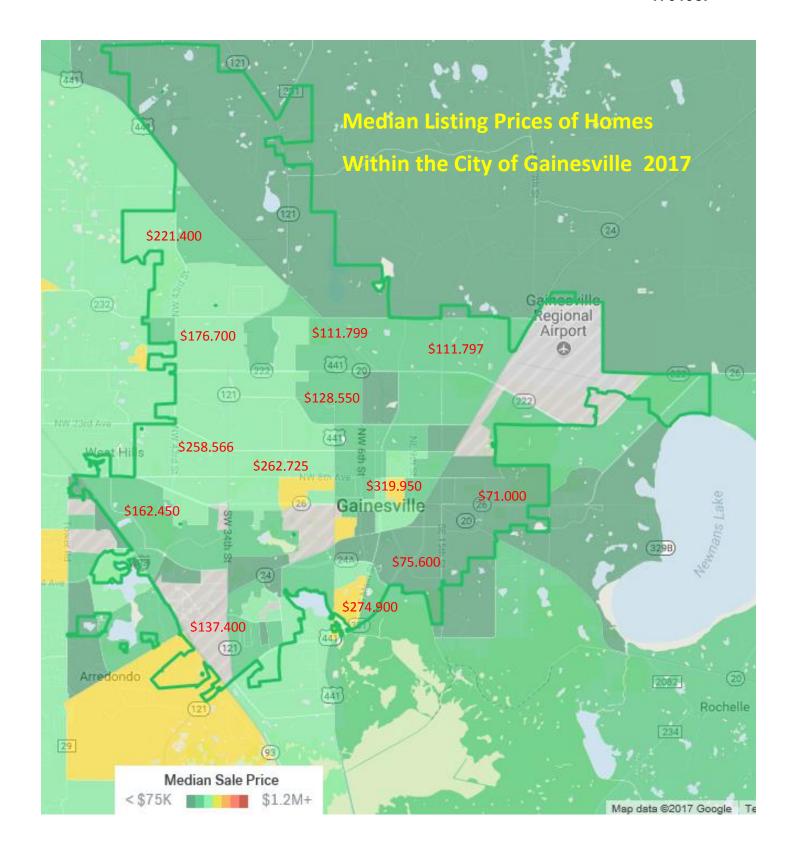
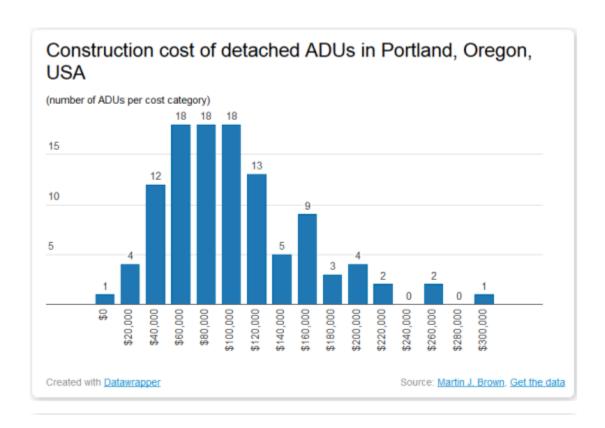
## ATTACHMENT D

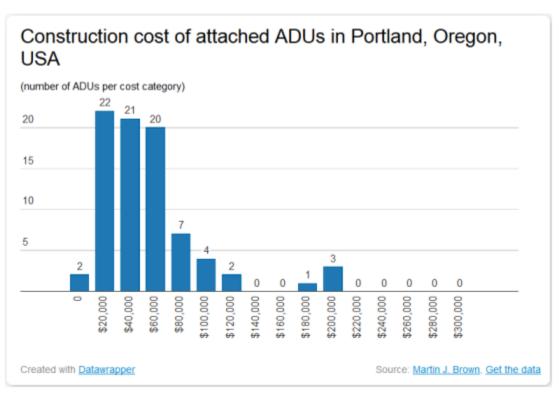
# **Reference Related to Economics of Accessory Dwelling Units**

