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Federal Home Loan Bank Review

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SUBSCRIPTION PRICE OF REVIEW

THE FEDERAL HOME LOAN BANK REVIEW is the Board's medium of communication with member institutions of the Federal Home Loan Bank System and is the only official organ or periodical publication of the Board. The REVIEW will be sent to all member institutions without charge. To others the annual subscription price, which covers the cost of paper and printing, is \$1. Single copies will be sold at 10 cents. Outside of the United States, Canada, Mexico, and the insular possessions, subscription price is \$1.40; single copies, 15 cents. Subscriptions should be sent to and copies ordered from Superintendent of Documents, Government Printing Office, Washington, D. C.

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Appraisal Methods and Policies

This is the sixth in a series of articles.

“**W**HAT did it cost” is probably the first question that would occur to the average person if he should be asked to estimate the value of a newly constructed house. It is an almost universal assumption that there is a close relationship between the cost of producing any good and its value. The exact nature of this relationship, however, has been a matter of much controversy and difference of opinion. Among the economists of a century or more ago the value of a good was considered to be determined by its cost of production. But there were, it was recognized, many exceptions to this rule, so many in fact, that some economists began to doubt if it could be accepted as a general principle. It was pointed out that if a good was scarce and in great demand, it would have value regardless of its cost of production. A gold nugget accidentally found with no expense would be worth just as much as a similar one mined at great cost. And a good produced at considerable expense would have no value if there was no demand for it.

Today it is generally recognized by economists and appraisers alike that cost does not cause or produce value. It only serves as an indicator of value and it is an accurate indicator only under four conditions; namely, when the good can be freely reproduced; when it is produced under competitive conditions; when it is produced with reasonable efficiency; and when it is new and in current demand.

These principles and conditions should be borne in mind when using the cost-of-replacement-less-depreciation method of

appraisal. In particular, it should be emphasized that the method does not assume that the value of a property is always equal to its cost. Value and cost will be equivalent only under the four conditions described above.

The cost-of-replacement-less-depreciation method covering a property on a particular site consists of finding the answers to four basic sets of questions:

1. What is the reasonable value of the land on which the house is built?
2. What would it cost to reproduce the house, assuming reasonable efficiency and prevailing costs?
3. Was the house properly planned and designed? Was it, when constructed, suitable to its time, environment, and particular location? If not, how much allowance should be made for these defects?
4. What changes, if any, have taken place either in the house itself or in external factors which have lessened or increased its desirability? What allowance should be made in the valuation of the house because of these changes?

In our discussion of this method we may well begin with the first of these questions. How shall the value of the lot be determined?

APPRAISING THE LOT

THE neighborhood is the chief factor in determining the value of residential sites. It is chiefly the neighborhood which makes one lot worth \$500 and another \$5,000. People who can pay \$5,000 for a home site prefer to live near other people of the same financial and social status. This creates a demand for lots in the neighborhood which

is sufficient to keep their price up to the \$5,000 level. Thus the variation in the price of the lots in a given neighborhood tends to be within a very narrow range.

The first step in appraising a residential lot, therefore, is the determination of the general level of lot values in the neighborhood. For the experienced appraiser this will be a matter of common knowledge for the territory with which he is familiar. In order to keep his knowledge definite and up-to-date, however, he will find it desirable to collect and file as much information as possible on recent transactions.

If there have been recent sales of vacant lots, their selling prices will give a direct indication of the general level of lot values for the neighborhood. In the absence of such sales, the portion of the sale price of improved properties that is due to the lot may be estimated by subtracting from the total sale price a reasonable allowance for the improvements. The remainder may be considered to be the value of the lot.

After having obtained an accurate idea of the general level of lot values in the neighborhood, the appraiser may then proceed by any one of three methods to determine the value of a particular lot. In the first place, he may compare the value of the lot as a unit with the known value of similar lots in the neighborhood. However, since no two lots are exactly alike, each one offers a problem in itself. A multitude of different factors may cause lots in the same neighborhood to differ somewhat in their values.

The appraiser should study carefully the lot which he is evaluating in order to discover all factors either favorable or unfavorable, that affect its value. Its particular location in the neighborhood is one of the most important of these factors. If it is lying on the outskirts, it may soonest be affected by an unfavorable change in the character of the neighborhood. If it is immediately adjacent to schools, trading centers, or transportation lines its value may be affected adversely, as will also be the

case if it is too far removed from such utilities. The ideal distance is generally considered to be more than one and not more than five blocks.

The cost of the grading, filling, or excavating necessary to prepare the lot for building must also be considered in the appraisal of vacant lots. Drainage is an important factor that is frequently overlooked if the appraisal is being made in dry weather. Basements that are flooded with every heavy rainfall definitely lessen the value of the property.

The size and shape of lots naturally affect their value. The value of a lot varies somewhat in proportion to its size, although if the standard size is adequate, larger lots will not be worth proportionately more. Irregularity of shape frequently detracts from the value of a lot, although if it provides adequate space for a house and grounds, the irregularity may offer a pleasing variation from the other lots.

Lots which are considerably above the street level usually require terracing or retaining walls, which entail considerable expense or labor. A gentle slope toward the street is commonly preferable, although in some communities people prefer lots sloping backward from the house.

The direction in which the house faces is an important factor in some cases. Generally a southern or eastern exposure is preferred in the northern part of the country, while the opposite may be true in the warmer sections. In particular instances, lots on one side of a street may have a greater value than those on the other side because of the cutting off of an obnoxious view or the opening up of a pleasing one. Because of the direction of the prevailing winds, disagreeable odors, smoke, and noise may affect one side of the street more than the other.

The appraiser should inquire into all legal restrictions on the use of the lot, and of those surrounding it. The effect of deed and zoning restrictions upon its value should be carefully considered, as should

also the effect of all easements and encroachments. In one community, for example, a large gas main carrying a 500 pound pressure and 12 feet below the surface and built 30 years before the land was subdivided underlies many of the lots. In addition to the danger hazard involved, the gas company has the right to tear up the lots to make repairs. An easement such as this, which has a material effect upon the value of the property, could easily be overlooked unless the appraiser was thoroughly familiar with the community or had searched carefully for all such legal complications.

Since the value of a lot is dependent largely upon the quality of the neighborhood in which it is located, any indication of a change in that quality should be carefully considered before placing a final value upon the lot. As has been stressed in previous articles in this series, the trend is as important as the present condition in appraising for long-term mortgage credit.

These and all other factors that effect its value as a home site should be considered by the appraiser in arriving at a valuation of the lot. In order not to omit any important items, some appraisers have found it desirable to make up a check list of all the elements of value that they have found by experience should be considered and to go through it systematically when they are inspecting the property.

Instead of valuing the lot at a unit, many appraisers prefer to use either the front-foot or the square-foot method. In the use of the first of these methods, a standard price per front foot for all lots in the neighborhood is determined upon the basis of actual sales prices, after carefully weighing and analyzing each transaction. A tentative value for any lot can then be determined by simply multiplying its front footage by the standard price per front foot. The square-foot method is similar to the front-foot, differing only in the use of the square foot instead of the front foot as the unit of valuation. These methods in their simple

forms, as stated above, are rarely adequate for appraising residential property, as they fail to give proper weight to the differences between lots.

In the use of the front-foot method it is not a safe assumption that the value of the lot always varies in direct proportion with the width. If the standard width in a community is 50 feet, a lot 75 feet wide is not necessarily worth 50 percent more. Indeed, conceivably it might be difficult in some communities to find a buyer who would pay any appreciable amount more for the extra 25 feet of width. Neither does the simple front-foot method make allowance for the depth of the lot. The actual front-foot value commonly varies somewhat with the depth but by no means in direct proportion with it. Ordinarily the footage in excess of the standard size diminishes rapidly in value.

Various appraisal manuals furnish the appraiser with tables giving the percentage of standard value for lots of various depths. These tables are usually based upon some assumed mathematical relationship between the depth and the front-foot value. According to one such formula, the value of a lot with extra depth is equal to the front footage multiplied by the value per front foot, multiplied in turn by the square root of the actual depth divided by the square root of the standard depth. Thus, if the standard size is 50 feet by 100 feet, a lot 50 feet by 144 feet would be worth $\frac{\sqrt{144}}{\sqrt{100}}$ or 1.20 times as much.

Other tables and formulas are available to the appraiser for calculating the value of corner lots and those of irregular shapes.

Under the simple square-foot method, the value of the lot is affected directly and proportionately both by width and depth and thus in the usual case it places too great value upon footage in excess of the standard. As with the front-foot method, however, tables have been developed to enable the appraiser to avoid this error.

(Continued on p. 225)

Administrative Rulings, Board Resolutions, and Counsel's Opinions

DIGEST OF A-B-C BOOK OPINION

ANY member may obtain from a Federal Home Loan Bank a copy of any administrative ruling, Board resolution, or the complete text of any opinion of the Legal Department of the Board, the digest of which is printed in the REVIEW. "A" indicates administrative rulings by the Governor; "B" indicates resolutions of the Board; and "C" indicates Counsel's opinions.

VOTING RIGHTS OF MEMBERS—Cumulative voting. Fed. Charter E, Secs. 4, 5; Fed. Charter K, Secs. 4, 5; Bylaws (1935), Sec. 3; Bylaws (1934), Sec. 3.

The members of a Federal association operating under Charter E or Charter K are not permitted to cumulate their votes. The right to cumulate votes of members is not granted by statute, regulations, Charter E or Charter K, or by bylaws (any form of Exhibit H). See A-B-C Book, C-152, dated March 10, 1937.

BONUS PLAN—Adoption of, by members. Fed. Charter E, Sec. 7; Fed. Charter K, Sec. 10; Bylaws (1936), Sec. 10; Fed. Reg. 43.

Federal associations operating under Charter E are obligated by Section 7 thereof to pay a cash bonus, which obligation can be abolished only by amendment of Charter E by the vote of members with Board approval. Associations operating under Charter K may adopt without further Board approval, by vote of members, the exact resolution prescribed in Section 43 of Federal regulations (effective December 1, 1936) to amend the Bylaws (1936 edition of Exhibit H) by adding a new Section 11 thereto which will obligate the association, effective on the next succeeding dividend date, to pay a short or long term bonus or

both. A Charter K Federal cannot adopt a bonus plan by any other action. Directors have no power except to recommend to members the adoption of a bonus plan. Section 10 of Charter K authorizes the members without further Board approval, by repeal of such new Section 11 of the Bylaws (1936 edition of Exhibit H), to abolish any bonus plan as to savings share accounts opened after the date of such repeal. Directors have no power under Section 10 of the Bylaws (1936 edition of Exhibit H) to amend the Bylaws so as to adopt or to abolish a bonus plan or plans. See A-B-C Book, C-153, dated March 4, 1937.

LOAN ON SECURITY OF SHARE ACCOUNTS—Delivery of share account certificates pledged. Fed. Charter E, Sec. 11; Fed. Charter K, Sec. 13; Fed. Reg. 40.

A Federal association operating under Charter E has, by the provisions of Section 11 thereof, a lien on all shares of a borrowing shareholder whether the actual share certificates be pledged or not, but the Board may, under its supervisory powers, require such association to obtain actual pledges of the share certificates. A Federal association operating under Charter K has no lien on the share accounts of borrowers but is required by the provisions of

Section 13 of the Charter to obtain and maintain a lien or pledge of sufficient share accounts from a borrowing member so that the amount of the loan shall not exceed 90 percent of the repurchase value of the share account or accounts securing the loan. Section 40 of the Federal regulations requires that loan contracts must contain a full clear statement of all the terms of the loan. Under this regulation, a collateral note enumerating shares or share accounts pledged as security for a loan would be an appropriate form of note to evidence such loan. See A-B-C Book, C-154, dated February 19, 1937.

LOANS—To officers, directors, employees, limitation on. Fed. Charter E, Sec. 11; Fed. Charter K, Sec. 13.

An attorney who, from time to time, renders professional service to a Federal savings and loan association upon a fee basis but who receives no fixed salary or retainer, is not an employee within the provisions of Section 13 of Exhibit K Charter or Section 11 of Exhibit E Charter placing limitations on loans to officers, directors, and employees. See A-B-C Book, C-155, dated February 19, 1937.

LOANS—Limitation, 15 percent of assets. HOL Act, Sec. 5 (c); Fed. Charter K, Secs. 13, 14.

If a Federal association operating under Charter K which has exhausted the 15 percent of assets limitation upon lending power fixed by Section 5 (c) of Home Owners' Loan Act of 1933 and Section 13 of Charter K desires, nevertheless, to make a nondirect-reduction loan on a home property not exceeding \$20,000 and located within 50 miles of the home office, it must first obtain written approval of the Federal Home Loan Bank Board before making any such loan. See A-B-C Book, C-156, dated March 13, 1937.

