



HCJ Presentation - "Planning to Restore an Old House"

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**Historic
City of Jefferson**

It's true what they say about childbirth and renovations: Once you see the final product, you fall in love, and all memory of pain and prolonged labor evaporates. That's how "serial rehabbers" are created!

Before you jump into the demolition phase, you'll need to have a good plan for how to proceed with making the house livable, and you'll need to be in agreement with your rehab partner(s) on what this plan includes! Think about the topics listed below as you develop your plan.

1. How to Approach Rehab:

a. All by Yourself (Super Human!)

If you are a very talented human being, able to do electrical, plumbing and leap 2 ½ story buildings in a single bound, then this may be the route for you. (Only applies to home owners. If a rental, city code requires city licensed electricians and plumbers. But, you can be registered with the city as an apprentice under a contractor for only \$12.)

b. As General Contractor

This role is attractive if you're pretty handy or have done some rehab before. Your job is to plan the project, bringing in subcontractors when needed. The trick is to sequence the project in the proper order and to have all needed supplies on hand. Otherwise, you may end up removing work done by one contractor so another can squeeze into the same space, then having the first contractor return to re-do their work. (Paying to do things more than once is not fun!)

c. Hire a General Contractor

Even if you hire a general contractor to plan the project and hire the subcontractors, expect to remain very involved in the project. There are almost daily decisions you'll be asked to make regarding placement, type, color and size of items. DO NOT allow contractors to pick colors or other items unless you want "builder grade" choices in your home. (Grey, silver -what's the difference??)

2. Where will you live?

a. Not a problem, this is a rental or second home. Boy are you lucky! No drywall or plaster dust for you!

b. We're not moving 'til it is done. This may require 2 house payments, or house and rental payment, but is an option.

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- c. Living with relatives. Might be an option for some, for a short time. “Honey, when are we going to finish that rehab???”
- d. Living with the mess. Depending on the size of the house, this may be a workable option. If there is any space not being rehabbed at the time, consider setting up a temporary kitchen and bedroom at least, so you can live in a “clean” zone.

3. What Will You Do?

- a. Systems upgrade only – make it functional, leave rest for later. This is the minimum level of rehab. Other repairs and painting can be finished at a later date, as funds allow.
- b. Systems upgrade + some cosmetics. Most people are going to choose this option, as if the systems need updating, the paint probably does too. (And the bathroom, kitchen, lighting fixtures...)
- c. Full blown rehab – it needs everything! If the house has been vacant for a long time, this may be the only option. Or, you want to do everything at once and be done with rehab for a long time. Just be prepared, as this is the option where “we may as well do that...” can run up the budget.

4. What is Your Approach to Rehab?

- a. Keep original as much as possible, replace later modifications. Seems like in any older home, someone has had bright idea about “updating” along the way. These changes now stick out like a sore thumb, and you can’t stand living in the house with them. Otherwise, you plan to keep as much of the original materials as possible, including the windows & doors. Even if you plan to keep original trim, do you plan to strip in place, or remove and have it stripped? How hard will it be to return each piece to its original place? What if one or more pieces break – how hard will it be to get a replacement?
- b. Keep best of original, modernize where needed. It is that open ended “where needed” that allows many changes. Do you hate plaster, and want to remove it all? Plaster has a bad reputation sometimes – if in good condition & not too many cracks, it can be repaired and withstands flooding & other damage better than drywall. Think twice before removing from walls, as plaster & drywall have different thicknesses, so your trim may not fit flush with drywall around doors & windows as it did with plaster, making more work & expense. If you decide to remove plaster from ceilings, cut around the edge first with a grinder to keep walls from cracking when removing ceiling plaster. Be aware that taping two different materials together can be tricky, and if you / your contractor doesn’t use enough drywall mud when taping, the mud and your beautiful new paint can crack and pull away from the wall in just a few months.
- c. Replace windows, doors, plaster, floors. Many manufacturing companies will encourage you to replace as much as possible in your house, often in the name of energy

