

## Rural Design Studio \$20K House Project

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### Affordable housing designed to change lives in SE United States

Rural Studio was founded in 1993 by architecture professors Samuel Mockbee and D.K. Ruth with the intention of bringing the benefits of good design to an underserved population in the West Alabama Black Belt region. They devised the idea of creating affordable housing when the studio team observed many residents having difficulty paying off their trailer home loans and saw their properties depreciating. The studio hoped to provide the locals with better housing alternatives that would appreciate in the future.

#### **Cost/ Design:**

Most impoverished residents owned inherited land, but they simply lacked the financial resources needed to build a new living space.

Original budget was \$12,000 for materials and \$8,000 for labor. The goal was to increase local employment and economic opportunities and to utilize local resources.

The project included a researched based, experimental process which continued to allow for revision and learning while providing a systems-based housing solution to the area.

The cost of labor, utility installation and applications for building permits was highly variable for each project.

#### **Financing:**

Students calculated the monthly mortgage that would be affordable for a resident whose income depended on government aid, which translate to an \$80 monthly payment or \$20,000 mortgage (2005 conditions).

The studio designed instructions and construction documents to track construction progress and cost.



Fig.3 “A Yard View of the \$20K House Project”  
[https://impactdesignhub.org/wp-content/uploads/2016/10/IDH\\_WP-EMBED-IMAGES\\_003-RURALSTUDIO\\_20161018-620x466.png](https://impactdesignhub.org/wp-content/uploads/2016/10/IDH_WP-EMBED-IMAGES_003-RURALSTUDIO_20161018-620x466.png)

The \$20,000 loan is lower than the home loans typically offered by most banks, and the banks have less incentive to finance these smaller mortgages.

**Regulatory:**

A similar house constructed elsewhere may not meet building and health codes of that town or state.

Rural Studio was able to engage in such a process due to the academic nature of its institution.

The purpose of the \$20K Home Project was to design an all-encompassing housing solution for a particular area, not a universal product that will work for everyone.

**Lessons Learned**

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In this \$20K rural house project, architecture students were able to design and build a real-life project.

Besides the student input into the project, some other outside factors that also contributed to achieving the \$20K goal were that the land was free because it was owned by the homeowners and local sponsors.

The overall model of the \$20K rural house project might not work for other regions in the United States but the studio's thorough materials budgets may provide a great basis for other organizations that may adopt the \$20K home model design in the future.

The materials and designs utilized to create these houses elsewhere would need to be adapted to ensure a low cost monthly operation cost in terms of energy usage.

**Learn More:**

<http://www.ruralstudio.org/people/mockbee> - Auburn University's Rural Studio