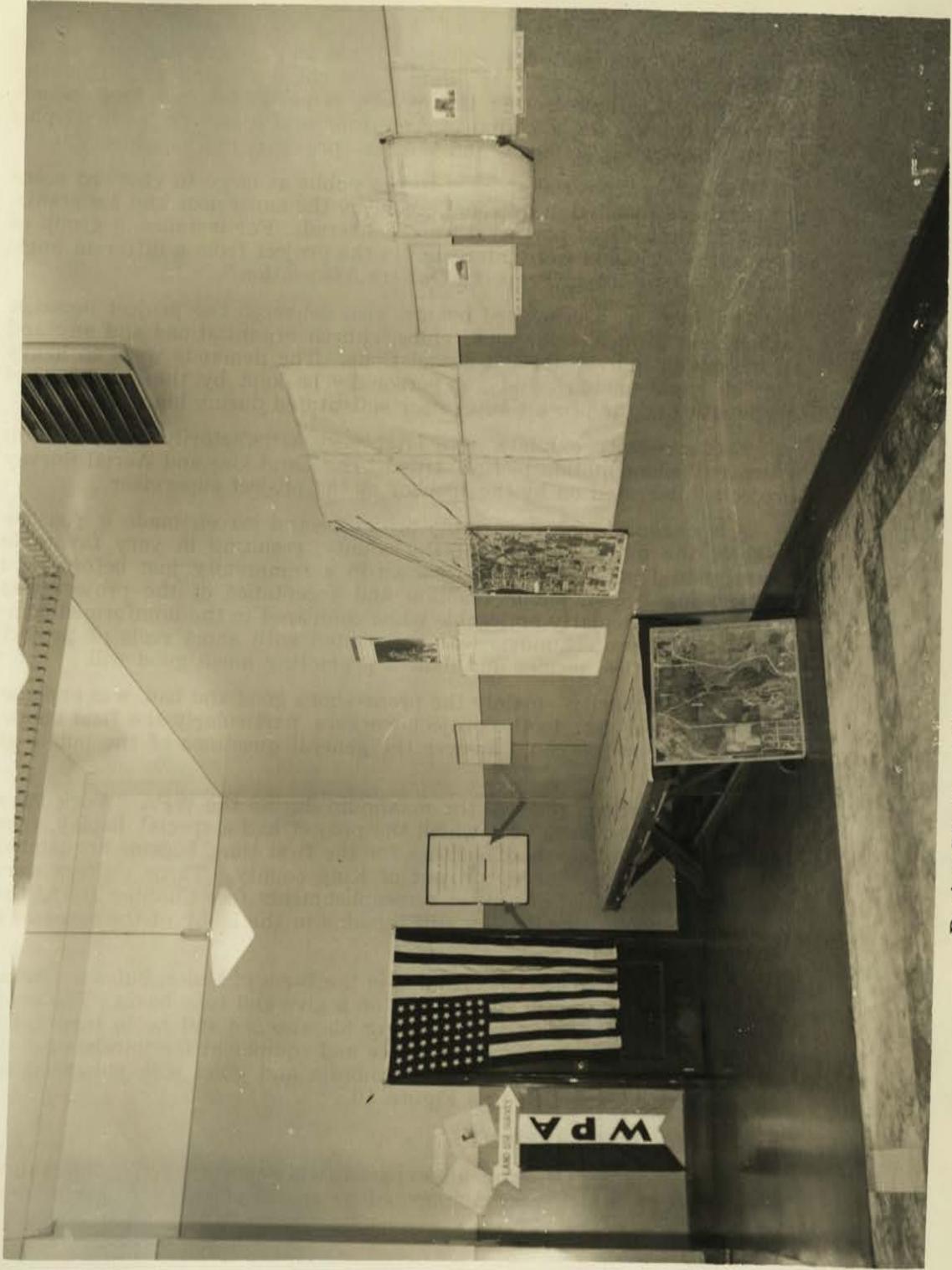
Project publicity—mainly the press—both good and bad, was explained by the supervisor to the project workers, particularly the field enumerators, so they too could answer the general questions of the public at large.

Public relations reached the maximum during the WPA "Work Pays Your Community Week" for which the project had a special display, (see Figure 9), and hundreds of visitors for the first time, became acquainted with the Land Use Survey project of King county. These visitors were also given a pamphlet of project accomplishments (see Chapter 2). At the sponsor's request, this display still remains in the lobby of the assessor's office.

Public relations are not included in the Book of Rules, but were satisfactorily incorporated in this project on a give and take basis. The project substituted for the sponsor during his absence and he in turn aided WPA; for instance, by providing space and equipment for unrelated projects and other things; building up morale and good will, enhanced by correspondence, submitted as Figure 10.

### ASSEMBLY DEPARTMENT

The Assembly Department prepared field reports for the field enumerating crews, which were augmented by copies of three Property Iden-



Project Display—"Work pays your community week."

Figure 9

PROJECT PROCEDURE  
FEDERAL WORKS AGENCY  
WORK PROJECTS ADMINISTRATION  
STATE OF WASHINGTON

May 27, 1940

Mr. Roy B. Misener, King County Assessor  
County City Building,  
Seattle, Washington

Dear Mr. Misener:

May I, in behalf of Mr. Wadhams of the Committee "This Work Pays Your Community" week, and myself, thank you for the excellent address you gave portraying the assessor's project at our WPA dinner at Woodland Park.

We appreciate the address and your courtesy in taking the necessary time to attend our dinner and speak to our people in order that they may have a more complete understanding of the value of the project that you have so ably sponsored.

May I also thank you for your further courtesy in sending a photographer and for the pictures taken and printed, and given us by you for distribution.

Since my active connection with this project during the past twelve to fourteen months, I appreciate your unflinching courtesy and full cooperation in every way in regard to this project.

Yours very truly,

WORK PROJECTS ADMINISTRATION,  
By (Signed) H. C. Sampson, Field Supervisor  
Research and Records Projects.

cc Mrs. Kina Bower  
Mr. A. C. Klotz

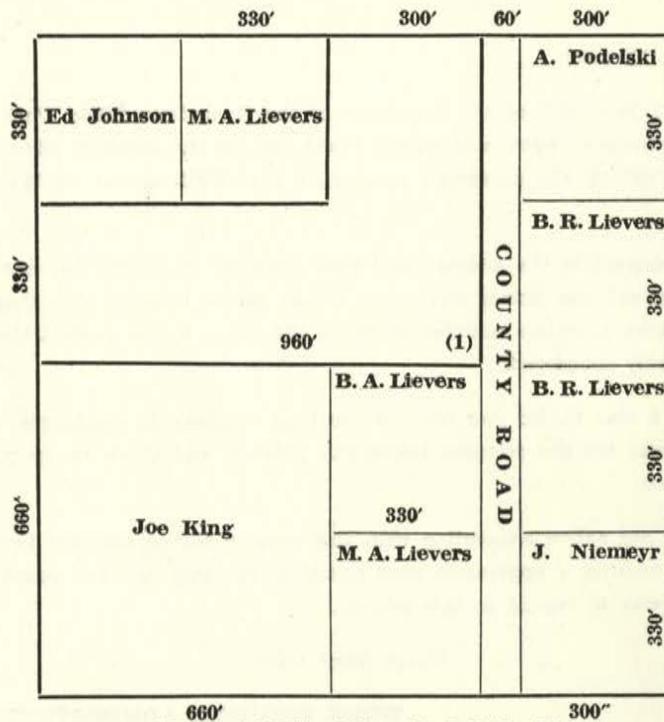
## PROJECT PROCEDURE

tification (P.-I. maps)—a conversion of Atlas maps. An Atlas map shows sub-divisions and lot lines, unplatted areas, roads, highways, rights of way, etc., but does not portray segregations thereof. The markings of these segregations converts an Atlas to a P.-I. map.

Atlas maps were available in the sponsor's office, and these, or copies, were procured and converted into P.-I. maps, three copies each, two for field enumerating crews and one for later use of the sponsor's land deputies.

### EDITING LEGAL DESCRIPTIONS

In preparing these P.-I. maps and related field enumerating reports, the first step was the editing of legal land descriptions, simplified and



NE $\frac{1}{4}$  of NE $\frac{1}{4}$  of Sec. 14, T 21N—R6

Figure 11

unified, for instance: Tax Lot No. 1. of Section 14, Township 21N, Range 6E., was described as:

- |   |  |         |
|---|--|---------|
| 1 | NE $\frac{1}{4}$ of NE $\frac{1}{4}$ of Sec. 14-21-6 less county road, |         |
|   | Less portion to John Neimeyk   | 9/2/20  |
|   | Less portion to Anton Podelski   | 2/17/21 |
|   | Less portion to B. A. Leivers  | No Date |
|   | Less Portion to M. A. Leivers  | 2/11/28 |

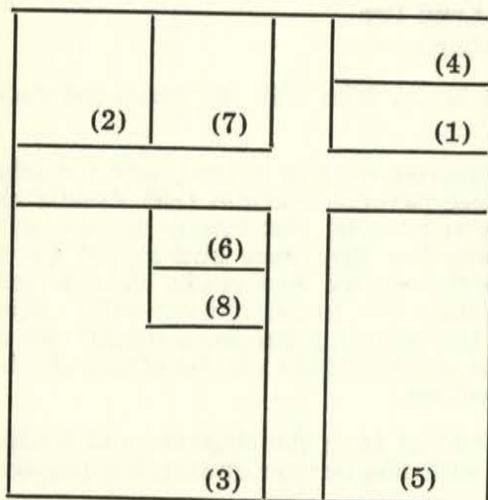
## PROJECT PROCEDURE

Less portion to Ed Johnson	4/5/28
Less portion to B. R. Leivers	5/18/29
Less portion to Joe King	11/24/30
Less portion to B. R. Leivers	No Date
and Less portion to B. R. Leivers	No. Date

and appeared on the map as Figure 11.

This was, after "searching"\* the deeds for verification, definitely described by metes and bounds, as follows: Beginning 330' south of the NW corner of the NE $\frac{1}{4}$  of NE $\frac{1}{4}$  of Sec. 14, Tp. 21, R. 6, thence south 330', thence east 960', thence north 660', thence west 300', thence south 330', thence west 660', to beginning.

This is more positive than the "lessings out" because these "lessings out" continue to be active and change ownerships or portions thereof. As exhibited, Joe King, owner of the 10 acres in the SW corner may sell all or any part of his property that will add confusion to the old style



Note: These numbers can never remain long in numerical order or uniform rotation. New segregations, or platting into subdivisions, soon obsoleted uniformity. Altho tax lot No. 1, when segregated could have the portions thereof identified by alphabetical suffixes as 1A, 1B, 1C, confining the numbers and following letters to a small area. However, we found no undue handicap in using the section as our area, using no two numbers which were the same.

Figure 12

legal description, particularly if he sold to the Leivers family. Also a reference point as actually encountered "a ten-foot maple tree," the starting point of a legal description since 1904, was replaced by a more definite and unchanging reference.

Because the aforementioned "Aerial Survey" project was finding additional discrepancies between the descriptions of record and the actualities on the ground, re-editing of legal descriptions by the Land Use

\*It may be desirable in prospective projects to have an "Abstract of Title" phase, as in editing legal descriptions many titles have to be looked up. With little added time and expense, all properties could be researched and the chain of title brought to date. This was not included in the King County Land Use Survey because of legal difficulties.

## PROJECT PROCEDURE

Survey project was confined to the "obvious," as portrayed in the above examples.

After editing of the legal description, the outline of the segregation of property was entered on the Atlas Map, identified by a tax lot number 1, 2, 3, etc., for the unplatted properties as shown in Fig. 12.

In lengthy descriptions, generally intricate, of platted property, the tracts were identified as parcels "A", "B", "C", etc. These numerals and letters simplified the discussion and referencing of these properties, but the entire edited legal description was also followed through. Measurements and dimensions, when available, were also shown on the P.-I. maps. Likewise streets, highways, waterways, etc., all were positively identified.

Upon completion of the P.-I. maps, all three were uniformly folded and identified on the reverse side:

- 1—Buildings
- 2—Land Use
- 3—Land

Maps 1 and 2 were assembled in one folio with the aerial picture of the corresponding area.

Aerial pictures of sections or quarter sections of land were furnished this project by the sponsor, and these pictures, taken in 1936, greatly aided the field work in locating sites and tracts, particularly in relation to unchanging ground detail. However, as they were still in use by the project in 1940, many changes, (river courses, new roads, cleared lands, new construction, etc.) confined their use to referencing only. When these pictures were current with the project progress, a simple and exceedingly accurate checking routine was established in the office, alleviating the added expense of field checking.

A folio was provided, as protection from the elements and binding, and contents listed on the cover, with number for cataloguing purposes.  
\*1.

When completed, catalogues and indexes were prepared, simplifying project referencing, dispatching, routine and the mechanics of preparing receipts for later use of the Land Department.

\*1 These indexes and catalogues were actually prepared alphabetically, numerically, geographically and cross-referenced. This was necessary during the pioneering days of this project, as a large portion of the work of each department was completed before the next step was created, and as these backlogs became unwieldy, these indexes became paramount in locating the folios desired.

Also the field enumerating data (assessed valuation) was used by the sponsor before the project had completed its routine, necessitating finger-tip control of each folio and appraisal form.

The use of these values by the sponsor made them a public record, and it became necessary that they be available for his immediate reference, which resulted in additional project work. This was eliminated in the final routine by confining the field report to the project until completed.





## PROJECT PROCEDURE

### ENUMERATING FORMS

Field enumerating forms—Field sheets—(Fig. 13) were then prepared from the abstract and P.-I. maps, one field sheet for each segregation of property in King County. Entered thereon was the newly edited legal land description, typed or printed for legibility, giving the fee owner's name and the district. The fee owner's name written with lead pencil as these sheets reverted to the sponsor for his continued use, and as ownerships are constantly changing, simple erasing and entering the name of the new owner avoided making a new report.

These field sheets were bound into folios of suitable size to prevent loss and mutilation. As explained in the foreword, during early months the project used loose leaf appraisal forms, the "Not at homes," "Commercials" and "Case by Case," separated and worked in different departments, which proved very unsatisfactory. An attempt was also made to eliminate the field report assembly, the field enumerators to identify each appraisal by their own created legal description, or other means of identification which also proved unsatisfactory.

The City of Seattle and other well established residential communities were first enumerated and the field sheet exhibited in Fig. 13—occasionally revised—was continued throughout the project as the primary appraisal form. When "commercial," "farm buildings," and other type construction were encountered they were enumerated on their particular type field report and added to, rather than substituted for the residential type field sheet which contained the ownership and legal identification. However, in agricultural areas the building field report was augmented with a "Land Usage" report. (Fig. 14)—bound into separate folios. The variegated terrain of King County relegated this form to a secondary nature, and was used only for tracts having several land uses.

When the field sheet was bound into a folio, the corresponding abstract entry was noted, "Folio Assembled," calling the sponsor's attention to the fact that the entry was in process of being worked, to preserve, not to destroy, the record "as is" for current changes.

During the early months of this project, current changes were maintained as project routine, and picked up in all departments, but as the final working routine was developed as portrayed, backlogs were reduced to the workable minimum and these changes held up until the project's completion, which caused no evident embarrassment to the sponsor's office.

### BOUNDARIES

All folios were assembled having a natural boundary, (road, river, etc.) rather than an indeterminate—in the field—section or sub-division line, which eliminated the possibility of a second crew contacting the owner of one site extending into adjoining sub-divisions, or across a section line. Great precaution was also taken to avoid assembling duplication of a tract in separate folios, dual ownerships considered as one segregation.

# PROJECT PROCEDURE

## LAND REPORT

1 DISTRICT 2 ADDITION.....  
 Section.....Twp.....N. Range.....E. M. Block.....Tract or Lot No.....

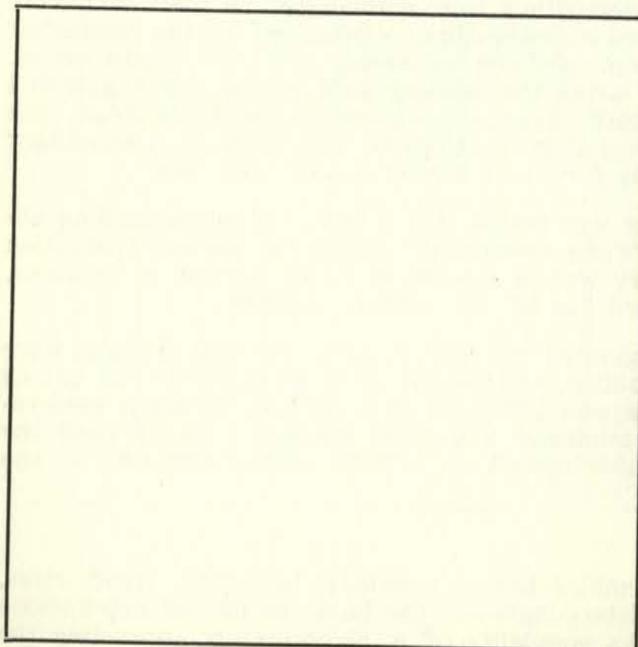
3 ADDRESS-PROPERTY..... CONT. PUR.....  
 4 FEE OWNER .....

### LAND INFORMATION

1 Size Tract or Lot...x...Topography.....Above-Below Grade.....Ft.....  
 2 Street-Road.....Surface.....Alley.....Paved.....  
 3 Sidewalk.....Sewer.....Cesspool.....Septic Tank.....Water.....Drainage.....  
 4 Landscaping.....Condition.....  
 5 Trend of District; Static.....Up.....Down.....Value Lot or Tract \$.....Front St. Val. \$.....  
 Side Street Value \$.....Depth Factor.....% Side Street Factor.....% Credit.....  
 6 Use of District: Residential.....Apartment.....Business.....Industrial.....Water Front.....  
 View.....Farm-Kind.....  
 7 District: Best.....Good.....Medium.....Poor.....Old.....New.....Zoned for.....  
 8 Land Use.....Soil Type.....Crops-Timber Stand No. Acres Value Ac. Value  
 Land Size.....x..... Total..... \$.....

### LAND SEGREGATION AND CLASSIFICATION

Scale one inch.....Ft. This square indicates ..... Acres.  
 Indicate by Acres, Use of Land by Marks, Type of Letters.



### LAND USE

- 111 Cultivated
- †Pasture
- 00 Timber
- XX Stump
- . . . Gravel or Useless
- V Swamp Land Type
- A—Shot Clay
- B—Bog
- C—Peat
- D—Silt
- E—Loam
- F—Gravel
- G—Bottom
- H—Upland
- K—Hill

Appraised by..... Checked by.....

Date..... Date.....

REMARKS .....

Figure 14

## PROJECT PROCEDURE

No two sub-divisions or portions thereof were assembled in the same folio, for two reasons: First, it would disrupt the numerical control, and Second, avoided identical block and lot numbers in the same folio with incurring danger of errors, except where known large industrial institutions extended into several sections and/or sub-divisions.

### INDUSTRIALS

These "Industrial" folios used the one ownership as the natural—generally a fence—boundary, and the segregations therein were "taken out" of the regular folio and replaced with a reference sheet, noted, "See Industrial Folio No. So and So for Lot 1, Block 1 Addition." This avoided duplication of field contacts, as a special P.-I. map was prepared for this Industrial folio and cancelled on the section map.

This sidestep from regular routine was necessary because of lack of qualified enumerators. For instance: a lumber mill containing sawmill, planer mill, burners, sheds, dry kilns, etc., would demand a very capable commercial enumerator—the same institution possibly having several hundred residences for workers that could be enumerated by the ordinary field worker. Believing it more feasible to make only one contact with the plant manager, rather than sending in several crews, these buildings, plus possible buildings in the woods, would all be enumerated by the same crew, and passed up by a second crew working other properties in the same vicinity.

### CROSS REFERENCES

Whenever the natural boundary contained multiple sub-divisions, all folios were dispatched simultaneously to the field, and the field crew determined the pertinent report to enumerate and cross referenced the related segregations.

For instance, Mr. Jones owned Lots 1, 2 and 3, with buildings on Lot 2. The Field worker enumerated only the land usage on the field sheet for Lots 1 and 3, but added: "See Lot 2 for Building Appraisal," and on Lot 2 was added: "See Lots 1 and 3." This cross reference not only simplified the work in the field but also proved of tremendous value to the sponsor.

To expedite completion of any one section, particularly in heavily populated districts with their many segregations and buildings, these sections were broken down into quarter sections or city blocks, always retaining the natural boundary. Section 1 in any given township was assembled before Section 2. The perimeter of Section 1 was checked for natural boundaries and any unnecessary overlapping was duly added to the margin of the map, or taken out and transferred to the adjacent section and specifically noted,—"This portion of Section 2 is assembled with Section 1 for enumerating purposes only," thus again avoiding the possibility of a second crew contacting the owner of one site contained in two or more sections. Section 1 then preceded Section 2 through the entire project.

The average section of land contains several sub-divisions and un-

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platted areas. The field sheet folio was bound alphabetically by subdivisions, and numerically by Blocks and Lots. The unplatted, numerically by tax lot number. All folios were numbered from 1 up, no two alike, in the entire county and were numbered consecutively by sections.

This confined all folios of one section in one group, and as Section 1 was assembled before Section 2, a numerical control automatically followed.

The individual folder had not over 30 segregations of property, which allowed insertion of supplemental appraisal forms for additional buildings on the same tract without abusing the packaging ability of the folio cover. By limiting the number of sheets and staggering the accompanying building photographs, the folio remained even and uniform, which was particularly desirable in filing and bundling.

Too much stress cannot be laid on the positive control of each appraisal sheet and folio. Responsibility was placed on each department and worker, that each and every form proceeded in uniform manner and returned when completed. In a project of this size, experience has proven the wisdom of these controls, and the necessity of each appraisal sheet or folio proceeding in uniform manner.

Receipts received upon delivery of the P.-I. maps, field appraisal folios, indexes, catalogues, and return of aerial pictures, completed the duty of the Assembly Department.

To digress: During the early months of King County's Land Use Survey, while the aerial pictures were new, and few if any changes had been made on the ground, not shown in the pictures, field enumerators reported sites and tracts as unimproved, that had buildings of record in the sponsor's old files, and checking of these aerial pictures in the office enabled the project to determine whether the field enumerator or the record was in error. But, as these pictures became obsolete, it was sometimes necessary to return the appraisal to the field for checking, causing added expense and interruption of the normal flow of folios. Then a special stamp (a common lead pencil eraser carved into a star) was devised, for the field enumerating report, calling attention of the field worker that a building was of record on the site, necessitating special remarks, such as:

1. "Building burned down."
2. "Building removed, valueless foundation only remains."
3. "Building not on this site. See Lot No. 2 for appraisal, etc."

To avoid "curb stone" appraising, and the personal element entering into this revaluation of property, jeopardizing the "Equalization" phase no other available data was given the field workers, it being deemed more prudent to obtain all new appraisal data from an entire new inventory. The available data would have been the old building card—but this would encourage curb-stone appraising for the exterior, and guessing, for the interior appointments—the old assessed valuation possibly unduly influencing the field worker in his reproduction computation.

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The Assembly Department can, of course, have no advance information as to what the field enumerator may encounter in his work, except from the admittedly erroneous available records. In communities with many buildings on each site,—auto cabins, summer resorts, etc.—the field was allowed to divide any given folio into two or more parts, identifying same as Folio No.— and ½. Due notification was then given the Control Department, so catalogues and indexes could be corrected to conform to these newly created folios, causing no undue confusion in normal project routine.

### CONTROL DEPARTMENT

The control department was the hub of all project operations, and while not a producing department, lubricated the wheels of project progress and acted as a brake against inroads of disruption.

Upon acceptance of any given section of land completely assembled, an entry was immediately made on a visible record control. \*Maps and field sheet folios were filed and provisions made for the growth and maintenance of indexes and catalogs. From these indexes was created a ledger for folio routing, dispatching, control and warning of impending bottlenecks, as shown (Fig. 15).