- efficiency. The real culprit in energy loss is not the windows themselves, but the space around them. Is the mortar holding your windows in solid? Or does it need repair so air doesn't whistle around your window frames? Do you have good window & door insulation to seal air gaps? Are there storms in place to protect your windows from weather & to act as another layer against temperature changes? Research for yourselves – numerous studies now show that cost of window replacement is so high that you may move well before you'd recoup the energy savings from replacement. And window repair is not rocket science, just time consuming. Contractors would rather replace windows because it is easier to estimate the time needed to replace a window rather than repair it. See above re: plaster vs. drywall. Hardwood floors can usually be repaired. Just because they have holes where the heating pipes came through the floor, or some termite or water damage, stains, splinters, staples or nails, they can still be repaired. Most likely this repair will be far less costly than replacement. Your doors may have already been replaced, and you want something more appropriate to the period. Or, you're changing windows to doors, doors to windows and need something new for the opening. The good news is that period doors are getting easier & easier to obtain. Menard's has expanded their line, & Freedom Products in Osage County can manufacture whatever you want or need in wood. Good replacement windows can also be found (or made) – keep looking. Cheaper options may look, well, cheaper.
- d. Gut & modernize. Maybe you've spent a lot of time reading magazines where they turn a typical bungalow on the outside into a modern, vaulted ceilinged space inside. Since this option retains the least of the original materials of any option, it is also likely to be the most expensive option.
5. Phasing. How will you pay for it all? Borrow all the money at once? Do what's necessary to make it livable & then do one project at a time? Do all the interior, then add garage, patio, deck, landscaping, etc. later? Do one floor at a time? If planning to use tax credits, phasing may impact what you can use credits for. Don't worry -whatever approach you use, there will always be more to do!
 6. Planning – Staying Ahead of the Contractors
 - a. Your friend, the punch list. Keep a punch list for each contractor & for each part of the project (by room, by floor, etc.) so that if a contractor has time available, they have something to do or else they'll leave and no telling when they'll be back. Try and arrange for at least a full day's work every time you ask a contractor to work on your home if possible. That makes the best use of their time, making it more likely they'll want to return when you need them.

- i. Make a notebook / binder with measurements, samples. You can keep your punch lists in this. Take it with you each time you go to a home store, lumberyard, salvage yard, etc. Get in the habit of cruising by all the clearance areas in your favorite stores. Then when you find a great tile or flooring on clearance, you'll have the dimensions with you so you'll know if it will cover the area you intend to cover. Your notebook should include paint and fabric samples too, so you can take advantage of savings in these areas too.
 - ii. Pinterest. This may be new for guys, but Pinterest is a great way to get and file ideas for rehabbing & decorating. Just try to make your boards specific enough that you can find that great idea again. Making one board titled "Rehab Ideas" that gets filled with 1,000s of photos isn't easy to use. Try and look at photos and pick out no more than 1 or 2 things you'd like to consider for your home, then label the photo in the notes. Like, beadboard ceiling or farmhouse sink.
 - iii. Apps to sketch, keep notes, track sun's movements. Especially if you have an iPad, there are apps for sketching your ideas, then taking them with you. Check out this article and search for others: <http://www.archdaily.com/525062/top-10-technical-apps-for-architects>
- b. Functional items – suggest you start with the exterior, as keeping the exterior envelope secure keeps out water, putting a halt to further damage. Plan according to your priorities, and the first one should always be to keep water outside your building. No sense in painting first if the roof is going to leak and destroy all your hard work!
- i. Roof / Gutters. What type do you have, what type do you want? Function is most important, but design may make a difference if applying for tax credits.
 - ii. Walls / Foundation. Do they need tuckpointing, caulking, paint?
 - iii. Windows / Doors. Are all parts in place & operational? Do windows need glazing? Weatherstripping?
 - iv. Grading. Make sure your yard slopes away from your house, or rain will dump water into your basement / crawl space. Consider this when installing landscaping too – make sure to maintain a slope away from the house.
- c. Functional items – Systems. If you learn one thing from this presentation, let it be this: draw, make or get floor plans for your house, preferably to scale, then make 10 – 12 copies. On one, draw your electrical system, marking (ideally in color) where your electrical box is, current & planned locations of switches, outlets, light fixtures and appliances. Mark where wires go from one level to the next, & what direction floor & ceiling joists run. That will help you plan the easiest way to run new wires. Walk through your house after dark to see if there are light switches in all the places you'll want them. Mark 2 & 3 way switches. Think about where you'll want USB outlets to charge your phone &/or tablet; how you'll connect your tv's to cable or internet so you don't have a

