

Managing Construction Timelines and Cost Estimates



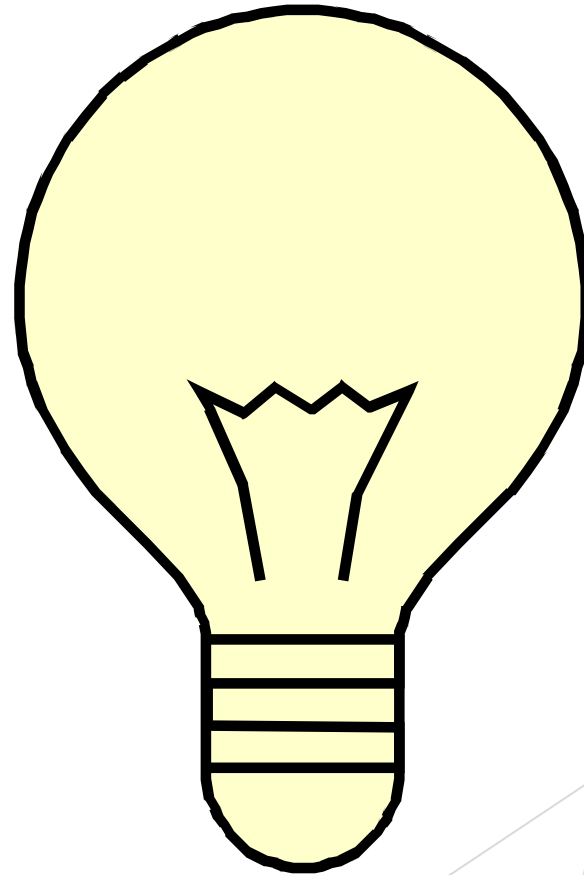
Construction Timelines

This is a projection based on:

- ▶ Loan closings
- ▶ Bid schedules / subcontractor availability
- ▶ Weather
- ▶ Availability of construction materials

Cost Estimating is not an exact science.

- ▶ You must determine what works best for you.



How do we develop an accurate cost estimate?

- ▶ 1. Accurate bids
- ▶ 2. Quality house plans
- ▶ 3. Complete specifications
- ▶ 4. Site Adjustments - slab vs. crawl space vs. basement

Obtaining Quality Bids

Best Practices

- ▶ 1. Newspaper ads - one week time frame.
- ▶ 2. Use your website and social media
- ▶ 3. Be sure to completely describe the task to be performed and the material the contractor is to provide. Specify the quality and approximate quantity to be used.
- ▶ 4. Obtain a minimum of three bids.
- ▶ 5. Require contractors to provide a minimum of three references and that they have workman's compensation.
- ▶ 6. For new subcontractors, order a credit report.
- ▶ 7. Be sure not to include any task that the families can do themselves.



Awarding Bids

Best Practices

- ▶ 1. Check out references in person or by telephone.
- ▶ 2. Review credit report.
- ▶ 3. Check with suppliers on the contractors history of paying bills on time and their reputation.
- ▶ 4. Watch out for bids that are either too high or too low.
- ▶ 5. Award the contract in a face to face meeting so you can go over the requirements of the contract and answer any questions.
- ▶ 6. Be sure that the contractor has the skilled staff and financial backing to complete the task.

Land Cost

- ▶ This estimate is based on the option to purchase the property or the Offer and Acceptance.

Loan Closing Fees

- ▶ The closing agent is the applicant's choice, but if the group agrees to bid it out, then considerable savings can be made.
- ▶ Fees such as the appraisal, escrow, tax monitoring fee, hazard insurance, and closing fee may be financed in some cases.

Utility Cost

- ▶ Be sure to research out the cost of the building permits and impact fees with the city building official.
- ▶ Research utilities as to location and check with local utility companies as to connection fees and capacity to connect.

Site Prep/Culvert

Evaluate your plot plan carefully to look for items that will require additional cost, such as:

- ▶ 1. Elevations
- ▶ 2. Utilities
- ▶ 3. Natural Barriers
- ▶ 4. Man Made Barriers

Footings and Foundations

- ▶ Excavation
- ▶ Family Labor
- ▶ Pretreatment
- ▶ Steel / Wire Mesh
- ▶ Insulation
- ▶ Vapor Barrier
- ▶ Concrete / Concrete Block

Plumbing

- ▶ Recommend bidding Material and Labor together. Be specific as to fixtures. If color or type cost difference then the families pay the difference. State and city codes will require quality.
- ▶ Three Phases
 - ▶ 1. Rough In 33% (Slab)
 - ▶ 2. Stack out 33% (Set Tubs and Vents)
 - ▶ 3. Completion 34% (Set fixtures and faucets)

Framing Bid

- ▶ Nails - Include in the bid. If contractor uses air gun have contractor bid nails.
- ▶ Trusses - Framers bid out.
- ▶ Tar Paper - Be sure it is in the bid to provide it and install it. Be sure to allow for overhang on the trusses.

Framing Material

- ▶ Lumber - Grantee line item calculates this or gets bid package from supplier.
- ▶ Nails - Framers Contract bid.
- ▶ Decking - # sheets, use speed square book to calculate based on rafter length. Supplier can give you a formula.
- ▶ Trusses - Framers Contract bid.
- ▶ Doors - Allowance in the bid.

Roofing

- ▶ Trusses - Framers bid out.
- ▶ Shingles - One bundle of shingles will cover one sheet of decking. There are 3 bundles in a square.
- ▶ Nails - Based on the type of application.
- ▶ Labor - Bid out estimate / family labor opportunity.
- ▶ Architecture shingles may require 4 bundles instead of 3 bundles for regular shingles.