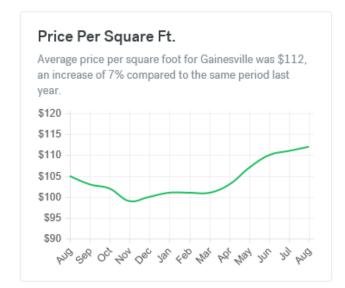
Accessory Dwelling Unit: A Cost Breakdown, Portland, Oregon

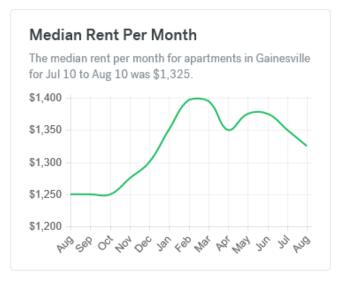
| Construction        | COSTS     | Description of Work  |   |
|---------------------|-----------|--|---|
| Items               |           |  |   |
| Permits             | \$10,000  | This includes the current Portland SDC Waiver that is expiring in July and all of            |   |
|                     |           | the individual trade permits.  |   |
| Excavation          | \$10,000  | around a 600sf slab area including the exterior decks. Also included excavation              |   |
|                     |           | for a couple landscaping retaining walls on the proper                                       | • |
| Footings &          | \$20,000  | This includes work needed for the ADU plus a couple of retaining walls needed as             |   |
| Retaining Walls     |           | part of the surrounding landscaping.   |   |
| Framing and         | \$20,000  | How Much Will My Accessory Dwelling Unit (ADU) Cost? —Propel Studio Page 3                   |   |
| Sheathing           |           | of 9 https://www.propelstudio.com/blog/how-much-v  | • |
|                     |           | typical 2x6 stud wall construction and 2x12 roof joists and supporting structural            |   |
|                     |           | posts and beams  |   |
| Siding              | \$8,000   | Hardi siding with vertical tongue and groove cedar highlights in some areas and cedar soffit |   |
|                     |           |  |   |
| Roofing             | \$10,000  | Standing seam metal roof Windows and Doors   |   |
| Windows and Doors   | \$10,000  | 2 custom windows, 3 skylights, 8' front door with side lite, 8' two panel sliding            |   |
|                     |           | door, and a few standard vinyl windows.  |   |
| Concrete Slab       | \$5,000   | exposed concrete slab for floor of main level  |   |
| Plumbing            | \$12,000  | includes radiant floor installation and on demand hot water system Electrical                |   |
| Electrical          | \$11,000  | electrical panel, electrical wiring and outlets  |   |
| Insulation          | \$9,000   | batt insulation in walls and ceiling stud cavities, 2" rigid on exterior walls               |   |
|                     |           | and  |   |
|                     | 4         | 3" rigid on roof   |   |
| Sheetrock           | \$8,000   | drywall, mudding, taping   |   |
| Interior Doors      | \$1,000   | 2 standard doors, 1 pocket door and 3 closet bi-folding doors                                |   |
| Paint - Exterior    | \$4,000   |  |   |
| Paint - Interior    | \$7,000   |  |   |
| Trim Work           | \$3,000   | painted MDF, plus clear coated fir window sills  |   |
| Cabinets            | \$4,500   | Ikea kitchen and some custom work  |   |
| Countertop          | \$2,500   | Wood butcher block   |   |
| Tile                | \$6,000   | Kitchen backsplash and shower - materials and labor  |   |
| Staircase           | \$2,500   | off the shelf spiral staircase   |   |
| Flooring - loft     | \$2,500   | solid white oak, prefinished   |   |
| Cable Railing       | \$2,500   | off the shelf system   |   |
| Appliances          | \$4,500   | stove, oven, washer, dryer, refrigerator   |   |
| Electrical Fixtures | \$1,500   | lighting fixtures, installation, etc.  |   |
| Additional          | \$1,500   | plumbing fixtures, installation, etc.  |   |
| Plumbing            |           |  |   |
| TOTAL               | \$176,000 |  |   |
|                     |           |  |   |













## Sustainable NW Modern ADU in Portland, Oregon

How Much Will My Accessory Dwelling Unit (ADU) Cost? —Propel Studio Page 2 of 9 https://www.propelstudio.com/blog/how-much-will-my-adu-cost 8/12/2017