- ton of wires hanging down. (DVD player, X-box, Roku, speakers...?) Where do you want to plug in small kitchen appliances, & how many outlets will you need? How will you hide wires? In walls, behind baseboards? On exterior plastered walls, will you need to cut a chase for wires and an opening for outlet boxes? If so, consider doing this yourself to minimize the size of the hole you'll need to repair when electrical work is done. Do the same for plumbing and heating / cooling. Where will you need to run / replace pipes and ducts? How will they connect with the water, sewer lines and furnace? Will you need plumbing for an icemaker, or water & ice in the refrigerator door? Or a pot-filler faucet? Be sure to mark where you want your thermostats installed, or the contractor will invariably place it in the only space where you could hang artwork! Something about best location due to ... yawn, I forget. Look for a space between doors that can't be used for anything else.
- i. Electrical. Is your electrical panel up to code? Do you want / need to add new circuits to supply more power or in different areas?
 - ii. Plumbing. Has the plumbing been updated, or is it still galvanized? Is it leaking anywhere? What is the water pressure? Does the sewer back up?
 - iii. HVAC. Is the current system operational and/or efficient? Would you prefer a different type of system (add AC, heated floors, radiant heat...)? Numerous options now for thermostats, including ones controlled by your phone.
- d. Design - Room elements
- i. Ceilings. What is their condition, how will you run new heat / air ducts, electrical wiring & plumbing? Would it be better to remove and replace them? Are there delicate features, like crown molding made of plaster you need to protect? Central medallions? Even cracked ceilings can be repaired – with special washers to hold new drywall mud or plaster or with fiberglass strips like wallpaper. Worst case, add a layer of drywall over the existing plaster ceiling. This may or may not require addition of furring strips to hold screws in place.
 - ii. Walls. Are they going to remain in the same place? If not, be sure you know which walls are load-bearing, as any change to these may need the assistance of an architect. Otherwise, the weight of your house may not be supported properly.
 - iii. Floors. Hardwood floors are all the rage now, due to allergies (less dust / mites trapped in carpet), ease of maintenance and appearance. So if your house has them, you may want to leave them exposed. Or, you can always add rugs – antiques, orientals, modern plush rugs, even bound solid color carpeting. What will you use for kitchens and bathrooms? Is there existing vintage tile? (Adhesive can sometimes be removed using water – soak bed underpads with water and leave overnight, damp side down, to loosen water soluble adhesive. Razor

blades, Goop (hand cleaner), acetone, heat gun may remove non-water soluble adhesives.) Hardwood, tile, sheet vinyl, vinyl or linoleum tile, laminate flooring (some now look like tile), carpet? Consider ease of maintenance when choosing these, as these areas get heavy use.

- iv. Trim. What is the condition of your trim? Does it all match, or has some been replaced? Does it remain in place, or has it been removed? How complicated is it – how hard would it be to strip paint by hand? If you have original trim, often you can match it pretty well using premanufactured pieces from the box store. You may need to combine 2 or more trim pieces to come up with the similar profile. Or you can have matching trim made by Freedom Products (no, I don't get a referral, they're just that good!) If your trim is fairly flat, it can be prepped for paint while on the wall, but I don't recommend using a heat gun on any trim that you can't see behind. You might accidentally heat up years of dust & debris inside the wall – this could catch on fire hours after you've left the house and cause considerable damage. You can strip using hand tools or chemical stripper. Or, you can remove and label the trim on the back, have it stripped separately then return for installation & painting.
- v. Window sash and doors can easily be removed for repair & painting, then replaced.
 1. Always put the hinge pins back in the hinge when removing a door, so they don't get lost or mixed up – sometimes they're a little bent & will only fit a particular hinge. Remove, bag & label door hardware, but consider leaving hinges on & covering with tape while painting. If they're screwed in nice & tight, why risk them being loose later? If refinishing door knobs, do the screws as well. Stick them in cardboard or styrofoam for painting or applying clear sealer. Once you've polished brass hardware, you'll want to seal it to prevent tarnishing again. Window sash pulls and locks should be removed and refinished or replaced when painting sash.
 2. This is also the time to replace worn or dirty sash cords. Make a small weight using fishing line and lead sinkers. Crimp 3-4 lean sinkers on one end of the fishing line. Feed this end through the rollers where the sash cord came through at the top of the window frame. Remove the sash weight pocket cover to reach the weight at the bottom of the space. Tie new sash cord onto the fishing line, & gently pull through the pulley at the top. Tie a knot in the new cord, and install in the hole in the side of the window sash. Using the old sash cord as a template (if possible), cut the cord long enough to reach the sash weight inside the sash pocket.