Folio No.	Assembled	Field		Review Board		Land		Typing		Outline		Posting		Sponsor
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	
1	1-2-41	1-3	1-10	1-11	1-14	1-15	1-20	1-21	1-30	2-1	2-3	2-4	2-15	2-16
2	1-2	1-3	1-10	1-11	1-14	1-15	1-20	1-21	1-30	2-1	2-3	2-4	2-15	2-16
3	1-2	1-3	1-10	1-11	1-14	1-15	1-20	1-21	1-30	2-1	2-3	2-4	2-15	2-16
4	1-2	1-3												
5	1-2	1-3	1-10	1-11	1-14	1-15	1-20	1-21	1-30	2-1	2-3	2-4	2-15	2-16
6	1-4	1-5	1-12	1-13	1-15	1-16	1-21	1-22	1-30	2-1	2-3	2-4	2-15	2-16
7	1-4	1-5	1-12	1-13	1-15	1-16	1-21	1-22						
8	1-4	1-5	1-12	1-13	1-15	1-16	1-21	1-22						
9	1-5	1-7	1-13	1-14	1-15	1-17	1-23	1-24						
10	1-5	1-7	1-13	1-14	1-15	1-17	1-23	1-24	1-30	2-1	2-3	2-4	2-15	2-16
11	1-5	1-7	1-13	1-14	1-15	1-17	1-23	1-24						
12	1-5	1-7	1-13	1-14	1-15	1-17	1-23	1-24						
13	1-5	1-7	1-13	1-14	1-15	1-17	1-23	1-24						
14	1-5	1-7	1-13	1-14	1-15	1-17	1-23	1-24	1-30	2-1	2-3	2-4	2-15	2-16

Figure 15

NOTE: Notice folio No. 4 suggests something wrong in the field. Also note the typing department is developing a bottleneck. By routing only the entire section through departments, individual folios of course will not be held up, but the group of folios will reflect as above.

\*The most practical visible control was a map of King County divided into sections. As a section progressed through the department, code shadings were entered in the corresponding sections, and when completed, a solid color vividly portrayed the project status. A thermometer and line charts were also satisfactorily used.

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When a sufficient number of sections of land had been assembled, the field department was immediately instituted. The Control Department acted as the field contact with the office, and supplies and materials were ordered through, prepared and delivered by it, particularly films and photographs. A special delivery of films was inaugurated, the roll exposed by the field crew sent in daily for developing,—developed and returned the following day and attached to the appraisal the second day, which made pictures available while the appraisal was still fresh in the mind of the field worker. To insure a fresh stock and discourage private use, the field photographer was confined to a reserve stock not exceeding a dozen rolls of film.

When the enumerated sections were returned from the field, dates were entered in the ledger, the visible control noted, and the folio routed through the balance of the project.

Each field crew needed at least three working units; one being enumerated, one being checked and photos attached, and one on its way to or from the field. The field office to have a few extra units with which to provide a full day's work where only a few hours may remain in a current area.

### STATISTICS

Desired statistics were gathered in this department during the tenure of less than 200 workers. At one time an attempt was made to obtain the actual cost per operation, but because so many operations and intermingled relationships with other projects had gone before, the findings could not be accurate and the work was deleted from the Land Use Survey. Temporary figures were obtained for communities and districts, as requests for partial information was received, and were tabulated in any and/or all departments, mostly those having the least bottleneck, making only an overall cost analysis practicable. (See Cost Analysis).

In the end this project determined the record of acreage under all usage, by individual ownership only, before and after the Land Use Survey. Totals of buildings—before and after—plus the assessed valuation of buildings and the assessed valuations of land were continued on and recapitulated into totals.

Upon completion of desired statistics this department supervised their filing alphabetically, by subdivision in incorporated towns and rural districts. Acreage was filed numerically. Block separators were prepared by the file clerk. Abstracts and old building cards were cancelled and marked: "See Permanent Record Cards," and receipts were prepared for the sponsor's signature and delivered to the supervisor for action.

As folios were routed through and completed by the project, numerically and geographically, these, when filed as finished, automatically arranged themselves in order. Simultaneous with the delivery of the permanent record cards all folios and indexes were turned over to the sponsor ready to use.

## PROJECT PROCEDURE

### THE FIELD

As the success or failure of this type of project depends upon the FIELD, it is necessary that great care be exercised in the selection of personnel, as haphazard and/or inaccurate field enumerating produce like results. The field foreman, responsible for the success of the work, in addition to a thorough knowledge of project requirements and routine, must have exceptional ability as a personnel director.

Attention is called to some of the—for want of a better word—"PROBLEMS" encountered in conducting the field crews, together with their solutions. These, encountered daily for four and a half years, became part of the History of Project Procedure, which was necessarily based partially on the unexpected happenings.

Naturally, could all have been anticipated—could they have occurred the previous or following day—many would have been eliminated, or project routine simplified, but their very nature precluding this, demanded their inclusion in project routine, and their recognition and acceptance in somewhat the order in which encountered, and their solution is herein portrayed.

#### FIRST: EQUIPMENT

While not an operating problem, the cost of equipment must be considered in determining the size of personnel. Besides folios and maps of the assigned territory, each crew should have a road (township) map, engineer's chain in rural communities, 50-foot tape measure for measuring buildings, six-foot flexible rule for measuring ceiling heights, floor joists, etc., six-inch transparent rule for drawing building perimeters on appraisal sheets, triangular scales for scaling land segregations, spotting of buildings, etc., camera and film, supplemental appraisal forms, appraisal charts, manuals of procedure and bulletins, clip boards, scrap paper and pencils.

#### SECOND: TRAINING AND INSTRUCTION

Each piece of property is an individual appraisal, and while many of the items to be enumerated are fairly uniform in many respects, each tract and/or building has its individual peculiarities.

As these peculiarities arise in each appraisal, a red tape, militaristic organization, with too rigid rules and methods of procedure, frightened the ordinary worker and encouraged "bluffing" through a report, or tended toward the forging of minor items because of unfamiliarity with these irregularities. Therefore, the project organization, particularly the FIELD, was set up to develop the highest degree of esprit-de-corps between workers and leaders.

The foreman was provided with answers covering every anticipated question, making it easier for him to guide the individual enumerator through new and unfamiliar situations. The project believed it advisable to spend additional time in instruction, rather than rectifying possible

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errors of a worker "guessing" his way through unforeseen situations, and by reducing formalities to a workable minimum a comradery was developed that paid big dividends to the project.

All field workers must understand certain fundamentals and have a knowledge of legal land descriptions. While the project did not expect nor attempt to teach each worker the many details and technical terms encountered in these descriptions, by emphasizing a few cardinal precepts, the personnel was satisfactorily instructed with the essentials in a reasonable time. This in addition to the original preliminary training. See Appendix "A."

Subdivisions, with their definition and use, were explained. Blocks, lots and fractional segregations thereof, and the various ways of describing these segregations was given in detail. A satisfactory lesson was for the students to describe each lot in a block by portions of the block and not as individual lots. This, particularly, because many of the larger platted tracts had been subdivided, with several ownerships, without the formality of replatting into smaller lots. Figure 16 aided the instructor in transmitting this information.

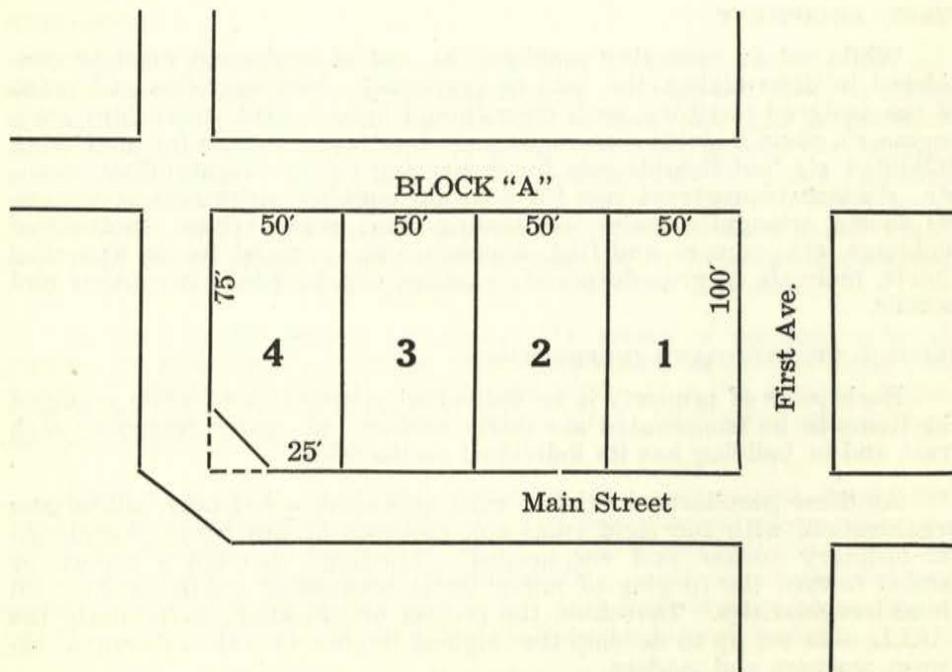


Figure 16

Lot 1, in the above figure, could be described as the East 50' of Block A. or could be described as "beginning at the SE corner of Block A, thence W 50', thence N 100', thence

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E 50', thence S 100' to beginning or—it could be described as beginning at the NW corner of the intersection of Main St. and First Ave. thence around to beginning.

Lot 2 could be described as the W 50' of the E 100' of Block A, or any of the corresponding metes and bounds description as describing Lot 1.

Lot 3 could be described as the W 50' of the E 150' of Block A, or it could be described as the E 50' of the W 100' of Block A.

Lot 4, for our purpose—presuming we had been provided with an engineer's map—could be described as the W 50', less portion for street, of Block A; or it could be described more in detail by beginning 175' west of the northwest corner of the intersection of Main St. and First Ave. and thence by metes and bounds around the said tract. Or, knowing the location of Block A and thence, by directions and distances around the tract.

When time permitted and education of workers necessitated, this was enlarged by segregating the lots—for instance, Lot 1 was divided into a north and south half and descriptions given, both in fractional dimensions and footage. The north half of Lot 1 then divided into an east and west half, and the same type description carried out. These descriptions were all correct, and were encountered in all variations on the sponsor's records. If all descriptions could have been re-edited and unified this added instruction, of course, would have been superfluous.

Instructions were also given, describing and/or reading irregular tract descriptions, showing how diagonal lines, curves, radii and arcs were derived, and described by degrees, minutes and seconds. This more intricate instruction was confined to the foremen and crew leaders.

All field workers should understand the meaning of Townships, Ranges, Sections and the numerical order of their locations. Particularly for unplatted properties. They should also know dimensions and number of acres contained therein, and also in the fractional break-downs of sections. This general information, already given the workers in the original training period (See Fig. 7) was enlarged upon in this department.

It takes a vivid imagination to construe personnel training as a project problem rather than operating routine. To illustrate, in defense of this interpretation—the unexpected re-enumeration of the City of Seattle, as mentioned in the Foreword, necessitated additional schooling, and necessary procedure adjustments, not before recognized, were made and incorporated in the project, and continued until completion.

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Fig. 17 portrays a sample problem satisfactorily used by the project in furthering this instruction and testing the knowledge of the workers. When answered correctly, it was reasonably sure the worker could orient himself in the field, and the segregation on the P.-I. map.

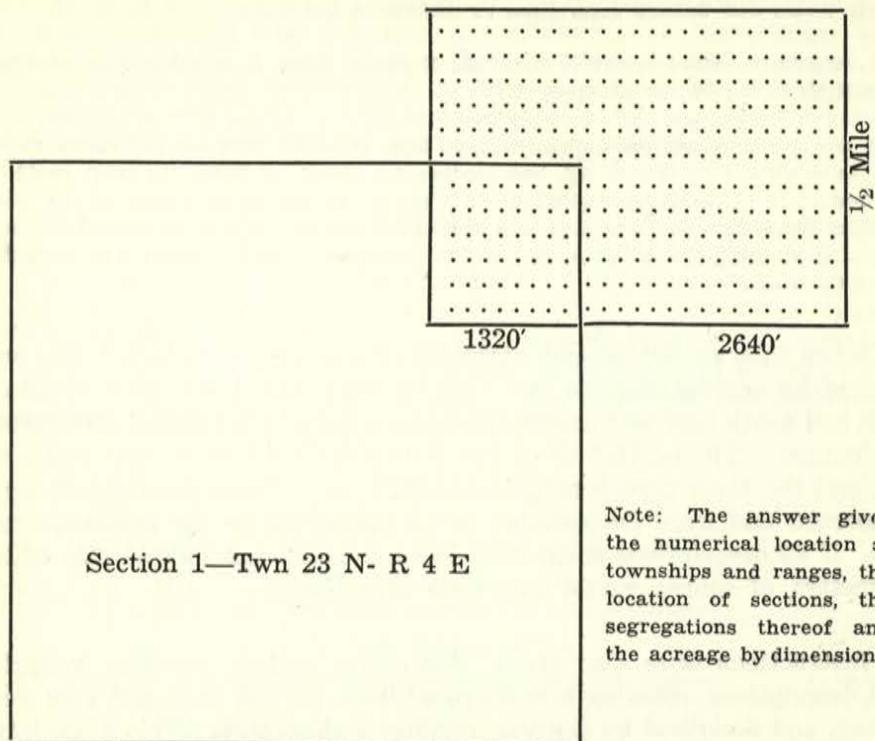


Figure 17

### THE SAMPLE PROBLEM:

**Ques.** Describe by fractional acreage description, the shaded area, complete with section township and range. Give acreage in each section.

To stimulate class room interest, the instructor sometimes varied the question—"Farmer Brown who just died, owned the shaded area as outlined, and willed equalled portions of his ranch to the widow and five sons." The one-sixth of the ranch shown in Section 1, Township 23, Range 4, was given to the widow. Describe clockwise, the widow's share and the share each son received. Each parcel to be completely described within itself, with the number of acres contained therein.

### ANSWER:

Widow receives	N 1320' of	E. 1320'	of Sec. 1 T 23N R 4 E	40 Acres
Son No. 1 receives	SE $\frac{1}{4}$ of	SE $\frac{1}{4}$	of Sec. 36 T 24N R 4 E	40 Acres
Son No. 2 receives	SW $\frac{1}{4}$ of	SW $\frac{1}{4}$	of Sec. 31 T 24N R 5 E	40 Acres
Son No. 3 receives	SE $\frac{1}{4}$ of	SW $\frac{1}{4}$	of Sec. 31 T 24N R 5 E	40 Acres
Son No. 4 receives	NE $\frac{1}{4}$ of	NW $\frac{1}{4}$	of Sec. 6 T 23N R 5 E	40 Acres
Son No. 5 receives	NW $\frac{1}{4}$ of	NW $\frac{1}{4}$	of Sec. 6 T 23N R 5 E	40 Acres

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### THIRD: TRANSPORTATION

The organization chart (appendix B) calls for 25 field crews, which should have 25 privately-owned cars and a few extras to replace those absent or temporarily out of commission. Sufficient transportation was always available, as mileage allowance paid by the sponsor, was desired by the workers.

To avoid dissatisfaction, all cars maintained an average number of miles travelled, based on distances to and from assignments.

The questions involved in the dovetailing of the ability of workers with available transportation, plus average travel, required much finesse on the part of the field director—for instance, if the area to be enumerated was predominantly "commercial" and transportation was available only by workers without commercial knowledge, many adjustments in crew arrangement had to be immediately made, to satisfactorily enumerate these commercial institutions without leaving workers with other ability, temporarily not in demand.

### FOURTH: ABILITIES

Quoting from the organization chart, "Each crew should have transportation, a junior engineer, a junior draftsman, a mathematician, a good penman, a photographer and a leader," as a reminder—these, with fluctuating quotas, voluntary absences, workers with varying abilities in any and all lines, soon made apparent the impossibility of arranging assignments of crews very far in advance. Maintenance of worker satisfaction required a high personnel directing ability on the part of the field foreman.

### FIFTH: GENERAL

The ability and personality of crews to work together harmoniously was also considered in the project when it was deemed feasible to operate in an unmilitaristic manner. Assignments to territory to be enumerated, some predominantly lower class residential, some exclusive, with the added problems of intricate appraisal, or entirely commercial, plus aforementioned transportation and other influences, were considered in crew arrangements and assignments. In rural areas, often with rough terrain, the physical condition of the worker was given due consideration.

Locker space was provided in the field office for each crew, expediting daily assignments and avoiding the temptation of private use of sponsor's equipment—particularly cameras and film over the week ends.

Promotions, in the main to crew leaders, were made from crews showing the greatest efficiency. These promotions, of course, disrupted good crews, but the improved morale and greater efforts to achieve these promotions more than offset this temporary disruption.

Field crews, particularly the enumerators who entered buildings, were versed in current events, and, granted that workers should not discuss controversial subjects or politics, with building occupants, on the other hand the general public resented the apparent rudeness when workers were confined to the one reply, "me no savee." These and additional problems, of diverse character, prohibited a too rigid straight line text

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book, though general rules, regulations and procedures must be laid down in conducting a project of this type.

In further illustrating, each appraisal being an unknown quantity before enumerating, the personnel was kept flexible. For instance, as an appraisal may contain several residences, of different construction,—have no improvements—or commercial buildings, the ability of the worker to properly enumerate the various types of construction, was deemed of more importance than a “prophesied procedure.”

Further illustrating—during the recently completed Land Use Survey with the nightmarish experience of using unbound field reports, before the acquisition of folio covers, still fresh in the project mind, and the dire consequences threatened every worker who loosened or removed a field sheet from the folder—while a good order—if enforced, prohibited the insertion of a secondary building appraisal sheet in its numerical order, thus confining the folio to one worker, which increased enumerating costs. Also the worker, though an exceptional mathematician, might have no sense of proportionate values—both of which were essential to a successful enumerator. Thus the rule of “no loose sheets,” while never officially countermanded, was not recognized, as pertaining to the field, except upon completion of the enumerating, when the crew captain was made responsible for the completed and intact folio.

As the better “commercial” men were few, they operated more as free lances, and besides assignments to strictly commercial areas, assisted the ordinary crew when encountering buildings referred to as “too tough,” enabling them to proceed in regular manner with the “run of the mill” enumerating, rather than be held up by intricate and unfamiliar appraisals.

The danger of “getting out of line” with this flexibility, of course, is a project problem.

### FIELD OPERATION

As it is impracticable to attempt to list all the extraordinary events occurring in over four years of project operation, or to condense these events into general statements, we submit a few of the outstanding occurrences in detail, and will assume a hypothetical day’s operation during the rainy season.

The Field office opened at 8:30 a. m. to prepare for 9:00 o’clock operation—earlier hours having been tried and discontinued because of inconvenience to building occupants.

First, the crews ordinarily arranged themselves as assigned the previous day—on our hypothetical morning, crew leader James Brix, who the day before slipped on a slimy stairway spraining his back, did not report, leaving his crew without a captain.

Second, Crew No. 2, had completed its section, except for the “lumber mill,” regarded as “too tough.” The main office “crying for work” sug-

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gested immediate completion of this section, and the only capable "mill man"—crew captain—was transferred to clean up this section, leaving a second crew minus a captain.

Third,—Charlie Yoakum, a commercial man working the town of Fall City, needed only one assistant, releasing another crew member.

Fourth. A worker failed to report because of inclement weather, his crew enumerating a new sub-division,—a two-man crew was sufficient—and his absence caused no assignment problem, but necessitated other detail, as his failure to report because of inclement weather, suggests consideration for the health of the worker, and possible inside work.

Fifth. This inclement weather necessitated many photograph retakes, as, due to film purchased some two or three years previous getting rather stale, most photographers were under-exposing their shots. Camera No. 6 went "haywire"—but this breakdown and under exposure were not detected until the negatives were developed by the photographic department. So Max Chute, (crew leader and photographer extraordinary) was assigned to clean up these retakes. He was also assigned to complete Section 26 which had been held up for photograph of a mine necessitating special flash photography.

The obvious solution of the above problems—mostly crews without a leader—was to rearrange the men into temporary crews and assign them to new territories, or to create a "trouble shooting" department. But both obvious solutions had their peculiarities. In reverse, "trouble crews" had been used but the unexpected did not appear with regularity. There was either too much trouble, or none at all.

For the other solution—temporary crews—let us portray snatches of project correspondence from the field foreman to the project supervisor, re-edited to fit this report.

"Yesterday, I made my periodic check," states the field foreman, "of the three crew leaders on 15 day leave for private employment, and it looks as if all three have found steady private employment, definitely two of them. Their crews have been operating with acting crew leaders, who are beginning to grumble about their re-classification. Also this morning I had to assign three more crew leaders, enclosed please find 490's (Occupational recommendation), and had the timekeeper give the "Oaths of Allegiance" in the hopes they will be reclassified.

"I am informed by the grapevine that Pete Smith, the best of the acting crew captains gets his "403 for 18 months" (dismissal) in a couple of weeks—if so, will need someone else as crew leader."

Also please note Production Report of last Wednesday is nil for field enumeration. It stormed that day and we stayed in the office, checking previous work, and had further instruction. I could not reach you by 'phone, but knew we would do lots of damage by tracking mud and snow into buildings, if working in the field."

So much for the assignments of crews, all of a temporary nature, but a continuous project operating problem. When recognized as such and adjustments made to fit the capabilities of the available personnel, coin-

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cident with mandatory rules and regulations, they were confined to a temporary nature and solved as encountered. Regular crew assignments—the big majority—will be found in later pages.

Continuing our hypothetical day during the rainy season, a different operating problem appeared, the solution of which may be interesting and prove descriptive in this report, the solution as portrayed below, in bulletin form to the Foreman.

### THE HAPPENING:

The rain and high water caused the river to overflow its course in the Southwest corner of Section No. 10, and the Northwest corner of the adjoining Section 15, during field operation.

### THE STATUS:

Section 10 was partially enumerated. Section 15 untouched. Section 10 contained many segregations and improvements, discouraging re-working the entire area, but obviously not acceptable to the sponsor as our reports would not conform to the actualities on the ground. Three of the summer cottages, previously appraised, having been washed away during the high water, changed our enumeration from an "improved with buildings" to an "unimproved" tract. Production totals correctly claimed for the appraisal of these buildings of course could not coincide with the final project results. The total cost of this extra enumeration, though infinitesimal to the project as a whole, would be tremendously increased in the portion to be re-worked.

### THE SOLUTION:

"After your best surveyors have determined the new river banks, block out the portion on map of Section 10 affected and attach corrected copy thereto, showing the old and new river beds. (This will necessitate a draftsman, tracer, instruments and mapping paper.) Be particularly careful of these measurements and new acreage, as the sponsor will have to place a new value on each parcel. This after determining who lost land, who gained land, or who now has land on both sides of the river.

Proceed in the regular manner for the portion not enumerated in both Sections 10 and 15—tell what happened, and what you now find on each appraisal sheet, particularly those with the improvement stamp. Do not change any legal description. For those legals that have the old river bank as a boundary, attach a suggested corrected copy. The portion of Section 10 previously worked, but now of different character before completion, is still the project responsibility and will have to be re-worked. Transfer the old legal description and the fee owner's name to a new appraisal form, cancel the old and proceed as new work.

Notify the photo department so they may cancel the negatives of the three buildings, now driftwood in the bay. Other departments were consulted in the solution of this problem and have been instructed in their routine.

Allow duplicate credits to the workers, but explain by foot note the variations in your total report."

This, as all project problems, was given due deliberation, particularly the effect its solution may have on other departments. Conferences were held with sponsor's representative to learn their needs and desires, meanwhile remaining in line with WPA Rules and Regulations. This particular case may warrant official correspondence with copies to all affected parties.