REPURCHASES—Receipts for payments upon. Fed. Charter E, Sec. 10; Fed. Charter K, Sec. 12; Fed. Reg. 34.

Section 10 of Charter E and Section 12 of Charter K necessitate the filing of a written application for repurchase if an investor is to establish a right to have his investment repurchased. Neither a Charter E nor a Charter K association is required to obtain a repurchase receipt upon settlement on a repurchase application. As a matter of policy, some form of receipt is advisable. A canceled check would be sufficient. See A-B-C Book, C-157, dated March 13, 1937.

DIRECTORS—Election of and number. Fed. Charter E, Sec. 5; Fed. Charter K, Sec. 5; Bylaws (1935), Sec. 5.

The board of directors of a Federal association operating under Charter E or Charter K has no power to change the number of directors by an increase or decrease therein, except that for associations operating under Charter E action by the board of directors amending the sentence of Section 5 of the Bylaws (1935 edition of Exhibit H) which fixes the number of directors may be made valid by subsequent ratification by the members and approval by the Board as to an increase to not more than 15 directors and as to a decrease for not more than the number of directors whose terms next expire or, in any event, to not less than 5 directors. Such amendment of such sentence by the directors cannot appropriately be approved by the Board unless the members have ratified the change in the number of directors proposed by such amendment. If the members have previously amended such sentence the directors thereafter have no power to amend such sentence of Section 5 of the Bylaws (1935 edition of Exhibit H). The directors may not fill the apparent vacancy created by such a proposed increase in the number of directors. If the members increase the number of directors and fail to elect the additional directors,

the board of directors may elect the additional directors in associations operating under Charter E for the unexpired term, and in associations operating under Charter K to serve until the next annual meeting of members when the members shall elect a director for each unexpired term. See A-B-C Book, C-112, dated March 5, 1937.

CHARTER AND BYLAWS — Availability of, to members. Ins. Reg., Sec. 8.

Section 8 of Insurance Regulations, as amended January 26, 1937, applies to all insured institutions regardless of when insured and regardless of what forms of certificate representing shares or other investment have been approved for use by any such insured institution. The word "member" used in such section means whatever the law of the State of the insured institution makes such word mean, that is, if membership is limited by State law to shareholders, the word "member" as applied to such insured institutions means shareholder. If the State law does not make depositors members, then for insured institutions in such State, the word "member" does not include depositors. See A-B-C Book, C-160, dated April 1, 1937.

RESOLUTIONS OF THE BOARD

The Board adopted the following resolution on March 3:

Whereas the final design of the official insignia of the Federal Home Building Service Plan is now completed: Therefore

Be it resolved, That the insignia of the Federal Home Building Service Plan approved by, and attached as Exhibit B to, the resolution adopted

September 25, 1936, be and the same is hereby withdrawn, and that from and after date hereof the official insignia of the Federal Home Building Service Plan approved for use shall be as shown on Revised Exhibit B, which is ordered filed in the Minute Exhibit File No. 250.

The Board adopted the following resolution on March 8:

Be it resolved, That pursuant to authority vested in the Federal Home Loan Bank Board by Section 17 of the Federal Home Loan Bank Act (12 U. S. C. 1437), Exhibit E to the Rules and Regulations for Federal Home Loan Banks, effec-



tive February 15, 1936, is hereby amended by inserting a new paragraph numbered 6 reading as follows, and renumbering as paragraph numbered 7 the former paragraph numbered 6:

"If this institution is admitted to membership, the Federal Home Loan Bank Board and said bank are authorized to make available to any State or Federal regulatory authority or officer exercising supervisory authority over this institution, any information furnished to, or obtained by, said Board or said bank regarding this institution or its affairs and all or any part of any report of any examination of this institution made by said Board or said bank or by any regulatory or public authority or officer."

A Catalog of Thirty-five Small Home Designs

THE Federal Home Building Service Plan is now in operation in the Indianapolis District through the Federal Home Loan Bank of Indianapolis, and the very important work of completing a catalog of approved designs for small houses has been completed. This is a very interesting publication, therefore one of its 35 pages is reproduced in full on the page following this one. In the catalog each page is 12x9 inches, not including margins. The pictures are plain line drawings in black and white which have the great advantage of allowing the prospective home builder to supply, in imagination, any color that he thinks appropriate.

Each of the 35 pages of the catalog presents a different design; and the floor plan accompanies the picture, in each case, just as shown on the following page. A full page in the REVIEW is not as large as the catalog pages so there has necessarily been some reduction in the size of the reproduction presented herewith.

The 35 designs offered for the Indianapolis District were either selected, or adapted, or originated by the architects of that district who are cooperating in the Architectural Advisory and Construction Supervisory Service.

Very shortly a similar catalog will be issued for the Minneapolis District, offering designs approved by the architects of that district. The actual blue prints and complete plans for each of the designs pictured in the catalogs are, of course, available to the prospective home builders. They look at the pictures and the floor plans and the brief explanation accompanying each, and when they find what they want, the rest is detail that has been prearranged.

The purpose of this Home Building Service Plan, as previously explained in the REVIEW, is to bring to the builder of a small

house the same expert help and protection that the builder of a large and expensive home employs. The essence of the plan is to cut costs by cooperative methods, and thus reduce the expense to a minimum.

The Mail Bag

IN A letter to the editor of the FEDERAL HOME LOAN BANK REVIEW, John H. Armbruster, Secretary of the Community Federal Savings and Loan Association of Overland, Missouri, writes:

We are pleased to announce that our Association has now reached the million-dollar mark; we are grateful to the Government for their whole-hearted support, for the help of the Federal Home Loan Bank and all others who assisted us.

In our town of 20,000 people but adjacent to the City of St. Louis, it seemed impossible to us three years ago when we started with \$5,000 that within the space of 37 months we would be in the million-dollar class but we worked steadily gaining ground each month. We hope our experience may be an inspiration to other associations in small towns adjoining large cities and that they will all forge ahead as we have.

Appraisal Methods

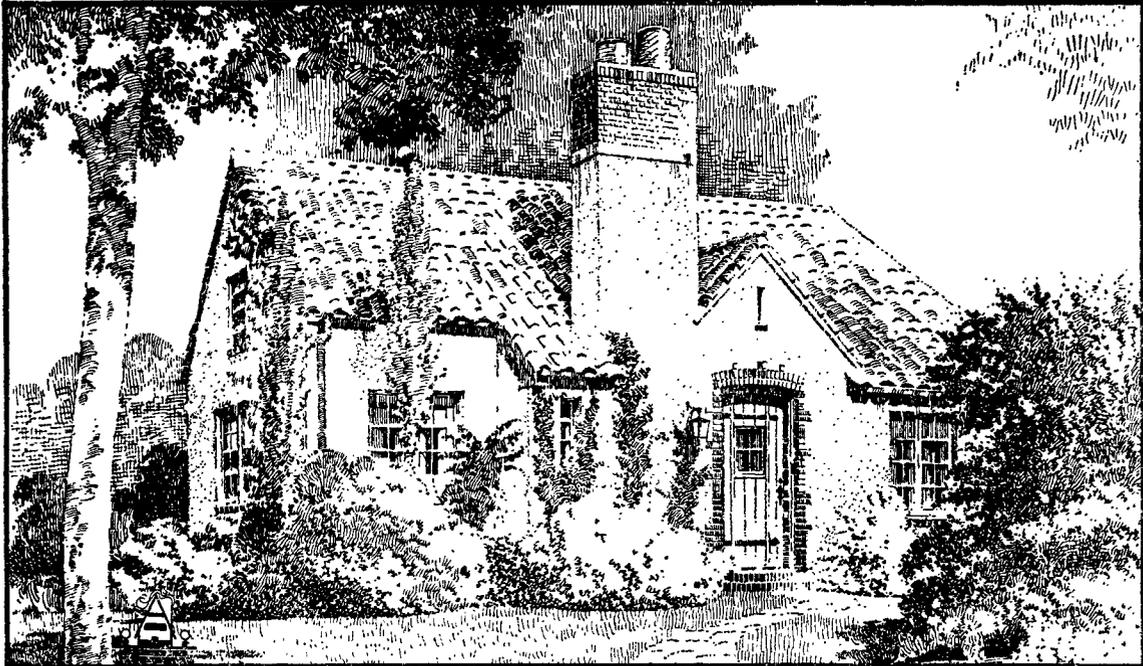
(Continued from p. 221)

Such mathematical aids to appraising may be useful in some cases but their limitations should be clearly realized. At best, they are based on generalizations developed from the observation of many individual cases and thus are rarely entirely accurate when applied to any one particular case. The results obtained by such methods should be regarded simply as one indication of the value of the lot, which may need to be modified by other factors which the experience and judgment of the appraiser indicate should be taken into consideration.

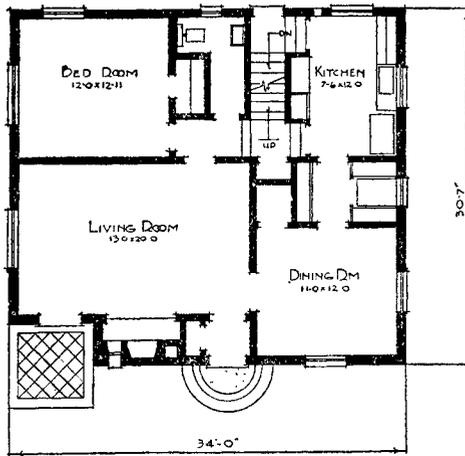
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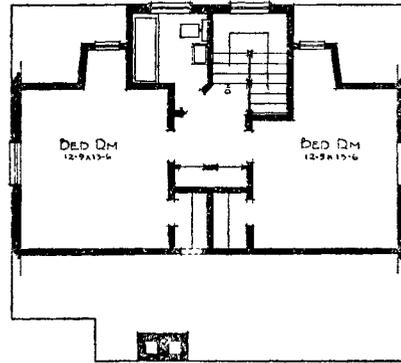
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**MEDITERRANEAN TYPE
SIX ROOM BUNGALOW**



FIRST FLOOR PLAN



SECOND FLOOR PLAN

Construction: Hollow tile.

Exterior finish: Stucco.

Ceiling height: First story 8'4", second story 7'6"

The tile roof is not essential to the design, and wood sash may be substituted for the steel casements as shown. The small terrace at the side of the fireplace may be omitted.

Volume
22,763 Cu. Ft.

SMALL HOUSE ARCHITECTURAL SERVICE
ARCHITECTS AND BUILDERS BUILDING
333 North Pennsylvania Street
INDIANAPOLIS, IND.

DESIGN
6-B-27

Common Faults in Structures

CERTAIN common faults frequently develop in structures after a period of use. Whether they are due to improper design and poor construction, or to natural causes connected with the inherent properties of the materials involved, they are a potential threat to the value of the security on which mortgage loans may have been made. The causes of the most common faults in residential structures are of concern to mortgage lending institutions, and to the builders and architects who may work in cooperation with them. Since these faults are frequently due to the interaction of materials rather than to any obvious flaws in structure and design, particular care is needed to prevent them.

The most common enemy of residential structures is water, which is most often responsible for the failures of building materials or material combinations. Either free water, or water suspended in the air and in turn suspending chemical elements such as salt or sulphur, may be responsible for damage.

Metals, whether ferrous or non-ferrous, are affected by the continual presence of chemical compounds which may be contained in water. Common gases, such as carbon dioxide, sulphur trioxide, and their compounds, or solutions of salts, such as sulphates of sodium or calcium, are compounds which frequently affect metals in this way. They may either be corrosive, or may form crystals within the pores or cells of certain materials and thereby cause disintegration.

Vegetable materials such as wood need to be preserved from either complete dryness or saturation. A normal balance of their water content must be maintained to prevent attacks by bacterial fungus or insects. The common method of maintaining this balance, and preventing such attacks, is to coat the wood with paint or to impregnate

it with materials destructive to animal life.

Water's various methods of attack, whether in the form of uncontrolled flood or atomic particles suspended in the air, cause chemical disintegration of metals and disintegration of vegetable matter. In diagnosing any building fault, except one obviously caused by improper structural design, it is advisable to consider first of all the possibility of damage by water. The correction of infiltration of water is purely a mechanical technicality. The practical solutions are generally difficult yet the corrective theory is simple.

It must be borne in mind that water does *not* always run down hill. Capillary attraction, pressure, either through gravity or air, may cause water to find exit far removed from its point of entrance.

CAUSES OF FAILURE

THE basic building materials are chemically inert, and not subject to self-destruction. It is a problem of scientific research to isolate the harmful relationships of material. It is then necessary to prevent the occurrence of such relationships by checking on some stage of the process of converting raw materials into a finished structure.