One of the first questions we get from every client is: How much does an Accessory Dwelling Unit or ADU cost? At the same time, we get a lot of clients that come to us with a budget and ask if an ADU can be built for their available funds. The problem for any designer is that it is impossible to answer that question without knowing more about the unique aspects of the design that addresses the client's needs, wants, and site conditions. However, we thought we should at least share a breakdown of the costs for a recent ADU project to give a realistic guideline for you to base your budget on. Below is a rough construction cost breakdown for a 795 square foot sustainable ADU that was built in the summer of 2015 in Portland, OR. This design has a few unique elements that are reflected in the cost breakdown. The design

includes a high performance envelope - typical wall construction with standard BATT insulation, plus an additional 2" of rigid insulation on all the walls, 3" of rigid added to the roof, and a fully insulated slab. We also designed in radiant floor heating with an on-demand hot water system. There was also a couple of unique custom windows that are significantly more than a standard window would be - however they were important to the design and function of the spaces. Finally, this breakdown is for the construction costs and doesn't include architectural or structural design work. The design fees vary depending on the complexity, size and budget of your project.

This is a relatively typical cost breakdown for the ADUs we work on. This isn't an extravagant project, and although there are a few places where the client invested in a bit of a premium (custom windows, skylights, radiant floor heating), the rest of the project is pretty straightforward. I think this is a good resource to base your project's budget on.

One thing of note, is that each site condition is different. Excavation and concrete work costs can vary greatly depending on the complexity of the site, ease of access, and amount of fill to be added or removed. Cost can also rise dramatically depending on the exterior siding materials and interior finish materials. There were some unique aspects for the concrete work that drove up the cost and we did have some premium siding materials in certain areas of the exterior. Even then we don't really see the cost of a custom designed ADU dropping below \$150,000 when all is said and done.

It is also important to consider that a cost per square foot calculation is not a great way to determine the cost of a project like this. With smaller projects, the money that goes towards the expensive parts of a house - kitchen, bathroom, mechanical systems, excavations and concrete - don't get offset by the cheaper square footage of bedrooms, dining rooms and other spaces. If you have any questions don't hesitate to contact us (/contact). We are always happy to talk about the unique aspects of your projects and discuss your ideas and goals for a sustainable Accessory Dwelling Unit.

# What are the true costs of an Accessory Dwelling?

Costs vary wildly from \$200 per square foot to over \$1,000 per square foot. But the process of designing, permitting and building always stays the same. Following the best practices, you can guide your project to either outcome.

### March 03, 2017

One of the primary motivations and limitation when deciding to construct an Accessory Dwelling Unit (ADU) is finances. Let's face it, why not build a backyard cottage? The uses are almost limitless, and here at New Avenue we've seen ADU's being used for music studios, entertainment space, pool house, guest house, and most surprisingly, rental units. It's no secret that the San Francisco Bay Area is in the midst of a housing crisis with the influx of job growth, the supply of housing has diminished substantially. After lumping 1-, 2- and 3- bedrooms apartments together, average monthly rents are \$3,057 in San Francisco, \$2,187 in Oakland, and \$2,066 in San Jose (1).

With affordable housing almost being non-existent for those trying to enter the bay area, we at New Avenue have decided to take it upon ourselves to do a study on the financial implications of building an Accessory Dwelling for the purposes of it being a rental unit in the San Francisco Bay area.

Based on New Avenue's extensive experience and data we estimated that a 600 square foot, 2 bedroom ADU costs around \$250,000 to design and construct. This is based on our data from completed projects, for example a 250 square foot "Casita" cost a client \$112k, a 360 square foot "L-shape Cottage" cost \$151k, and a 620 square foot Backyard Cottage cost \$252k. Based on these three scenarios we are looking at a cost of approximately \$415.00 per square foot. Keep in mind the square footage costs of your Accessory Dwelling can increase of decrease based on a number factors including:

- **Permitting fees** these may shift up or down depending on your city or towns permitting schedule, and utilities to be included in your ADU (kitchen, plumbing, data, electrical)
- Quality of Materials Hardwood floors and other such finishes increase the costs compared to a professionally stained concrete floor
- Quality of Contractors and Designer New Avenue has partnerships with numerous architects/ designers and
  contractors that charge varying hourly rates and bid proposals which are in accordance with the design and build
  quality their previous projects