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### REFUSED ADMITTANCE

With adverse, or no publicity, and perhaps even with favorable publicity, occasionally when the field worker introduces himself and attempts to enumerate the interior of buildings, he may be rebuffed with "No, you can't come in." The easiest way out, of course, would be to drop it in the sponsor's lap—but, as this rebuff may occur 18 miles from nowhere, and be a very isolated building, if as much information as possible were not obtained, the cost to the sponsor in recovering this same ground would be prohibitive.

While refused permission to enter the building, very little diplomacy was required to get permission to photograph the buildings and gather the exterior construction features and land usage. The attitude of the sponsor, that the occupant was trying to hide value by refusing admittance, and his instructions to the worker to "guess-timate every possible interior feature," was very satisfactory to the project. The sponsor later, by correspondence, notified the owner of his action, and if this correspondence did not elicit a reply, the ensuing tax statement did.

This action, modified, applied to "not at homes" and "vacancies," particularly in low-valued suburban properties where the related cost of transportation was a big factor. In the cities and for higher values, special crews took care of these, by evening appointments, keys from real estate brokers, etc.

So much for the unexpected. Each little event had to be handled in itself. It proved more advisable to clean up these "damp spots" as they appeared, rather than let them accumulate until dim in the minds of the project and workers.

### CREW CONTACTS

All field crews were contacted daily at the scene of operation, special or very remote crews, excepted. This contact by the supervisor, foreman or chief assistant, was of two-fold purpose—first, to aid each crew unexpectedly encountering unfamiliar situations that may have been quite familiar to the project. Second, to check on each worker's application, particularly to insure similar routines being followed by all workers. In addition, such contacts inclined to discourage unauthorized absences.

To avoid unnecessary delay of running around an entire section in locating a crew, each leader prepared his location report and left it in the field office, as exhibited in Figure 18.

### ARRANGEMENT, SELECTION AND ASSIGNMENT OF FIELD CREW

Crew arrangement and assignments depended upon territory to be worked, type and number of buildings, location, land usage and available personnel. In cities close to the scene of operation, two-man crews were satisfactory; one for interior enumerating and one for gathering exterior data and measuring and photographing buildings.

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If home addresses are satisfactory identification for photographs, the camera man may operate independently of enumerators, which may be more advisable because of the cost of outfitting each crew with a camera, or the scarcity of photographers. But actual experience of the King County Land Use Survey using photographers individually and street addresses as identification, created unexpected additional work.

DAILY LOCATION REPORT		
CAPTAIN—John Smith	CREW NO.	DATE
SEC. 1	TWN. 24	R. 6
CREW—Ed Jones—Tom Brown		

Figure 18

As sponsor's records were kept by legal description, building addresses and street numbers were not sufficient identification, and much research work was necessitated in reconciling house numbers with legal descriptions, and transcribing this information to previously completed negatives and pictures.

Due to transportation costs, four, five and six men crews supplied with one automobile were used in remote districts. These larger crews in

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neavily populated remote districts, operated as sub crews, one photographer being sufficient. In sparsely settled remote districts, each sub crew needed an individual camera man, who was given extra duties. These larger crews were used only in remote districts where saving in transportation offset handicaps of workers operating in too crowded quarters.

Three men was the ideal suburban crew. The No. 1 man, the Crew Captain, to make the interior report, classify buildings, check legal descriptions, instruct and supervise the other two workers. The No. 2 man was the photographer—gathered the exterior data, enumerated simple out-buildings, measured and determined the area of acreage and land usage. The No. 3 man was the computer and tracer, and should also be a good penman and fairly artistic.

### ENUMERATING TECHNIQUE

As individual peculiarities of each of the 500,000 separate surveys cannot be portrayed in this history, the field technique in detail is shown of one picked at random. Let us accompany this ideal three-men crew making the field survey.

This, after completion, we find to be a ten-acre country home with a residence, garage, barn and chicken house, the land broken up with garden and lawn, orchard, pasture and swamp.

Presuming this to be the second appraisal of the day, while the actual enumerating and inventory is being taken, the No. 3 man is computing and completing the first daily appraisal.

Arriving at the scene of operation, the No. 1 man orients the site to be enumerated—for instance, Tax Lot 147, of Section 20, Township 23, Range 4—this, by referring to his maps. Opening the Field appraisal folio to that particular sheet, he checks the legal description, comparing same with his maps and location on the ground, and finding everything in order, with his assistant, the No. 2 man,—strong physically and dressed for fairly rough work—enters the site.

Sizing up the tract and noting more exterior than interior work, No. 1 instructs No. 2 to appraise the barn, apparently of simple construction, for experience, valuable both to the project and the worker—identifying it as building "No. B," also instructing him to photograph the house and barn only, as the garage and chicken house will be enumerated on the residential appraisal form not necessitating a picture. And also instructs leaving the garage and chicken house until the last, which simple buildings either or both can enumerate.

No. 1 approaches the residence and identifies himself with the occupant \* the fee ownership simplifying his approach. Not until he explains that an aide will be busy outside, will No. 2 proceed with his work.

\*Regulations compelled the sponsor's deputy to have made a previous appointment but this was unsatisfactory as appointments could never be accurately timed, resulting in confusion. Alternatives could be: permission for WPA to contact the occupant, or the sponsor to employ the crew leader.

## PROJECT PROCEDURE

Upon entering the residence, No. 1 enumerated the field sheet. The occupant is interrogated as to date of construction, rent paid, if tenant occupied, and other data necessary for the report.

Comparison of the owner's old tax statement and the appraisal forms, greatly aided field spotting in areas of indeterminate property boundaries.

The interior construction of the residence is then enumerated by No. 1, until all residential data is gathered—in this case the main building. He also classifies and depreciates all buildings at this time, for the computer.

The main building being enumerated before No. 2 has completed his routine, No. 1 enumerates the garage and chicken house, as "other buildings," in the space provided on the main appraisal sheet. An extra tape measure makes it possible for No. 1 to immediately compute the reproduction cost of these simple out-buildings from sponsor provided factors, and, allowing proper depreciation, he can conclude the appraisal, thus assisting No. 3, who, let us presume, is very busy.

No. 2 first measured the residence, complete with all bays, overhangs, porches, ells and angles, drawing measurements roughly to scale on scratch paper, together with dimensions later given to No. 3 for computation and transcription to the main appraisal form. Setting his camera up on a tripod, for accuracy, he first photographs the main building, and then the barn, identifying the shot numbers on a photographer's form, as exhibited in Fig. 19, which is dispatched to the photographic laboratory with the entire roll of exposed film.

PHOTOGRAPH				
CAMERA NO. _____		_____ DATE _____		
SHOT NO.	TYPE	BLDG. NO.	LEGAL	ADDRESS REMARKS
1				Double Exposure
2	Res.	'A'	(147) Sec. 20-23-4	15803-12th So.
3	Barn	'B'	(147) Sec. 20-23-4	15803-12th So.
4				
5				
6				
7				

Figure 19

No provision being made for photographing minor outbuildings—in this case the garage and chicken house—the barn being of sufficient size and value, was enumerated on a supplemental sheet and photographed.

Had this tract been of uniform use and verification by sight could have been made from the road, No. 2 would measure the garage and chicken house and place these measurements, with a rough building outline, on a piece of scratch paper which No. 3 would transcribe to the main

## PROJECT PROCEDURE

field report. But this not being the case it was necessary to traverse the land to determine the acreage under the various uses. No. 2 transcribes his findings to the land usage report (see Figure 14) and totals are entered by No. 3.

Returning to the buildings—No. 2 enumerated the barn on the proper form (Fig. 20). This form is identified by a synopsised legal description with fee owner's name, copied from the original, and separated, by earmarking it "SUPPLEMENTAL SHEET 'A' BUILDING B" and when completed, it is bound into the folio immediately following the original.

Land values prepared by the sponsor, unlike building values, were not available for field crews, therefore, no computations were made by the enumerator. The entire field land use inventory was necessary to the sponsor to determine these land values, and computations of assessed valuation were later made by workers in the land department.

Because of the influence schools, transportation, local street improvements, nationalities of neighbors, etc., had on real estate valuation this entire inventory was necessary to the sponsor in determining values. It was impossible to state beforehand that all river-bottom garden land was worth \$500 per acre, when one tract was adjacent to markets, traversed with railroads and highways, and another with identical soil, practically inaccessible, between two mountain ranges.

When buildings were completed, worker No. 2 completes the land use report, in this case determined by measuring the portions under the various usages—i. e., garden and lawn, pasture and swamp. In lower priced land, measurement was made by "stepping off;" more valuable tracts were chained.

The findings of No. 1 and No. 2 are delivered to No. 3 for final computations and transcription of data to maps, and No. 1 and No. 2 then proceed to the next site—No. 3 completing his detail.

Leaving appraisal forms in the folio until completion of enumeration, provided a solid base upon which to write, but when enumerated they were removed from the folio for use of No. 3, who was provided with automobile clip boards—one to hold the maps and one to rest on the steering wheel, as a desk.

On the pertinent field sheet, No. 3 outlines exactly to scale, the perimeter and dimensions of the building, transcribed from the rough outline on scratch paper. The land usage data, transferred to the land map, developed into a mural of the entire section, as roads and slopes extended from segregation to segregation.

The buildings were reproduced and depreciated for usage—later explained. No. 3 spots the buildings, drawn roughly to scale, on the map,

## PROJECT PROCEDURE

(i20) FARM BUILDINGS Sheds, Barns, Chicken Houses, Green Houses, Pump Houses

1. DISTRICT	2. ADDITION	FOLIO NO.	SHEET NO.
ORIG. COST	SECTION TWP. RANGE BLOCK	LOT	
3. ADDRESS			
4. FEE OWNER		CONT. PURCHASER	
5. ARCHITECT		CONTRACTOR	

TYPE	CEILING HEIGHTS	ROOF	REFRIG.	PUMPS
and USE	1st	Tar & G.	Size	Kind
No. Stories	2nd	Comp.	Len.	
No. Rooms	3rd	Shingle	Wid.	Lift
Loft	Loft	Shake	Hgt.	H. P.
<b>FOUNDATION</b>	Diam.	Bd. & Bat.	Insul.	
Post & Pier		Lam.	Tonnage	<b>FENCE</b>
Concrete	<b>CONVEYORS</b>	Cor. Iron	Give Drawing	Kind
<b>BASEMENT</b>	Kind	Glass	of Const.	Hgt.
Size		Quads.		Lin. Ft.
Floor				
Rooms				
Plast. Ceiled	Const. Single	Double	Solid	
<b>EXTERIOR</b>	Const. very cheap	Cheap	Med	Good
Frame	Bldg. Finished	Unfinished		
B. Ven. Solid	Year Built	Remodeled		
Concrete	Effective Age	Future Life		
Metal Tile	Depreciation Cond.	%		
Fr. Con. Stucco.	<b>CLASS</b>			
Glass	<b>REPRODUCTION</b>			
<b>INTERIOR</b>				
Post & Beam				
No. Part Show				
Kind				
No. of Trusses				
Kind Length				
Plastered Ceiled				
Open Finish				
No. Stanchions				
Metal Wood				
No. Sprinklers				
No. Nests Open No. Trap				
<b>PLUMBING</b>				
Drain Toilet				
Basin Sink				
W. Cups				
<b>FLOORS</b>				
Drt Conc.				
Wood				
Lam. Joist				
Gutters				
<b>HEATING</b>				
Kind				
Stoker Oil Burner				
Man Auto				
In Bldg. Adj. To				
<b>WIRING</b>				
Open Conduit				
No. Outlets				

AREA		TOTAL	
x			
x			
x			
x			
x			
<b>TOTAL SQ. FT.</b>		<b>A. V.</b>	

**REMARKS—THIS BLDG.**

**REMARKS—OTHER BLDGS.**

Other Bldg.	Const.	Floor	Roof	Sty.	Dims.	S.F. Area	Factor	Value	% Dep.	Deprec.	Net Value
					x			\$		\$	\$
					x			\$		\$	\$

Figure 20

## PROJECT PROCEDURE

identifying each as appraised on the field sheet, accurately spotted as exhibited in Figure 21.

Except for reproduction and depreciation, the temporary duties of the field crew in this site are completed. Photographs, checked for accuracy will later be attached to each appraisal. The forms just completed by No. 3 are rebound into the field folio upon receipt of the next appraisal,

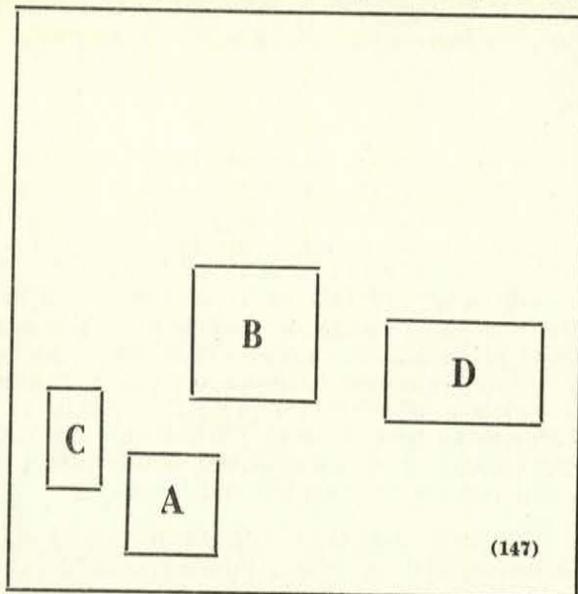


Figure 21

NOTE: This spotting enabled the sponsor in the future immediately to determine in the office what buildings, if any, are included, if a portion of this property is sold. Eliminating the expense of a field check that was necessary before this project.

confining "loose sheets" to a minimum. Exposed rolls of films are returned daily to the field office, but the entire section is retained by the crew until completely enumerated.

When finished, No. 1 returns all maps and appraisal forms to the field office and is assigned a new area.

### CHECKING

Every field sheet was checked for accuracy, and comparisons made between the enumeration, photographs and maps. Each roll of film, developed as exposed, enabled the checker, upon delivery of the section by the field crew, to begin his routine, photographs of a few buildings only—the last day's enumerating—not developed.

The checking routine emphasized comparison of exterior building appointments and land uses—as sometimes appearing in the background—

## PROJECT PROCEDURE

with the photograph. The mathematical computations were proven. The buildings as spotted were checked for a corresponding appraisal—the appraisal was checked back to verify spotting. Classifications and computations were compared with a photographic classification chart, and any variance proven by the enumerator, or the appraisal rejected.

When satisfied the appraisals were complete and accurate, all folios in the section were simultaneously forwarded to the control department for the balance of routine.

### APPRAISALS

This report will not attempt to debate for or against any particular appraisal system, but portrays the system used successfully to overcome the statement in the Washington Tax Commission Manual, "Inequalities in real property assessments do not arise out of the fault of the law itself—The Statute requires that each piece of property be assessed at 50% of its true and fair value in money. It is equally clear that they do arise in the process of ascertaining the actual values of properties as bases for assessed values. Technically, inequitable assessments generally result from one or more of three causes: inadequate basic data, improper use of basic data and the widely varying ideas of different appraisers as to true values." Whether appraisal system A, B or C is used in appraising is inconsequential, as all values, determined on the same basis, will remain comparable and equitable.

Commercial and residential land values were based and computed on front foot value, influenced by street intersections, depth of lot, street and public improvements, etc., as given in "Principle of real estate appraising," by John A. Zangerle.

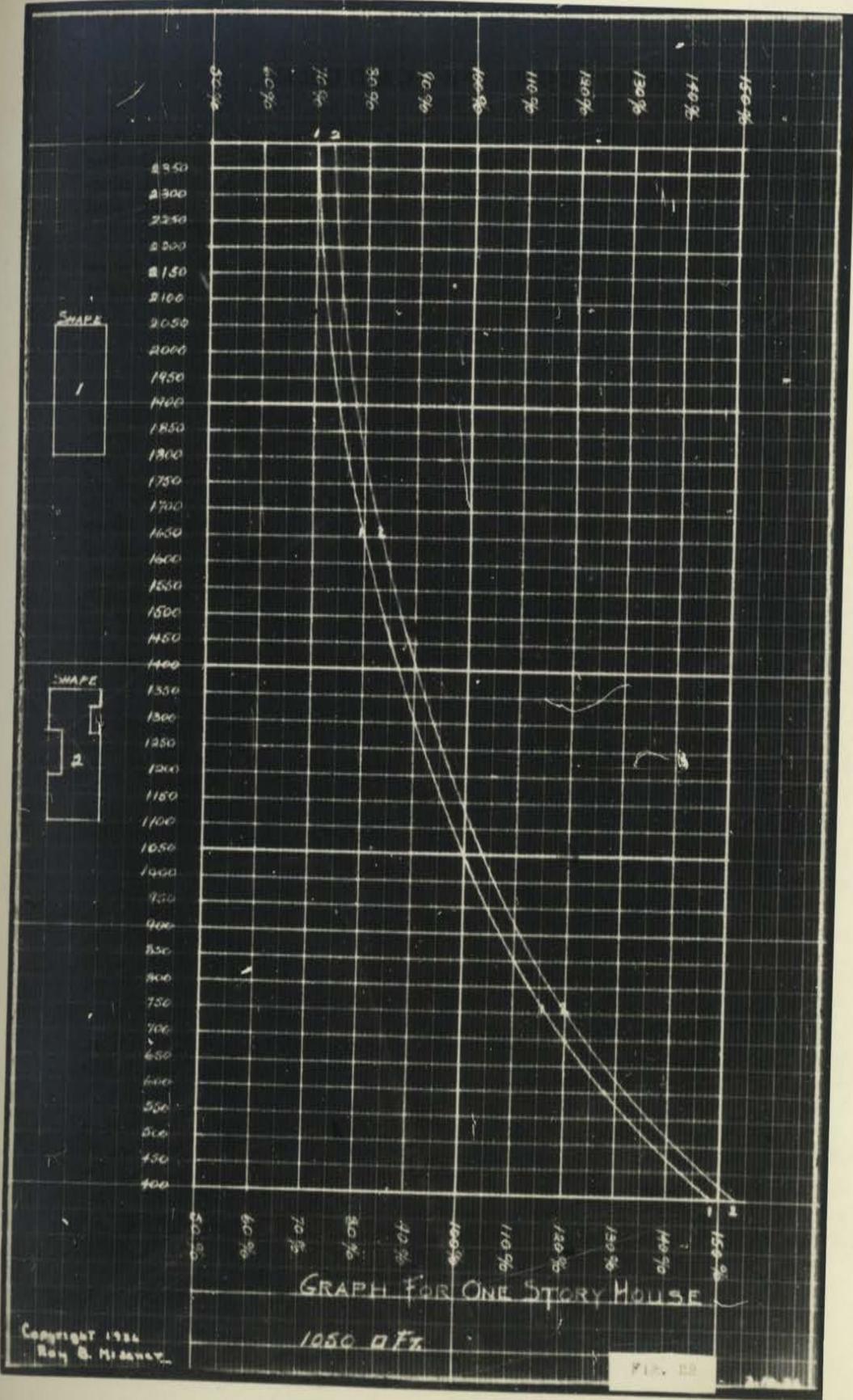
Front foot values were placed by the sponsor on the site, and computed by the project, see "Land Department" for detail.

### BUILDINGS

With so many authorities using income as an appraisal base, we recognize its merits, but as this confined the work to a case by case appraisal, restraining its absorption into a production line project, we used the reproduction cost, less depreciation, as the revaluation basis of all buildings.

The reproduction cost was figured on a bill of materials, construction, labor and financing costs, with depreciation allowed for age, usage, obsolescence and economic suitability.

Realizing the improbability of obtaining estimators versed in building construction, simplified charts and graphs containing this information, based on "Building Appraisal Manual" by the Washington Tax Commission, providing basic cost per square foot of the average building of average size, of average appointments, different classifications providing for different construction, were furnished by the sponsor. This reduced proj-



## PROJECT PROCEDURE

ect duties to multiplying the square foot area of the building by the sponsor-furnished factor—adding for above, and deducting for below, average construction.

✓ Residences were confined to seven types as listed below:

- Class 1: The shack; single constructed on post and pier foundation, stove heat and no plumbing.
- Class 2: Slightly better construction, with plumbing, plastered walls, fair room arrangement. A very modest cottage type but superior to the shack.
- Class 3: Still a modest cottage, with concrete foundation, double construction, better room arrangement, built-in cupboards, etc.
- Class 4: Semi-modern bungalow, with concrete basement, fireplace, hot air coal and wood furnace, double fir flooring, etc.
- Class 5: Contract-built modern bungalow, with tile floor in bath, tile drain boards, hardwood floors, etc.
- Class 6: Architect-built modern residence, frame construction.
- Class 6-A Architect-built modern residence. Brick veneer construction.
- Class 7: Mansion.

The above classification chart, augmented with photographs of sample type average buildings, grouped on a cardboard, proved particularly useful in the field checking department. The sponsor provided the basic cost per square foot for each classification—for example, let us presume the sample residence more closely fits the "Class 4 Building," which the factors state will cost \$2.50 per square foot for the average size residence, with appointments as outlined in the chart.

NOTE: While this average size had been based on 1050 square feet simplified mathematics suggests basing the average on 1,000 square feet.

✓ Assuming our sample residence contains 900 square feet, this, multiplied by \$2.50, gives a reproduction cost of \$2,250, but, as the established price of certain fixtures, regardless of the size of house,—plumbing, whether in a 500 or 2000 square foot house—fireplace, based on height rather than square foot area, cost the same, this figure would be too low. On the other hand, twice as much lumber and labor will be required to floor 2000 as 1000 square feet of space.

Thus, three identical residences, except for size, computed on the same base, would appear as follows:

Building No. 1— 500 sq. ft. @ \$2.50 .....	\$1,250.00
Building No. 2—1000 sq. ft. @ \$2.50 .....	2,500.00
Building No. 3—2000 sq. ft. @ \$2.50 .....	5,000.00

This wide variation, obviously incorrect, was equalized by use of the percentage graph. (Fig. 22).

✓ The 500 square foot area of residence No. 1 shows as 142%, raising the basic factor of \$2.50 per square foot to \$3.55, which, multiplied by the square foot area gives a reproduction cost of \$1,775.00, rather than the \$1,250.00 portrayed above.

over The 2,000 square foot area of residence No. 3, shown as 78%, lowers

## PROJECT PROCEDURE

the basic factor of \$2.50, to \$1.95 per square foot, giving a reproduction cost of \$3,900.00, rather than \$5,000.00, obviously more in line.

These are exaggerated sizes, percentage variations lessening as they approach standard size. Adjustments were made on the square foot base rather than total costs, in the sponsor furnished factors.

In portraying let us return to the residence enumerated under: "The Field."

On closer checking, we find our residence to contain 900 square feet rather than average size of 1050. Our curve line chart shows 900 square feet to be 111%. This adds 11 per cent to our basic factor, changing it from \$2.50 to \$2.77.

Continuing, we find this house has no fireplace. Roughly worth \$120, reduced to cost per square foot, equals 13c. Our factor, now \$2.77, minus 13 for no fireplace, leaves \$2.64. Next we find an oil burner over and above the coal and wood furnace included in the original classification. Computing the value—\$270—of this oil burner into a square foot answer, we have 30c to add to our factor of \$2.64, now making it \$2.94.

Still presuming, we find this sample residence to have one hardwood floor and an extra set of plumbing in a one half basement, and add 4c for the floor and 7c for plumbing to our factor, now totaling \$3.05. The ori-

### REPRODUCTION COST Factor Make Up

Factor	Plus or Minus	Dimensions	S. F. Area	Factor	Cost
\$2.50	Size	20x25	500	\$	\$
+27	Size	10x20	200		\$
+30	Oil	10x20	200		\$
+07	Plumbing	x	900	2.89	\$2601.00
-13	Fireplace	Pch. x			\$
-16	Basement	Pch. x			\$
2.89				Total	\$
				Less Depreciation	\$
				Total	\$
				Other Buildings	\$
				Total Value (Full)	\$
				Assessed Valuation 50%	\$

Figure 23

ginal factor of a Class 4 house called for a full basement, so we deduct roughly \$150 or 16c per square foot for this particular building, leaving us a now final factor of \$2.89.