There are five principal stages involved. It is impracticable to check on the work of the producer of the raw material, or of the manufacturer who processed it or manufactured the device, although neither usually has complete knowledge of the relationships that his product would assume in the finished structure. It is well, therefore, to watch carefully the work of the architect, the builder, and the mechanic, in designing the structure, specifying the materials and assembling them. Let us examine first the various mechanical causes of failure of building materials, and then take up the specific faults which most frequently develop in certain processed materials. When

technical research teaches us more about these detrimental factors, a more complete understanding of them by those who build and inspect our residential structures will be of great value to the business of home financing.

The mechanical causes of failure may be classified as follows: stress, impact, abrasion, corrosion, temperature, hydration, and infection.

Stress is usually caused by faulty design of the component parts of a building. It can also be caused by changes in temperature and hydration. When no obvious fault of design may be found, it may be due to such contributory causes.

Impact and abrasion are the result of motion. This is not the result of inherent insufficiency within the material or combination. It might be mentioned as a contributing factor to structural failure. Certain materials poorly utilized are quickly deteriorated through abrasion. Usually stress and impact, although not each prime causes of failure, can, in combination, cause metallurgical conditions which will change the original properties of materials.

Corrosion is the chief cause of fault in metals. It is caused by (1) chemical reaction caused by exposure to unfriendly elements or (2) electrolytic action—this induced by galvanic or static currents developing as the result of proximity of certain different metals and chemical elements also being present. (Refer to bulletins #TIBM 10-17-22-29, National Bureau of Standards, which may be had upon request.)

Extremes of temperature (fire and freezing) probably are the cause of more different materials developing faults than any other. No material in its processed form will retain its designed qualities if subjected to extremely high temperature. It either becomes fluid and returns to its more primitive state or is separated into its elementary gaseous forms through combustion. The other extreme—freezing—will have no ef-

fect on material without hydration—the presence of water.

Hydration is probably the simplest to control. It is highly contingent on temperature variations and may be overcome by controlling temperatures. High temperature above 210 degrees Fahrenheit causes water to evaporate as steam while below 32 degrees Fahrenheit it congeals becoming ice and its presence at low temperatures in porous material develops temporary stresses. This factor will attack all materials of cellular or porous properties. Hydration will also cause decomposition of certain processed materials. It will place certain elements in solution or create chemical reactions which may seriously alter the original structure. Such materials as gypsum, lime, animal fat, etc., are susceptible to such decomposition.

Infection is confined entirely to vegetable materials. It is evidenced by either eventual complete consumption of the material or may develop a fungus or cancerous growth within or on the material.

PROCESSED MATERIALS

THESE general types of structural failure are those most often responsible for faults developing in residential buildings. Causes of faults in processed materials may also be easily classified, although considerable study is needed for a complete knowledge of the applied material, its application to the structure, and its relationship with neighboring materials.

Paint Faults. Many treatises have been written covering this subject, yet the most common are caused by water, with heat, and light, with corrosion, chemical reaction and infection, all contributing factors. New buildings contain water—placed there by both natural and mechanical causes. This must be removed. It is a natural law that heat attracts water, evidently by natural evaporation. It is carried in air in different degrees of saturation. The air within a new structure is of higher water content, and when the outer air is warmer

than the air within the structure, the water immediately seeks the warmer and dryer air. It will find its way through any porous or cellular material. Frame houses sided with wood will show paint "blisters". These are caused by the water being drawn through the walls and finding resistance in the paint, which becomes a waterproof fabric or sheet. The water will accumulate in "blisters" wherever the paint structure has weaker bond to the wood on which it has been applied. The condition is similar to that which causes "water blisters" in the human anatomy.

The correction for this fault is obvious. Create channels of lesser resistance and the water in its course to the outer air will follow them. Leave windows, doors, and flues open to give water-laden air free passage to the outdoors.

Other paint failures are mostly due to chemical reaction. The presence of a material unfriendly to some of the components of the formula in use may neutralize the tenacious and the elastic elements in paint and contribute to rapid deterioration. The same is true of paint which has undergone change in its original color. In white paint which has turned "yellow" or grayish, either an unexpected chemical change has taken place in some component material or some vegetable or animal component has created an infection and generated a fungus. The base on which paint is applied is seldom the cause of fault if properly prepared. Overcoming these faults may be a simple laboratory problem, yet to isolate every defect, it is first necessary to isolate every cause.

Sheet Metal Failures. Replacement of sheet metal parts such as flashing, gutters, and leaders, and other metal equipment, is an expected item of building maintenance. In order to provide the longest life for such parts, metals favorable for use in the locality must first be determined. For example, copper is indicated for use where the air is known to have a salt content.

In the case of metal roofings temperature changes cause expansion and contraction

which in turn will cause rupture of the sheets if no means has been provided to absorb the thermal movement of the metal.

Brickwork faults are generally caused by unsuitable clay poorly fused, which usually results in low resistance to water and subsequent freezing, which in turn "spalls" or "dusts" surfaces. Modern kilns and firing have reduced this fault to a minimum. Brick which has a bell-like ring when struck is usually sound whereas brick without such a ring is mostly pale in color, soft and porous. It is usually easy to determine sound well-burned brick.

Brick mortar in use today is made with cement and sand, usually with an added percentage of a hydrated lime product. Usual brick mortar (composed of three parts sand to one part cementing material) is sufficient for ordinary use. Improper sand—that containing fine loam or organic matter—can contribute to brickwork faults. In rare cases water containing organic matter or unusual chemical elements may contribute also to this factor. Usually any water suitable for human use is satisfactory for brickwork. Therefore, in analyzing faults in brickwork it may be helpful to determine the source and quality of the sand and water. Failure of cement is almost unknown if prescribed portions are used.

In certain sections of the country new brickwork frequently develops a white salt coating. This may be considered a fault by some persons but it is not the result of omission or neglect on the part of the brick mason. This condition commonly known as "efflorescence" can be attributed to natural causes. It is seldom harmful to the brickwork and usually within six months it completely dissipates itself leaving the wall clear of all deposit.

Recently chemical compounds have been marketed which check this condition, and in certain instances prevent its occurrence. No deteriorating effect through the use of these compounds has been recorded. It is therefore reasonably safe to employ such

preventive measures when new face brick walls are built.

Other Types of Masonry Walls. The most common fault in all structural walls is caused by stress. The correction is obviously to relieve the over-stressed parts.

Shrinkage or drying movement in lumber, weakened foundation conditions and many other contributing causes can produce situations which will create fault factors not existent in the structure when built.

Terra cotta tile (block) walls are subject to the same faults as brick, except that they are more susceptible to damage through rapid and excessive temperature changes. For example, hollow tile walls, when subjected to ordinary fire and then a cold stream from a hose, will disintegrate more rapidly than brick. Water penetrating and lodging within the cells of the blocks and freezing can rupture the block, causing structural failure. Although this is not a frequent occurrence it nevertheless should be given consideration, particularly in determining stucco finish faults in terra cotta walls.

Concrete. This material is probably the least susceptible to fault, if properly designed and made. Insufficient design will obviously develop internal stresses and faults will occur. Correct design of reinforcement will largely eliminate internal fault.

In reinforced concrete excessive corrosion is theoretically possible, and such a condition may cause faulting of the structure.

Rubble Masonry or Field Stone. All plain masonry walls are subject to water infiltration. Rubble stone masonry offers less resistance to water than other material. It is subject to the same faults as other walls. It should not be considered as "waterproof" in itself. Water repellent agencies must be employed to prevent infiltration. Stone faced brick walls frequently show "stain" unless properly protected by a damp proof course. This is due to water penetration.

Rubble walls are frequently penetrated by rodents but there are many effective ways to prevent this.

Roofings. Under this heading we shall not consider sheet metal roofings but only materials produced in shingle units or rolls, such as slate and similar shale stones, and shingles of wood and composite structure.

The common built-up roofing materials used in housing are:

1. Tile (ceramic)
2. Tile (cast cement)
3. Asbestos composition (shingles)
4. Asphalt composition (shingles and rolls)
5. Wood (shingle)

Roofing is not a structural member of a building. It is, therefore, not subject to load stresses. It is merely a protective and decorative covering. Slate, tile and asbestos composition are considered the most satisfactory materials and possess less inherent weakness than the other materials. They are subject only to temperature changes. Freezing and the resultant expansion will expose these materials to breakage when improperly laid.

The average normal life of wood shingles is about 20 years. Wood shingle roofs are subject to depreciation through temperature changes and chemical decomposition induced by hydration. It is infrequent that wood roofs are subject to infection, as sunlight is considered a most effective germicide. Occasionally a fungus infection (moss) will develop but it does not materially curtail the life of wood roofings.

Stucco as a Wall Finish. The usual cause for stucco failure is through stressing of the material, or through external stresses developed in the structure and transmitted to the stucco finish. It is safe to assume that nearly all faults come within this category. Other faults may be allocated to improper composition of the material and its application on an insecure or inadequate base.

Stucco has no structural value and should be so treated in design. If it shows fault,

(Continued to p. 243)

Indexes of Small-House Building Costs

THE cost of residential construction increased again in March as indicated by the combined index of rates of labor and prices of materials used in building a typical 6-room house. There are only 2 cities of the 26 surveyed that showed a decrease in March 1937 from December 1936, while 1 city showed no change.

Unusually large increments in material prices were indicated in Rutland, Milwaukee, Wichita, Omaha, and Oklahoma City. Baltimore, Maryland, and Columbia, South Carolina, were the only cities showing declines in material costs in March, tending to offset recent increases in these communities.

Labor rates, after rising considerably during the preceding year, have leveled off during recent months. Of the 26 metropolitan centers reporting, 16 showed no significant change from December 1936, while 8 registered increases, and only 2 had declines of any significance.

Among the four Districts covered this month, total construction costs were highest in those reporting cities in the Chicago District, with the exception of Oshkosh, Wisconsin, whose index stood in March at less than \$5,600. Chicago, Illinois, heads the list of high-cost communities, with nearly \$7,100 being estimated as the cost of building the standard house. Springfield, Milwaukee,

and Peoria (all in the same District) are next in line, each with an index of more than \$6,500, or 27 cents per cubic foot. These are the highest rates reported by any of the 12 Federal Home Loan Bank Districts this year. Building of homes, as shown by chart 3 of the residential construction activity article, stands at a low ebb in the Chicago area.

The Winston-Salem District, with the exceptions of Washington, D. C., and West Palm Beach, Florida, which may be classified as "boom" cities, show relatively low residential construction costs, with Columbia, South Carolina, having an index of less than \$4,700, or 20 cents per cubic foot. Reference to table 2 and chart 3 of the residential construction activity article shows that among the States in this District high rates of construction predominate.

Special attention is called to the description of the standard house on which costs are obtained, appearing as a footnote to the accompanying table. It should be emphasized that the costs reported do not represent the cost of building a completed house in any of the cities. The purpose of the reports is rather to give a true picture of *movements* of costs within each city and a reliable comparison of costs among all reporting cities.

Cost of building the same standard house in representative cities in specific months ¹

NOTE.—These figures are subject to correction.

