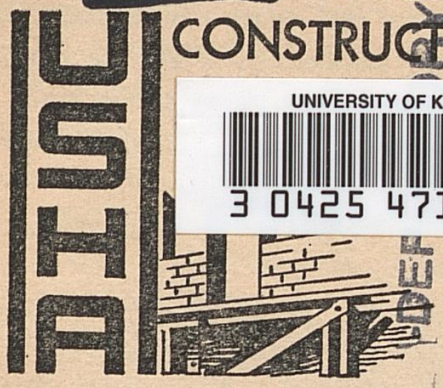
BRINGING DOWN CONSTRUCTION COSTS



Construction costs under the Nation-wide low-rent housing and slum clearance program administered by local housing agencies with aid of the United States Housing Authority.

IT WAS A BUSY AFTERNOON at the site of Jefferson Homes.

At one end of the huge building site concrete foundations were still being poured. At the other the bricklayers were already at work on the first-story walls. The sharp buzz of an electric saw split the air. A heavy truck, arriving with materials, screeched to a stop near the large sign that read

JEFFERSON HOMES
LOW-RENT HOUSING PROJECT
BEING BUILT BY THE
ANYTOWN HOUSING AUTHORITY
WITH AID OF
THE UNITED STATES HOUSING AUTHORITY
JONES & CO., CONTRACTORS

At the sidewalk a heated discussion was taking place among a few of the spectators.

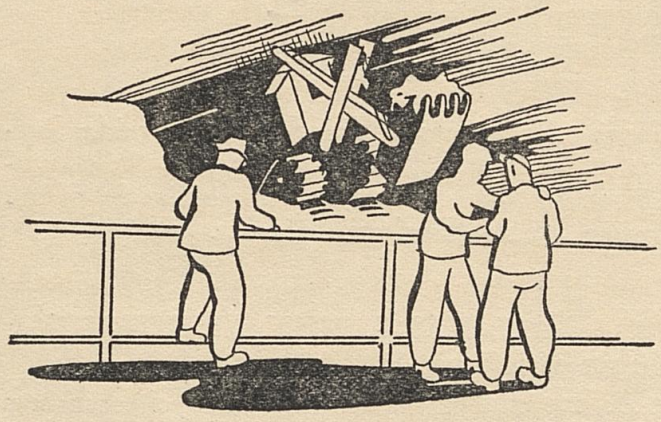
"These Government projects always cost too much money," declared A between puffs on his cigar. "They ought to be stopped."

"You don't know what you're talking about!" countered B, waving his folded newspaper under the other man's nose. "Can't you see it's being

built by a private contractor? That means it costs the same as any private real estate development."

A shook his head stubbornly. "Private contractor or no private contractor, these public housing experiments always cost thousands of dollars more than ordinary homes."

"They cost the same thing, I tell you," persisted B. "Now look, if . . . ."



"For the love of Mike," interrupted a third fellow, who had been following the argument impatiently, "why don't you get the facts of the matter instead of standing around and beefing?"

"What do you mean?" demanded B.

"Well, down the next street there's a row of typical private houses going up. Why don't you go over and get the construction cost figures? Then, you could get the figures for the project and compare them."

"Makes sense," muttered A.

"Come on," said B, and led the way.

Within a few minutes they were talking with the construction superintendent at the private housing development.

"Construction cost, eh?" He stroked his chin thoughtfully. "Let me see, including heating, plumbing, and electricity, it's just about $3,000 a house."

"Of course," he added, "this figure doesn't include the land or the architect's fee or the carry-

ing charges or the iceboxes or window shades or things like that. Just pure and simple construction—$3,000 apiece."

Mr. A beamed triumphantly. "That proves it! You'll never find a public housing project with a construction cost that low."

"We'll see," said B, looking a little worried.

At the construction office of the Jefferson Homes project they buttonholed one of the architects.

"Hmm," he said reflectively, after listening to their arguments. He pulled out a pencil and performed a rapid calculation on his scratch pad.

A moment later a smile broke forth on the architect's face. "You think it's far above $3,000," he laughed, nodding at A. "And you"—to B—"think it's just about $3,000. Well, you're both wrong!"

They looked at him in bewilderment.