This has been rather lengthy to describe in narrative form. Actual practice has proven the workers soon automatically classify buildings and at the same time visualize the over and under average appointments. Reducing all variations from the original factor, confines the reproduction of this residence to one table appearing on the Field Sheet portrayed herein as (Fig. 23).

## PROJECT PROCEDURE

✓ Porches are extended as separate units. The sum of the main building, plus the porches equals the reproduction cost. To complete this example, let us presume the front porch is 5x7', estimated at \$1.00 per square foot and the rear porch 4x6' at \$.75, which adds \$53.00 to our building, making a total reproduction cost of \$2654.00, which is carried on to an assessed valuation.

A similar table is found on the reverse side of the field sheet, for later use of the Review Board.

### ✓ DEPRECIATIONS

Under the line "reproduction cost" we find "less depreciation." The sponsor furnished a depreciation chart (Fig. 24) to be used in conjunction with the classification chart. Building type Class No. 4 was estimated to have an average life of 40 years. The project then allowed 2½% per year depreciation for the actual age or the use the building had undergone.

Obsolescence and economic suitability depreciations were entirely the responsibility of the sponsor. Under the heading of "Remarks," when making the field enumeration we noted obsolete factors, undesirable neighborhood, lack of transportation, sewage and/or water, etc., for the sponsor's consideration, but the project did not allow for same. We did, however, go a little farther than actual age depreciation—by determining building usage—for instance, two identical houses built by the same builder at the same time. One has been owner-occupied since construction and kept in good repair—painted, roofed, good drainage and other improvements as needed. The other has been tenant-occupied since construction. The roof and basement leak, plaster on the walls broken, floors scratched and gutters and downspouts rotted away. Obviously the owner-occupied house is of more value than the tenant-occupied and, under normal upkeep will remain more valuable. Therefore, our depreciations were predicated more on the future life of each building than upon actual age.

Future life, deducted from the average life as determined by the sponsor, gave the project the allowable amount of depreciation.

✓ Our example house we find to be 16 years old, allowing 2½% per year, or 40% for depreciation, which is \$1,062.00 of the total reproduction cost. Extended on our sample table as follows:

Total	\$2654.00
Less depreciation	1062.00
Net	\$1592.00

Our next line is "Other Buildings." These "other buildings," reproduced and depreciated on their own tables are totaled and brought forward. Let us say they are worth \$700.00—added to our table as follows:

Total	\$2654.00
Less Depreciation	1062.00
Net	\$1592.00
Other Buildings	700.00
Total value (full)	\$2292.00
Assessed value 50%	\$1150.00

(The sponsor desired all A. V. S. to end in a cipher).

This completes the field work appraisal.

PROJECT PROCEDURE

DEPRECIATION CHART										
EFFECTIVE AGE AND FUTURE LIFE OF BUILDINGS										
Estimtd. Life	20	25	30	33	35	40	45	50	55	60
Yrly. Deprec.	5%	4%	3 <sup>1</sup> / <sub>3</sub> %	3%	2.85%	2 <sup>1</sup> / <sub>2</sub> %	2.22%	2%	1.81%	1.66%
2	10	8	7	6	6	5	4	4	4	3
3	15	12	10	9	9	7	7	6	5	5
4	20	16	13	12	11	10	9	8	7	7
5	25	20	17	15	14	12	11	10	9	8
6	30	24	20	18	17	15	13	12	11	10
7	35	28	23	21	18	18	16	14	13	12
8	40	32	27	24	23	20	18	16	14	13
9	45	36	30	27	26	23	20	18	16	15
10	50	40	32	30	28	25	22	20	18	17
11	55	44	37	33	31	27	24	22	20	18
12	60	48	40	36	34	30	27	24	21	20
13	65	52	43	39	37	32	29	26	24	22
14	70	56	47	42	40	35	31	28	25	23
15	75	60	50	45	43	37	33	30	27	25
16	80	64	53	48	46	40	36	32	29	27
17		68	57	51	49	42	38	34	31	28
18		72	60	54	51	45	40	36	33	30
19		76	63	57	54	47	42	38	34	32
20		80	67	60	57	50	44	40	36	33
21			70	63	60	52	47	42	38	35
22			73	66	63	56	49	44	40	37
23			78	69	66	58	51	46	42	38
24			80	72	68	60	53	48	43	40
25				75	71	62	55	50	45	41
26				78	74	65	58	52	47	43
27				81	77	67	60	54	49	45
28					79	70	62	56	51	46
29					82	72	64	58	52	48
30						75	67	60	54	50
31						77	69	62	56	51
32						80	72	64	58	53
33							74	66	60	55
34							76	68	62	56
35							79	70	63	58
36							81	72	65	60
37								74	67	61
38								76	69	63
39								78	71	65
40								80	72	66
41									74	68
42									76	70
43									78	71
44									80	73
45									81	75
46										76
47										78

Figure 24

## PROJECT PROCEDURE

Classification of commercial buildings, breakdowns for all types of construction, price catalogs and flexible personnel enabled this project to inventory and compute all buildings in King County.

Mathematical characters written with lead pencil enabled the sponsor to allow extra depreciations or other adjustments to the project's appraisal without constructing an entire new report.

### "DANIEL BOONING"

Field production showed appreciable gain by incorporating what we called "Daniel Booning." Realizing workers had special abilities in various lines, a preliminary survey was made by the project supervisor, sponsor's representative and/or the field foreman, to determine the general type of appraisal of each area, and crew assignments fitting the special type of work to be encountered, was very favorable. In sections not so handled, many crews ran into unfamiliar difficulties which could have been avoided by strategic assignments.

### PHOTO DEPARTMENT

Photographing of buildings was included in the project—pictures taken by the workers. Two prints were made of each appraisal, one attached to the field appraisal sheet, the other vulcanized to the front of the record card.

Owing to the great number of buildings, installation of its own laboratory was advisable in King County, rather than having pictures developed by private concerns. This laboratory also developed and enlarged the aerial pictures furnished by the sponsor, for field work. WPA workers in this laboratory were supervised by a deputy assessor—an experienced photographer—this expert supervision and extra equipment proving very valuable.

Returning to early months of pioneering days of this project, when some 300 or 400 workers were appraising in the field, the cost of equipping each crew with a camera being prohibitive, a special group of men were trained as photographers, and pictures of all buildings in the City of Seattle, identified by street numbers, were taken.

Addresses were included in or on the picture in several different ways—first, writing it on the negative as the picture was taken—discarded because of illegibility and error in street number, being part of the picture, necessitated a re-take.

Second, writing address on a portable blackboard and photographing it as part of the picture—discarded because erroneous addresses necessitated re-takes.

Third, writing addresses on the negative after it was developed—discarded as street numbers expired at the city limits, in fact began to fade as they neared outlying districts. However, this writing of the identification on developed negatives was incorporated.

## PROJECT PROCEDURE

But the street address alone was not a satisfactory identification, because the sponsor's other related records were filed by legal description and not house numbers—so some 100,000 negatives that had gone before, were further identified by a synopsisized legal description. Naturally some little time and labor in this restitution was necessary, but had been completed when the final routine was established.

The exposed roll of film was received from the field, attached to the photographic identification form (see Fig. 19).

When developed the identification was transcribed on the negative, across the face, with black india ink, due care being taken not to obliterate nor cover any of the building detail. One print was then immediately made and delivered to the field. One print only at this time—as the permanent record, not yet available because when filed in a cabinet with necessary handling and shuffling, would tend to give the photograph a used appearance.

The negatives were filed alphabetically and numerically by legal description in preparation for later delivery to the sponsor. Records were kept of each camera's output, particularly the number of spoils and reasons therefor. If the photographer was at fault, instructions were issued for correction. If the camera was "haywire," repairs were made or new equipment issued.

The negative on file remained dormant until the permanent record card had been constructed, then was pulled and a second picture printed, and vulcanized to the card with an adhesive, completing this department's routine.

The photo department assisted the project in other ways through the cooperation of the sponsor. Charts and graphs were photographed and enlarged for exhibition purposes, the aforementioned "movie" also an output. Naturally this special work demanded special equipment and experience which was available.

### ✓ REVIEW BOARD

The Review Board dealt only with building appraisals. It was manned by the better estimators who had proven themselves in the field. Summarized, the duty of this department was to determine the final assessment of all buildings in King County.

During our just completed project, the buildings were not appraised in the field as outlined in that chapter, as the original classification chart had proven inadequate for irregular buildings. The second, an improvement, was also unsatisfactory, and a third, with sponsor furnished basic factors for foundation and shell only, was incorporated. The reproduction cost of buildings was derived by adding the cost of the other building specifications and appointments to this basic factor.

This third method was satisfactory except for one handicap—the lack of qualified personnel to use this system in the field. Therefore this appraisal in the field was eliminated; the enumerators making a more detailed inventory and the building appraised in this department.

However, the sponsor states if he were doing the work again, he would have each building appraised in the field, as herein outlined, and reappraised in this, the review board, department.

## PROJECT PROCEDURE

Folios were routed through this department upon receipt from the field, and when completed were forwarded to the land department. In suburban areas having a land folio, these were separated and immediately dispatched to both departments.

The field sheet has two tables to compute the reproduction cost of buildings—that on the face, for the field, and on the reverse, for the review board.

Using two systems based on the same cost factors ordinarily produced like results, but occasionally this detailed reproduction computation varied from the simplified field appraisal, particularly in irregular, or remodeled buildings. Naturally, as both answers could not be correct, the sponsor generally accepted this detailed build-up, as more information was available to this department—often building permits and plans and specifications showing detailed wall construction, while only a painted exterior could be enumerated by the field man.

This aid, especially in irregular buildings which the field enumerator could not completely appraise, plus direct supervision of the sponsor, with an immediate Yes, or No, answer, took care of all appraisals with temporarily varying answers.

Mathematics of each reviewer were checked for accuracy and appraisals were passed to the research editor—the department head—for confirmation, and special notations desired by the sponsor, including, all buildings varying more than 10% from the previous assessment of record to be ear-marked, and all building appraisals above a certain value to be "flagged," these flags to remain on the appraisal until its final acceptance. See "Horsebacking."

Appraisals in doubt were immediately checked by the sponsor's representative, who instructed project procedure—for instance, an appraisal of an old house, several times remodeled, which could not be held up without disrupting regular routine. Its original construction may have been Class 1—the shack. The first addition may have been of Class 3 construction, and later there was added a tile bathroom, Class 5. The worker's problem was, "Under what classification shall I compute this building?"

In this chapter we have so far discussed only reproduction cost—less depreciation, which is determined by the project. Special depreciations for obsolescence and economic suitability, were determined by the sponsor. See "Horsebacking."

### LAND DEPARTMENT

Continuing on the wheel of folio project's progress, our next station is the Land Department.

As tax statements containing individual assessments are prepared for each lot or portion thereof in the entire county, each receives an individual appraisal. The value of each lot is determined by the sponsor and the project computes the value and enters it on the proper records.

In urban areas the sponsor furnished a front foot value, the deter-

## PROJECT PROCEDURE

mination of which was facilitated by the completed project Field inventory. These values were placed on map No. 3, as prepared by the assembly department, and noted "Land Map." These maps were prepared on a scale of 200' per inch for a section of land, and 100' to the inch for a quarter section, depending upon the number and sizes of the lots. The project furnished each sponsor's land deputy with clerical help in the field.

Except in determining values, project field workers assisted the sponsor as desired, often necessitating climbing over banks, re-measuring ravines, computing tentative values, folding or unfolding maps, or just sharpening lead pencils—one worker for each crew of land deputies proving sufficient, when judiciously selected.

When the map, with front foot or acreage value, was completed and delivered to the supervising clerk of the department, the worker was ready for a new assignment.

The supervising clerk or assistant then recorded the section or quarter section map on the departmental control chart and assigned it to office workers for computation of each parcel. He also called attention of sponsor's deputies to areas or districts not coming through in regular order, which co-operation was greatly appreciated by the project.

The value furnished by the sponsor was entered on the margin of each regular lot of ordinary depth: for instance, on a lot 50x100 feet, with a front foot value of \$100.00, the mathematical computation is easy, and the answer—\$5,000.00—written in each segregation. But as many lots are triangular, circular, or have other irregular boundaries that must be computed, the sponsor furnished charts showing the relationship between the front foot value and these irregularities, or side street influences of corner lots.

From these charts, computations of assessed value were made and entered upon each lot. Occasionally a tract was encountered of dimensions defying mathematical computation, but the available land usage map, plus the completed computation of adjoining lots enabled the sponsor to place a tract value without returning to the field.

The map, complete with all assessments, was then returned to the supervisor's desk for comparison with the Land Use map. The project had no reason to question the values placed by the sponsor and computed by the workers, but with this comparison, a possible slide area which may have been missed by the sponsor, was called to his attention and adjustments immediately made, allowing the project to proceed in regular routine.

Lot values between blocks in the same vicinity under similar usage were roughly compared, and large variations were called to the sponsor's attention, particular attention being paid to corner lots that had been divided, creating new sites facing on side streets—corner lots having more value than comparable lots on an alley.

The sponsor desired all assessments to end in a cipher whenever pos-

## PROJECT PROCEDURE

sible, which also simplifies the checking, and soon enabled the clerk to verify the values at a glance.

Fig. 25 is the sponsor's furnished chart for residential lots having an alley influence. The entire lot was first computed and this value then broken into the percentages as herein outlined.

STREET									
.55									.30
									.225
.45									.225
									.25

ALLEY									
.325									
.275									.45
.40									.50
									.50
									.55
									.45

STREET

Figure 25

Additional charts taken from various appraisal text books, showing depth factors, side street influences, public improvement credits, etc., providing a complete set, were furnished by the sponsor.

Confining the entry of land valuations to a particular colored indelible pencils, eliminated the possibility of confusing the assessment with the front foot value or other mathematical characters. Before this project was instituted, dimensions of lots were sometimes entered on the tax rolls, as the valuation.

The value of each lot was entered on the map and this value map was re-assigned to a senior clerk, for transcription of the final assessment to the pertinent field appraisal sheet. The building folios in urban areas were ordered and received from the control room, the dispatcher dating the project ledger for project records.

## PROJECT PROCEDURE

When values are entered on the field sheet, the transcription is checked for accuracy, the folio returned to the control department for further progress through the project, and the maps immediately filed in the sponsor's land department for later use.

### AGRICULTURAL LANDS

Because of different characteristics of property and availability of land use folios, another routine was followed for agricultural areas. The land use folios were dispatched immediately to this land department upon receipt from the field—the building folios meanwhile going to the review board.

The folios and land usage maps were taken to the field for determining of values, this time by acreage rather than front foot, by sponsor's deputies, assisted by project workers. This value was placed in the same table as the acreage and usage, already entered on the enumerating sheet, using the Land Department's colored pencil. This is the per acre value, and mathematical extensions were later made by clerks in the office and checked for accuracy of mathematics and transcription.

The sample 10-acre ranch enumerated in the field will appear on the land usage report appraisal sheet, as shown in Fig. 26.

LAND USE	TYPE SOIL	CROPS	ACRES NO.	ACRE VALUE	VALUE TOTAL
Garden & Orchard	EF111	Truck	4	200	800
Pasture	EF...		3½	100	350
Swamp	Bvvv		2½	20	50
Totals			10		1200

Figure 26

NOTE: The characters used under the heading "Soil Type" are outlined on the margin of the land usage report and on the reverse of permanent record card types No. 1 and No. 3.

Using this procedure both land and building folios were completed at the same time for routine progress. However, we were not always able to follow this precise procedure—for instance, returning to our sample Section No. 10 in which the river changed its course, the sponsor and his deputies were familiar with the situation, having been consulted upon discovery. There was a variation between the original legal description and resultant acreage, and the actualities upon the ground. The sponsor, aided by project workers, had to accept or reject the suggested new legal description as edited by the original enumerator and make adjustments for the gainer and/or loser of land.

## PROJECT PROCEDURE

We are proud to state that all suggested corrections by the field department were accepted by the sponsor upon verification.

Our work suggests a project, containing some 500,000 individual surveys, be maintained on a production line basis rather than to complete any one step in its entirety before the creation of the second department, both of which were used.

For instance, Lake Washington's nationally known pontoon bridge and new trans-county highway runs through Ranges 4, 5, 6, 7 and a portion of Range 8.

The field enumerating of Range 4 was entirely completed before the contract was let for the highway. Range 5 was assembled, showing the right of way, but when encountered in the field, road construction had not been started in this area, although the sponsor accepted the field report of each segregation usage as "highway." Range 6 proceeded in regular manner as construction was under way by the time it was enumerated.

Ranges 7 and 8 may be eliminated as the right of way was not yet obtained. Range 4 had NOT been completed and delivered to the sponsor in regular manner—the field folios had been part of a bottleneck, and when this bottleneck was eradicated and the permanent card was ready for delivery to sponsor—in some cases showing a residence situated on a now paved highway, many months after the enumeration had been completed)—this permanent Record Card was hardly acceptable to the sponsor.

The sponsor held it the duty of the project to make these corrections as he had no possibility of noting the changes on the new record card being prepared—though the changes had been made on the old records—which claim was hard for the project to refute. But, it being a highway, the changes were satisfactorily made in the office. Photographs of buildings were cancelled and the sponsor assumed responsibility of cancelling or determining and extending newly created values.

Each of the 500,000 tracts in the county was inventoried and an equitable assessment value determined and placed. Each is represented by at least one field sheet and each section or quarter section of land was mapped, portraying the location of all buildings and land usage.

### ✓ "HORSEBACKING"

When building appraisals of an entire section were reviewed, all folios were given to the sponsor for his field check, our trade name for this step being "horsebacking." These appraisals, together with the land values, were taken to the field and the sponsor's deputies considered the economic and obsolescent factors for added depreciations and variations between the old and new, already flagged, were adjusted as needed.

The "No, you can't come in's" and "Not at home's"—appraisals were accepted or rejected by the deputies.

The sponsor's rule, that all digressions from the project determined values must be justified by the deputy, on the appraisal, over his signature," was strictly followed, confining appraisals to a strict mathematical standard, yet allowed adjustments for extraordinary influences.

But the history reveals the "current changes" sometimes had to go back to the field, adding much cost to the project, before the production

## PROJECT PROCEDURE

line procedure was incorporated. For instance, months after field enumerating was completed, a taxpayer notified the sponsor his residence had been partially destroyed by fire, and requested adjustment of value on the tax rolls. Checking the old records—the new not yet completed—revealed no building assessment, although the building was duly photographed and appraised in the folio. Field checking by the sponsor, with the folio, to determine the loss, revealed adjoining properties of entirely different character than when enumerated, which necessitated reopening one of the many field offices for the third time, recovering much of the same territory when the final project procedure was incorporated.

Examples are portrayed under this department because it was changed value due to land usage, rather than buildings, that was particularly affected.

As it was advisable for the project to deliver the land maps to the sponsor at this time, they were folded, identified, filed and receipted for by the supervising clerk. This receipt remained in the project files and all folios, both urban and suburban were returned to the control department for regular routine.

The first half of the primary purpose—tax equalization—now was completed and two of the three basic causes of tax inequalities had been eliminated, i. e.: (1) inadequate basic data and (2) the personal element.