[Source: Federal Home Loan Bank Board]

Federal Home Loan Bank Districts, States, and cities	Cubic-foot cost		Total building cost					
	March 1937	March 1936	March 1937	Decem- ber 1936	Septem- ber 1936	June 1936	March 1936	Decem- ber 1935
No. 1—Boston:								
Connecticut:								
Hartford.....	\$0. 255	\$0. 235	\$6, 131	\$5, 768	\$5, 589	\$5, 657	\$5, 647	\$5, 655
New Haven.....	. 240	. 230	5, 753	5, 636	5, 468	5, 544	5, 509	.....
Maine:								
Portland.....	. 219	. 214	5, 252	5, 252	5, 245	5, 132	5, 124	5, 103
Massachusetts:								
Boston.....	. 261	. 241	6, 275	5, 781	5, 876	5, 773	5, 780	5, 699
New Hampshire:								
Manchester.....	. 235	. 226	5, 641	5, 545	5, 467	5, 462	5, 416	5, 467
Rhode Island:								
Providence.....	. 240	. 230	5, 768	5, 633	5, 577	5, 496	5, 531	5, 574
Vermont:								
Rutland.....	. 237	. 223	5, 696	5, 305	5, 305	5, 329	5, 329	5, 337
No. 4—Winston-Salem:								
District of Columbia:								
Washington.....	. 246	. 205	5, 906	5, 569	5, 150	4, 973	4, 918	4, 850
Florida:								
Tampa.....	. 234	. 224	5, 619	5, 500	5, 483	5, 360	5, 379	.....
West Palm Beach.....	. 265	. 245	6, 367	6, 038	5, 974	5, 911	5, 889	5, 894
Georgia:								
Atlanta.....	. 218	. 202	5, 228	5, 150	4, 897	4, 889	4, 854	4, 849
Maryland:								
Baltimore.....	. 224	. 184	5, 388	5, 401	4, 899	4, 909	4, 427	4, 543
Cumberland.....	. 236	. 226	5, 659	5, 491	5, 482	5, 424	5, 419	5, 358
North Carolina:								
Raleigh.....	. 227	. 211	5, 443	5, 197	5, 148	5, 060	5, 070	4, 967
South Carolina:								
Columbia.....	. 195	. 193	4, 674	4, 804	4, 697	4, 712	4, 634	4, 505
Virginia:								
Richmond.....	. 217	. 207	5, 207	4, 870	5, 026	5, 026	4, 964	5, 062
Roanoke.....	. 222	. 189	5, 331	5, 014	4, 760	4, 843	4, 544	4, 491
No. 7—Chicago:								
Illinois:								
Chicago.....	. 295	. 275	7, 081	6, 825	6, 745	6, 639	6, 608	6, 498
Peoria.....	. 274	. 259	6, 585	6, 312	6, 331	6, 420	6, 212	.....
Springfield.....	. 288	. 269	6, 908	6, 625	6, 459	6, 459	6, 459	6, 451
Wisconsin:								
Milwaukee.....	. 279	. 224	6, 701	6, 081	5, 838	5, 540	5, 386	.....
Oshkosh.....	. 232	. 229	5, 576	5, 555	5, 658	5, 612	5, 502	5, 357
No. 10—Topeka:								
Colorado:								
Denver.....	. 260	. 254	6, 250	6, 105	6, 133	6, 047	6, 098	.....
Kansas:								
Wichita.....	. 241	. 215	5, 794	5, 290	5, 192	5, 164	5, 164	5, 200
Nebraska:								
Omaha.....	. 250	. 233	6, 008	5, 601	5, 578	5, 582	5, 582	5, 55 4
Oklahoma:								
Oklahoma City.....	. 242	. 220	5, 816	5, 486	5, 449	5, 561	5, 282	5, 214

¹ The house on which costs are reported is a detached 6-room home of 24,000 cubic-foot volume. Living room, dining room, kitchen, and lavatory on first floor; 3 bedrooms and bath on second floor. Exterior is wide-board siding with brick and stucco as features of design. Best quality materials and workmanship are used throughout.

The house is not completed ready for occupancy. It includes all fundamental structural elements, an attached 1-car garage, an unfinished cellar, an unfinished attic, a fireplace, essential heating, plumbing, and electric wiring equipment, and complete insulation. It does not include wall-paper nor other wall nor ceiling finish on interior plastered surfaces, lighting fixtures, refrigerators, water heaters, ranges, screens, weather stripping, nor window shades.

Reported costs include, in addition to material and labor costs, compensation insurance, an allowance for contractor's overhead and transportation of materials, plus 10 percent for builder's profit.

Reported costs do not include the cost of land nor of surveying the land, the cost of planting the lot, nor of providing walks and driveways; they do not include architect's fee, cost of building permit, financing charges, nor sales costs.

In figuring costs, current prices on the same building materials list are obtained every 3 months from the same dealers, and current wage rates are obtained from the same reputable contractors and operative builders.

Monthly Lending Activity of Savings and Loan Associations

OF THE 2,639 savings and loan associations reporting during February 2,095 made loans for all purposes in the amount of \$35,445,200; the remaining 544 reporting no lending activity during the month. The total assets of all reporting associations (for the most part as of February 28, 1937) were \$2,514,288,500. These institutions represent every State, the District of Columbia, and the Territory of Hawaii.

The accompanying table breaks down by States and by Federal Home Loan Bank Districts the number and volume of loans

and the purposes for which they were made. For the United States as a whole the reporting associations made mortgage loans on 1- to 4-family nonfarm homes of \$31,709,200. These loans were made to 12,542 borrowers.

Analyzing the loans on nonfarm homes according to the purposes for which they were made, we find 31.8 percent in dollar volume went for new construction; 36.4 percent for the purchase of homes; 26.0 percent for refinancing; and 5.8 percent for reconditioning.

Monthly lending activity and total assets as reported by 2,639 savings and loan associations in February 1937

[Source: Monthly reports from savings and loan associations to the Federal Home Loan Bank Board]

[Dollar amounts are shown in thousands of dollars]

Federal Home Loan Bank Districts and States	Number of associations		Loans made in February according to purpose										Total assets Feb. 28, 1937 ²	
			Mortgage loans on 1- to 4-family nonfarm homes						Loans for all other purposes		Total loans, all purposes			
			Construction		Home purchase ¹		Refinancing and reconditioning ²							
			Sub- mitting reports	Report- ing loans made	Num- ber	Amount	Num- ber	Amount	Num- ber	Re- financing	Recon- dition- ing	Num- ber		Amount
UNITED STATES...	2,639	2,095	3,090	\$10,087.9	4,187	\$11,566.1	5,265	\$8,231.1	\$1,824.1	2,434	\$3,736.0	14,976	\$35,445.2	\$2,514,288.5
No. 1—Boston.....	147	129	132	578.9	312	949.8	336	582.5	118.7	201	311.0	981	2,540.9	273,186.3
Connecticut.....	30	26	43	185.4	20	71.9	36	117.0	5.2	9	10.4	108	389.9	23,813.6
Maine.....	22	17	2	26.2	34	74.8	33	84.0	2.3	15	12.9	84	200.2	12,102.2
Massachusetts...	78	71	66	303.0	162	529.6	209	290.3	90.6	111	219.3	548	1,432.8	195,755.2
New Hampshire...	10	10	5	12.0	25	67.6	19	25.3	9.4	30	33.0	79	147.3	13,491.0
Rhode Island....	3	2	12	39.6	64	186.2	35	54.3	9.1	32	29.6	143	318.8	24,852.2
Vermont.....	4	3	4	12.7	7	19.7	4	11.6	2.1	4	5.8	19	51.9	3,172.1
No. 2—New York...	305	163	238	986.8	225	726.2	257	478.9	112.6	129	169.3	849	2,473.8	377,801.4
New Jersey.....	168	55	23	132.2	39	126.7	36	70.6	9.8	23	36.2	121	375.5	145,585.6
New York.....	137	108	215	854.6	186	599.5	221	408.3	102.8	106	133.1	728	2,098.3	232,215.8
No. 3—Pittsburgh...	235	140	61	162.7	165	424.6	165	221.5	54.3	73	134.6	464	997.7	113,949.1
Delaware.....	6	6	3	5.0	8	21.6	2	5.0	0.7	2	2.1	15	34.4	5,047.3
Pennsylvania....	207	118	36	109.8	138	365.2	129	189.1	43.8	56	115.0	359	822.9	97,744.5
West Virginia...	22	16	22	47.9	19	37.8	34	27.4	9.8	15	17.5	90	140.4	11,157.3

See footnotes at bottom of table, page 234.

Monthly lending activity and total assets as reported by 2,639 savings and loan associations in February 1937—Continued

Federal Home Loan Bank Districts and States	Loans made in February according to purpose														Total assets Feb. 28, 1937
	Number of associations		Mortgage loans on 1- to 4-family nonfarm homes						Loans for all other purposes		Total loans, all purposes				
			Construction		Home purchase		Refinancing and reconditioning								
			Number	Amount	Number	Amount	Number	Amount							
Sub- mitting reports	Report- ing loans made	Number	Amount	Number	Amount	Number	Re- financing	Recon- dition- ing	Number	Amount	Number	Amount			
No. 4—Winston-Salem.....	277	234	496	\$1,409.9	393	\$989.5	672	\$964.9	\$267.9	296	\$426.4	1,857	\$4,058.6	\$179,892.0	
Alabama.....	17	15	27	33.4	17	18.5	31	22.9	19.4	14	16.9	89	111.1	5,016.0	
District of Columbia.....	11	11	44	164.5	24	135.1	125	360.9	45.1	47	27.1	240	732.7	53,282.1	
Florida.....	48	45	123	474.1	44	131.0	69	83.3	51.8	35	169.5	271	909.7	20,863.6	
Georgia.....	46	42	72	166.6	48	94.2	127	172.6	37.2	36	35.3	283	505.9	12,869.7	
Maryland.....	47	29	28	150.3	78	214.2	50	77.9	20.6	13	15.0	169	478.0	33,244.6	
North Carolina.....	45	42	101	200.0	87	166.2	142	116.7	43.8	84	104.5	414	631.2	27,721.1	
South Carolina.....	35	30	54	109.8	44	90.5	70	47.3	32.6	21	28.5	189	308.7	9,334.8	
Virginia.....	28	20	47	111.2	51	139.8	58	83.3	17.4	46	29.6	202	381.3	17,560.1	
No. 5—Cincinnati.....	361	303	346	1,194.6	980	3,682.5	827	1,353.5	276.8	306	470.7	2,459	6,978.1	474,399.1	
Kentucky.....	51	33	31	99.0	69	166.9	125	225.1	39.1	45	60.6	270	590.7	43,152.3	
Ohio.....	274	240	226	923.3	873	3,434.3	569	944.5	210.4	253	400.1	1,921	5,912.6	417,160.9	
Tennessee.....	36	30	89	172.3	38	81.3	133	183.9	27.3	8	10.0	268	474.8	14,085.9	
No. 6—Indianapolis.....	174	161	168	541.4	405	756.6	537	548.9	233.5	284	353.4	1,394	2,433.8	194,634.0	
Indiana.....	125	114	72	144.2	331	563.2	428	366.5	208.6	204	180.9	1,035	1,463.4	118,178.2	
Michigan.....	49	47	96	397.2	74	193.4	109	182.4	24.9	80	172.5	359	970.4	76,455.8	
No. 7—Chicago.....	283	235	138	467.1	357	1,102.7	550	1,338.5	125.4	163	252.0	1,208	3,285.7	199,964.0	
Illinois.....	199	163	67	247.5	293	909.8	429	1,118.8	80.1	119	170.0	908	2,526.2	135,960.3	
Wisconsin.....	84	72	71	219.6	64	192.9	121	219.7	45.3	44	82.0	300	759.5	64,003.7	
No. 8—Des Moines.....	176	130	138	468.4	131	302.9	339	487.6	113.4	139	186.0	747	1,558.3	115,064.9	
Iowa.....	43	32	28	64.2	23	43.4	83	101.0	7.6	19	17.1	153	233.3	15,831.6	
Minnesota.....	44	32	43	176.7	47	114.1	84	121.6	49.7	37	92.1	211	554.2	28,292.5	
Missouri.....	69	54	59	215.5	49	122.0	142	235.0	47.1	61	46.9	311	666.5	62,311.8	
North Dakota.....	14	7	2	4.1	8	16.1	24	28.0	8.6	17	26.0	51	82.8	7,150.1	
South Dakota.....	6	5	6	7.9	4	7.3	6	2.0	0.4	5	3.9	21	21.5	1,478.9	
No. 9—Little Rock.....	255	219	394	1,098.4	335	608.4	447	506.4	164.3	214	284.4	1,390	2,661.9	140,888.2	
Arkansas.....	40	32	30	55.5	37	73.1	75	50.0	23.5	40	37.3	182	239.4	9,509.1	
Louisiana.....	63	55	84	274.1	115	227.0	91	176.6	67.5	71	125.9	361	871.1	69,021.7	
Mississippi.....	25	22	25	40.1	22	26.8	36	23.6	9.8	8	10.0	91	110.3	3,872.2	
New Mexico.....	14	14	20	39.3	5	5.1	16	19.9	3.1	10	9.8	51	77.2	3,260.1	
Texas.....	113	96	235	689.4	156	276.4	229	236.3	60.4	85	101.4	705	1,363.9	55,225.1	
No. 10—Topeka.....	185	161	187	562.9	362	755.1	366	385.2	139.8	259	352.7	1,174	2,195.7	152,729.9	
Colorado.....	34	28	38	145.3	59	123.5	44	61.1	15.6	26	41.8	167	387.3	12,537.3	
Kansas.....	70	62	60	139.9	101	181.2	117	97.5	75.0	60	70.6	338	564.2	50,560.1	
Nebraska.....	33	27	20	85.1	64	136.6	88	102.8	20.5	95	125.8	267	470.8	40,814.6	
Oklahoma.....	48	44	69	192.6	138	313.8	117	123.8	28.7	78	114.5	402	773.4	48,817.9	
No. 11—Portland.....	110	95	209	539.2	202	453.8	381	581.5	128.1	167	206.4	959	1,909.0	76,052.8	
Idaho.....	8	8	18	41.7	11	18.6	36	37.6	45.8	19	11.6	84	155.3	4,721.9	
Montana.....	10	7	21	43.3	11	29.2	21	32.8	2.3	7	17.9	60	125.5	7,016.1	
Oregon.....	24	20	46	141.8	48	113.3	61	129.0	9.4	14	17.5	169	411.0	18,389.9	
Utah.....	8	6	9	25.9	7	20.3	27	31.1	8.8	2	1.2	45	87.3	6,950.8	
Washington.....	49	46	105	259.4	116	258.0	227	335.1	60.7	119	152.3	567	1,065.5	35,347.4	
Wyoming.....	11	8	10	27.1	9	14.4	9	15.9	1.1	6	5.9	34	64.4	3,626.7	
No. 12—Los Angeles.....	131	125	583	2,077.6	320	814.0	388	781.7	89.3	203	589.1	1,494	4,351.7	215,726.8	
Arizona.....	2	2	14	36.4	6	11.5	7	14.4	0.0	5	5.3	32	67.6	1,044.5	
California.....	127	121	569	2,041.2	314	802.5	378	764.4	87.9	198	583.8	1,459	4,279.8	214,359.5	
Nevada.....	1	1	0	0.0	0	0.0	1	0.8	0.0	0	0.0	1	0.8	151.5	
Hawaii.....	1	1	0	0.0	0	0.0	2	2.1	1.4	0	0.0	2	3.5	171.3	

¹ Loans for home purchase include all those involving both a change of mortgagor and a new investment by the reporting institution on a property already built, whether new or old.