The sash will need to hang free, not sit on the bottom of the sash pocket, so some trial and error should result in the proper length cord. If the cord is too long, the top window sash may not pull all the way to the top. Tie the lower end of the new cord to the sash weight. Replace the pocket cover & you're done!

- e. Design – fixtures. When you start selecting fixtures, you're moving from the systems that won't be seen to those that will. That means that while you're still dealing with items that are functional, your decisions will impact your decorating designs. Before you start shopping, have your overall "look" or "theme" in mind so everything is coordinated when you're done. Traditional? Farmhouse / country? Historic? Modern? And set a budget, because some of these items get really expensive!!!
- i. Plumbing fixtures -bathrooms & kitchen. Sinks, tubs, showers, toilets, garbage disposals, faucets – sinks, tubs, showers. Chrome, nickel, bronze, brass; polished, satin, ... many choices here! Kitchen faucets – pull down, single handle, double handled, wall faucets, pot fillers, ...! Kitchen sinks – single or double; stainless, porcelain, fiberglass; drop in, under-mount, farmhouse style, built-in drainboard? Bath sinks – round, oval, drop-in, under-mount, how many, porcelain, glass, ceramic?
 - ii. Kitchen appliances. Refrigerator – drawers, french door, top freezer, bottom freezer, water & ice in the door...? Stainless, black, white, colors? Modern, retro? Microwave & oven – built-in, drop-in, countertop? Cooktop? Gas or electric? How many burners? Optional griddle, etc.? Dishwasher – buttons exposed or at top of door? Raised for ease of use? Garbage disposal – how much power?
 - iii. Countertops – laminate, recycled glass, granite, concrete, wood, Corian, tile...?
 - iv. Light fixtures (indoors & out). Modern, historic? Rewired antiques or new to look old? Painted, nickel, chrome, brass, iron, bronze? What about lights inside &/or under cabinets? Accent lights, like under kitchen cabinet toe-kick? Task lights and ceiling lights in kitchen? Think about the type of lights – halogens create heat, so LED may be better in cabinets.
 - v. Fireplaces. Painted, unpainted, mantel upgrade? Gas logs? (Great ideas on Pinterest.)
 - vi. Televisions. Well, they may as well be considered fixtures. What type / size do you want? Where will they be placed? On a mantel is typical, but may make your neck sore looking up from a sofa. On a wall? With doors or other covering when not in use? Check Houzz for articles on this topic, & Pinterest for ideas on covering tv's. How many & what type outlets will you need for cable, add-ons like DVD player, Roku or other internet connection, X-box, etc.?
- f. Design – exterior

- i. Garage. Existing? Condition? Keep, or build new? Replace doors? Insulate / heat?
 - ii. Patio / deck. Existing? Condition? Add patio and / or deck?
 - iii. Landscaping. Dead, overgrown, missing?
 - iv. Lighting. You'll want lights on porches, shining on patios, walkways, maybe lights to highlight the front of your house or landscape features.
 - v. Parking. You can never have too much. Where will you park extra vehicles (ex.: RV, trailer, pickup truck)?
 - vi. Trash. Where will your trash cans go between pickups? Do you want to install a fence around them to screen the view?
 - vii. Composter. Do you like to garden? If so, you'll want someplace to shield the view of your compost facility.
 - viii. Shed. Where will you store lawn & garden tools?
7. Hiring a General Contractor or Subcontractors. The best way to start looking for either a general contractor or subcontractors is to ask people who they used that they'd recommend. You might also want to ask if there are contractors you should stay away from – people may be more likely to tell you this if they're asked directly. You want to hire someone who showed up, did the job in a professional manner (you didn't have to point out things like rotten fascia boards, they just replaced them before hanging the gutters), and was reasonable in terms of cost. This does not mean they are the cheapest.
- a. Once you have names of several contractors who've been recommended to you, they'll need to see the property. Set a time when they can come by (probably one at a time due to their schedules – you'll need to describe the work to be done to each of them), let them walk through and ask questions. Have a business card or sheet of paper with your contact information to give them, so they'll have a way to call back with any questions and a way to send you their bid. Let them know what items you've already purchased, and what you plan to purchase. Ask who they would use as subcontractors (they may be cagey about this to protect trade secrets, but it doesn't hurt to ask). Ask them how they'd tackle different parts of the project. You want to get a feel for their approach – would they really rather rip everything out and replace with new? How do they feel about things that aren't square, as is often the case in older homes? You and this contractor will be working together closely for several months, so you want to have similar philosophies toward rehab so you end up with a project you're happy with.
 - b. If you're acting as your own general contractor, how do you find good subcontractors? Again, ask around. Many HCJ members have experience with rehab efforts and can recommend who they've worked with. Or, ask a contractor you know who they use for a certain thing. They'll tell you! Ask your subcontractors who they know – my painter lady's son is my tile guy, and they're both great to work with!