LAND CLASSIFICATION OR SEGREGATION  
THIS SQUARE INDICATES \_\_\_\_\_ ACRES

LOT NO. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

BLOCK NO. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

SECTION \_\_\_\_\_  
TWP. \_\_\_\_\_  
RANGE \_\_\_\_\_

TAX LOT NO. \_\_\_\_\_  
\_\_\_\_\_

PARCEL NO. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

AERIAL PHOTO \_\_\_\_\_  
QUARTER MAP \_\_\_\_\_  
PLAT MAP \_\_\_\_\_



Lot No. \_\_\_\_\_

Block No. \_\_\_\_\_

Section \_\_\_\_\_

Twp. \_\_\_\_\_

Range \_\_\_\_\_

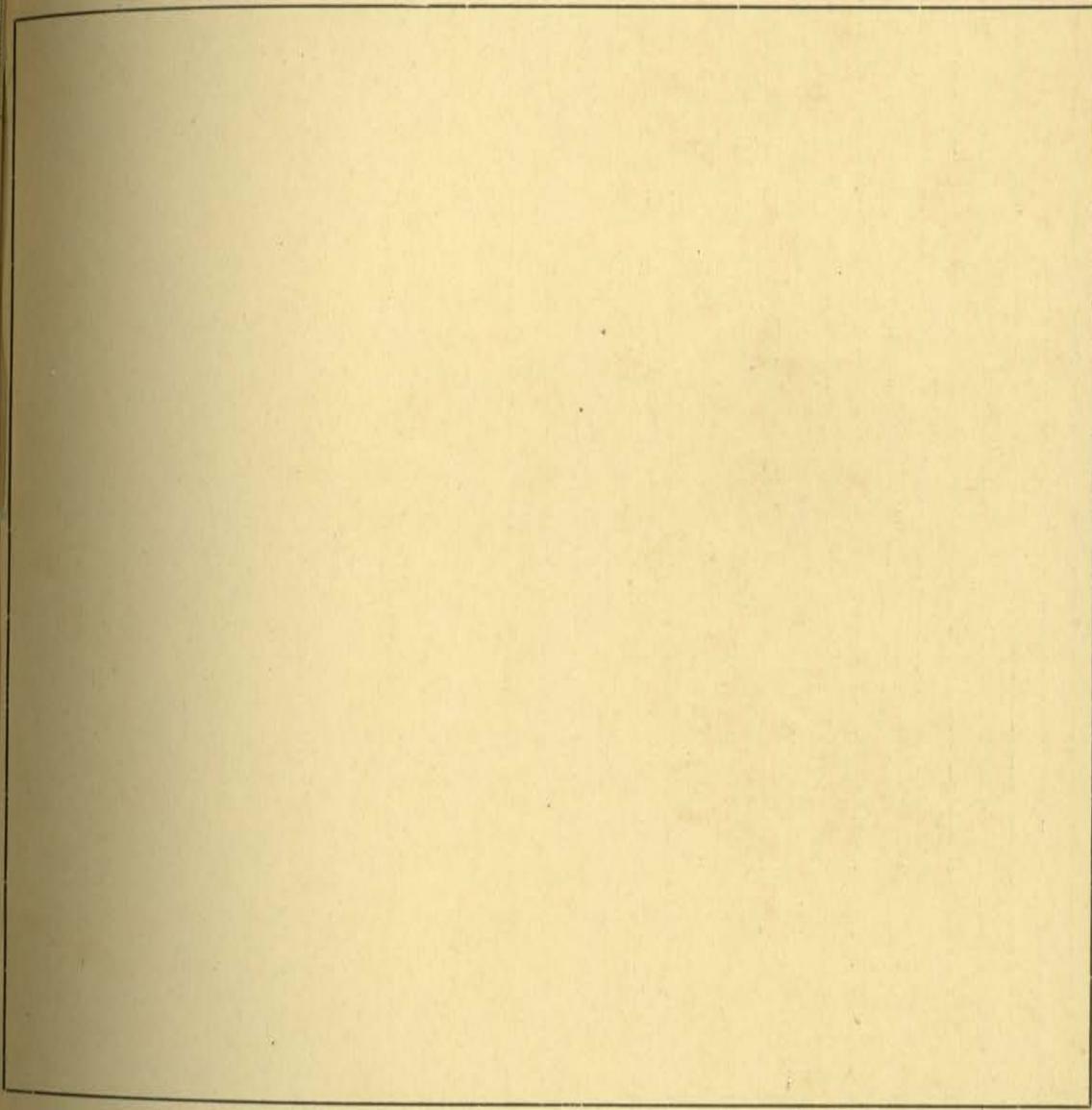
Tax Lot No. \_\_\_\_\_

Parcel No. \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

LAND CLASSIFICATION OR SEGREGATION

THIS SQUARE INDICATES \_\_\_\_\_ ACRES



AERIAL PHOTO \_\_\_\_\_

QUARTER MAP \_\_\_\_\_

PLAT MAP \_\_\_\_\_

3. SIDEWALK

4. LANDSCAPING

ELEVATORS

1 DISTRICT \_\_\_\_\_ NAME \_\_\_\_\_

2 ADDITION \_\_\_\_\_ TRACT OR LOT NO. \_\_\_\_\_

SECTION \_\_\_\_\_ TWP. \_\_\_\_\_ N. RANGE \_\_\_\_\_ EWM: BLOCK \_\_\_\_\_

DESCRIPTION \_\_\_\_\_

LIMITS \_\_\_\_\_

CODE NO. \_\_\_\_\_

3 ADDRESS --- PROPERTY \_\_\_\_\_ CONT. PURCHASER \_\_\_\_\_

4 FEE OWNER \_\_\_\_\_

5 ARCHITECT \_\_\_\_\_ CONTRACTOR \_\_\_\_\_

BASEMENT \_\_\_\_\_

STORE FRONTS \_\_\_\_\_

EXTERIOR \_\_\_\_\_

FOUNDATION \_\_\_\_\_

ROOF \_\_\_\_\_

INTERIOR \_\_\_\_\_

EXTRA FEATURES \_\_\_\_\_

CONSTRUCTION \_\_\_\_\_

REFRIGERATION \_\_\_\_\_

7 CONDITION: EXTERIOR \_\_\_\_\_ INTERIOR \_\_\_\_\_ FOUND. \_\_\_\_\_

8 MAIN SUPPORT COLUMN \_\_\_\_\_ X \_\_\_\_\_ FOOTING \_\_\_\_\_ SPAN \_\_\_\_\_ FT.

9 FIRST FLOOR JOIST \_\_\_\_\_ INCH CENTERS BRIDGED \_\_\_\_\_

10 \_\_\_\_\_ BUILDING \_\_\_\_\_

11 GROSS INCOME \$ \_\_\_\_\_ EXPENSE \$ \_\_\_\_\_ NET INCOME \$ \_\_\_\_\_

12 DEPRECIATION: COND. \_\_\_\_\_ % OBSLSE. \_\_\_\_\_ % ECON. SUIT. \_\_\_\_\_ % TOTAL \_\_\_\_\_

YEAR BUILT \_\_\_\_\_ REMODELED \_\_\_\_\_

EFFECTIVE AGE \_\_\_\_\_ YEARS \_\_\_\_\_ FUTURE LIFE \_\_\_\_\_ YEARS

DIMENSIONS \_\_\_\_\_ X \_\_\_\_\_ X \_\_\_\_\_ SQUARE FT. \_\_\_\_\_ AREA CUBIC FT. \_\_\_\_\_

FLOORS \_\_\_\_\_

FIRE PLACE \_\_\_\_\_

PLUMBING \_\_\_\_\_

TILE WORK \_\_\_\_\_

WIRING \_\_\_\_\_

HEATING \_\_\_\_\_

IMPROVEMENT VALUE \_\_\_\_\_

BUILDING \$ \_\_\_\_\_

LESS DEPRECIATION \$ \_\_\_\_\_

DEPRECIATED VALUE \$ \_\_\_\_\_

ASSESSED VALUE 50% \$ \_\_\_\_\_

DATE \_\_\_\_\_

LAND INFORMATION \_\_\_\_\_

1. SIZE \_\_\_\_\_ X \_\_\_\_\_

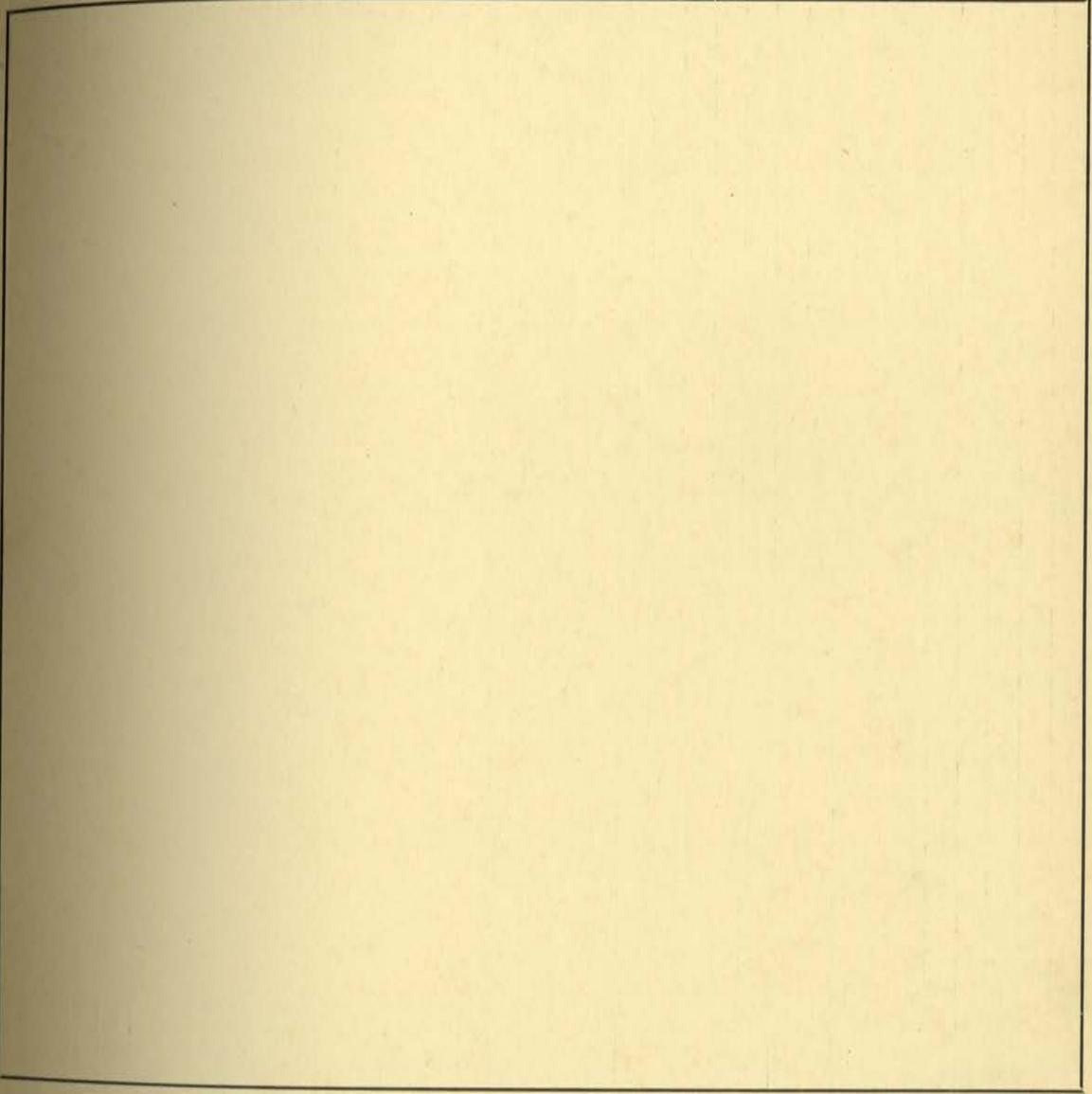
2. STREET --- ROAD \_\_\_\_\_

3. SIDEWALK \_\_\_\_\_

4. LANDSCAPING \_\_\_\_\_

LAND CLASSIFICATION OR SEGREGATION

THIS SQUARE INDICATES \_\_\_\_\_ ACRES



LOT No. \_\_\_\_\_

BLOCK No. \_\_\_\_\_

SECTION \_\_\_\_\_

TWP. \_\_\_\_\_

RANGE \_\_\_\_\_

TAX LOT No. \_\_\_\_\_

PARCEL No. \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

AERIAL PHOTO \_\_\_\_\_  
QUARTER MAP \_\_\_\_\_  
PLAT MAP \_\_\_\_\_

3. SIDEWALK

4. LANDSCAPING

HEATING

1 DISTRICT \_\_\_\_\_ 2 ADDITION \_\_\_\_\_ NAME \_\_\_\_\_  
 SECTION \_\_\_\_\_ TWP. \_\_\_\_\_ N. RANGE \_\_\_\_\_ EWM: BLOCK \_\_\_\_\_ TRACT OR LOT NO. \_\_\_\_\_  
 LIMITS \_\_\_\_\_ DESCRIPTION \_\_\_\_\_

CODE NO. \_\_\_\_\_  
 PERMIT NO. \_\_\_\_\_  
 3 ADDRESS—PROPERTY \_\_\_\_\_ CONT. PURCHASER \_\_\_\_\_  
 4 FEE OWNER \_\_\_\_\_  
 5 ARCHITECT \_\_\_\_\_ CONTRACTOR \_\_\_\_\_

ORIG. COST \$	BASEMENT	STORE FRONTS	EXTRA FEATURES
6 BUILDING			CONSTRUCTION
			REFRIGERATION
			7 CONDITION: EXTERIOR _____ INTERIOR _____ FOUND. _____
	FOUNDATION	EXTERIOR	8 MAIN SUPPORT COLUMN _____ X _____ FOOTING _____ SPAN _____ FT.
			9 FIRST FLOOR JOIST _____ INCH CENTER BRIDGED _____
			10 _____ BUILDING _____
			11 GROSS INCOME \$ _____ EXPENSE \$ _____ NET INCOME \$ _____
			12 DEPRECIATION: COND. _____ % OBSLSE. _____ % ECON. SUIT. _____ % TOTAL _____ %
INTERIOR	ROOF		YEAR BUILT _____ REMODELED _____
			EFFECTIVE AGE _____ YEARS _____ FUTURE LIFE _____ YEARS
			DIMENSIONS _____ X _____ X _____ SQUARE FT. _____ AREA CUBIC FT. _____

FLOORS			
PLUMBING			
TILE WORK			
WIRING			
HEATING			
ELEVATORS			

IMPROVEMENT VALUE	
BUILDING	\$ _____
LESS DEPRECIATION	\$ _____
DEPRECIATED VALUE	\$ _____
OTHER BUILDINGS	\$ _____
ASSESSED VALUE 50%	\$ _____
DATE	_____
LAND INFORMATION	
1. SIZE	_____ X _____
2. STREET—ROAD	_____
3. SIDEWALK	_____
4. LANDSCAPING	_____

SECTION \_\_\_\_\_

T.W.P. \_\_\_\_\_

RANGE \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

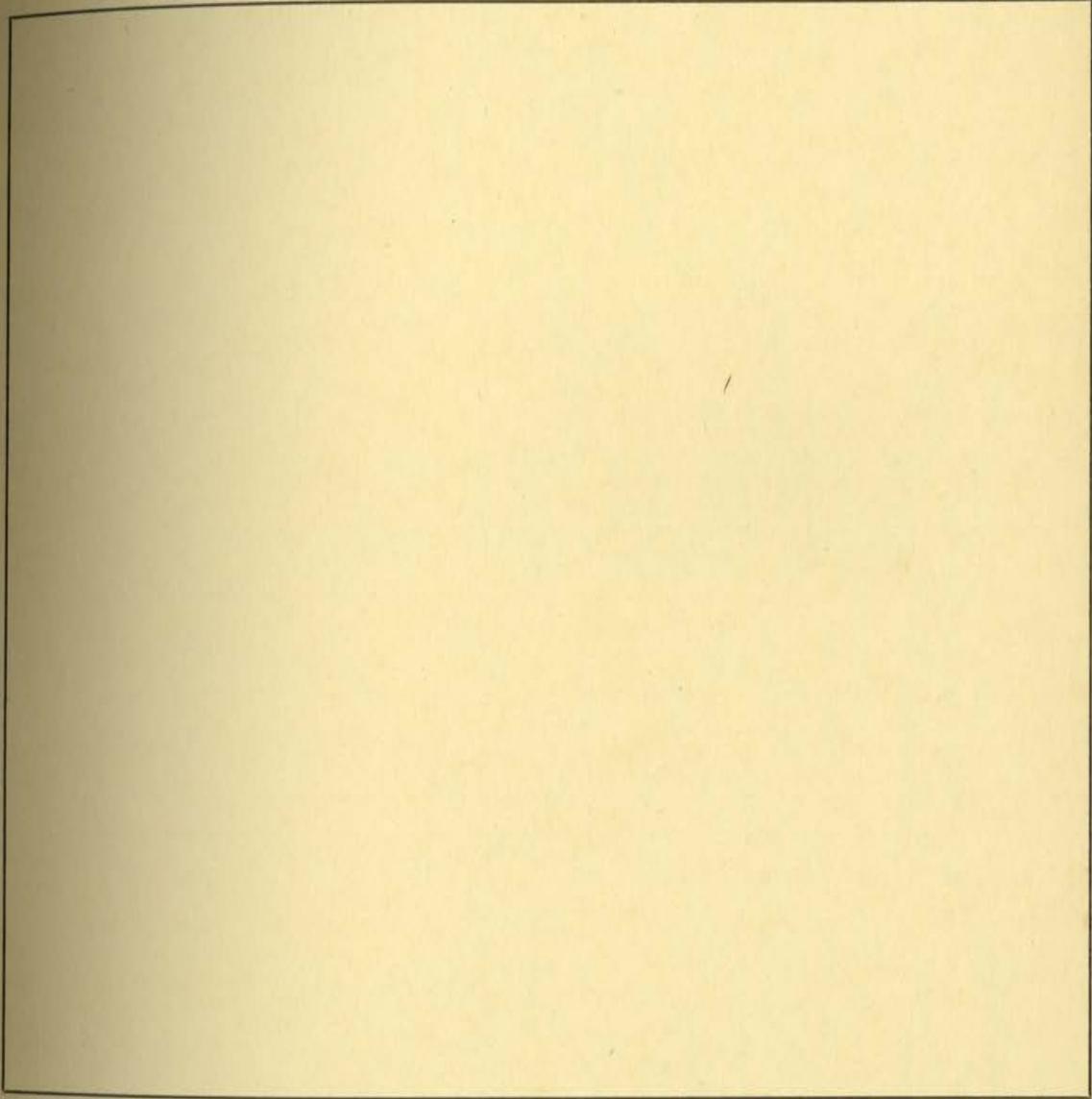
TAX LOT NO. \_\_\_\_\_

PARCEL NO. \_\_\_\_\_

LOT NO. \_\_\_\_\_

BLOCK NO. \_\_\_\_\_

LAND CLASSIFICATION AND SEGREGATION



AERIAL PHOTO \_\_\_\_\_

QUARTER MAP \_\_\_\_\_

PLAT MAP \_\_\_\_\_

2. STREET—ROAD

3. SIDEWALK

4. LANDSCAPING

HEATING

ELEVATORS

1 DISTRICT	2 ADDITION	NAME	
SECTION	TWP.	N. RANGE	EWM: BLOCK
LIMITS	DESCRIPTION	TRACT OR LOT No.	
CODE No.	3 ADDRESS...PROPERTY	CONT. PURCHASES	
PERMIT No.	4 FEE OWNER	5 ARCHITECT	
ORIG. COST	BASEMENT	STORE FRONTS	EXTRA FEATURES
\$			CONSTRUCTION
6 BUILDING			MISCELLANEOUS
		EXTERIOR	7 CONDITION: EXTERIOR INTERIOR FOUND.
			8 MAIN SUPPORT COLUMN x FOOTING SPAN FT.
			9 FIRST FLOOR JOIST INCH CENTERS BRIDGED
	FOUNDATION		10 BUILDING
			11 GROSS INCOME \$ EXPENSE \$ NET INCOME \$
	ROOF		12 DEPRECIATION: COND. % OBSLSE. % ECON. SUIT. % TOTAL %
INTERIOR			YEAR BUILT REMODELED
		EFFECTIVE AGE YEARS	FUTURE LIFE YEARS
		DIMENSIONS x x	SQUARE FT. AREA CUBIC FT.
FLOORS			
FIRE PLACE			IMPROVEMENT VALUE
PLUMBING			MAIN BUILDING \$
TILE WORK			OTHER BUILDINGS \$
WIRING			TOTAL \$
HEATING			ASSESSED VALUE 50% \$
			DATE
			LAND INFORMATION
			1. SIZE x
			2. STREET...ROAD
			3. SIDEWALK
			4. LANDSCAPING

SECTION \_\_\_\_\_  
 TWP. \_\_\_\_\_ N.  
 RANGE \_\_\_\_\_ E.

TAX LOT NO. \_\_\_\_\_  
 PARCEL NO. \_\_\_\_\_

LAND CLASSIFICATION AND SEGREGATION  
 THIS SQUARE INDICATES \_\_\_\_\_ ACRES  
 INDICATE BY AREAS, USE OF LAND BY MARKS AND TYPE BY LETTERS


AERIAL PHOTO \_\_\_\_\_  
 QUARTER MAP \_\_\_\_\_  
 PLAT MAP \_\_\_\_\_

LAND USE ACRES  
 111 CULTIVATED \_\_\_\_\_  
 # PASTURE \_\_\_\_\_  
 OO TIMBER \_\_\_\_\_  
 XX STUMP \_\_\_\_\_  
 GRAVEL OR \_\_\_\_\_  
 USELESS \_\_\_\_\_  
 V SWAMP \_\_\_\_\_

LAND TYPE ACRES  
 A SHOT CLAY \_\_\_\_\_  
 B BOG \_\_\_\_\_  
 C PEAT \_\_\_\_\_  
 D SILT \_\_\_\_\_  
 E \_\_\_\_\_ LOAM \_\_\_\_\_  
 F GRAVEL \_\_\_\_\_  
 G BOTTOM \_\_\_\_\_  
 H UPLANDS \_\_\_\_\_  
 K HILLY \_\_\_\_\_

- 1. SIZE X
- 2. STREET...ROAD
- 3. SIDEWALK
- 4. LANDSCAPING

HEATING \_\_\_\_\_  
 WIRING \_\_\_\_\_



LAND CLASSIFICATION AND SEGREGATION

THIS SQUARE INDICATES \_\_\_\_\_ ACRES

INDICATE BY AREAS, USE OF LAND BY MARKS AND TYPE BY LETTERS

SECTION \_\_\_\_\_  
TWP. \_\_\_\_\_ N  
RANGE \_\_\_\_\_ E

TAX LOT NO. \_\_\_\_\_  
PARCEL NO. \_\_\_\_\_


AERIAL PHOTO \_\_\_\_\_  
QUARTER MAP \_\_\_\_\_  
PLAT MAP \_\_\_\_\_

LAND USE ACRES

111 CULTIVATED \_\_\_\_\_  
 # PASTURE \_\_\_\_\_  
 OO TIMBER \_\_\_\_\_  
 XX STUMP \_\_\_\_\_  
 ... GRAVEL OR USELESS \_\_\_\_\_  
 V SWAMP \_\_\_\_\_

LAND TYPE ACRES

A SHOT CLAY \_\_\_\_\_  
 B BOG \_\_\_\_\_  
 C PEAT \_\_\_\_\_  
 D SILT \_\_\_\_\_  
 E \_\_\_\_\_ LOAM \_\_\_\_\_  
 F GRAVEL \_\_\_\_\_  
 G BOTTOM \_\_\_\_\_  
 H UPLANDS \_\_\_\_\_  
 K HILLY \_\_\_\_\_

TOTAL AREA  
IMPROVEMENT VALUE

X  
X  
X

HEATING

1. DISTRICT \_\_\_\_\_ 2. SECTION \_\_\_\_\_ TWP. \_\_\_\_\_ N. RANGE \_\_\_\_\_ TAX LOT NO. \_\_\_\_\_

DESCRIPTION \_\_\_\_\_

LIMITS \_\_\_\_\_

CODE NO. \_\_\_\_\_

PERMIT NO. \_\_\_\_\_

DATE \_\_\_\_\_

3. ADDRESS OF PROPERTY \_\_\_\_\_ CONTRACT PURCHASER \_\_\_\_\_

4. FEE OWNER \_\_\_\_\_ RENTAL PER MONTH \$ \_\_\_\_\_ ESTIMATED RENTAL PER MONTH \$ \_\_\_\_\_

5. ARCHITECT \_\_\_\_\_ CONTRACTOR \_\_\_\_\_

6. ORIG. BUILDING COST \$ \_\_\_\_\_ OCCUPIED BY \_\_\_\_\_ INTERIOR \_\_\_\_\_ FLOOR PLAN \_\_\_\_\_

7. CONDITION OF EXTERIOR \_\_\_\_\_ DOWN SPOUTS SEWER CONNECTED \_\_\_\_\_

8. BUILDING \_\_\_\_\_

TILE WORK \_\_\_\_\_

PORCHES \_\_\_\_\_

EXTRA FEATURES \_\_\_\_\_

BUILT-INS \_\_\_\_\_

CONSTRUCTION \_\_\_\_\_

HEATING \_\_\_\_\_

CEILING HEIGHT \_\_\_\_\_

BASEMENT \_\_\_\_\_

FOUNDATION \_\_\_\_\_

ROOF \_\_\_\_\_

9. CORNER JOINTS \_\_\_\_\_ X \_\_\_\_\_ AND \_\_\_\_\_ INCH CENTERS BRIDGED \_\_\_\_\_

10. FIRST FLOOR JOIST SIZE \_\_\_\_\_ X \_\_\_\_\_ AND \_\_\_\_\_ INCH CENTERS BRIDGED \_\_\_\_\_

11. FIRST FLOOR JOIST SUPPORT COLUMN OR POST SIZE \_\_\_\_\_ X \_\_\_\_\_ SHAPE NO. \_\_\_\_\_

12. CLASS OR GRADE NO. \_\_\_\_\_

13. BUILDING FINISHED OR UNFINISHED \_\_\_\_\_

14. DEPRECIATION: CONDITION \_\_\_\_\_ % OBSLSE. \_\_\_\_\_ % ECON. SUIT \_\_\_\_\_ % TOTAL \_\_\_\_\_ %

YEAR BUILT \_\_\_\_\_ REMODELED \_\_\_\_\_ EFFECTIVE AGE \_\_\_\_\_ YRS. FUTURE LIFE \_\_\_\_\_ YRS.