² Because many refinancing loans also involve reconditioning it has been found necessary to combine the number of such loans, though amounts are shown separately.

Amounts shown under refinancing include solely new money invested by each reporting institution and exclude that part of all recast loans involving no additional investment by the reporting institution.

³ Assets are reported principally as of Feb. 28, 1937.

Residential Construction Activity and Real-Estate Conditions

IN FEBRUARY 1937 the index of residential construction, as measured by building permits granted in all cities of 10,000 and more population, increased from 30 percent in January to 42 percent of the 1926 base of 100. This represents the highest point in residential construction since 1929, while the index for February 1936 was only 19 (chart 2). This index has been adjusted for seasonal variation.

The estimated number of family dwelling units authorized in cities of 10,000 population and over, was 15,156 in February,

and represents an estimated total cost of \$58,332,700 (table 1). The number of units was 118 percent over February 1936, while the estimated cost was only 95 percent over figures for the same period.

The number of 1- and 2-family dwellings authorized registered a slight decrease between January and February, accounting for 72 percent of the total residential building permits granted in January and for 54 percent in February. The February figure was also 10 percent below that of the same month a year ago.

CHART 1.—NUMBER AND COST OF FAMILY DWELLING UNITS FOR WHICH PERMITS WERE GRANTED, BY MONTHS, IN CITIES OF 10,000 OR MORE POPULATION; 1937 COMPARED WITH SELECTED PERIODS

[Source: Federal Home Loan Bank Board. Compiled from residential building permits reported to U. S. Department of Labor]

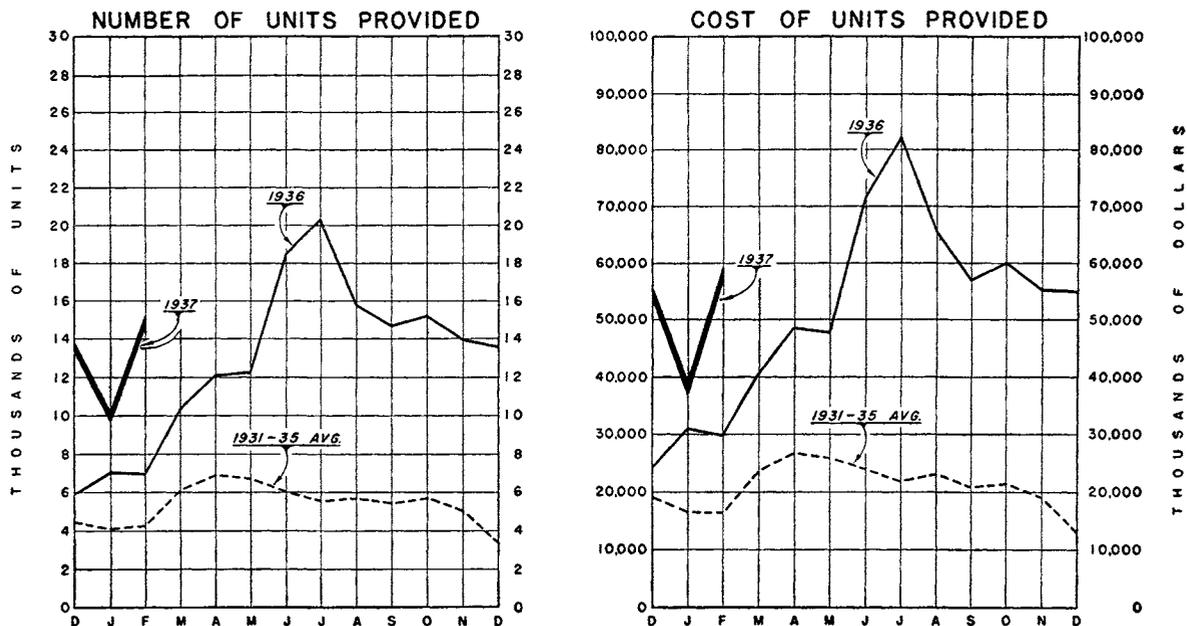
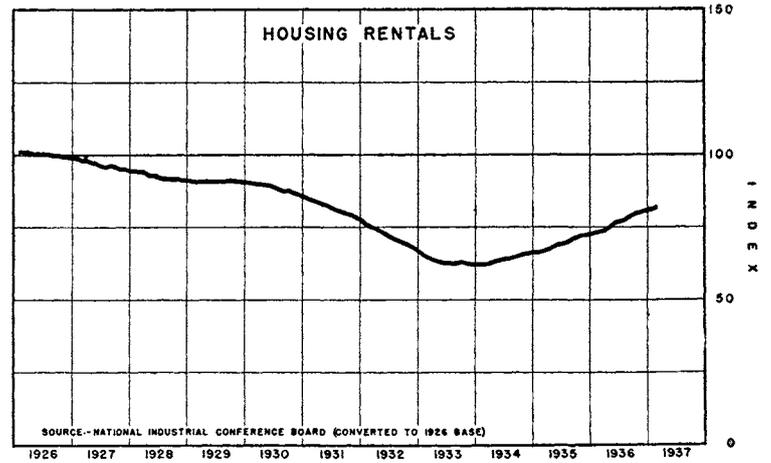
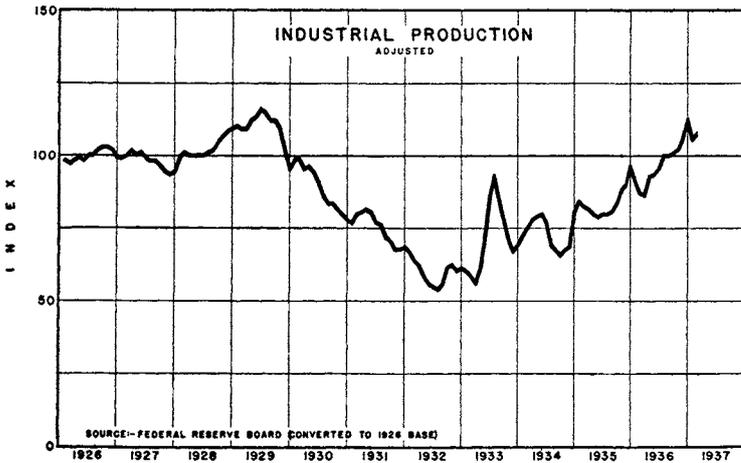
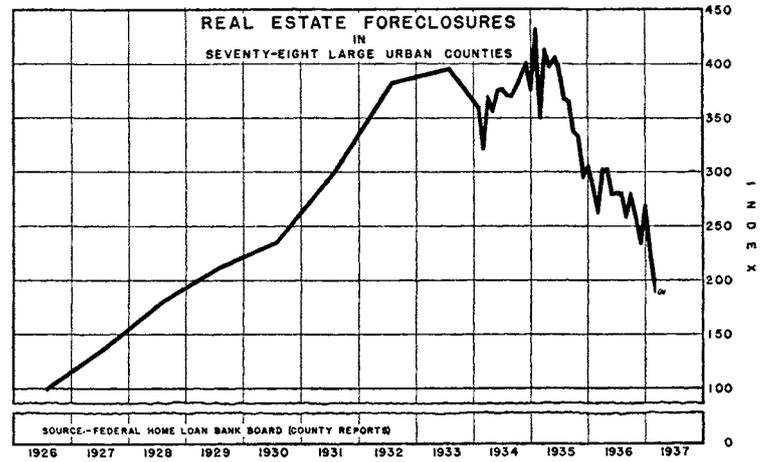
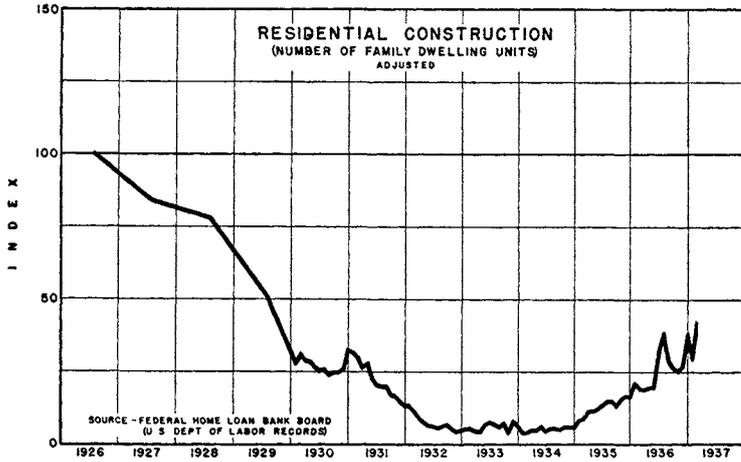


CHART 2.—COMPARISON OF RESIDENTIAL REAL-ESTATE CONDITIONS AND INDUSTRIAL PRODUCTION IN THE UNITED STATES
[1926=100]



BUILDING ACTIVITY BY FEDERAL HOME LOAN BANK DISTRICTS AND STATES

TABLE 2 shows that by far the greatest volume of building activity is taking place in New York. In this State there were 6,381 units provided, of which 5,644 were of the multifamily type. All States except Wisconsin and Nevada showed increases from February 1936, the sharp drop in the former State being due to two large Government housing projects in Milwaukee last year.

[1926=100]

	Feb. 1937	Jan. 1937	Per- cent change	Feb. 1936	Per- cent change
Residential construction.	42	30	+40	19	+121
Industrial production. ¹	108	106	+2	87	+24
Rentals	82	81	+1	73	+12
Foreclosures ¹	191	221	-14	266	-28

¹ Preliminary.

The large volume of building taking place in New York State is reflected in a greatly increased rate of building in the Second Bank District which includes both New York and New Jersey. This is shown graphically in Chart 3 which compares the rate of building per 100,000 population among all Federal Home Loan Bank Districts.

In the New York District building permits were granted for 20 dwelling units per 100,000 population during January. In February this figure had jumped to 49 units which puts this District in the lead for the first time since last June. Only three Districts reported decreases in rate of building between January and February. They are the Boston, Chicago, and Los Angeles Districts.

FORECLOSURES AND OTHER REAL-ESTATE CONDITIONS

CHART 2 pictures the movement of residential construction, industrial production,

TABLE 1.—Number and estimated cost of new family dwelling units provided in all cities of 10,000 population or over, in the United States, in February 1937¹

[Source: Federal Home Loan Bank Board. Compiled from residential building permits reported to U. S. Department of Labor]

Type of structure	Number of family units provided			Total cost of units (000 omitted)			Average cost of family units		
	Febru- ary 1937	Febru- ary 1936	Percent change	February 1937	February 1936	Percent change	Febru- ary 1937	Febru- ary 1936	Percent change
All housekeeping dwellings. . .	15, 156	6, 943	+118. 3	\$58, 332. 7	\$29, 885. 4	+95. 2	\$3, 849	\$4, 304	-10. 6
Total 1- and 2-family dwell- ings	8, 171	4, 464	+83. 0	34, 935. 2	21, 777. 9	+60. 4	4, 276	4, 879	-12. 4
1-family dwellings	7, 300	4, 195	+74. 0	32, 453. 8	21, 111. 7	+53. 7	4, 446	5, 033	-11. 7
2-family dwellings	788	248	+217. 7	2, 141. 5	610. 7	+250. 7	2, 718	2, 463	+10. 4
Joint home and business ²	83	21	+295. 2	339. 9	55. 5	+512. 4	4, 095	2, 643	+54. 9
3- and more-family dwellings.	6, 985	2, 479	+181. 8	23, 397. 5	8, 107. 5	+188. 6	3, 350	3, 270	+2. 4

¹ Estimate is based on reports from communities having approximately 95 percent of the population of all cities with population of 10,000 or over.