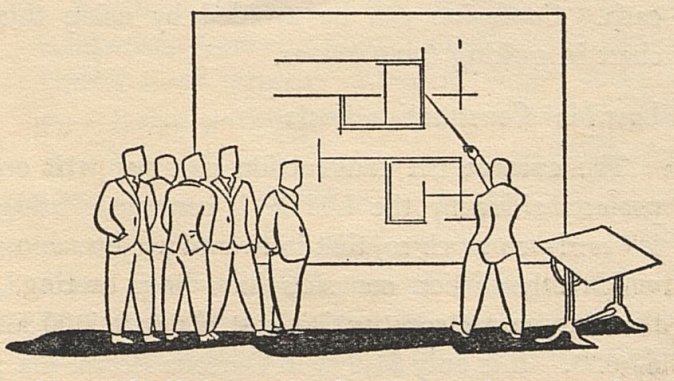
"You see," explained the architect, "it's much less than $3,000. The net construction cost on this project averages only $2,200 a dwelling!"

B whistled incredulously.

"I don't see how it's possible!" snorted A.

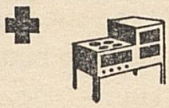
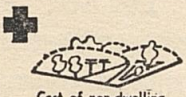
"I'll *tell* you how it's possible," smiled the architect.

And while the others drew closer and listened eagerly, he unfolded the story behind the low costs at the Anytown Housing Authority's project.



First of all, he pointed out that there are three separate and distinct kinds of housing costs:

WHAT ARE HOUSING COSTS?

Column 1	Column 2	Column 3
NET CONSTRUCTION COST	DWELLING FACILITIES COST	"OVER-ALL" COST
 Cost of building the house, including the cost of plumbing, heating, and electrical installation	 Cost of building the house, including the cost of plumbing, heating, and electrical installation	 Cost of building the house,, including the cost of plumbing, heating, and electrical installation
	 Cost of dwelling equipment	 Cost of dwelling equipment
	 Architects' fees, local administrative expenses, and carrying charges	 Architects' fees, local administrative expenses, and carrying charges
		 Cost of land
		 Cost of non-dwelling facilities
Comparable with cost of private building, since these are the items included in the building permit averages for private construction published by the U. S. Department of Labor, Bureau of Labor Statistics.	Comparable with statutory dollars and cents limitations which are: Cities under 500,000 Per room $1,000 Per dwelling unit $4,000 Larger cities Per room $1,250 Per dwelling unit $5,000	This is the cost of new housing and does not include the cost of slum buildings to be torn down. Comparable with the cost per home of new private large-scale rental developments.

The above chart sets forth the three types of housing costs, and shows the items contained in each. Confusion can be avoided by using this chart in making comparisons.

Low Net Construction Costs

The average net construction cost per unit on projects aided by the USHA is constantly being lowered—so much so, that in several projects upon which construction contracts have been awarded, the average net construction cost per unit is about $2,000. It is only $1,890 in Daytona Beach, Fla.; only $2,074 in Charlotte, N. C.; $2,087 in Austin, Tex.; and $2,074 in Los Angeles, Calif.

Moreover, net construction costs are lower than for comparable private housing. In Jacksonville, Fla., for instance, the first USHA-assisted project had a net construction cost of $2,667 a dwelling. According to figures gathered from local building permits by the United States Department of Labor, Bureau of Labor Statistics, the net construction cost of private homes built in Jacksonville during the same period averaged about $3,985, a difference of more than $1,300.

In Buffalo, where the net construction cost of private homes was around $4,000 a dwelling, the local housing authority has built projects averaging $800 less.

On the first two New York City projects under the USHA program the difference was about $380 and $775 a dwelling less than the net construction cost of private construction.

In Austin, Tex., net costs on one of the first projects was about $740 less than private costs, and in Allentown, Pa., more than $1,900 less.

In 81 cities where early USHA-aided projects were put under construction, data gathered by the Bureau of Labor Statistics show that net construction costs for private homes averaged about $3,460. The average net construction cost of the low-rent housing projects built in these cities averaged only about $2,856.

It should be pointed out, however, that if the comparison were on a more equitable basis, costs on USHA-aided projects probably would make an even better showing. Although both sets of figures include the same items, most privately built homes are constructed under labor standards considerably lower than those maintained on projects aided by the USHA. Many private homes are jerry-built structures that are substandard almost before they are occupied. Few are built durably enough to last for 60 years or more, as are all the projects under the USHA program.

It is obvious that public housing under the USHA program has lived up to the requirement in the United States Housing Act that the net construction cost be no greater than "the average construction costs of dwelling units currently produced by private enterprise in the locality or metropolitan area concerned . . ."

Low Dwelling Facilities Costs

But when Congress drafted the United States Housing Act, it inserted still another restriction upon costs.