LAND INFORMATION

1. SIZE \_\_\_\_\_ 2. ROAD \_\_\_\_\_

3. SEWAGE \_\_\_\_\_ DRAINAGE \_\_\_\_\_ WATER \_\_\_\_\_ PUMP \_\_\_\_\_

4. TREND \_\_\_\_\_ 5. DISTRICT \_\_\_\_\_ 6. USE \_\_\_\_\_

LAND USE	SOIL TYPE	CROPS-TIMBER STAND	NO. ACRES	VALUE-ACRE	VALUE
				\$	\$
				\$	\$
				\$	\$
				\$	\$

LAND SIZE \_\_\_\_\_ X \_\_\_\_\_ TOTAL NUMBER OF ACRES \_\_\_\_\_ VALUE \$ \_\_\_\_\_

ASSESSED VALUE \$ \_\_\_\_\_

REMARKS \_\_\_\_\_

MAIN BUILDING		SQ. FT. AREA
DIMENSION		
	X	
	X	
PCH.	X	
PCH.	X	

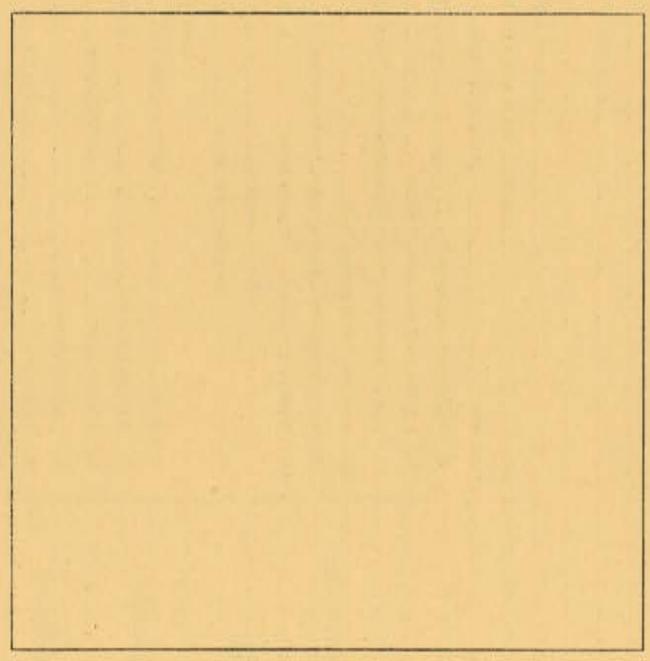
IMPROVEMENT VALUE \_\_\_\_\_

SECTION \_\_\_\_\_  
TWP \_\_\_\_\_ N  
RANGE \_\_\_\_\_ E

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TAX LOT NO. \_\_\_\_\_  
PARCEL NO. \_\_\_\_\_

LAND CLASSIFICATION AND SEGREGATION  
SCALE ONE INCH 100 FEET TO 2 1/2 ACRES OR 330 FEET  
THIS SQUARE INDICATES 2 1/2 ACRES



AERIAL PHOTO \_\_\_\_\_  
QUARTER MAP \_\_\_\_\_  
PLAT MAP \_\_\_\_\_

MAIN BUILDING		SQ. FT. AREA
DIMENSION		
	X	
	X	
PCH.	X	
PCH.	X	

IMPROVEMENT VALUE

MAKING BUILDING

PLUMBING	
FOUNDATION	
ROOF	

1. DISTRICT \_\_\_\_\_ SECTION \_\_\_\_\_ TWP \_\_\_\_\_ N. RANGE \_\_\_\_\_ EWM \_\_\_\_\_ BLOCK \_\_\_\_\_ TRACT OR LOT NO. \_\_\_\_\_  
 DESCRIPTION \_\_\_\_\_

CODE NO. \_\_\_\_\_

2. ADDRESS OF PROPERTY \_\_\_\_\_ CONTRACT PURCHASER \_\_\_\_\_  
 4. FEE OWNER \_\_\_\_\_

5. ARCHITECT \_\_\_\_\_ CONTRACTOR \_\_\_\_\_  
 6. ORIG. BUILDING COST \$ \_\_\_\_\_ OCCUPIED BY \_\_\_\_\_ INTERIOR \_\_\_\_\_ RENTAL PER MONTH \$ \_\_\_\_\_ ESTIMATED RENTAL PER MONTH \$ \_\_\_\_\_  
 7. CONDITION OF EXTERIOR \_\_\_\_\_ FOUNDATION \_\_\_\_\_ FLOOR PLAN \_\_\_\_\_

8. BUILDING \_\_\_\_\_  
 9. CORNER JOINTS \_\_\_\_\_ DOWN SPOUTS SEWER CONNECTED \_\_\_\_\_  
 10. FIRST FLOOR JOIST SIZE \_\_\_\_\_ X \_\_\_\_\_ AND \_\_\_\_\_ INCH CENTERS BRIDGED \_\_\_\_\_  
 11. FIRST FLOOR JOIST SUPPORT COLUMN OR POST SIZE \_\_\_\_\_ X \_\_\_\_\_ SHAPE NO. \_\_\_\_\_  
 12. CLASS OR GRADE NO. \_\_\_\_\_

13. BUILDING FINISHED OR UNFINISHED \_\_\_\_\_  
 14. DEPRECIATION: CONDITION \_\_\_\_\_ % OBSLSE. \_\_\_\_\_ % ECON. SUIT \_\_\_\_\_ % TOTAL \_\_\_\_\_  
 DATE BUILT \_\_\_\_\_ REMODELED \_\_\_\_\_  
 EFFECTIVE AGE \_\_\_\_\_ YEARS FUTURE LIFE \_\_\_\_\_ YEARS

LAND INFORMATION  
 1. SIZE \_\_\_\_\_ X \_\_\_\_\_ TOPOGRAPHY \_\_\_\_\_ GRADE \_\_\_\_\_ FEET \_\_\_\_\_  
 2. STREET ROAD \_\_\_\_\_ SURFACE \_\_\_\_\_ ALLEY \_\_\_\_\_  
 3. SIDEWALK \_\_\_\_\_ SEWERAGE \_\_\_\_\_ WELL \_\_\_\_\_ ELECT. PUMP \_\_\_\_\_  
 4. LANDSCAPING \_\_\_\_\_  
 5. TREND \_\_\_\_\_ VALUE OF LAND \_\_\_\_\_ VIEW \_\_\_\_\_  
 6. USE OF DISTRICT \_\_\_\_\_ ZONED \_\_\_\_\_  
 7. RESIDENTIAL \_\_\_\_\_

REMARKS \_\_\_\_\_

MAIN BUILDING		SQ. FT. AREA
DIMENSION		
X		
X		
X		
X		
PCH.	X	
PCH.	X	

EXTENDING WALLS \_\_\_\_\_  
 BASEMENT \_\_\_\_\_  
 HEATING \_\_\_\_\_  
 FLOORS \_\_\_\_\_  
 FIRE PLACE \_\_\_\_\_  
 INTERIOR TRIM \_\_\_\_\_  
 PLUMBING \_\_\_\_\_  
 ROOF \_\_\_\_\_

LAND CLASSIFICATION AND SEGREGATION  
 THIS SQUARE INDICATES \_\_\_\_\_ ACRES  
 INDICATE BY AREAS, USE OF LAND BY MARKS AND TYPE BY LETTERS  
 LAND INFORMATION  
 SURFACE \_\_\_\_\_



FLOOR PLAN

VALUE

AREA

STY. DIMENSION

ROOF

FLOOR

CONSTRUCTION

OTHER BUILDINGS

TWP. \_\_\_\_\_

RANGE \_\_\_\_\_

OTHER BUILDINGS \$ \_\_\_\_\_

TOTAL \$ \_\_\_\_\_

ASSESSED VALUE 50% \$ \_\_\_\_\_

DATE \_\_\_\_\_

TAX LOT NO. \_\_\_\_\_

PARCEL NO. \_\_\_\_\_


QUARTER MAP \_\_\_\_\_

PLAT MAP \_\_\_\_\_

- LAND USE ACRES
- 111 CULTIVATED \_\_\_\_\_
- # PASTURE \_\_\_\_\_
- OO TIMBER \_\_\_\_\_
- XX STUMP \_\_\_\_\_
- GRAVEL OR \_\_\_\_\_
- USELESS \_\_\_\_\_
- V SWAMP \_\_\_\_\_
- LANDTYPE ACRES
- A SHOT CLAY \_\_\_\_\_
- B BOG \_\_\_\_\_
- C PEAT \_\_\_\_\_
- D SILT \_\_\_\_\_
- E \_\_\_\_\_ LOAM \_\_\_\_\_
- F GRAVEL \_\_\_\_\_
- G BOTTOM \_\_\_\_\_
- H UPLANDS \_\_\_\_\_
- K HILLY \_\_\_\_\_

IF USED AS 1/4 SECT. SCALE ONE INCH 400 FEET OR 160 ACRES OR 2640 FEET

IF USED AS 1/2 OF 1/4 " SCALE ONE INCH 200 FEET OR 40 ACRES OR 1320 FEET

IF USED AS 1/2-1/2-1/4 " SCALE ONE INCH 100 FEET OR 10 ACRES OR 660 FEET





























1 DISTRICT	2 ADDITION	TWP.	N. RANGE	EWM:	BLOCK	TRACT OR LOT NO.
LIMITS	SECTION					
CODE NO.	3 ADDRESS OF PROPERTY					
PERMIT NO.	4 FEE OWNER					
	5 ARCHITECT					
	6 ORIG. BUILDING COST. \$	OCCUPIED BY	RENTAL PER MONTH \$	ESTIMATED RENTAL PER MONTH \$		
7 CONDITION OF EXTERIOR	INTERIOR	FOUNDATION				
8 BUILDING	EXTERIOR WALLS	EXTRA FEATURES	CONSTRUCTION	FLOOR PLAN		
	TILE WORK		CEILING HEIGHT			
			9 CORNER JOINTS	DOWN SPOUTS SEWER CON.		
			10 1ST FL. JOIST SIZE	X	AND	INCH CENTER BRIDGED
			11 1ST FL. JOIST SUPPORT COLUMN OR POST SIZE	X		X
	ATTIC	PORCHES	12 CLASS OR GRADE NO.			
			13 BUILDING FINISHED OR UNFINISHED			
			14 DEPRECIATION: COND.	% OBSLSE	% ECON. SUIT	% TOTAL
			DATE BUILT	REMCDELED		
			EFFECTIVE AGE	YEARS	FUTURE LIFE	YEARS
	HEATING	BUILDING				
FLOORS			DIMENSIONS	SQUARE FT. AREA		
			X			
			X			
			X			
			X			
			PCH. X			
			PCH. X			
			IMPROVEMENT VALUE			
			MAIN BUILDING	\$		
			OTHER BUILDINGS	\$		
			TOTAL	\$		
			ASSESSED VALUE 50%	\$		
			DATE			

SUPPLEMENTAL RESIDENCE... KING COUNTY ASSESSOR, SEATTLE, WASHINGTON

SUPPLEMENTAL COMMERCIAL ... KING COUNTY ASSESSOR, SEATTLE, WASHINGTON

SUPPLEMENTAL FARM BUILDINGS... SHEDS, BARN, CHICKEN HOUSES, GREEN HOUSES, PUMP HOUSES, ETC. KING COUNTY ASSESSOR... SEATTLE, WASHINGTON

WESTERN ETG. CO.



YEAR	BUILDING	DATE	BY	REASON	DECREASE	INCREASE
19						
19						
19						

RECORD OF ASSESSED VALUE

1 DISTRICT	2 ADDITION	NAME	
SECTION	TWP.	N. RANGE	EWM:
DESCRIPTION	BLOCK		TRACT OR LOT. No.
PERMIT No.	3 ADDRESS-PROPERTY		
ORIG. COST	4 FEE OWNER		
\$	5 ARCHITECT		
6 BUILDING	EXTERIOR	CONTRACTOR	
	MISCELLANEOUS		
7 CONDITION: EXTERIOR	INTERIOR		FOUND.
	8 MAIN SUPPORT COLUMN	X	FOOTINGS
	9 FIRST FL. JOIST		SPAN
INTERIOR	INCH CENTERS BRIDGED		
FLOORS	11 GROSS INCOME \$		
FIRE PLACE	EXP. \$		
PLUMBING	12 DEPRECIATION		
TILE WORK	COND. % OBSLSE.		
WIRING	ECON. SUIT. % TOTAL		
HEATING	DATE BUILT		
ELEVATOR	REMODELED		
CEILING HGT.	EFFECTIVE AGE YEARS		
BASEMENT	FUTURE LIFE YEARS		
FOUNDATION	DIMENSIONS		
ROOF	SQUARE FT. AREA		
STORE FRONTS	CUBIC FT.		
IMPROVEMENT VALUE			
MAIN BUILDING \$			
OTHER BUILDINGS \$			
TOTAL \$			
ASSESSED VALUE 50% \$			
DATE			



DISTRICT \_\_\_\_\_ ADDITION \_\_\_\_\_ SECTION \_\_\_\_\_ TWP. \_\_\_\_\_ RANGE \_\_\_\_\_ TRACT OR LOT NO. \_\_\_\_\_ FOLIO \_\_\_\_\_

ADDRESS \_\_\_\_\_  
 FEE OWNER \_\_\_\_\_ CONT. PURCHASER \_\_\_\_\_

TYPE	CEILING HEIGHTS	ROOF	REFRIGERATION	PUMPS
USE				
FOUNDATION				
BASEMENT	CONVEYORS			FENCE
EXTERIOR				
	CONSTRUCTION			
	BUILDING FINISHED			
	YEAR BUILT			
INTERIOR	EFFECTIVE AGE			
	REMODELED			
	FUTURE LIFE			
	DEPR.			

BLDG. CLASS	DIMENSIONS		Sq. Ft. AREA
	X		
	X		
	X		
	X		
	X		
TOTAL AREA			
IMPROVEMENT VALUE			
MAIN BUILDING			\$
OTHER BUILDINGS			\$
TOTAL			\$
ASSESSED VALUE 50%			\$
DATE			



## Chapter IV

### Permanent Record

The Land Use Survey of King County, Washington, a WPA project, aided the county assessor to prepare and install a new property record, which included the identification, legal land description, address, ownership and characteristics of each tract in inventory form, as well as the construction data and photographs of buildings. The assessed valuation, with the taxing district, or limits, and reference information (simplifying the use of this record) was also shown on the "Permanent Record Card," herein exhibited. This data was obtained from the sponsor's old records and information gathered by previous work of this project.

The old method of keeping records in "Abstract Volumes" and on "Building Cards," written in longhand, was obsolete and replete with errors admittedly unsatisfactory, and therefore, was replaced by this new record constructed by WPA.

The new cards were of eleven types, with their designated use shown in the lower left hand corner. The color schemes at the top aids the identification of cards, and when completed and filed, portrayed the predominant type of buildings in any area. The various type of cards are described below:

1. **VACANT.** These cards were prepared for all properties without a building improvement. The land inventory and taxing data were entered on the face of card, and perimeter of lot and "use of soil" symbols were shown on the reverse side.
2. **RESIDENCE.** These were prepared for all urban properties having a residence as the major improvement. The face of the card was used entirely for inventoried information and a photograph. The reverse side used for taxing data and the lot perimeter. When folded, the taxing data became the lower portion of the face, similar in size and arrangement to the "Vacant" card.
3. **SUBURBAN.** These were prepared for suburban properties having a residence as the major improvement, a combination of cards 1 and 2 —house information, plus tables for detailed land usage.
4. **FARM BUILDINGS.** These were prepared for suburban properties when other than the residence was the major improvement.
- 5-6-7-8. **SMALL COMMERCIAL — COMMERCIAL — APARTMENTS — DOCKS & PIERS.** Such cards were prepared when this type of building was the major improvement.
- 9-10-11. **SUPPLEMENTAL RESIDENCE — SUPPLEMENTAL COMMERCIAL — BARN, ETC.** These were prepared when such types were the secondary improvement on the tract and were smaller in size than cards 2 to 8 and contained only building data. The folded major card providing a jacket for as many supplemental cards as there were secondary buildings on the property.

On the face of cards No. 2 to 8 inclusive, is a table for "Other Build-

## PERMANENT RECORD

ings" in which were listed additional buildings of plain construction (under \$200.00 depreciated value) consisting principally of garages and sheds. These minor buildings were not photographed.

### TYPING DEPARTMENT

During the peak of this project, some 150 workers were transcribing the data of the field inventories to these permanent record cards by typewriter, the majority of the workers having been trained on the project. An experienced worker donated his time as instructor, and was placed in charge in 1937 when the department was first instituted, following a year and a half of backlogs. The sponsor donated space, materials and machines for practice and we are happy to report that this training enabled some of the workers to obtain private employment. See heading: "By Products."

Until typists were thoroughly familiar with the various cards, it proved advisable to "lay out" the work.

To illustrate this department's technique, we submit the following "detailed instructions" given to the typist, together with the author's remarks for explanatory purposes, using our "sample house" for portrayal. This house, situated on a rural ten-acre tract would ordinarily be transcribed on the "suburban" residential type card, though the same building could be, and we will assume, has been moved to a city lot.

To assist the reader to understand this detailed instruction to the typist, we suggest that he refer to the use of the Field Sheet (Fig. 13) and the Permanent Record Card, Type 2.

For further clarification we call attention to Table No. 8, "BUILDING," on the Field Sheet appearing as Figure 27.

TABLE NO. 8

BUILDING	
—————	One Family Dwelling
—————	Two Family Dwelling
—————	Store and Dwelling
—————	Number of Stories
—————	Number of Rooms
—————	Basement
—————	First Floor
—————	Second Floor
—————	Third Floor
—————	Attic

Figure 27

## PERMANENT RECORD

This is, in fact, four tables:

- 1st. The Type of Building.
- 2nd. The No. of Stories.
- 3rd. The No. of Rooms.
- 4th. The Location of Rooms.

Questions not pertaining to the individual appraisals were ignored. This same table is condensed on the permanent record card, as follows:

BUILDING
.....
.....
.....
.....
.....
.....

Figure 28

and the typist transcribed only the pertinent data as enumerated.

### INSTRUCTION TO TYPISTS

**Table No. 1. DISTRICT.** Under this heading, type names of district appearing on the field sheet. This was entered by the assembly department and is the name of the geographic area, township, community or city.

**LIMITS.** For later use of the Posting Department. Taxing districts with different millage levies—(data obtained from abstracts).

**CODE NUMBER.** For later use of the Posting Department. The City of Seattle has two taxing limits, identified by the sponsor as Code No. 1 or Code No. 2. (data to be obtained from abstracts).

**PERMIT NUMBER.** For sponsor's continued use of the permanent records. In a few instances the permit number will appear on the project-prepared field sheets, these numbers to be transcribed in this space. Data will be obtained from the communities' building departments.

**DATE.** For date Permit.

**Table No. 2. ADDITION.** Transcribe from the field sheet the name of the subdivision, if any. (Originally entered by the assembly department).

**SECTION-TOWNSHIP-RANGE.** Transcribe from the field sheet. These spaces must be complete, even in platted areas.

**BLOCK.** Transcribe from the field sheet, the block number, if any.

**TRACT OR LOT NUMBER.** In platted areas transcribe from the field sheet the tract or lot number, blocking out either the word TRACT or LOT, as blocked out on the field sheet. In unplatted

PERMANENT RECORD

areas, block out the word "TRACT and OR," and type in the word TAX after the abbreviated word "NUMBER." Also type in the numerical figures of the TAX LOT NUMBER and encircle or enclose this number in parenthesis.

**DESCRIPTION.** This space in platted areas for complete lots will be left vacant. In unplatted areas or segregated platted lots, transcribe the legal description as appearing on the field sheet. (This entire table was originally entered by the assembly department, the data obtained from the abstract).

Table No. 3. **ADDRESS OF PROPERTY.** Transcribe the house number, if given, from the field sheet. (Data entered by the field enumerator).

**CONTRACT PURCHASER.** Leave blank. This space for later use of the sponsor.

Table No. 4. **FEE OWNER.** Leave blank. This space for later use of the Posting Department. (Data obtained from the abstract).

Table No. 5. **ARCHITECT.** Leave blank. This space for later use of the sponsor in new construction.

**CONTRACTOR.** Leave blank. This space for later use of the sponsor.

Table No. 6. **ORIGINAL BUILDING COST.** Leave blank. For later use of sponsor, this space is for the amount or amounts of building permit or permits for new construction.

**OCCUPIED BY.** Type in the word OWNER or TENANT as determined by the field man.

**RENTAL PER MONTH.** If tenant occupied, type in the amount of monthly rent paid, if the same was determined by the field man, otherwise leave blank.

**ESTIMATED RENTAL PER MONTH.** Type in the amount of rent this type building would ordinarily bring, as determined by the field man. This for both owner and tenant occupied houses.

Table No. 7. **CONDITION OF EXTERIOR.** Type in the word, GOOD, FAIR, or POOR, as determined by the field man, this is a general exterior description of the home, including the roof, gutters, siding and drainage.

**INTERIOR.** Type in the word GOOD, FAIR or POOR, as determined by the field man for the general condition of the interior of this residence.

**FOUNDATION.** Type in the word GOOD, FAIR or POOR, as determined by the field man for the general condition of the foundation of this building.

Table No. 8. **BUILDING.** Type on first blank line, the words: ONE FAMILY DWELLING. On the second line the word and figures: 1½ STORY. On the third line, the word and figures: 6 ROOMS. On the fourth line type: "4 FIRST." On the fifth line, type: "2 SECOND."

**INTERIOR WALLS.** Type on the first blank line under this heading, the figure and words, "4 PLASTERED AND PAINTED," and on the second line: "2 SHIPLAP AND PAPERED"—accounting for all six rooms.

**FLOORS.** Type "5 FIR AND 1 HARDWOOD."

**FIREPLACE.** Type: "NONE."

## PERMANENT RECORD

**INTERIOR TRIM.** Type: "6 FIR."

**PLUMBING:** Type the number and kind of fixtures, namely:

- 1 LEG TUB
- 2 TOILETS
- 1 BASIN
- 1 SINK
- 1 HOT WATER TANK
- 1 LAUNDRY TRAY. (2 compartments).

plus the description word as checked on the field sheet, in this case, AVERAGE. (This descriptive word applies to the classification of the house; average plumbing in a shack would be very cheap in our class No. 6, an architect supervised house.) The "D. S. SEWER CONN." refers to, or is the abbreviated form for "drainage system sewers connected." This item is only enumerated in the field if special tiling or fixtures were needed for the drainage system and would have to be further elucidated under the heading of remarks, or if all the drainage ran back into the basement. If D. S. SEWER CONN. is checked on the field sheet, type the words in this table.

We now go to the second column under Table No. 8 and find:

**TILE WORK.** Type the word NONE.

**ATTIC.** Type the word "NONE." (This residence has an upstairs which is a second story and not an attic.)

**HEATING.** Type the words HOT AIR FURNACE—PREMIER OIL BURNER.

**BASEMENT.** Type: 50%—4 FEET CONCRETE—3 FEET FRAME. DRAINED.

**FOUNDATION.** Type: 6" CONCRETE.

**ROOF.** Type: SHINGLE.

**EXTERIOR WALLS.** Type: 8" CEDAR SIDING.

Third column of Permanent Record Card.

**PORCHES.** Type: 2 ONE-STORY.

**EXTRA FEATURES.** Type: NONE.

**BUILT-INS.** Type: USUAL (This word is related to the classification of the buildings.)

**CEILING HEIGHT.** On the first blank space, type: 7 FEET.

**BASEMENT.** On the next line type: 8 FT. 4 IN. FIRST. And on the third line type: 7 FT. 2 IN. SECOND.

This completes Table No. 8, except for related descriptions to be found under the heading of "REMARKS."

Table No. 9 **CORNER JOINTS.** Type: MITERED.

Table No. 10 **FIRST FLOOR JOIST SIZE.** Type: 2x10 AND 16" CENTERS.

**BRIDGED.** Type: CROSS.

Table No. 11 **FIRST FLOOR JOIST SUPPORT COLUMN OR POST SIZE.**  
Type: 8X9.

## PERMANENT RECORD

- Table No. 12** CLASS OR GRADE NUMBER. Type: Class No. 4.  
SHAPE NUMBER. Type: 2.
- Table No. 13** BUILDING FINISHED OR UNFINISHED. Type: FINISHED.
- Table No. 14** DEPRECIATION. On blank following the word "Condition," type the figure "40." There being no added depreciations allowed for obsolescence or economic suitability, we may ignore these spaces and after the word "Total," type the number "40."  
DATE BUILT. Type: "1924."  
REMODELED. Type: "NO."  
EFFECTIVE AGE. Type: "16."  
FUTURE LIFE. Type: "24."

### LAND INFORMATION

On the suburban type cards this table data is obtained from the land folio, and the typists preparing the permanent record cards were provided with space for two folios.

- Table No. 1** SIZE.—x—. Type: FIGURES 50 AND 100.  
TOPOGRAPHY. Type: LEVEL.  
GRADE. ——— Feet. Type: ABOVE 3'.
- Table No. 2** STREET ROAD. Type: STREET.  
SURFACE. Type: PAVED CONCRETE.  
ALLEY. Type: NO.
- Table No. 3** SIDEWALK. Type: CONCRETE.  
SEWERAGE. Type: CITY.  
WELL AND ELECTRIC PUMP. Leave blank.
- Table No. 4** LANDSCAPING. Type: LAWN AND SHRUBS.  
CONDITION. Type: AVERAGE.
- Table No. 5** TREND. Type: STATIC.  
VALUE OF LAND. Type: the "assessed value" as determined by the sponsor and entered on the field sheet in special colored pencil in this case 500. The dollar sign is unnecessary.
- Table No. 6** USE OF DISTRICT. Type: RESIDENTIAL.  
VIEW. Type: NO.
- Table No. 7** RESIDENTIAL. Type: AVERAGE. This word is again related to the classification of this building. Is this the average district for this class home?  
ZONED: Type: 1st RESIDENTIAL.  
REMARKS. This space is for out-of-the-ordinary land information. "Proximity to a slide area," "influx of other races," "odors from a packing house," etc., are placed on this line.