² Includes 1- and 2-family dwellings with business property attached.

real-estate foreclosures, and housing rentals. The first two are adjusted for seasonal variation. All of these activities are shown in comparison to a base line of 100 for the year 1926. The accompanying brief table gives the story of the charts in percentages of this base.

During February, foreclosures in metropolitan communities declined to a new low for the second month in succession. The index declined from 221 for January to 191 (preliminary) for February.

This decline of 14 percent exceeds the normal seasonal decline of 8 percent for February. The index for February 1937 was 28 percent below the level of the same month a year ago, when the index stood at 266. For the first two months of the current year, foreclosures averaged 25 percent below the first two months of 1936.

About two-thirds of the communities included in the index reported less foreclosures for February than for January. The decreases were general in all sections of the country.

TABLE 2.—Number and estimated cost of new family dwelling units provided in all cities of 10,000 population or over, in February 1937, by Federal Home Loan Bank Districts and by States

[Source: Federal Home Loan Bank Board. Compiled from residential building permits reported to U. S. Department of Labor]

Federal Home Loan Bank Districts and States	All residential dwellings				All 1- and 2-family dwellings			
	Number of family dwelling units		Estimated cost (thousands of dollars)		Number of family dwelling units		Estimated cost (thousands of dollars)	
	February 1937	February 1936	February 1937	February 1936	February 1937	February 1936	February 1937	February 1936
UNITED STATES.....	15, 156	6, 943	\$58, 332. 7	\$29, 885. 4	8, 171	4, 464	\$34, 935. 2	\$21, 777. 9
No. 1—Boston.....	459	117	2, 510. 8	625. 2	443	110	2, 448. 7	603. 3
Connecticut.....	118	40	705. 0	211. 8	114	37	694. 0	201. 0
Maine.....	9	8	37. 7	15. 5	9	8	37. 7	15. 5
Massachusetts.....	255	55	1, 470. 2	348. 2	252	51	1, 457. 2	337. 1
New Hampshire.....	15	2	44. 8	9. 0	15	2	44. 8	9. 0
Rhode Island.....	47	12	180. 2	40. 7	47	12	180. 2	40. 7
Vermont.....	15	.....	72. 9	.....	6	.....	34. 8	.....
No. 2—New York.....	6, 614	1, 330	24, 224. 0	4, 868. 5	904	365	4, 189. 7	1, 658. 7
New Jersey.....	233	64	1, 260. 0	442. 7	167	64	1, 079. 0	442. 7
New York.....	6, 381	1, 266	22, 964. 0	4, 425. 8	737	301	3, 110. 7	1, 216. 0
No. 3—Pittsburgh.....	542	134	3, 074. 0	588. 0	522	111	3, 042. 0	560. 5
Delaware.....	33	.....	150. 8	.....	33	.....	150. 8	.....
Pennsylvania.....	443	88	2, 661. 7	476. 9	439	88	2, 653. 7	476. 9
West Virginia.....	66	46	261. 5	111. 1	50	23	237. 5	83. 6
No. 4—Winston-Salem.....	1, 963	1, 356	6, 311. 2	4, 627. 8	1, 338	646	4, 692. 2	2, 605. 2
Alabama.....	78	33	156. 9	79. 8	73	19	147. 9	32. 2
District of Columbia.....	629	511	2, 251. 1	1, 598. 6	158	86	978. 1	616. 1
Florida.....	423	451	1, 311. 6	1, 573. 6	374	201	1, 190. 7	632. 8
Georgia.....	152	45	416. 4	129. 4	152	39	416. 4	116. 1
Maryland.....	159	31	575. 0	133. 0	155	27	565. 0	123. 0
North Carolina.....	242	64	658. 7	216. 4	200	64	593. 8	216. 4
South Carolina.....	108	62	279. 3	144. 5	97	54	255. 3	124. 5
Virginia.....	172	159	662. 2	752. 5	129	156	545. 0	744. 1

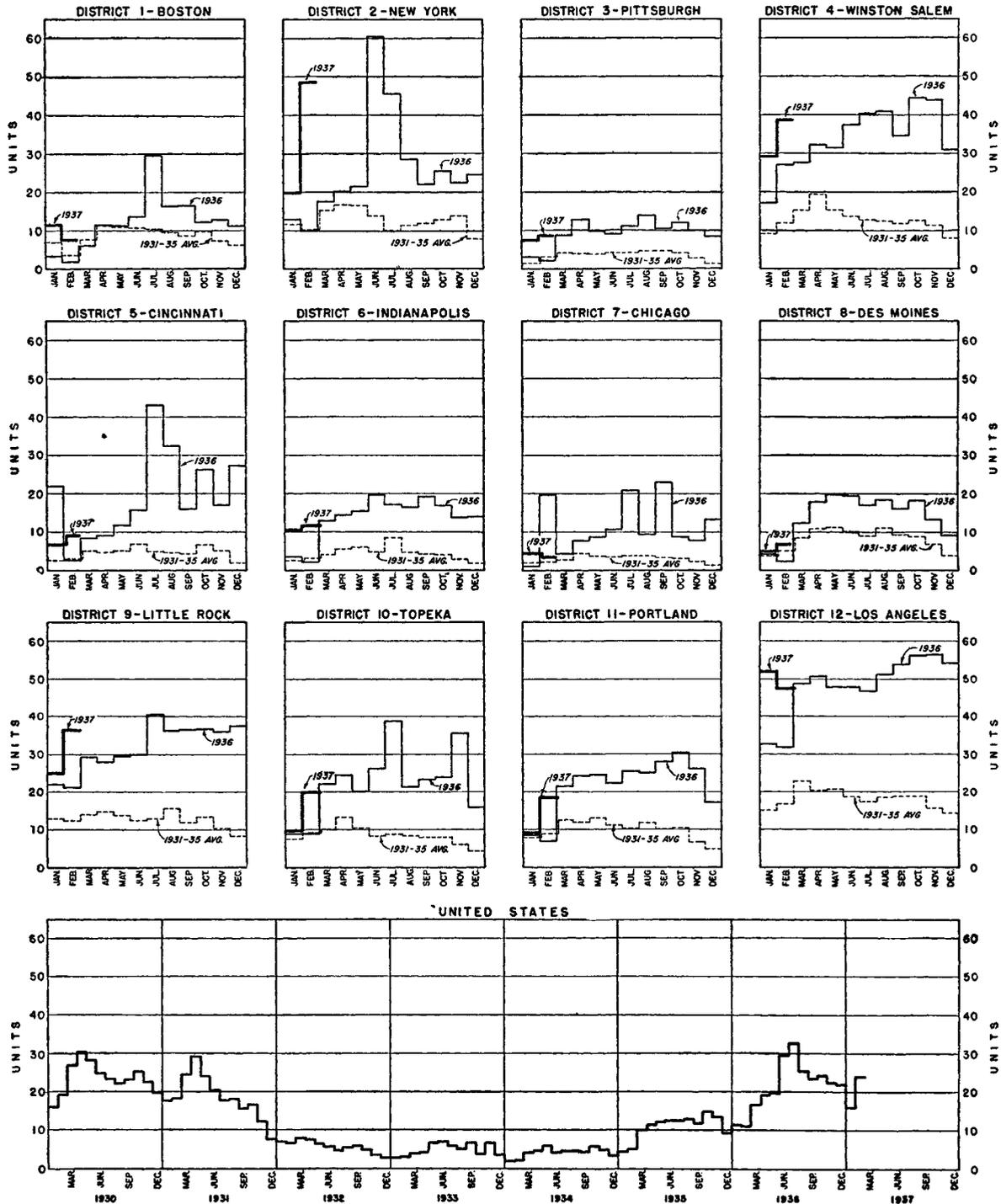
TABLE 2.—Number and estimated cost of new family dwelling units provided in all cities of 10,000 population or over, in February 1937, by Federal Home Loan Bank Districts and by States—Continued

Federal Home Loan Bank Districts and States	All residential dwellings				All 1- and 2-family dwellings			
	Number of family dwelling units		Estimated cost (thousands of dollars)		Number of family dwelling units		Estimated cost (thousands of dollars)	
	February 1937	February 1936	February 1937	February 1936	February 1937	February 1936	February 1937	February 1936
No. 5—Cincinnati.....	529	149	\$2,377.0	\$808.7	441	133	\$2,070.5	\$748.7
Kentucky.....	25	10	85.6	44.0	18	10	66.6	44.0
Ohio.....	385	93	2,009.9	632.0	308	77	1,727.8	572.0
Tennessee.....	119	46	281.5	132.7	115	46	276.1	132.7
No. 6—Indianapolis.....	577	105	3,293.9	677.0	564	105	3,239.9	677.0
Indiana.....	76	9	320.9	51.2	76	9	320.9	51.2
Michigan.....	501	96	2,973.0	625.8	488	96	2,919.0	625.8
No. 7—Chicago.....	254	1,322	1,751.6	9,698.9	227	804	1,651.7	7,460.4
Illinois.....	176	31	1,329.2	276.8	149	31	1,229.3	276.8
Wisconsin.....	78	1,291	422.4	9,422.1	78	773	422.4	7,183.6
No. 8—Des Moines.....	260	95	1,184.0	408.2	244	95	1,150.5	408.2
Iowa.....	21	1	146.1	3.5	21	1	146.1	3.5
Minnesota.....	62	9	282.5	67.3	62	9	282.5	67.3
Missouri.....	165	82	727.9	330.9	149	82	694.4	330.9
North Dakota.....	3	1	7.3	2.0	3	1	7.3	2.0
South Dakota.....	9	2	20.2	4.5	9	2	20.2	4.5
No. 9—Little Rock.....	1,208	695	3,509.3	1,808.8	1,132	659	3,321.3	1,732.7
Arkansas.....	34	20	78.7	45.8	34	20	78.7	45.8
Louisiana.....	137	64	428.0	211.4	125	64	392.0	211.4
Mississippi.....	133	12	271.6	44.6	123	12	248.8	44.6
New Mexico.....	44	21	98.3	67.0	44	21	98.3	67.0
Texas.....	860	578	2,632.7	1,440.0	806	542	2,503.5	1,363.9
No. 10—Topeka.....	409	185	1,431.9	652.8	374	158	1,377.8	588.8
Colorado.....	84	53	320.0	235.3	68	34	295.0	181.3
Kansas.....	76	38	285.8	129.1	72	30	275.8	119.1
Nebraska.....	39	.....	139.5	.....	39	.....	139.5	.....
Oklahoma.....	210	94	686.6	288.4	195	94	667.5	288.4
No. 11—Portland.....	311	118	1,005.3	382.7	249	114	957.1	375.7
Idaho.....	9	2	29.2	5.8	9	2	29.2	5.8
Montana.....	9	4	17.7	10.0	9	4	17.7	10.0
Oregon.....	89	41	381.9	135.1	89	37	381.9	128.1
Utah.....	75	5	153.7	9.4	35	5	128.0	9.4
Washington.....	119	64	386.3	212.6	97	64	363.8	212.6
Wyoming.....	10	2	36.5	9.8	10	2	36.5	9.8
No. 12—Los Angeles.....	2,030	1,337	7,659.7	4,738.8	1,733	1,164	6,793.8	4,358.7
Arizona.....	33	30	110.3	93.7	25	22	100.3	78.7
California.....	1,991	1,290	7,476.8	4,566.1	1,702	1,125	6,620.9	4,201.0
Nevada.....	6	17	72.6	79.0	6	17	72.6	79.0

**RATE OF RESIDENTIAL BUILDING IN THE UNITED STATES AND IN EACH FEDERAL HOME LOAN BANK DISTRICT,
BY MONTHS**

Represents the estimated number of family dwelling units provided per 100,000 population; based upon building permit records for all cities of 10,000 or more population

[Source: Federal Home Loan Bank Board. Compiled from reports to U. S. Department of Labor]



Federal Home Loan Banks

TABLE 1.—Interest rates, Federal Home Loan Banks: rates on advances to member institutions ¹

Federal Home Loan Bank	Rate in effect on Mar. 1	Type of loan
	<i>Percent</i>	
1. Boston.....	3	All advances. All 10-year advances made after Jan. 15, 1937 shall be written at 3 percent for 2 years, with the right to increase the interest rate to not more than 4 percent for 8 years thereafter.
2. New York.....	3	All advances for 1 year or less. This rate shall be applicable to balances outstanding on Jan. 1, 1937.
	3¾	All advances for more than 1 year shall be written at 4 percent, but interest collected at 3¾ percent during 1937.
3. Pittsburgh.....	3½	All advances for 1 year or less. All advances for more than 1 year are to be written at 4 percent, but until further notice credit will be given on all outstanding advances for the difference between the written rates of 5, 4½, or 4 percent and 3½ percentum per annum.
4. Winston-Salem.....	3½	All advances, with the provision that the interest rate may be increased to not more than 4½ percent after 30-days written notice.
5. Cincinnati.....	3	All advances.
6. Indianapolis.....	3	All secured advances.
	3½	All unsecured advances, none of which may be made for more than 6 months.
7. Chicago.....	3	All secured advances are to be written at 3½ percent, but interest collected at 3 percent.
	3½	All unsecured advances.
8. Des Moines.....	3-3½	On all advances up to \$1,000,000, the interest rate shall be 3½ percent. If the balance of loans outstanding to any one member equals or exceeds \$1,000,000, the interest rate thereon shall be at the rate of 3 percent.
9. Little Rock.....	3	All advances.
10. Topeka.....	3	Do.
11. Portland.....	3	All advances to members secured by mortgages insured under Title II of National Housing Act.
	3½	All advances for 1 year or less. All advances for more than 1 year are to be written at 4 percent, but interest collected at 3½ percent so long as short-term advances carry this rate.
12. Los Angeles.....	3	All advances.