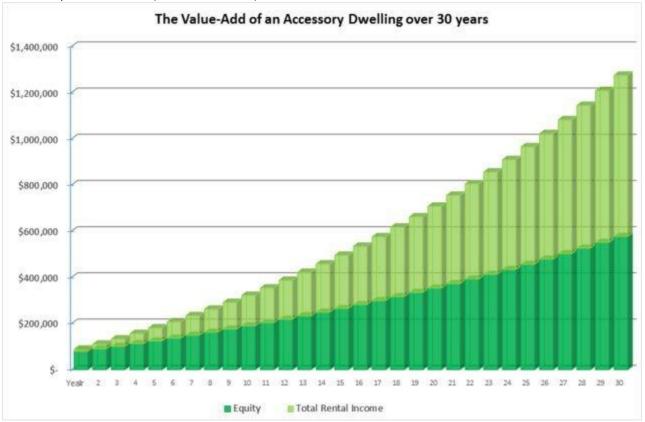
For the sake of this study let's assume you are building a 600 square foot ADU and the entire \$250,000 is financed via a traditional 30-year fixed interest rate of 4.25%, you would see a monthly mortgage payment of \$983.88. We estimate a 30% increase of ADU value upon completion of construction; similar to the sales prices of newly constructed homes compared to their costs to build. With that in mind your \$250,000 investment would stand to be worth \$325,000 after construction. Subtracting out your ending mortgage balance for the end of the first year amount leaves you with roughly \$79,000 in immediate equity. Using a conservative home value growth rate of 2% and consistently paying off your mortgage you would realize roughly \$577,000 in ADU equity by the end of the 30-year mortgage.

Now that we covered the basic costs of building an ADU and its equity appreciation, we move onto the second component of this ADU study: Rental Income. After looking at the rental incomes the San Francisco Bay Area is charging, we assumed a modest \$2,250 per month rent for your newly constructed ADU. At \$2,2250 a month, that totals to \$27,000 in the first year and from there we grow annual rent increases at a modest 3% compared the 18% YoY increase in San Jose and Oakland from 2013 to 2014 and 8% YoY increase in San Francisco for 2013 to 2014, slowing only because SF rents were already high in 2013 (2).

With \$27,000 in your total first year rental income based on a \$2,250 monthly rent already established, it is time to consider the costs associated with your ADU. Immediately you can deduct the \$14,758.20 in total annual mortgage payments which will remain steady for the 30-year duration. We then factor in the property taxes at 0.5% of the assessed ADU value starting at \$250,000 in year 1 to equal \$1,250 in additional annual property taxes a homeowner with a new ADU would expect. Maintenance is another expense, set at 1% of the Market Value of the Home (Year 1 would \$325,000 based on the 30% Equity increase previously discussed), making it \$3,250 for the first year and increasing at the 2% ADU appreciation rate.

Finally, you get a break on your Taxes when you factor in your mortgage interest payments. Based on Bankrate's mortgage tax deduction calculator <sup>(3)</sup> for a person in a 20% tax bracket, we would see a tax savings of \$2,109.00 in the first year, which would slowly decline as you pay off your mortgage.

Ultimately, after subtracting out the mortgage payments, maintenance expenses, property taxes from your annual rent, then including the tax savings from your mortgage you stand to Net \$9,850.80 in supplemental income in just your first year of renting out your new ADU. Additionally, the net ADU rental income increases annually as rents increase. Furthermore, when you take a long-term perspective look at where you would be at the end of the 30 years after paying off the mortgage you now have over half-a-million in ADU Equity, and close to \$700,000 in cumulative rental income over that period of time. (See Chart Below)



Based on the assumptions we have provided you would have surpassed \$1,000,000 in financial benefit by year 26. Granted this is only a study, New Avenue plans on integrating a calculator into our website based people's local conditions. Keep in mind construction costs, mortgage rates, and rents vary from person to person and region to region. Also most people don't fully intend to rent out their ADU for the duration of 30 years, the intangible benefits of having an ADU in your backyard can be far greater than the economic benefits we have illustrated. We have seen clients utilize a short term rental approach through the use of AirBnB to provide weekend or weekly rentals to travelers, while being able to enjoy their guesthouse when not being rented.