## P E R M A N E N T   R E C O R D

Transcribe from the reproduction table on the reverse side of the field folio appraisal, the data to complete this table as follows:

MAIN BUILDING		
	DIMENSIONS	SQ. FT. AREA
	20x25	500
	10x20	200
	10x20	200
	x	900
PCH	5x7	35
PCH	4x6	24

Figure 29

and immediately under this table we find a second table to be filled in. Type as follows:

IMPROVEMENT VALUE	
MAIN BUILDINGS.....	\$1592
OTHER BUILDINGS.....	54
TOTAL .....	1646
ASSESSED VALUE 50%.....	820
DATE—7-4-40	

Figure 30

The assessed value always ends in a cipher and the date is that on which the card is typed and not of the appraisal.

This completes the upper half of the front of the permanent card, except the space for attachment of building photo, which is the work of another department.

Continuing on the lower part of the permanent record card we find a table for "OTHER BUILDINGS." The word GARAGE is already printed for the typists' convenience. The other lines are for additional buildings of simple character — sheds, barns, chicken houses, etc. Under the word "garage," would be typed the building being enumerated. Other buildings of more complicated construction are itemized on the supplemental type building cards, with space for photographs. Plain buildings of higher value are also listed on supplemental cards.

Returning to instructions to typists:

**CONSTRUCTION.** On the first blank line, continuing description of garage, type: DOUBLE.

**FLOOR.** Type: DIRT.

**ROOF.** Type: SHINGLE.

**STORY.** Type: 1.

**DIMENSIONS.**—x—, Type: 10 and 20.

**AREA.** Type: 200.

**VALUE.** Type: 54. The dollar sign is unnecessary.

## PERMANENT RECORD

The next table is for the sponsor's use only in recording future activity of this property. Activity of title and finance only, activity of a physical character necessitating a new record card.

**REMARKS.** Type the story you find on the field sheet. In this case, THE RESIDENCE AND GARAGE HAVE JUST BEEN MOVED TO THIS LOT, FROM TAX LOT 147 OF SECTION 20, TOWNSHIP 23, RANGE 4. THERE IS APPARENTLY NO PHYSICAL DAMAGE TO THE BUILDING FROM THIS MOVING, AS THE INTERIOR WALLS HAVE NOT RECENTLY BEEN RENOVATED AND SHOW NO DAMAGE. THE FOUNDATION AND HEATING PLANT ARE THE ONLY NEW FEATURES, BUT FULL DEPRECIATION WAS ALLOWED THESE ITEMS, TO OFFSET ANY POSSIBLE HIDDEN DAMAGE.

We now have remaining on the front of the new record card only the diagram, under the heading "FLOOR PLAN." This space is for later use of the building outline department.

At the base of the diagram the word FRONT refers to the front of the building to be outlined, facing the bottom of this record. But we have other duties for the typing department on the reverse of the card. In the space under general heading of "Land Classification" and "Segregation," the square diagram is for later use of the outline department in showing the perimeter of the lot. The typing department to complete the headings:

SECTION. Type: 4.  
TOWNSHIP. Type: 25.  
RANGE. Type: 5.

On the first of the three blank lines immediately following, type: FOLIO NUMBER 1234.

TAX LOT NUMBER. Leave blank.  
PARCEL NUMBER. Leave blank.

On upper right hand side of this report we find:

**AERIAL PHOTO.** Leave blank. This card was constructed because the project expected to number the aerial photographs, but this was unnecessary as the numbers of the section, township and range were sufficiently accurate and brief.

**QUARTER MAP.** Leave blank for similar reasons.

**PLAT MAP.** Type: 8765. These plats are filed as recorded and not in alphabetical order.

Reversing the permanent record we find the table **DISTRICT.** This is for later use of the posting department. The data is available in the abstract, but the abstracts were so voluminous and heavy, our lack of space and physique of personnel, suggested the entry of these items by pen and ink in another department.

Under the heading of **RECORD OF ASSESSED VALUE,** type on first blank line, in the year column, 19—, Type: 40.

The balance of this record is for the future use of the sponsor.

**ACREAGE.** Leave blank. (On suburban cards we would type the total acreage.)

**LAND.** Type: 500. The dollar sign is unnecessary.

**BUILDINGS.** Type: 820.

**TOTAL.** Type: 1320.

The folio and card are then checked for accuracy of transcription. Record is kept of accuracy of workers and production. This check is by folio, and when the entire section of folios were completed, cards and folio were delivered to, and receipted for by the control department, which in turn enters this step in the project ledger and control map.

## PERMANENT RECORD

### BUILDING OUTLINE DEPARTMENT

The partially completed permanent record cards are retained in their corresponding folios, awaiting additional data. The building outline department next drew the perimeter of each building to scale in the space provided on the face of the permanent record card, which is a transcription of the outline from the field sheet. The main building outlines, were drawn with red pencil, the porches, bays, overhangs—one story additions to a two story house, etc., were outlined with blue pencil—the dimensions entered with ink.

“Other” buildings were not outlined, but “supplemental” buildings having an individual card were the “main” building of that card and were so handled.

The perimeter of the lot and its location in the block, or the nearest street intersection, was drawn in the table on the reverse side of the permanent record card. This for urban lots. These lots were drawn to scale for width and depth, but a broken line, with the measurements to the street intersections, sufficed for the distance.

Agricultural lands were outlined to scale and roads and streets bounding the segregations were also identified. Also the symbols showing soil types and land uses were entered as designated on the field sheets. The table for land segregation was used to the largest possible scale, and this scale was entered in the space provided at the top of the table.

Both the building outline and lot perimeters were checked for accuracy of transcription. Records of workers' accuracy and production were kept by the foreman, for possible future higher classifications.

When completed, folios in the section were returned to the control department for forwarding through the balance of the project.

The folios, with the now nearly completed new record cards were then dispatched to the photo department for attachment of photos to the new record. All new record cards, improved and unimproved, were kept together at this time, eliminating possibility of loss or strayed record cards for vacant lots. The photo department pulled the pertinent negative from the files and printed a new picture, insuring an unmutilated photograph.

Before vulcanizing to the permanent record card the photograph was checked for accuracy of identification, creating a further check on the folio and the permanent record card. When attached to the new card the entire folio was returned to the control department for continuance through the project.

### POSTING DEPARTMENT

Identification of the new permanent record card to a taxing district and cancellation of the abstract, is the summarized duty of this department. But the details are composed of many component parts, as new segregations of properties were made during the life of the project, necessitating this department embodying a portion of the duties of the entire project.

## PERMANENT RECORD

Up to this point "current changes" and duties of the sponsor have not invaded our project story, which is moulded on the presumption that all properties remained dormant until completed. But this was not the case, nor could it be expected in a new project, and these facts were accepted and incorporated in our work.

But before we stray from our main theme let us report the duties of this department for ordinary routine.

Each card, representing one piece of property, was identified into a taxing district, and this entry was made with pen and ink from information already established in the abstract.

The overall card was checked, particularly to determine, "Does, or will this new card supplant the corresponding entry in the abstract?" If the answer was "Yes," the abstract was cancelled and the card substituted for the abstract entry. When the sponsor requested immediate substitution, the card was filed by the posting clerk and the project was completed except for the sponsor's formal acceptance.

But when project findings had to be tabulated and "current changes" corrected on the permanent record card, many other steps were necessary.

**First: Simple Tabulations.** When the sponsor and/or the project wanted simple figures, tabulations were made in this department, as this skilled personnel had both the old and new records simultaneously under their scrutiny. These simple tabulations were such as:

(a) The assessed valuation for the town of Kirkland, before and after the project.

(b) The increase in units and assessed valuations — both land and buildings—in Fall City.

(c) The before and after valuation, and number of new buildings in the Enumclaw school district.

**Second: Current Changes.** Two years of project work—both field enumeration and preparation of new records had passed before the installation of this quasi-final department. In fact, two and a half years, before the first completed record was delivered to the sponsor. Naturally more than a few changes of ownership; demolition, remodeling and construction of buildings; platting of sub-divisions; new and/or abandoned highways and resultant changes in valuation; influx and/or deflux of population—not to mention three building classification charts, and other changes in foregone project procedure, had transpired during this period.

So, when installed, the duties of this department, over and above identifying each new record by a taxing district, was to recapitulate, recapture, reclaim, reconcile, reconstruct, reconvert, recover, recreate, rectify and in some cases resurrect these recondite records—without rupturing previous work, nor run-afoul present procedure.

Therefore the personnel was chosen for their knowledge and versatility of and in all project operations and when possible were instructed to complete each record in its entirety, before starting on the next. Otherwise possibly only one "current change" in an entire section of land—be-

## PERMANENT RECORD

cause of the creation of one new lot—would have to be re-routed through the entire project, interrupting the continuity of project progress.

This more than two-year "backlog" of 1936 and 1937 was not entirely "cleaned up" until December 1939 and were the operations or incidents encountered to be minutely described, would necessitate a large volume.

### CURRENT CHANGES

However, a few of the complications arising as a result of an owner selling one half of his property during the functioning of the project are mentioned herein because of their prevalency, as well as their pertinency to regular departmental procedure—both in the "backlog" and the final routine.

As the folio may have been in the field or in any of many other departments, the transportation expense and "tracking down" precluded the entry of this new segregation. Therefore the project prepared only one new record card to care for the two entries now in the abstract as a result of the sale of half the property. What is the answer? There can be many.

**One. Assuming it is unimproved property.** The posting clerk printed, with pen, the description of the segregation retained by the original owner and erased the portion of the lot perimeter which, after the sale, was now under a different name, and completed the lot lines now existing. The clerk obtained the segregated assessed valuation from the sponsor and entered it in the line directly under the value as given for the whole lot.

This same routine was followed on the field sheet and the segregation was made on the field maps.

For the portion of the lot under new ownership, a new field report was prepared. The data was obtained from the Land Usage enumeration for the entire lot and the field report was bound into the folio immediately following the other segregation and a permanent record prepared in its entirety.

By confining this work to one posting clerk, re-routing through the entire project was eliminated. If the posting clerk was not sufficiently versatile to assemble the field sheet, edit and type the permanent record card, draw the lot segregations and obtain the land value from the sponsor, this folio would have to be routed through the entire project for this one segregation, though all adjustments could have been completed by the time the control for this procedure was set up.

**Two. Assuming there is an improvement on the lot.** It was more simple to prepare a new record for an unimproved, than an improved, site. By referring to the map (see Fig. 21, showing the location of buildings) the worker determined the portion now unimproved and followed the unimproved routine.

Owner's names, both new and old, were adjusted to conform to the unimproved and improved, now, "half lots."

Additional duties were changing the identification of the photographs.

**Third: For instance, both portions of the lot have buildings:** Let us say, a store and a residence, the residence now under new ownership. The store building was itemized on a "main" building card and the residence on a "supplemental." The store building would remain as is, the land segregation and value changes made thereon. The supplemental card

## PERMANENT RECORD

would be cancelled and a new "main type" residential card prepared for the segregation. Both photographs would be changed to coincide with the new legal descriptions and the additional identification of "Building A and B" would be eradicated from the photograph, field sheets and maps.

**Fourth: Let us presume the two buildings were a residence and a garage.** The same procedure is followed, except the garage had been enumerated as "other buildings" on the main appraisal form and not on a "supplemental" field sheet, nor photographed, (which brings up an entire new angle). Construction data being available in the office, records were prepared in their entirety, to coincide. The garage, cancelled as "other building" now becomes the "main"—or only building on the new half lot—but without a picture.

The above are four simple examples of lot segregation, but occasionally they become more involved. Subdividing into lots and blocks followed the same routine, though occasionally it was more expedient to reroute new subdivisions through the project. New highways causing vacations of property were eradicated from office records by similar routine.

These "current changes" were minimized when these 500,000 individual surveys were placed on the endless chain line of production, confining each parcel into one,  $\frac{1}{2}$  millionth part of the finished Land Use Survey project, to its proper niche, enabling the project to proceed to satisfactory completion.

**No Photograph:** For economy, garages and other simple buildings under a \$200 valuation were not photographed when they were the minor building or buildings on one tract. Continued activity of real estate occasionally converts these minor buildings to the "main" or only building on a newly created site. This changing status suggests it may have been more prudent to have photographed all buildings in project enumeration, rather than have the sponsor, in continued upkeep of these new records, return to the field with attendant transportation expense and time consumed in orientation in obtaining this photograph which is necessary to conform to the original intent of having all main buildings, regardless of value, inventoried and photographed.

### FILING

The King county assessor's office demanded the filing of these new office records in alphabetical and numerical form by legal description, subdivided into taxing districts, which was done, with block and subdivision separators prepared by the filing clerks to simplify the use of the newly arranged files.

When this filing was incorporated under the supervision of the Posting Department, official project receipts were prepared by the supervisor of said department and upon completion of any given area, were delivered to the sponsor for signature and returned to the project supervisor as completed. These receipts were then forwarded through the WPA administration office and recapped by correspondence—(Fig. 1)—of Sept. 3, 1940, writing FINIS to the "Primary Purpose" of the King County, Washington, Land Use Survey Project.

## Chapter V

### Resume

#### BY-PRODUCTS

The Land Use Survey project of King County, Washington, as other WPA projects throughout the nation, provided a haven for certified workers until they could be reabsorbed in private positions.

Proponents of this particular project claimed our work was opening new vocations, which is proven by the following specific examples that enter the author's mind as this report is being prepared.

Case No. 1. A certified worker, was, he says, "A broken-down glass cutter and general all round hoodlum," but through his application to the work, was absorbed over two years ago on the assessor's staff and has progressed until he is now assistant segregation clerk—a position of exacting demands.

Case No. 2. A certified worker was as he said: "A Jack of all trades and master of none" and was in charge of routing and dispatching work. As these duties became part of the sponsor's routine, this worker was also absorbed in the sponsor's staff and is satisfactorily filling a position of trust and responsibility.

Case No. 3. A young lady forced to quit high school to support the family through the media of WPA; received her initial assignment, as she said, "In a whipped dog attitude," but the sponsor's interest and good fellowship of her co-workers soon gave her a brighter outlook on life, and knowing there was a demand for secretaries, she continued her education with night study and asked for additional project work to put her studies into practice. This resulted in her obtaining a Civil Service position in the Federal government at Washington, D. C., in secretarial capacity. Latest report finds her twice promoted in less than six months.

Case No. 4. A young lady, through training and stenographic duties on this WPA project has found steady employment in the business office of the telephone company.

Case No. 5. Two male workers assigned to the project, as they said, "Broken down salesmen," who knew nothing of legal descriptions, have been absorbed in the County Property department—tax title sales—as "Trouble Shooters"—this work demanding thorough abstracting ability in running down broken chains of title and erroneous property records.

Case No. 6. Another project worker now has steady employment with an Abstract and Title Company.

Case No. 7. A widow with no previous employment—never before working outside her home—supporting herself through WPA, made her-

## R E S U M E

self so valuable to the sponsor's office that upon being released after 18 months continuous service was immediately placed on the sponsor's payroll, as assistant secretary.

Case No. 8. Two other certified lady workers have been absorbed as clerical workers on the staff.

Case No. 9. The sponsor's photographic department is now manned by two former certified WPA workers, one a young woman who after receiving her release for 18-months continuous service, was retained to do the clerical work in that department, and the other hired as laboratory technician.

Another certified worker is now assistant building superintendent of our County-City building, and a colored gentleman is a deputy sheriff. Four former workers are actively engaged in selling real estate, one of whom owns his own firm.

The above are a few examples recalled to mind, and corroborates the statements of friends of the project that many new avenues of endeavor were opened through WPA for workers, as well as furnishing a temporary haven for some 1600 employees.

### SPONSOR'S COOPERATION

The sponsor's co-operation and desire to lighten the burdens of WPA workers was greatly appreciated, and while the Book of Rules and Regulations does not credit this as sponsor contributions, his annual Christmas parties, with ice cream, cake, etc., augmented by summer-time picnics, parties and dances, made this Land Use Survey one, big, happy family of sponsor's representatives and WPA workers.

During the "Work Pays Your Community" Week, our sponsor, at personal expense, furnished a photographer to take pictures of the high lights of our communal picnic. At this writing he has condensed his office space to allow temporary quarters for an entirely unrelated WPA project, and three other unrelated WPA projects are furnished in full or in part with his office furniture.

Transportation to project workers to attend the last rites of a fellow worker was appreciated by increased endeavor and individual effort. Assistance during workers economic emergencies has also been of inestimable value in fostering good fellowship. Project collections to a fellow worker who lost his home and belongings by fire was greatly increased by the sponsor's personal contribution.

This entire co-operation, for which no official credit could be given was very desirable on a WPA project, and was reciprocated by a more hearty attitude of the workers and put a little more effort into the job than would be ordinarily expected.

Prior to the issuing of WPA Bulletin No. 676, December, 1939, prohibiting same, sixteen project workers had part-time employment in the sponsor's office.

## R E S U M E

This happy family, good-fellowship attitude is more touchingly portrayed as this page is being written on Christmas Eve of 1940—a former lady worker is being discharged from the hospital after a successful major operation, necessitating five blood transfusions, all five donors being project workers.

### COST ANALYSIS

The one calculation of the total cost (\$2,473,031.33) divided by the number of units enumerated and recorded (500,000) gives an overall cost per item of \$4.95.

But what is the item?

The 500,000 units are the number of land segregations in King County, but the Land Use Survey conducted many phases other than a strict enumeration of land usage. Deducting the cost of such phases as the Aerial Survey, Comparative Analysis, Alphabetical and Stencilled Index, from the overall figure, the cost per enumeration of each land segregation would be somewhat lowered. Lack of complete statistics, inter-relationship of these phases and the land usage enumeration, plus the costs thereof, prevent a more complete breakdown than the overall cost of \$4.95 per unit.

However, the statistical information from July 11, 1939, to September 3, 1940, is more complete and may delineate more advantageously the cost per operation of the final procedure; particularly because during this period, the project was confined more strictly to the primary purpose and operated with less than 200 workers.

Using a similar calculation, as in paragraph one of this analysis, the overall cost and number of completed units, we find the cost per item reduced to \$.99 for the period July 1939 to September 1940.

But neither the figure \$4.95 nor \$.99 per unit, should be too readily accepted—both have salient features peculiar to themselves.

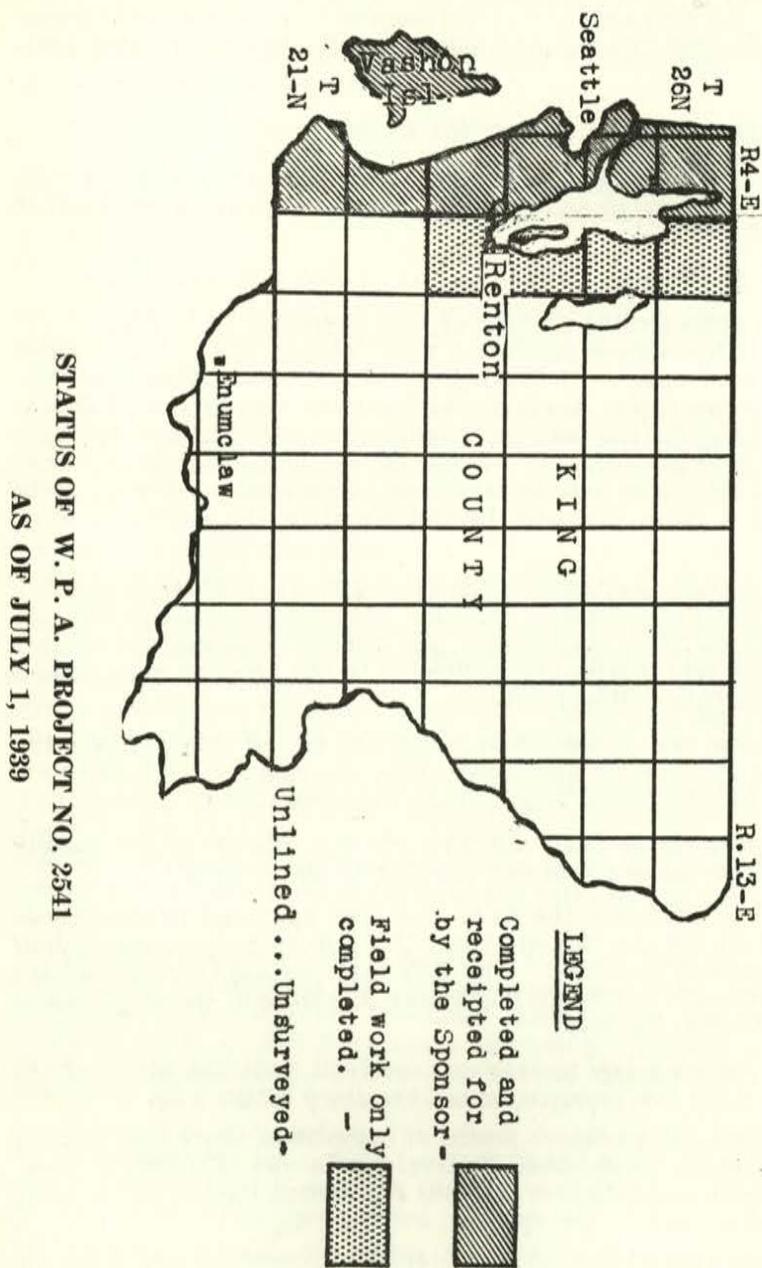
Repeating for emphasis, the \$4.95 cost per appraisal is the overall project expenditure for the "broad" Land Use Survey project during four and one-half years of operation. The \$.99 cost per appraisal is for the specific period of July 1, 1939 to September 3, 1940 and was confined to the "strict" Land Use Survey.

All of the chronicle, up to this cost analysis, tells the story of the \$4.95. The following few paragraphs tell the story of the \$.99.

During the final fifteen-month period of operations, there was actually expended \$148,806.73 (\$126,514.69 Federal funds and \$22,292.04 sponsor's money) which accounted for 150,140 Permanent Record cards being completed and delivered to the sponsor.

To the actual expenditure of this \$148,806.73 must be added the abstruse cost of "pioneering," "training," "experience," "equipment," (such as the photographic laboratory), etc., etc. On the other hand, deductions

RESUME



STATUS OF W. P. A. PROJECT NO. 2541  
AS OF JULY 1, 1939

Figure 31

## R E S U M E

should be considered for the continuing relations of the "broad" project departments, such as the Alphabetical Index, tabulations for the entire project life and four, distinct, remaining departments of the Aerial Survey. Neither the additions nor deductions can be accurately determined in dollars and cents.

Likewise, the number of permanent record cards was in various stages of completion.

Figure 31 shows the approximate status of the real estate inventory and new records (project primary purpose) as of July 1, 1939. Clearly showing that the larger towns, Seattle included, and the heavily populated western portion with 7/10th of the segregations, were entirely completed. On the other hand the inaccessibility of the more remote lands and the larger size of properties to be enumerated must be considered in analyzing the project status.

In approximately 18 of the 79 townships the work was entirely finished and the field work completed in approximately four more. 26 townships were alpine and timbered areas, necessitating no additional field work. The 31 remaining townships were enumerated in 12 months, from July 1939 to July 1940.

The 26 alpine and timbered townships contained 17,592 segregations, necessitating that many values for taxation purposes and 17,592 permanent record cards, containing the value (both land plus timber and/or minerals) and the taxing data were prepared in the office.

Besides the 36,589 buildings enumerated and the 17,592 "alpine" record cards prepared, many unimproved sites were field enumerated and recorded. There were appraisals and reports backlogged throughout the project departments in various stages of completion as of July 1939; these plus the above-mentioned unimproved, improved and alpine cards, totalled 150,140 permanent record cards completed and delivered to the sponsor in the last fifteen months of operation.