¹ On May 29, 1935, the Board passed a resolution to the effect that all advances to nonmember institutions upon the security of insured mortgages, insured under Title II of the National Housing Act, "shall bear interest at rates of interest one-half of 1 per centum in excess of the current rates of interest prevailing for member institutions."

TABLE 2.—Growth and trend of lending operations

Month	Members		Loans advanced (cumulative) (000 omitted)	Loans advanced (monthly) (000 omitted)	Repayments (monthly) (000 omitted)	Balance outstanding at end of month (000 omitted)	Borrowing capacity ² (000 omitted)
	Number	Estimated assets ¹ (000 omitted)					
December 1932.....	119	\$217, 000	\$837	\$837	.....	\$837	.....
December 1933.....	2, 086	2, 607, 000	90, 865	7, 132	\$889	85, 442	.....
December 1934.....	3, 072	3, 305, 000	129, 545	2, 904	3, 360	86, 658	.....
December 1935.....	3, 460	3, 020, 000	188, 675	8, 414	2, 708	102, 795	.....
1936							
January.....	3, 495	.....	193, 746	5, 071	5, 065	102, 800	.....
June.....	3, 640	3, 250, 000	226, 645	11, 560	3, 895	118, 587	\$869, 000
December.....	3, 760	3, 300, 000	281, 933	13, 473	5, 333	145, 401	973, 000
1937							
January.....	3, 770	.....	288, 502	6, 570	8, 225	143, 745	973, 000
February.....	3, 771	.....	292, 762	4, 260	6, 800	141, 205	973, 000

¹ Estimates of assets are brought up to date semiannually.

² Based upon the amount for which the members may legally obligate themselves, or 50 percent of their net assets, whichever is lower.

NOTE.—All figures, except loans advanced (monthly) and repayments, are as of the end of the month.

Federal Savings and Loan System

FEDERAL charters were granted to 12 savings and loan associations during February, bringing the total number of Federal savings and loan associations to 1,240. As of February 28, the approximate assets of all Federals were \$848,000,000.

Monthly reports for February and January were received from 1,143 identical Federal savings and loan associations. The combined assets of these associations were \$778,629,500. A summary of their activities for each month is shown in table 1.

Mortgage loans made during February amounted to \$18,083,500—a 9.1 percent increase over the amount reported for the preceding month. As a result of this activity, they registered a net increase of 2 percent in the business on their books. Analyzing the mortgage loans made during February according to the purposes for which they were made, new construction and reconditioning accounted for 38.9 per-

cent in dollar volume; home purchase for 27.5 percent; refinancing for 25.7 percent; and other purposes 7.9 percent. At the end of February combined mortgage loans outstanding to these associations amounted to \$588,037,600.

During February private investments in the reporting Federals totaled \$11,000,000 which was 48 percent less than investments during January. Repurchases during the later month were \$7,500,000. The total share liability of the 1,143 reporting Federals was \$640,128,700 at the end of February. Of this amount, \$481,493,700 was subscribed by private investors, and \$158,635,000 by the Treasury and the Home Owners' Loan Corporation. As of February 28 outstanding obligations to the Federal Home Loan Banks and to other sources of credit amounted to \$57,644,400. This was a decrease of 2.3 percent from the indebtedness at the end of January.

TABLE 1.—Monthly operations of 1,143 identical Federal savings and loan associations reporting during January and February 1937

	January	February	Change January to February
Share liability at end of month:			<i>Percent</i>
Private share accounts (number).....	662, 845	665, 324	+0. 4
Paid on private subscriptions.....	\$477, 366, 300	\$481, 493, 700	+0. 9
Treasury and H. O. L. C. subscriptions.....	154, 086, 900	158, 635, 000	+3. 0
Total.....	631, 453, 200	640, 128, 700	+1. 4
Private share investments during month.....	21, 640, 200	11, 208, 000	-48. 2
Repurchases during month.....	10, 324, 300	7, 578, 200	-27. 5
Mortgage loans made during month:			
a. New construction.....	5, 666, 400	6, 098, 000	+7. 6
b. Purchase of homes.....	4, 346, 000	4, 966, 800	+14. 2
c. Refinancing.....	4, 375, 500	4, 646, 400	+6. 2
d. Reconditioning.....	779, 200	944, 200	+21. 2
e. Other purposes.....	1, 404, 600	1, 428, 100	+1. 7
Total.....	16, 571, 700	18, 083, 500	+9. 1
Mortgage loans outstanding end of month.....	576, 299, 100	588, 037, 600	+2. 0
Borrowed money as of end of month:			
From Federal Home Loan Banks.....	57, 279, 000	55, 812, 200	-2. 6
From other sources.....	1, 700, 100	1, 832, 200	+7. 8
Total.....	58, 979, 100	57, 644, 400	-2. 3
Total assets, end of month.....	767, 055, 300	778, 629, 500	+1. 5

TABLE 2.—Progress in number and assets of Federal savings and loan associations

	Number at specified dates						Approximate assets	
	Dec. 31, 1933	Dec. 31, 1934	Dec. 31, 1935	Dec. 31, 1936	Jan. 31, 1937	Feb. 28, 1937	Jan. 31, 1937	Feb. 28, 1937
New.....	57	481	605	645	645	645	\$168, 237, 955	\$169, 255, 240
Converted.....	2	158	418	567	583	595	651, 230, 522	678, 838, 868
Total.....	59	639	1, 023	1, 212	1, 228	1, 240	819, 468, 477	848, 094, 108

Common Faults in Structures

(Continued from p. 230)

you have evidence that it is subject to stresses.

Stucco applied to smooth surfaces lacks "bond" and when even slightly stressed will develop fault.

Temperature change affects stucco. Provision for expansion and contraction should be made. Chemical reaction is seldom manifested in Portland cement stucco.

Interior Plastering. The most common cause for plaster fault is hydration. The next most frequent cause is stress transmitted from structural members to the plaster, with resultant faults becoming evident.

Hydration faults in plaster develop soon after completion of the work. Plaster work must be kept reasonably dry after its initial "set" on a wall or ceiling.

It is of little consequence if the plastered wall is done in the conventional manner over wood or metal lath or over any of the so-called "plaster base" materials. The same stress faults may occur in each. Plastering possesses little structural value.

Hydration faults usually develop shortly after the initial "set" of the material. Too rapid drying will subject plastering to hair-line cracks (shrinkage). This may be accelerated by "over gauging" the finished or white coat with an excessive amount of plaster of paris, which sets quickly and is quite brittle.

Dehydration under artificial heat tends to create surface or shrinkage cracks. Open fires to accelerate dehydration may produce discoloration, through chemical re-

action caused by carbon monoxide or other products of combustion.

Plastering exposed to low temperature will freeze leaving surface cracks and water patterns on the smooth surface. It may also create internal stresses which may damage the "key" or bond to the base or destroy the bond between the undercoats.

In some localities plastering is subject to a mild infection, usually attributed to dampness or humidity. This may be overcome by one of the several commercial insecticides.

Corrosion of metal lath base is an infrequent cause of fault but it may occur when plastering is continually subjected to excessive dampness.

Plaster may develop fault due to chemical reactions but this is very unusual.

Although materials of an animal derivation are little used in processing structural materials, they are subject to attacking factors which cause curtailment to their normal life. Wax, glue, tallow, vegetable gums (resins) and animal and fish oil are the most common in use today. These are less subject to rapid deterioration through the cause of water, yet frequently they are attacked by insect life which in turn demands water for its existence. They are more susceptible to heat and light than other basic materials.

Ceramic materials such as brick, tile, terra cotta, glass, etc., are also subject to conditions which accelerate their depreciation. Their faults are generally due to inherent stresses developing within the material,

(Continued on p. 245)

Federal Savings and Loan Insurance Corporation

UP TO March 15, 1937, the Federal Savings and Loan Insurance Corporation had received applications from more than 2,000 associations with combined assets of \$1,524,878,369. This was an increase over last month of 27 in the number of applications submitted. Of the applicants, 17 were operating under State charters, 5 had just converted to Federal charters, and 5 were newly organized Federals.

During the February-March period, insurance certificates were granted to 18 associations, of which 8 were State-chartered,

9 were converted Federals, and 1 was a new Federal association. At the same time, the assets of all insured associations increased approximately \$30,000,000 and the number of insured shareholders 41,000.

ACTIVITIES OF REPORTING ASSOCIATIONS

TABLE 2 shows the comparative activities of 264 identical insured State-chartered savings and loan associations reporting during the two months, January and February. On February 28 the total assets of these associations were \$379,446,700.

TABLE 1.—Progress of the Federal Savings and Loan Insurance Corporation—Applications received and institutions insured

APPLICATIONS RECEIVED								
	Cumulative number at specified dates					Assets (as of date of application)		
	Dec. 31, 1934	Dec. 31, 1935	Dec. 31, 1936	Feb. 15, 1937	Mar. 15, 1937	Feb. 15, 1937	Mar. 15, 1937	
State-chartered associations.....	53	351	671	684	701	\$812, 240, 679	\$854, 532, 698	
Converted F. S. and L. A.....	134	480	620	640	645	644, 244, 194	655, 579, 337	
New F. S. and L. A.....	393	575	651	653	658	14, 648, 267	14, 766, 334	
Total.....	580	1, 406	1, 942	1, 977	2, 004	1, 471, 133, 140	1, 524, 878, 369	

INSTITUTIONS INSURED ¹								
	Cumulative number at specified dates					Number of shareholders	Assets	Share and creditor liabilities
	Dec. 31, 1934	Dec. 31, 1935	Dec. 31, 1936	Feb. 15, 1937	Mar. 15, 1937			
State-chartered associations.....	4	136	382	417	425	658, 224	\$503, 822, 727	\$444, 941, 196
Converted F. S. and L. A. . .	108	406	560	579	588	633, 851	627, 448, 569	580, 796, 842
New F. S. and L. A.	339	572	634	636	637	106, 287	116, 374, 700	113, 838, 818
Total.....	451	1, 114	1, 576	1, 632	1, 650	1, 398, 362	1, 247, 645, 996	1, 139, 576, 856

¹ Beginning Dec. 31, 1936, figures on number of associations insured include only those associations which have remitted premiums. Earlier figures include all associations approved by the Board for insurance.

Number of shareholders, assets, and share and creditor liabilities of insured associations are as of latest obtainable date and will be brought up to date after June 30 and Dec. 31 each year.

The volume of new mortgage loans made by these reporting associations increased 17 percent during February as compared with the loans made during January. This increased their mortgage loans outstanding 1.1 percent during February to \$251,332,600 at the end of the month. Of the total loans made, 35 percent was for new construction and reconditioning; 34 percent for the purchase of homes; 18 percent for refinancing; and 13 percent for other purposes.

During February the Home Owners' Loan Corporation subscribed for an additional \$630,300 in the shares of the associations covered by this report while the amount paid in on private investments decreased \$1,113,600.

Repurchases decreased 47 percent in February as compared with the month of January. The amount of new investments practically equaled the amount of repurchases made during the month.