- c. A general contractor will have workman's comp and insurance to cover any damage that may occur during the project. You'll want to confirm this with any contractor or subcontractor you hire, or else you'll need to pay for your own workman's comp and insurance. You will want to get a written bid for the work to be done. Typically, contractors don't like paperwork. But the more detailed the bid, the more agreement you have up front on what is to be accomplished.
8. How to Save Money During Rehab. Good, professional workers cost money.
- a. You may be able to reduce the cost by doing some or all of the demolition work ahead of time, removing partition walls or plaster that has to go. You can arrange with your contractor to do the daily cleanup. No point in paying someone \$13-20/hour to sweep! A good contractor will include daily cleanup as part of their project. If they take their tools, or leave them in a certain area each day, you can empty trash cans, sweep floors, etc..
 - b. Also, the less time they spend running to the hardware store, the more time they spend actually doing work! If you can be home during the day or meet or talk to the contractor at the end of the day, find out what they'll need next.
 - c. Always be thinking ahead so you can have what they need available for them. Ask what they need from you for the next day, so hopefully they'll think to ask questions about the next day's work. Like, which way do you want these doors to swing? These and similar questions slow the contractor down if you're not there to give them an answer. Or, they'll guess.
 - d. What can you learn to do? While you'll probably need professionals to do the roofing, gutters, electrical, plumbing and HVAC, kitchen cabinets and granite countertops, there are other projects you might want to tackle yourself. Lots of repair jobs involve mixing something with water and applying it to a surface. Plaster, mortar, drywall repair are all fairly similar. Even if you have someone do the mudding & taping on drywall, you can fill the thousands of little holes and cracks in the walls. With a bit of metal mesh, you can fix larger holes in plaster. Caulking above your baseboards and in wall corners will give you a much better paint project, and it is easy. Wet your finger with a bit of soapy water to get a smooth bead on your caulk, and have a rag or paper towel handy to wipe off any blobs. Caulk around your windows & doors, inside and out, for better appearance and to block air infiltration. YouTube is full of videos on how to do things, and DIY shows have videos on their websites. You might want to lay a laminate or vinyl floor, refinish wood floors, repair & paint your windows and doors, even install tile floors or walls. If refinishing wood floors, rent a pad sander rather than a belt sander. Pad sanders can be found at box stores or US Rents It – the belt sanders are more powerful, and can leave ridges in softer woods. Plus, they're hard to control. The pad sander is no more difficult

- to use than a vacuum. You can install a single countertop or island top - just order from your favorite supplier & follow the instructions provided.
- e. Shopping. Search a variety of places, and frequently, for items you can use in your project. Box stores have a number of places where they clearance different sections of the store. Menards has clearance throughout the store, plus a list of items on a board behind the counter in the lumber yard section – they’re stored out in the yard. Habitat gets in whole sets of kitchen cabinets, but they sell quickly, so check back often. They also have doors, sinks, toilets and other items regularly for sale. TNT in Cedar City has a wide variety of items, including cabinet doors, sinks and trim. Craigslist can be a gold mine for rehabbers, but you have to check often and be willing to drive to Columbia for many items. eBay has tools, antique lights and new ones for sale, and you can sort your searches different ways. As the economy recovers, you may find good buys on faucets and other lightweight items. As copper prices have fluctuated over time, we’ve been able to buy electrical wire from eBay, with shipping, cheaper than at the local box stores. Amazon has vendors with all types of hardware, and many items covered by Amazon Prime have free shipping.

For more tips and amusing stories (even professionals have rehab nightmares) check out “My Bath Remodel From Hell,” where a This Old House magazine editor shares her horror story.

https://www.thisoldhouse.com/ideas/my-bath-remodel-hell?utm_source=cheetah&utm_medium=email&utm_campaign=KB_051117