Over and above these cards, were the project tabulations, and statistical figures were computed as the sponsor desired and were all of minor character, except the overall project figures condensed in this report—particularly in Chapter II, **PROJECT ACCOMPLISHMENTS**.

As mentioned above, due to the many ramifications involved in the functioning of the project as a whole, an overall cost per unit is the only practical and somewhat near accurate cost analysis that can be applied.

However, regardless of the cost per unit, the project's inventory of taxable real estate, has enabled the sponsor to add approximately \$573,999.95 annually to the revenue of King County. With this previously unanticipated revenue, the total expenditure of \$2,473,031.33 will be entirely repaid in less than five years. In fact, a large proportion of the total cost was returned to the sponsors during the four and a half years the project was in active operation.



## RESUME

### IN RETROSPECT

The author, who assisted at the birth, served in the life, and remained to the end, corroborates the statement of the sponsor, "Assessments have been made on a fair and equal basis to all," and adds: The test period, three years use of this new appraisal system and its maintenance, proved the project to be satisfactory and prophetically portrays that favorable results will continue long after this WPA project has been "obited."



Appendix A

APPRAISAL SCHOOL

for the

Land Use Survey

of

King County, Washington

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A W. P. A. Project  
Sponsored by the County

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Conducted by  
**Roy B. Misener**  
King County Assessor

APPRAISAL SCHOOL

LESSON I . . . . . PROJECT IN GENERAL

- (A) . . . Necessity of this Survey
  
- (B) . . . The Sponsor's Office
  - (1) Mandatory functions
  - (2) Relationship to this Project
  
- (C) . . . Project Aims and Operations
  - (1) Departmental Relationships

\* \* \* \* \*

Lecture . . . . .  
Equipment needed . . . Flow Charts

APPRAISAL SCHOOL

LESSON II . . . . . PROJECT IN DETAIL

- (A) . . . Building Appraisal
  - (1) Income
  - (2) Comparative
  - (3) Reproduction (Our Method)
  
- (B) . . . Depreciations
  - (1) Physical age
  - (2) Effective age
  - (3) Obsolescence
  - (4) Economic suitability
  
- (C) . . . Land Appraisals
  - (1) Urban—Residential
    - (a) Location
      - (1) View
      - (2) Accessibility to schools, Transportation, etc.
      - (3) Neighborhood
      - (4) Street improvements
  - (2) Urban—Commercial
  - (3) Suburban
  - (4) Agricultural
    - (a) Types of soil
    - (b) Usage
  - (5) Timbered or Mineral
  
- (D) . . . Ownerships
  - (1) Fee simple
  - (2) Contract Purchasers
  
- (E) . . . Tax Levies
  - (1) Definition
  - (2) Derivation and variations
  
- (F) . . . Sponsor's Terminology
  - (1) Definitions of
    - (a) Tax lots
    - (b) Tax Title lots
    - (c) Government lots
    - (d) Platted lots, etc.
  - (2) Abbreviations

\* \* \* \* \*

- Lecture . . . . .
- Equipment needed . . . . .
  - (1) "How to Judge a House"
  - (2) Blank Tax Statement
  - (3) Terminology and Abbreviation Chart

APPRAISAL SCHOOL

LESSON III . . . . . LEGAL DESCRIPTIONS

- (A) . . . Acreage
  - (1) Townships
  - (2) Sections or Donation Claims
  - (3) Fractions of Sections
- (B) . . . Subdivision
  - (1) Locations
  - (2) Segregations of Subdivisions
- (C) . . . Metes and Bounds
  - (1) Definition
- (D) . . . Segregations
  - (1) Spotting on Plat
  - (2) Spotting on Field
- (E) . . . Various Descriptions for same Property

\* \* \* \* \*

- Lecture . . . . .
  - (1) Illustrated instructions on blackboard
  - (2) Individual problems on blackboard
  - (3) Group problems on scratch pads

Equipment needed:

- (1) Blackboard
- (2) Section Charts and Breakdowns
- (3) County Maps
- (4) Charts of various descriptions
- (5) Scratch Pads

APPRAISAL SCHOOL

LESSON IV . ARCHITECTURE AND INTERIOR ARRANGEMENTS

(A) . . . Classification of buildings

- (1) By descriptions
- (2) By materials
- (3) By picture

(B) . . . Architectural Types

- (1) Roofs
- (2) Dormers
- (3) Valleys
- (4) Irregularities
- (5) Outside finishes

(C) . . . Rooms

- (1) Arrangement
- (2) Size
- (3) Finish
- (4) Stairways
- (5) Sash

\* \* \* \* \*

Lecture . . . . .

Equipment needed . . (1) Classification group of pictures  
(2) Classification charts

APPRAISAL SCHOOL

LESSON V . . . . . STRUCTURAL INFORMATION

- (A) . . . Excavations
- (B) . . . Foundations
  - (1) Types
  - (2) Checking materials and workmanship
- (C) . . . Building skeleton
  - (1) Structural members and where used
  - (2) Checking materials and workmanship
- (D) : . . Heating plants
  - (1) Types
  - (2) Values
- (E) . . . Interior materials and workmanship
  - (1) Wall finishes
  - (2) Floor and finishing
- (F) . . . Attics
  - (1) Stairways
  - (2) Space and ceilings
- (G) . . . Roofs
  - (1) Value of materials
  - (2) Gutters and downspouts
- (H) . . . Exterior Walls
  - (1) Materials
  - (2) Comparative costs and value
- (I) . . . Plumbing
  - (1) Sewers
  - (2) Comparative value of fixtures
- (J) . . . Millwork
- (K) . . . Hardware

\* \* \* \* \*

Lecture. . . . . Physical demonstration with displays  
Equipment needed . . . . . Display and building exhibit

## APPRAISAL SCHOOL

As the foregoing lessons are general and the gist of these instructions should be understood in varying degree by all project workers, an examination at this time is desirable.

APPRAISAL SCHOOL

LESSON VI . . . . . APPRAISAL FIELD REPORT SHEET

To be given to all field workers in detail.

Other workers as needed.

- (A) . . . Detail instruction of checking item by item  
on report.
- (B) . . . Stressing the need of accuracy
- (C) . . . Explanation of building chart.

\* \* \* \* \*

Lecture . . . . .

Equipment needed . . . . . Report sheets.

APPRAISAL SCHOOL

LESSON VII . . . . . REPRODUCTION

- (A) . . . Area of Buildings
- (B) . . . Cost Factor
  - (1) Derivation
- (C) . . . Relation of Cost Factor to Building
  - (1) Area
  - (2) Type of Building
  - (3) Variations for size and materials
- (D) . . . Values of Irregularities
  - (1) Deductions for inferiorities
  - (2) Additions for superiorities

\* \* \* \* \*

Lecture and written problems of items.

- Equipment needed . . (1) Classification charts  
(2) Size charts  
(3) Price lists

APPRAISAL SCHOOL

LESSON VIII . . . . . DEPRECIATION

- (A) . . . Age
  - (1) Actual
  - (2) Physical
  - (3) Effective
  - (4) Future life
  
- (B) . . . Obsolescence and economic suitability
  - (1) Building
  - (2) District
  
- (C) . . . Relationship of reproduction costs and depreciation to appraisal value.

\* \* \* \* \*

Lecture and written problems of items.

- Equipment needed . . (1) Pictures of obsolescence
- (2) Depreciation charts



## APPRAISAL SCHOOL

Lessons VI to IX, inclusive, will be given to all field workers in detail. This department, one of the first in operation, will be the reservoir furnishing key personnel to man other departments as the project progresses.

Detail instructions for each succeeding department will be prepared as necessary.



Appendix B

Organization  
and  
Departmental Detail  
for  
King County, Washington  
Land Use Survey

ORGANIZATION CHART

Authority  
Folio Progress

SUPERVISOR

OPERATION  
MAINTENANCE  
ASSISTANT  
SUPERVISOR

W. P. A. PROJECT NO. 2541  
KING COUNTY LAND USE SURVEY

PROJECT CONTROL  
DISPATCHING  
Supervising Clerk

ASSEMBLY  
Abstractor  
SU

FIELD  
Foreman  
Grade A

PHOTO  
Supervising  
Clerk

REVIEW  
Research  
Editor

LAND  
Supervising  
Clerk

TYPING  
Supervising  
Clerk

OUTLINE  
Supervising  
Clerk

POSTING  
Supervising  
Clerk

FILES  
Senior Clerk

LEGAL DESCRIPTION

AERIAL PHOTO

MAPS

FIELD REPORTS

FOLIOS  
Field Map A. Photo.

INDEXES

CATALOGUES

ENTER LEGAL  
Senior Clerk

ENTER DISTRICT  
Senior Clerk

ENTER OWNERSHIP  
Senior Clerk

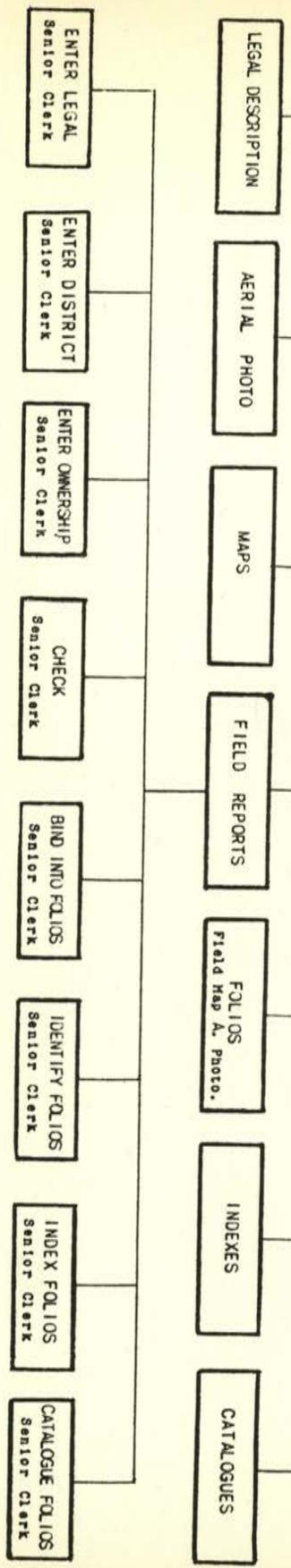
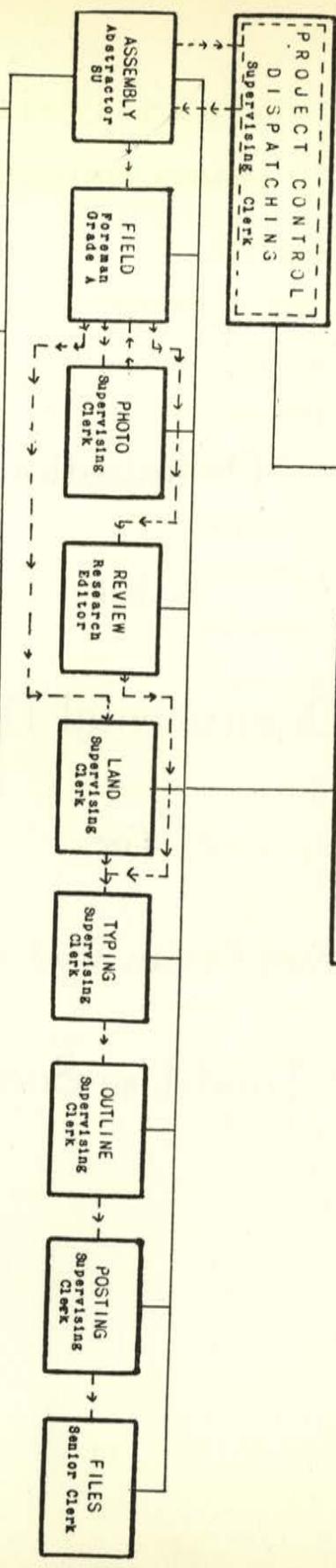
CHECK  
Senior Clerk

BIND INTO FOLIOS  
Senior Clerk

IDENTIFY FOLIOS  
Senior Clerk

INDEX FOLIOS  
Senior Clerk

CATALOGUE FOLIOS  
Senior Clerk



## ORGANIZATION

### PROJECT PERSONNEL

Supervisor	1
Assistant Supervisor	1
Secretary	1
Foreman, Grade A	1
Research Editor	1
Supervising Clerks	31
Photographers	3
Abstractors	3
Accountant	1
Timekeeper	1
Research Assistants	10
Research Field Workers	50
Tracers	6
Senior Typists	20
Senior Clerks	43
Messenger	1
Janitors	2
	<hr/>
Total	176

## ORGANIZATION

### OPERATIONS & MAINTENANCE

#### PERSONNEL

Supervisor	1
General Foreman	1
Secretary	1
Accountant	1
Timekeeper	1
Senior Clerks	2
Janitor	1

#### **SUPERVISOR**

Handle all phases and relationships with the administrative staff and the sponsor—decide on matters of policy and procedure.

#### **GENERAL FOREMAN**

Assist the project supervisor—handle personnel.

#### **SECRETARY**

Self explanatory.

#### **ACCOUNTANT**

Property clerk—procurer of supplies and materials—maintain fingertip control of project property. Operate typewriter and general office machines.

#### **TIMEKEEPER**

Self explanatory.

#### **SENIOR CLERK (1)**

Stock clerk — mimeograph operator — typist — operate variatype machine and mimeoscope.

#### **SENIOR CLERK (1)**

General clerical duties—stenographic—filing, etc.

#### **JANITOR**

Self explanatory.

## ORGANIZATION

### CONTROL AND DISPATCHING

Procure and index picture and atlas in territory to be worked. Dispatch picture and atlas to the Assembly Department. Receive aerial picture, map and assembled folios and maintain indexes thereof. Dispatch same to field. Act as connecting link for field supplies, particularly of film and pictures. Receive field completed folios and route through the balance of the project.

Maintain visible and mathematical record of project progress, compute project findings. Deliver completed product to the sponsor, maintain receipts, oversee filing—cancellation of old records.

### PERSONNEL

Supervising Clerk .....	1
Senior Clerks .....	3
Messenger .....	1

#### SUPERVISING CLERK

Department head. (Keep daily ledger control of folios' progress. Being the hub of all operations, gives immediate warning of impending bottlenecks or lack of sufficient departmental backlogs). General knowledge of entire project—replace general foreman on moment's notice.

#### SENIOR CLERK (1)

Maintain files of folios and indexes thereof. Prepare receipts for departmental dispatching. Maintain record of general project progress. Typist — good penmanship — replace supervising clerk on moment's notice.

#### SENIOR CLERKS (2) (one team)

Tabulate project findings—compare old records with the new—prepare findings in analytical form. One must be a good reader, the other a good listener. Both to be mathematically inclined and have better than general knowledge of map reading and sponsor's taxation terminology and procedures. Either to operate a typewriter and an adding machine.

#### MESSENGER

Connecting link between the field and office. Deliver and pick up daily film and other supplies. Bundle and deliver and pick up folios to and from all departments. Car driver—able-bodied.

## ORGANIZATION

### ASSEMBLY DEPARTMENT

Edit legal descriptions. Convert county atlases\* into property identification maps. Prepare field folios containing area picture. Two maps (one for building spotting—the other for land usage) and field enumerating form. Create folio catalogues and indexes.

#### PERSONNEL

Abstractors .....	3
Senior Clerks .....	6

#### ABSTRACTORS (3)

One to supervise the department. All to edit legal descriptions—determine and enter property boundaries on atlas—drafting ability.

#### SENIOR CLERKS (2)

Transcribe edited legal description and fee ownership—field report form—bind same into folios. Good penmanship—legal descriptions.

#### SENIOR CLERKS (1)

Index filed sheets by number and catalogue same. Typist—legal descriptions.

#### SENIOR CLERKS (1)

Note abstract "Folios Assembled"—maintain departmental production reports—keep finger on abstract pages, plats, supplies—pick up and return sponsor's records. Typist—good physical condition.

#### SENIOR CLERKS (2)

Identify folio exterior of contents — identify maps (1. Buildings, 2. Land)—do all project printing. Operate Wrico pen—free hand printer.

**NOTE:** During assembly of agricultural communities, with a special "Land Usage" field report, this department will be augmented with an assistant printer and another clerk to prepare said report.

\*This outline assumes aerial pictures and atlases containing subdivision and lot lines, streets, highways, lakes, rivers, etc., are available. Each map to be prepared individually. The size of this department to be governed by project demands.

## ORGANIZATION

### FIELD

Enumerate field report—photograph buildings.

### PERSONNEL

Foreman, Grade A .....	1	} 25 crews*
Supervising Clerks .....	25	
Research Field Workers .....	50	
Senior Clerks .....	5	
Janitor .....	1	

### FOREMAN

Thorough knowledge of the project—building estimator and junior civil engineer.

### CREW

(1) Supervising Clerk, (2) Research Field Workers.

This crew must have transportation, a junior civil engineer, a junior draftsman, a mathematician, a good penman, a photographer and a leader.

### SENIOR CLERKS (1)

Office routine — requisition supplies — transportation allowance — forms — production reports — assist foreman — junior secretary.

### SENIOR CLERKS (4) 2 teams

Check field work for accuracy—attach building photo to field report.

### JANITOR

Self explanatory.

\*Crews of 3, in rural and crews of 2, for urban field work were determined as most practical. Number of crews must be governed by field office space available, territory being worked, time limitations, etc.

## ORGANIZATION

### PHOTOGRAPHIC DEPARTMENT

This department to develop negatives, identify same, print same, file negatives, vulcanize print to permanent record card, enlarge special photos.

#### PERSONNEL

Supervising Clerk .....	1
Photographers .....	3
Senior Clerks .....	4

#### SUPERVISING CLERK (1)

Department head. Furnish field with daily supply of film. Receive same and have routed through the department. Keep production records. Rough knowledge of photographic work, files and legal description.

#### PHOTOGRAPHERS (3)

Laboratory men. Develop and print photographs—shoot exceptional and difficult pictures.

#### SENIOR CLERK (1)

Maintain files of negatives—legal description.

#### SENIOR CLERKS (2)

Identify negatives—good eyesight—penmanship—legal description.

#### SENIOR CLERK (1)

Vulcanize print to permanent record card—legal description.

## ORGANIZATION

### REVIEW BOARD

Build up reproduction costs of buildings, depreciation, breakdown to assessed valuation.

### PERSONNEL

Research Editor .....	1
Research Assistants .....	7
Senior Clerks .....	2

#### RESEARCH EDITOR (1)

Department head. Building estimator.

#### RESEARCH ASSISTANTS (7)

Reproduce building costs on paper and depreciate same. Good mathematicians—junior building estimators.

#### SENIOR CLERK (1)

Mathematical checker.

#### SENIOR CLERK (1)

“Breakdown” reproduction costs to assessed valuation. Mathematician.

## ORGANIZATION

### LAND DEPARTMENT

Assist sponsor's appraisers in the field, compute acreage and values by ownership, enter values on folio sheet, file land maps.

#### PERSONNEL

Supervising Clerk .....	1
Research Assistants .....	3
Senior Clerks .....	6

#### SUPERVISING CLERK (1)

Department head. Accomplished abstractor—mathematician.

#### RESEARCH ASSISTANTS (3)

Assist sponsor's appraisers in the field. Legal descriptions—sponsor's terminology—knowledge of land usage and types of soil. Good physical condition. Junior civil engineer.

#### SENIOR CLERKS (4)

Compute land values—mathematician—legal description.

#### SENIOR CLERK (1)

File land maps—legal description.

#### SENIOR CLERK (1)

Enter total value to field report sheet. Legal description.

## ORGANIZATION

### TYPING DEPARTMENT

Transcribe field report data to permanent record card.

#### PERSONNEL

Supervising Clerk .....	1
Senior Typists .....	20
Senior Clerks .....	4

#### SUPERVISING CLERK (1)

Department head. Thorough knowledge of the project. Legal descriptions—building terminology.

#### SENIOR TYPISTS (20)

Transcribe field report to permanent record card. Knowledge of legal descriptions\* particularly abbreviations. More than a passing acquaintance with building terminology.

#### SENIOR CLERKS (4)

Check accuracy of transcription.

\*Having no typists with these qualifications, two senior clerks edited the field sheet for typing and determined the type of permanent record card to be prepared.

## ORGANIZATION

### BUILDING OUTLINE

Draw building perimeter on permanent record card. Draw lot lines on permanent record card.

### PERSONNEL

Supervising Clerk .....	1
Tracers .....	6
Senior Clerk .....	1

#### SUPERVISING CLERK (1)

Department Head. Drafting ability—thorough knowledge of legal descriptions.

#### TRACERS (6)

Draw building and lot outlines—drafting ability and rough knowledge of legal descriptions.

#### SENIOR CLERK (1)

Check for accuracy. Legal descriptions.

ORGANIZATION

POSTING DEPARTMENT

Enter on permanent record card in long hand "Fee Ownership." Taxing districts, total building and land valuations—cancel abstract—rough check entire project.

Supervising Clerk ..... 1  
Senior Clerks ..... 9

**SUPERVISING CLERK (1)**

Department head. Working knowledge of entire project.

**SENIOR CLERKS (3)**

Transcribe owner's name, taxing district, taxing value to card. Excellent penmanship.

**SENIOR CLERKS (4) (2 teams)**

Check for accuracy.

**SENIOR CLERKS (2) (1 team)**

Rough check entire card to old records. Cancel old records. General knowledge of sponsor's records and the entire project.

ORGANIZATION

**FILING**

Originate filing system and file permanent record cards.

**PERSONNEL**

Senior Clerk ..... 1

**SENIOR CLERK (1)**

Prepare file separators—typist.

## GLOSSARY

ABSTRACTS	Bound volumes containing lot descriptions, taxing limits, fee ownerships and assessed valuation.
ACREAGE	Unplatted lands. Described by "acreage descriptions," rather than lots and blocks.
ASSESSED VALUATION	50% of the full value. Abbreviation: "A.V."
ATLAS MAPS	Maps containing subdivisions, blocks, lots, streets, roads, rivers, etc., but not segregations thereof.
BACK LOG	Accumulated departmental work awaiting installation of succeeding departments and/or acceptance of the accumulated work.
BOARD OF EQUALIZATION	The three County Commissioners and three City of Seattle Councilmen who have the power to change the Assessor's valuation of property.
COMMERCIAL	Business properties, both lands and buildings.
CURRENT CHANGES	Regular activity of real estate, and resultant changes in the the sponsor's records during the start and finish of this project.
IMPROVED PROPERTY	Land with a structure thereon.
LEGAL DESCRIPTION	A statement of the location factors which serve to identify a parcel of land in a manner which is legally acceptable for a particular purpose.
MAIN AND/OR MAJOR BUILDING	The main or major building on the one tract. Not necessarily a major building in construction or value.
MAPS	A composite of Atlas Maps and property identification (P.-I.) maps, showing lot lines and segregations thereof.

## G L O S S A R Y

METES AND BOUNDS	A type of legal description by measurements and directions.
OLD RECORDS:	Records in the assessor's office before revision by this project.
OTHER BUILDINGS	Secondary buildings on one tract, of plain construction under \$200 depreciated value. Usually appraised with the main buildings, not photographed or inventoried in detail.
P.-I. MAPS	Property identification maps, showing lot and ownership lines.
SPONSOR AND SPONSOR'S REPRESENTATIVE	Officially the sponsors were the County Commissioners, represented by the County Assessor. Common reference is to the Assessor as the sponsor.
SUPPLEMENTAL BUILDINGS	Secondary buildings on one tract of detail or plain construction over \$200 depreciated value. Inventoried in detail on individual enumerating form. Recorded permanently on supplemental record card which contains no land usage nor taxing data.
TAX LOT AND TAX LOT NUMBER	Reference to an acreage description with an encircled number identifying each parcel.
UNIMPROVED PROPERTY	Lands, both cultivated and uncultivated, but without a structure thereon.
W. P. A.	Works Progress Administration—changed in July 1939 to Work Projects Administration.

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