TABLE 2.—Monthly operations of 264 identical insured State-chartered savings and loan associations reporting during January and February 1937

	January	February	Change January to February
Share liability at end of month:			Percent
Private share accounts (number).....	422, 357	421, 814	-0. 1
Paid on private subscriptions.....	\$289, 366, 100	\$288, 252, 400	-0. 4
H. O. L. C. subscriptions.....	15, 317, 900	15, 948, 200	+4. 1
Total.....	304, 684, 000	304, 200, 600	-0. 2
Private share investments during month.....	9, 881, 300	4, 431, 300	-55. 2
Repurchases during month.....	8, 439, 200	4, 490, 600	-46. 8
Mortgage loans made during month:			
a. New construction.....	1, 337, 600	1, 625, 900	+20. 6
b. Purchase of homes.....	1, 608, 100	1, 862, 700	+15. 8
c. Refinancing.....	953, 100	1, 011, 800	+6. 1
d. Reconditioning.....	259, 800	291, 500	+12. 2
e. Other purposes.....	542, 400	693, 800	+28. 0
Total.....	4, 701, 000	5, 485, 700	+16. 7
Mortgage loans outstanding end of month.....	248, 663, 300	251, 332, 600	+1. 1
Borrowed money as of end of month:			
From Federal Home Loan Banks.....	15, 502, 300	14, 523, 300	-6. 3
From other sources.....	2, 122, 800	2, 026, 500	-4. 5
Total.....	17, 625, 100	16, 549, 800	-6. 1
Total assets, end of month.....	377, 774. 900	379, 446, 700	+0. 4

Common Faults in Structures

(Continued from p. 243)

either through the presence of water and freezing which stresses the material by expansion and resultant breakage as in the case of porous materials, or rapid and extreme temperature changes, or by crystallization of salts within the pores.

In certain localities some (non-vitreous, porous) soft ceramic material is subject to

attack by insect life. Rodents have also been known to damage such materials, structurally, in seeking passage or shelter.

Through some knowledge of the most common causes of faults in building structures and materials, lending institutions and the builders and architects with whom they cooperate may avoid the worry and financial loss which unexpected repairs and renewals so frequently involve.

Home Owners' Loan Corporation

TABLE 1.—*H. O. L. C. subscriptions to shares of savings and loan associations—Requests and subscriptions*¹

	Uninsured State-chartered members of the F. H. L. B. System		Insured State-chartered associations		Federal savings and loan associations		Total	
	Number (cumulative)	Amount (cumulative)	Number (cumulative)	Amount (cumulative)	Number (cumulative)	Amount (cumulative)	Number (cumulative)	Amount (cumulative)
Requests:								
Dec. 31, 1935.....	27	\$1,131,700	33	\$2,480,000	553	\$21,139,000	613	\$24,750,700
June 30, 1936.....	60	2,506,700	130	10,636,200	1,478	56,880,600	1,668	70,023,500
Dec. 31, 1936.....	89	3,845,710	279	21,016,900	2,617	108,591,900	2,985	133,454,510
Jan. 30, 1937.....	97	4,105,910	297	21,921,900	2,746	113,794,300	3,140	139,822,110
Feb. 28, 1937.....	99	3,762,910	317	23,341,900	2,874	120,320,300	3,290	147,425,110
Mar. 20, 1937.....	106	4,030,710	336	24,394,400	2,983	125,973,500	3,425	154,398,610
Subscriptions:								
Dec. 31, 1935.....	2	100,000	24	1,980,000	474	17,766,500	500	19,846,500
June 30, 1936.....	21	689,000	118	9,636,600	1,392	52,817,100	1,531	63,142,700
Dec. 31, 1936.....	45	1,688,000	262	19,455,900	2,538	104,477,400	2,845	125,621,300
Jan. 30, 1937.....	46	1,738,000	280	20,741,900	2,663	109,493,700	2,989	131,973,600
Feb. 28, 1937.....	50	1,553,200	300	21,746,900	2,771	115,156,200	3,121	138,456,300
Mar. 20, 1937.....	51	1,688,200	317	22,964,400	2,866	119,579,200	3,234	144,231,800

¹ Refers to number of separate investments, not to number of associations in which investments are made.

TABLE 3.—*Reconditioning Division—Summary of all reconditioning operations through Mar. 17, 1937*¹

Period	Cases received ²	Total contracts awarded		Total jobs completed	
		Number	Amount	Number	Amount
June 1, 1934, through Feb. 17, 1937.....	757,518	417,590	\$80,177,112	409,006	\$77,744,091
Feb. 18, 1937, through Mar. 17, 1937.....	5,377	5,287	1,005,134	5,356	961,555
Grand total through Mar. 17, 1937.....	762,895	422,877	81,182,246	414,362	78,705,646

¹ All figures are subject to correction. Figures do not include 52,269 reconditioning jobs, amounting to approximately \$6,800,000, completed by the Corporation prior to the organization of the Reconditioning Division on June 1, 1934.

² Includes all property management, advance, insurance, and loan cases referred to the Reconditioning Division which were not withdrawn prior to preliminary inspection or cost estimate.

TABLE 3.—Foreclosure cases dispatched to State Counsel and properties acquired by the Home Owners' Loan Corporations¹

Period	Foreclosure cases dispatched to State Counsel	Properties acquired by voluntary deed and foreclosure ²
Prior to 1935.....	35	9
1935		
Jan. 1 through June 30.....	535	114
July 1 through Dec. 31.....	3,900	983
1936		
Jan. 1 through June 30.....	23,181	4,449
July 1 through Dec. 31.....	40,084	15,646
1937		
January.....	4,992	3,059
February.....	5,116	3,290
Grand total to Feb. 28, 1937.....	77,843	27,550

¹ Figures prior to 1936 are as of the month in which the action took place. Subsequent figures are as of the month in which the action was reported in Washington.

² Does not include 12,849 properties bought in by H. O. L. C. at foreclosure sale but awaiting expiration of the redemption period before title and possession can be obtained.

In addition to the total of 27,550 completed cases, 133 properties were sold to parties other than the H. O. L. C. and 3,740 cases have been withdrawn due to payment of delinquencies by borrowers after foreclosure proceedings have been entered.

Directory of Member, Federal, and Insured Institutions

Added during February–March

I.—INSTITUTIONS ADMITTED TO MEMBERSHIP IN THE FEDERAL HOME LOAN BANK SYSTEM BETWEEN FEBRUARY 23, 1937, AND MARCH 20, 1937¹

(Listed by Federal Home Loan Bank Districts, States, and cities)

DISTRICT NO. 1

- MAINE:**
Brunswick:
Brunswick Loan & Building Association.
- MASSACHUSETTS:**
Boston:
Forest Hills Co-operative Bank, 3720 Washington Street.
Merchants Co-operative Bank, 24 School Street.
- Brighton:
Brighton Co-operative Bank, 157 Brighton Avenue.

DISTRICT NO. 2

- NEW JERSEY:**
Prospect Park:
Prospect Park Building & Loan Association of Passaic County, 130 Haledon Avenue.
- NEW YORK:**
Monticello:
Sullivan County Savings & Loan Association, 246 Broadway.
- Rochester:
Columbia Banking, Savings & Loan Association, 220–24 Granite Building.

¹ During this period 3 Federal savings and loan associations were admitted to membership in the System.

DISTRICT NO. 3

- PENNSYLVANIA:**
Conshohocken:
Rising Sun Building & Loan Association, 109 Fayette Street.
- Philadelphia:
Provident Building & Loan Association of Philadelphia, 643 North Sixteenth Street.

DISTRICT NO. 4

- MARYLAND:**
Baltimore:
Edmondson-Payson Progressive Building Association, 2003 Edmondson Avenue.

DISTRICT NO. 5

- OHIO:**
Cleveland:
St. Clair Savings & Loan Company, 6235 St. Clair Street.
- Defiance:
Northwestern Savings & Loan Company, 324 Clinton Street.
- Dover:
Dover Building & Loan Company, 222 West Third Street.
- Wooster:
Wayne Building & Loan Company.

DISTRICT NO. 6

- INDIANA:**
Williamsport:
Warren County Building, Loan Fund & Savings Association.
- MICHIGAN:**
Lansing:
Lansing Savings & Loan Association, 117 West Allegan Street.

DISTRICT NO. 7
 ILLINOIS:
 Abingdon:
 Abingdon Building & Loan Association.
 Ottawa:
 Home Building & Loan Association of Ottawa,
 Maloney Building.
 Peoria:
 Farmers Savings, Loan & Homestead Association,
 425 Liberty Street.

DISTRICT NO. 8
 MISSOURI:
 Liberty:
 Clay County Building & Loan Association, 6 West
 Franklin Street.

DISTRICT NO. 11
 WASHINGTON:
 Kelso:
 Commercial Savings & Loan Association.

WITHDRAWALS FROM THE FEDERAL HOME LOAN
 BANK SYSTEM BETWEEN FEBRUARY 23, 1937,
 AND MARCH 20, 1937

IOWA:
 Cedar Falls:
 Germania Building, Loan & Savings Association.
 LOUISIANA:
 New Orleans:
 Phoenix Building & Homestead Association, 921
 Canal Street.
 PENNSYLVANIA:
 Pittsburgh:
 McKinley Building & Loan Association, 168 War-
 rington Avenue.

II.—FEDERAL SAVINGS AND LOAN ASSOCIA-
 TIONS CHARTERED BETWEEN FEBRUARY
 23, 1937, AND MARCH 20, 1937

DISTRICT NO. 1
 MASSACHUSETTS:
 Waltham:
 Waltham Federal Savings & Loan Association, 45
 Moody Street (converted from Waltham Co-oper-
 ative Bank).

DISTRICT NO. 3
 PENNSYLVANIA:
 Altoona:
 L. G. Runk Federal Savings & Loan Association of
 Altoona, 1105 Thirteenth Street (converted from
 L. G. Runk Building & Loan Association).
 Jenkintown:
 York Road Federal Savings & Loan Association of
 Jenkintown, 8027 York Road (converted from
 Cheltenham Building Association No. 2).
 Philadelphia:
 Metropolitan Federal Savings & Loan Association
 of Philadelphia, 1700 Sansom Street (converted
 from Western Mutual Building & Loan Associa-
 tion).
 Pittsburgh:
 East End Federal Savings & Loan Association of
 Pittsburgh, 503 Peoples East End Bank Building
 (converted from City-County Building & Loan
 Association).

DISTRICT NO. 5
 OHIO:
 Cincinnati:
 Suburban Federal Savings & Loan Association of
 Cincinnati, 810 West Eighth Street (converted
 from Bon Ton Building & Loan Company of
 Cincinnati).

DISTRICT NO. 6
 INDIANA:
 Oakland City:
 Oakland City Federal Savings & Loan Association
 (converted from Home Economy Building &
 Loan Association).

DISTRICT NO. 8
 IOWA:
 Waterloo:
 Waterloo Federal Savings & Loan Association,
 Corner East Fifty-fifth & Lafayette Streets (con-
 verted from Waterloo Building & Loan Asso-
 ciation).

DISTRICT NO. 10
 KANSAS:
 Topeka:
 First Federal Savings & Loan Association of To-
 peka, 112-14 West Sixth Street (converted from
 Mutual Home Loan & Savings Association).

DISTRICT NO. 12
 ARIZONA:
 Tucson:
 Tucson Federal Savings & Loan Association, 71
 East Thirteenth Street.
 CALIFORNIA:
 Redlands:
 Redlands Federal Savings & Loan Association, 2
 North Fifth Street (converted from Redlands
 Building-Loan Association).

CANCELATIONS OF FEDERAL SAVINGS AND LOAN
 ASSOCIATION CHARTERS BETWEEN FEBRUARY 23,
 1937, AND MARCH 20, 1937

ARKANSAS:
 North Little Rock:
 Argenta Federal Savings & Loan Association, 318
 Main Street.
 CALIFORNIA:
 Santa Maria:
 First Federal Savings & Loan Association of
 Santa Maria, 102 West Church Street.
 NEW MEXICO:
 Albuquerque:
 Provident Federal Savings & Loan Association of
 Albuquerque, 300 West Gold Street.

III.—INSTITUTIONS INSURED BY THE FED-
 ERAL SAVINGS AND LOAN INSURANCE
 CORPORATION BETWEEN FEBRUARY 23,
 1937, AND MARCH 20, 1937¹

DISTRICT NO. 3
 PENNSYLVANIA:
 Philadelphia:
 Fox Chase Building Association No. 2, 8037 Oxford
 Avenue.
 New Concordia Building Association, 1728 South
 Broad Street

DISTRICT NO. 5
 OHIO:
 Ashtabula:
 Peoples Building & Loan Company, 227 North
 Main Street.
 Cleveland:
 Ukrainian Savings Company, 2190 Professor Street.

DISTRICT NO. 8
 MISSOURI:
 Carthage:
 Jasper County Building & Loan Association, 409
 South Main Street.
 Lilbourn:
 Lilbourn Building & Loan Association.

DISTRICT NO. 11
 WASHINGTON:
 Seattle:
 Prudential Savings & Loan Association, 1100 Third
 Avenue.
 Tacoma:
 Evergreen Savings & Loan Association, 917 Broad-
 way.

¹ During this period 7 Federal savings and loan asso-
 ciations were insured.

FEDERAL HOME LOAN BANK DISTRICTS