Under the Act, on no project assisted by the USHA may the cost of dwelling facilities—that is, the net construction cost plus the cost of dwelling equipment, and the applicable portion of architects' fees, administrative expenses, and carrying charges—exceed $4,000 a dwelling or $1,000 a room. For cities with a population over 500,000, however, the maximum dwelling facilities cost was set at $5,000 a dwelling and $1,250 a room.

At the time when the United States Housing Act was passed, many friends of public housing were afraid that these cost limitations could not be met. They felt that more leeway would have to be given if slum clearance and low-rent housing were ever to get under way in the United States.

Today, however, all such fears have been laid at rest.

In the first 116 projects built in cities of less than 500,000 population, the cost of dwelling facilities averages about $3,339 a dwelling—or about $661 less than the $4,000 maximum. In the first 26 projects built in the larger cities, dwelling facilities average about $3,700 a dwelling—or about $1,300 below the $5,000 maximum.

Accordingly, it can easily be seen that both net construction and dwelling facilities costs have been well below the requirements set forth in the Act.

Low Over-all Costs

But how about other costs? What is the cost of community facilities, such as wading pools and playgrounds and recreation rooms? What is the cost of land? It is especially significant that the over-all costs, which include net construction costs, dwelling equipment, administrative expenses, carrying charges, architects' fees, non-dwelling facilities, and land—are also low. At the very beginning of the USHA program over-all costs exceeded $5,000 a dwelling. Since then, however, they have fallen steadily. Recent loan contracts provide for a large number of projects with over-all costs as low as $3,600 and $3,200 per dwelling. Over-all costs are down to $2,839 in Charlotte, N. C., $2,754 in Miami, Fla., and $3,250 in Los Angeles, Calif.

On the first 142 projects assisted by the USHA, over-all costs averaged about $4,507 a dwelling. An interesting comparison may be made between this figure and the over-all costs on the large-scale rental developments constructed by private builders. On 165 of these projects completed as of May 31, 1939, over-all costs averaged $5,024 per dwelling unit.[1]

At times unfair comparisons have been made between the costs of public and private housing. Mathematical hocus-pocus has been resorted to in an effort to discredit public housing and foist upon the general public the notion that public housing is extravagant.

The formula which is usually followed is this: "Take the over-all cost of a housing project and compare it with the net construction cost of privately built homes."

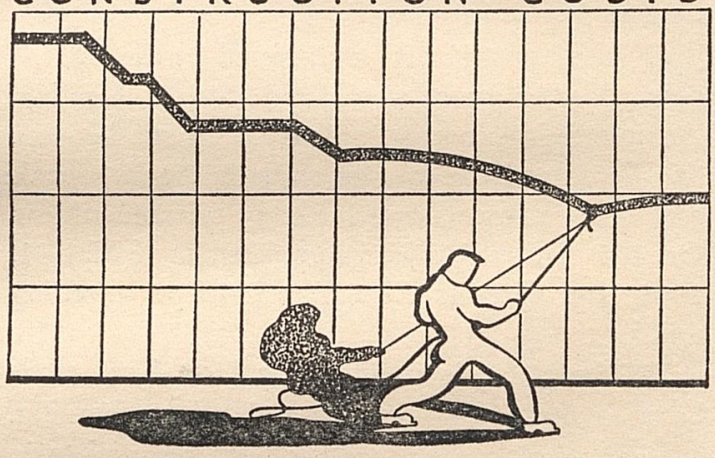
The dishonesty of this approach is apparent. When you include land costs, for instance, in your figure for a public project and exclude them in your

[1] These large-scale private rental developments were financed under the Federal Housing Administration plan.

figure for private housing, the result is distortion of the worst sort. You might just as well compare the cost of a full suit of clothes in one store with the cost of only a coat in the other.

Although every project under the USHA program provides not only decent shelter but also decent, healthful surroundings, the cost of these community facilities is always kept to a minimum. To cut the cost of playground construction, every attempt is made to locate the projects in neighborhoods where adequate play space is already available. Rigid economy is observed in landscaping. The amount of indoor community space is varied with the size of the project.