At the end of the day its reassuring to know that in the back of your mind, your backyard cottage can provide a source of additional income that would surpass its costs if needed.

## How Much Does it Cost to Build an ACCESSORY DWELLING UNIT? | Hammer & Hand

https://hammerandhand.com/field-notes/how-much-does-it-cost-to-build-an-accessory dwelling unit/

#### **Construction Costs**

Construction costs vary quite a bit depending on the specifics of a project. We're often asked, "What does an ACCESSORY DWELLING UNIT cost to build per square foot?" But when building a tiny house, we are essentially squeezing all of the elements of a larger house onto a smaller footprint, so per square foot cost falls short as a useful measure. Rather, overall cost is more helpful. Generally speaking, the ADUs we build (particularly the stand-alone variety) start at a couple hundred thousand dollars in construction cost, with that cost increasing depending on design choices about finishes, fixtures, and building components.

#### **Other Fees**

In Portland, the City levies System Development Charges, or SDCs, on construction projects to cover infrastructure costs for things like transportation, water, parks, etc. But the City has temporarily suspended SDCs for new ADUs that get started before July 31, 2016. This can easily save you over \$10,000 when building an ADU in Portland. Learn more from the City of Portland's ADU Program Guide.

http://www.moneycrashers.com/accessory-dwelling-unit-granny-flat-costs/

### **How Much Do ADUs Cost to Build?**

According to Brown and Palmieri's report, the median cost to build an attached ADU in Portland is just over \$75 per square foot. That's \$37,500 for a 500-square-foot space and \$75,000 for a 1,000-square-foot unit. Costs for detached ADUs are roughly double: just under \$150 per square foot, or approximately \$150,000 for a 1,000-square-foot unit.

Portland is a relatively expensive housing market, so it's certainly possible that costs are marginally lower elsewhere, but the fact remains that building a habitable, up-to-code structure is a costly proposition anywhere.

### **How to Finance Your ADU**

Most middle-class homeowners aren't in the position shell out tens or hundreds of thousands of dollars on a whim. Fortunately, those who can't afford to cover construction costs with cash on hand have a slew of legitimate financing options at their disposal. Some are appropriate for ADUs built simultaneously with the main house; others work for ADUs added after the fact.

- Fannie Mae HomeStyle Rehabilitation Mortgage: Designed to finance major home improvement work, this popular mortgage product lets you put as little as 5% down, though you'll need to pay private mortgage insurance (PMI) until you reach 80% LTV. However, unlike FHA mortgage loans, there's no upfront mortgage insurance requirement a potentially massive money-saver. Underwriting requirements can be strict lenders like to see FICO scores north of 650.
- FHA 203(k) Renovation Loan: FHA 203(k) renovation loans are specifically designed for homebuyers looking to roll the cost of major home improvement projects into their purchase loans. With lax underwriting criteria, they're ideal for first-time homebuyers with less than perfect credit. The major drawback is a big upfront mortgage insurance hit: 1.75% of the loan value.
- Construction-to-Permanent Loan (All-in-One Loan): This is a turnkey loan that finances every step of the home construction process, from land acquisition to the finishing touches, and then converts into a long-term (or "permanent") mortgage with a term of up to 30 years. Just one closing is required.

- Short-Term Construction Loan: Short-term construction loans are meant to finance costs associated with new
  home construction including, if necessary, ADU construction. They usually have one-year terms and variable
  interest rates that tend to be higher than longer-term mortgage loans. Once construction is completed, you'll
  need to convert to a permanent mortgage, which requires a second closing.
- Cash-Out Refinancing Loan: If you're adding an ADU to an existing property in which you've built significant equity, you can use a cash-out refinancing loan to extract cash and finance construction. If rates have fallen since you took out your original mortgage, your new loan may have a lower interest rate as well.
- **Home Equity Line of Credit**: This is a revolving credit line secured by your home equity often up to 90%. Since HELOCs are relatively low-risk for lenders, they typically have very low interest rates.

What Is an Accessory Dwelling Unit (Granny Flat) – ADU Costs & Benefits

By Brian Martucci

April 24, 2017 - Posted in: Home Improvement