

The FAB Housing Affordability Calculators[©]

Personal and Regional Housing Affordability Calculators

Access the FAB Calculators[©] at our website
http://www.ohcs.oregon.gov/PPR_FABCalculators.shtml

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FAB Housing Calculator 1

- Simple calculator for both personal and regional housing affordability assessments
- Can be used to determine income needed to afford a particular house for sale
- Can be used by households to determine the price of housing that is affordable
- Calculates the annual and monthly income needed and equivalent hourly earnings
- Can be used to assess the relative affordability of housing within a region by using median household income and the median sale price of housing in the region

Mortgage Rates and Affordability

- Affordability is a function of mortgage rates
- An affordability calculator should reflect different mortgage rate assumptions
- Calculator 1 uses three different mortgage rates
- Historical rate of 8.1% based on past rates
- Low rate is set at 6%
- High rate is set at 12%
- Demonstrates the significant effect of interest rates on current housing affordability

Housing Calculator 1 Assumptions

- Housing is affordable when no more than 30% of income is spent on housing costs
- Housing costs include mortgage payments, property taxes, and insurance
- Mortgage payments based on 80% 30 year mortgage - no mortgage insurance needed
- Property taxes set at \$15 per thousand
- Insurance based on State Farm Ins. rates

Lender Income Ratios & Affordability

- Historically lenders have used an income ratio of ~30% to determine affordability
- Today's lenders may increase the ratio depending on an applicant's credit score
- A housing affordability calculator should have flexibility to reflect this situation
- The FAB Calculators will handle historical and an individual's approved higher ratio

FAB Housing Affordability Calculator 1[©]

House Price (or Median Sale Price)	Minimum Gross Income Needed Depending on Mortgage Rates *			Lender Approved Income Ratio**
	Historical *	Low	High	
\$ 187,000	\$ 55,572	\$ 47,123	\$ 72,798	<input type="button" value="Clear Inputs"/>
Monthly Income	\$ 4,631	\$ 3,927	\$ 6,067	
Equivalent Hourly Wage	\$ 26.72	\$ 22.66	\$ 35.00	
Annual Gross Income (or Median Household Income)	Maximum House Price Affordable Depending on Mortgage Rates			
	Historical	Low	High	
\$ 56,800	\$ 191,161	\$ 225,920	\$ 145,471	

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House Price (or Median Sale Price)	Minimum Gross Income Needed Depending on Mortgage Rates *			Lender Approved Income Ratio**
	Historical *	Low	High	35.0%
\$ 187,000	\$ 47,633	\$ 40,391	\$ 62,398	↑ Explore impact of costs to income ratio on housing affordability
Monthly Income	\$ 3,969	\$ 3,366	\$ 5,200	
Equivalent Hourly Wage	\$ 22.90	\$ 19.42	\$ 30.00	
Annual Gross Income (or Median Household Income)	Maximum House Price Affordable Depending on Mortgage Rates			<div style="border: 1px solid gray; padding: 5px; display: inline-block;">Clear Inputs</div>
	Historical	Low	High	
\$ 56,800	\$ 223,021	\$ 263,573	\$ 169,716	

Local Housing Affordability Calculator

To calculate housing affordability, enter median household income into Annual Gross Income above and local median house sale price into House Price above

Homeownership Affordability Index Depending on Mortgage Rates

Interest Rates	Historical	Low	High
Affordability Index ¹	1.022	1.208	0.778

¹ An Affordability Index of 1.00 or higher indicates that the median priced house sold is affordable to the median income household. An index of 1.15 means that the median income household could afford 115% of the median priced house.

FAB Housing Calculator 2

- Calculator 2 produces accurate estimates by using both property and personal data
- Can be used by households to determine impacts of different financing scenarios
- Calculates the annual and monthly income needed and equivalent hourly earnings
- Can use a known credit score to more accurately estimate the cost of mortgage insurance if your mortgage terms require it

FAB Calculator 2 Notes

- Calculator assumes a credit score of 710 unless a different credit score is entered
- Calculator uses a debt-to-income ratio of 40% unless a different approved ratio is entered
- Other monthly debt payments such as auto loans, personal property loans, credit line loans, school loans, minimum credit card payments, alimony, child support payments, etc., are required to be entered

FAB Housing Affordability Calculator 2

House Price	Down payment	Down payment %	Down payment %	Down payment
\$212,500	\$30,000		14.12%	\$30,000
Mortgage amount	Term in years	Interest Rate	FICO Score (Note 1)	Lender Approved Debt-to-Income Ratio (Note 2)
\$182,500	30	6.75%	690	
Homeowners Insurance - annual premium	Property Taxes - annual	Other debt monthly payments³	Monthly housing expenses plus other monthly debt	
\$720.00	\$2,850.00	\$425.00	\$2,015.69	
Minimum Income Needed		Monthly Income	Equivalent Hourly Wage	
\$60,471		\$5,039	\$29.07	