Windows and Exterior Doors

- ▶ Develop an allowance based on the size of the house.
- ▶ Obtain competitive bids for the window and door packages for the build group.
- ▶ Use family labor to install.
- ▶ Include an allowance for painting supplies such as brushes, rollers and pans.

Electrical

- ▶ Typically the labor and material is bid together.
- ▶ Light fixture and outlet allowance needs to be stated in the plans and specifications based on the number of rooms and bedrooms.
- ▶ Have the families buy the light bulbs.
- ▶ Allow for ceiling fans and light kits if the families typically request them in your area.

Insulation

- ▶ Walls - Type of material can vary based on house size and R-Value needed. Use family labor to install.
- ▶ Ceilings - Typically blown or batt insulation is used. This can be performed by either the families or contracted out.
- ▶ Thermal performance standards must be met in accordance with USDA RD Instruction and State building codes.
- ▶ Allow for caulking and foam.

Heating, Ventilation, and Air Conditioning (HVAC)

- ▶ Typically this is contracted out based on the Heat Loss / Gain study for the proposed house plan. Typically allow for one ton per 600 square feet.
- ▶ Obtain competitive bids for the HVAC packages for the build group.

Drywall - Hanging/Finishing

- ▶ Hanging, taping, and texturing of sheetrock is typically contracted out.
- ▶ Family labor can be used.
- ▶ Be sure that the contractor bid includes screws, nails, and finish materials.

Painting / Staining

- ▶ Family labor should be used.
- ▶ Be sure to state an allowance in the plans and specifications.
- ▶ Allow one gallon of paint and primer per room.
- ▶ If the ceilings are textured, you do not have to paint them.
- ▶ Allow for painting supplies such as brushes, rollers and pans.

Interior Doors and Trim

- ▶ Door count off plan number of doors. Plans and specifications state the type and if they are prefinished.
- ▶ Trim is based on linear footage of wall area. Plans and specifications state the type and if they are prefinished.
- ▶ Include an allowance for painting or staining supplies, as needed.

Cabinets

- ▶ Develop a cabinet allowance based on the size of the house.
- ▶ Obtain competitive bids for the cabinet packages for the build group.
- ▶ Typically, the families install them.
- ▶ If you purchased unfinished cabinets, you will need a larger painting allowance.

Appliances

- ▶ Develop an appliance allowance based on the size of the house.
- ▶ Obtain competitive bids for the appliance packages based on name brand for the build group.
- ▶ Typically, the families install them.

Floor Covering

- ▶ Calculate the square footage of carpet and vinyl. Then bid them out specifying grade based on the plans and specifications.
- ▶ The bid should include the pad for the carpet, underlayment for plank floors, as well as state and local taxes.

Landscaping - Site Specific

- ▶ Dirt work and grading should be contracted out. Get bids based on the plot plan.
- ▶ Families can provide labor for pouring concrete sidewalks and driveways. Be sure to estimate the cost of material and supplies for forming the sidewalks and driveways. This includes the wire and saw blades for the expansion joints.
- ▶ Families can provide labor for planting grass, sod, shrubs, and trees. Be sure to specify an allowance for each home.

Managing Construction

- ▶ Group member construction meetings.
- ▶ Quarterly review meetings (USDA RD, T&MA Contractor, Grantee)
- ▶ Document family labor contributions.
- ▶ Avoid Change Orders
- ▶ Have a backup plan ready

Contingencies

- ▶ How much is enough? Five percent of the construction cost is the maximum allowed. We recommend budgeting for this in all cases. Costs can be affected by world conditions, the availability of skilled labor and materials, weather, and natural disasters.
- ▶ The lack of contingency funds can result in construction delays if loan funds are not available immediately.
- ▶ Families will incur additional loan closing costs of the subsequent loan. This may damage your relationship with contractors, USDA RD, and the families.

Overruns - Who's At Fault

- ▶ The grantee is ultimately responsible for developing a realistic construction budget and obtaining cost estimates.
- ▶ USDA RD reviews the cost estimates and compares them with the plans and specifications. USDA RD will address any concerns with the grantee.
- ▶ It is the Applicant's responsibility to minimize costs and not to exceed the cost allowances in the plans and specifications.

Wants vs. Needs

Questions to ask yourself before acting upon a Change Order request.

- ▶ 1. Was it in the plans and specifications?
- ▶ 2. Is there a cost estimate?
- ▶ 3. Is it a want or a need?
- ▶ 4. Does it add value?
- ▶ 5. Are there funds in the construction budget to pay for this?

If the answer is no to one or any of these then it should not be done.

Where's the Savings?

- ▶ Appraised Value - Construction Cost = Value of Sweat Equity (Family Labor Contribution)
- ▶ Technical Assistance (TA) Cost/# of Units Built = TA Cost/Unit
- ▶ For the future of the Mutual Self-Help Housing (MSHH) Program to be bright, the cost savings must be equal to, or exceed, the T/A Cost /Unit.

Questions we must ask ourselves?

- ▶ Do the Self Help Programs make homeownership more affordable?
- ▶ Are the families active in performing 65% of the construction task?
- ▶ Are we getting discounts and savings from mass purchases and contracting?
- ▶ Do the costs exceed the benefits?
- ▶ Are the homes affordable to maintain?
- ▶ Are the utilities affordable?

Thank You!

- How can we make the MSHH program better?

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