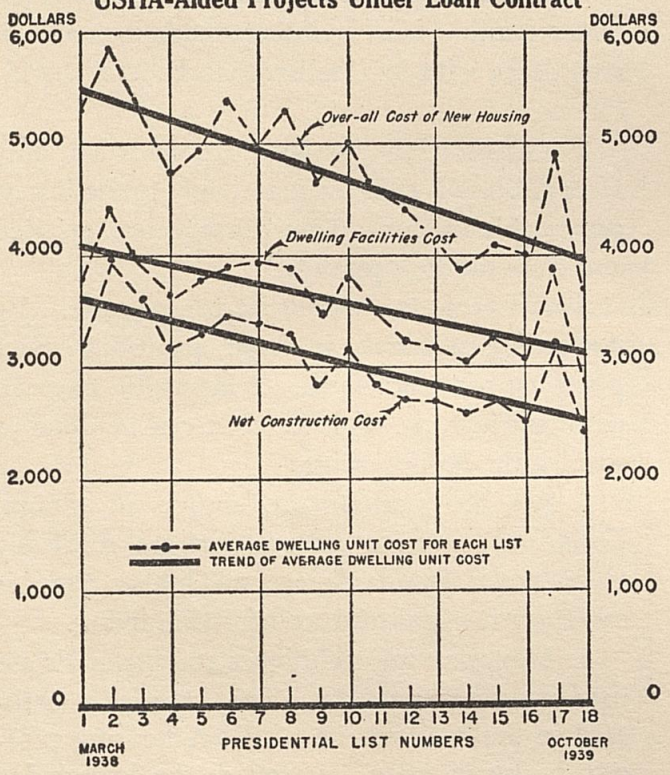
CONSTRUCTION COSTS



Moreover, the local authorities invariably use a fine-tooth comb in searching for low-cost sites, both vacant land and slum land. In order to prevent speculative rises in land costs, they make a practice of quietly taking up options upon desired parcels of land—before it is generally known where they plan to build. In order to escape speculative increases in land prices should they occur, they often choose alternate sites—so that if one turns out to be too expensive, they can buy the other instead. Yet at all times the interests of the seller are protected; a fair market value is always paid.

Moreover, a sharp distinction must be made between projects built under the USHA program and projects built by the old PWA Housing Division

Cost Trends Per Dwelling Unit,
USHA-Aided Projects Under Loan Contract



in the days before the USHA was created. The PWA Housing Division projects, which are now supervised by the USHA, were highly experimental and were built in accordance with an entirely different plan. Net construction costs on USHA-aided projects average about 25 percent lower than the costs of the old PWA housing projects.

Low construction costs have not been handed to the local authorities on a silver platter.

They have been the result of hard work over innumerable details rather than the product of some simple magic formula. They have been the result of unceasing vigilance on the part of both the local housing authorities and the USHA.

When the architect of Jefferson Homes sat down

with a few citizens of Anytown and explained the reasons for low costs, they were in for a long story. In order to do the subject justice, he had to discuss at least six important factors:

1. All USHA-aided projects are constructed under familiar local building regulations and in accordance with local rather than Federal specifications.

2. Construction contracts are awarded only after public advertisement and only to the lowest responsible bidder. As a consequence, spirited and close bidding prevails.

3. All projects are built on a large scale. By purchasing materials in large quantities lower prices are often obtained. It is possible to make more efficient use of labor than can be done in small-scale developments.

4. All the projects are simple in design. Frills and excess ornamentation are ruthlessly eliminated. Standards are no higher than is necessary for healthful, comfortable living.

5. Money-saving techniques and materials are used wherever possible. The experience gathered in the construction of PWA housing projects is drawn upon, as well as the knowledge gained by experimentation and research carried on during the past few years.

6. Agreements with the building trades unions have helped assure construction according to schedule and have thereby eliminated a large part of the labor risk which contractors generally figure upon in drawing up their bids.

* * *

When the architect had answered all their queries concerning these points, his listeners appeared satisfied that construction costs under the USHA program were really low.

"But what I want to know," demanded A, "is whether all this will have any effect upon private construction costs?"

"Undoubtedly," came the quick response. "After all, 160,000 dwellings are being built under the present program. There will be about 400 projects in approximately 170 communities. The program's bound to have an effect upon the entire construction industry."

"It ought to stimulate more large-scale construction," offered A.

"That's one of the most important angles," agreed the architect. "Besides, it will popularize both advanced techniques and more simplified design.

"Of course," he concluded, "the example set by low-rent public housing will not by itself solve all the problems that face the private builder. But by showing him how to reduce construction costs, it will help him reach a mass market. It will help him build houses for those families who earn too much to live in a public housing project and too little to afford the type of homes generally built through private enterprise. Even if the USHA program didn't help slash the huge social and economic costs resulting from slum conditions—as it unquestionably does—for this reason alone it would be of invaluable service to the entire Nation."

This leaflet is one of a series on various phases of the United States Housing Authority program. For additional copies of this leaflet, or for copies of others in this series, write to the:

FEDERAL WORKS AGENCY
UNITED STATES HOUSING AUTHORITY
Washington, D. C.

U. S. GOVERNMENT PRINTING OFFICE 16—12110

[redacted]