EXAMPLE 2025 NATIONAL BUILDING COST MANUAL

Edited by Ben Moselle 49th Edition

The Building



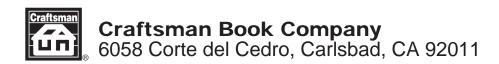
National Building Cost Estimator

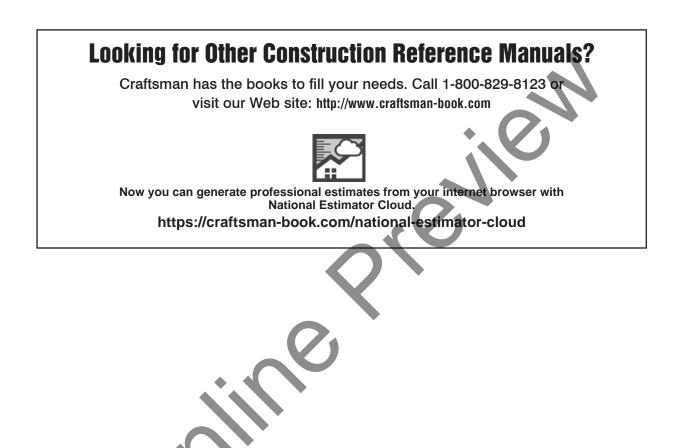
> Cost Estimator program will write valuation reports for any building type covered in this manual. Printed valuation reports show replacement costs by building component, depreciation and actual cash value. Using this program could reduce computation errors and simplify development of valuations.



If most of your valuations are residential (either site-built, manufactured, or multi-family homes), consider Craftsman's online valuation tool, National Appraisal Estimator. Visit

https://craftsman-book.com/national-appraisal-estimator-online-software for more information.





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Explanation of the Cost Tables

This manual shows construction or replacement costs for a wide variety of residential, commercial, industrial, public, agricultural and military buildings. For your convenience and to minimize the chance of an error, all the cost and reference information you need for each building type is brought together on two or three pages. After reading pages 4 to 6, you should be able to turn directly to any building type and create an error-free estimate or appraisal of the construction or replacement cost.

The costs are per square foot of floor area for the basic building and additional costs for optional or extra components that differ from building to building. Building shape, floor area, design elements, materials used, and overall quality influence the basic structure cost. These and other cost variables are isolated for the building types. Components included in the basic square foot cost are listed with each building type. Instructions for using the basic building costs are included above the cost tables. These instructions include a list of components that may have to be added to the basic cost to find the total cost for your structure.

The figures in this manual are intended to reflect the amount that would be paid by the first user of a building completed in mid-2025.

Costs in the tables include all construction costs labor, material, equipment, plans, building permit, supervision, overhead and profit. Cost tables do not include land value, site development costs, government mandated fees (other than the building permit) or the cost of modifying unusual soil conditions or grades. Construction expense may represent as much as 60% or as little as 40% of the cost to the first building owner. Site preparation, utility lines, government fees and mandates, finance cost and marketing are not part of the construction cost and may be as much as 20% of the cost to the first building owner.

Building Quality

Structures vary widely in quality and the quality of construction is the most significant variable in the finished cost. For estimating purposes the structure should be placed in one or more quality classes. These classes are numbered from 1 which is the highest quality generally encountered. Each section of this manual has a page describing typical specifications which define the quality class. Each number class has been assigned a word description (such as best, good, average or low) for convenience and to help avoid possible errors.

The quality specifications do not reflect some design features and construction details that can make a building both more desirable and more costly. When substantially more than basic design elements are present, and when these elements add significantly to the cost, it is appropriate to classify the quality of the building as higher than would be warranted by the materials used in construction.

Many structures do not fall into a single class and have features of two quality classes. The tables have "half classes" which apply to structures which have some features of one class and some features of a higher or lower class. Classify a building into a "half class" when the quality elements are fairly evenly divided between two classes. Generally, quality elements do not vary widely in a single building. For example, it would be unusual to find a top quality single family residence with minimum quality roof cover. The most weight should be given to guality elements that have the greatest cost. For example, the type of wall and roof framing or the quality of interior finish are more significant than the roof cover or bathroom wall finish. Careful evaluation may determine that certain structures fall into two distinct classes. In this case, the cost of each part of the building should be evaluated separately.

Building Shapes

Shape classification considers any cost differences that arise from variations in building outline. Shape classification considerations vary somewhat with different building types. Where the building shape often varies widely between buildings and shape has a significant effect on the building cost, basic building costs are given for several shapes. Use the table that most closely matches the shape of the building you are evaluating. If the shape falls near the division between two basic building cost tables, it is appropriate to average the square foot cost from those two tables.

Explanation of the Cost Tables

Area of Buildings

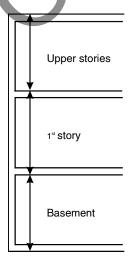
The basic building cost tables reflect the fact that larger buildings generally cost less per square foot than smaller buildings. The cost tables are based on square foot areas which include the following:

- 1. All floor area within and including the exterior walls of the main building.
- 2. Inset areas such as vestibules, entrances or porches outside of the exterior wall but under the main roof.
- 3. Any enclosed additions, annexes or lean-tos with a square foot cost greater than three-fourths of the square foot cost of the main building.

Select the basic building cost listed below the area which falls closest to the actual area of your building. If the area of your building falls nearly midway between two listed building areas, it is appropriate to average the square foot costs for the listed areas.

Wall Heights

Building costs are based on the wall heights given in the instructions for each building cost table. Wall height for the various floors of a building are computed as follows: The basement is measured from the bottom of floor slab to the bottom of the first floor slab or joist. The main or first floor extends from the bottom of the first floor slab or joist to the top of the roof slab or ceiling joist. Upper floors are measured from the top of the floor slab or floor joist to the top of the roof slab or ceiling joist. These measurements may be illustrated as follows:



Square foot costs of most building design types must be adjusted if the actual wall height differs from the listed wall height. Wall height adjustment tables are included for buildings requiring this adjustment. Wall height adjustment tables list square foot costs for a foot of difference in perimeter wall height of buildings of various areas. The amount applicable to the actual building area is added or deducted for each foot of difference from the basic wall height.

Buildings such as residences, medical-dental buildings, funeral homes and convalescent hospitals usually have a standard 8-foot ceiling height except in chapels or day room areas. If a significant cost difference exists due to a wall height variation, this factor should be considered in establishing the quality class.

Other Adjustments

A common wall exists when two buildings share one wall. Common wall adjustments are made by deducting the in-place cost of the exterior wall finish plus one-half of the in-place cost of the structural portion of the common wall area.

If an owner has no ownership in a wall, the inplace cost of the exterior wall finish plus the inplace cost of the structural portion of the wall should be deducted from the total building costs. Suggested common wall and no wall ownership costs are included for many of the building types.

Some square foot costs include the cost of expensive veneer finishes on the entire perimeter wall. When these buildings butt against other buildings, adjustments should be made for the lack of this finish. Where applicable, linear foot cost deductions are provided.

The square foot costs in this manual are based on composite costs of total buildings including usual work room or storage areas. They are intended to be applied on a 100% basis to the total building area even though certain areas may or may not have interior finish. Only in rare instances will it be necessary to modify the square foot cost of a portion of a building.

Multiple story buildings usually share a common roof structure and cover, a common foundation and common floor or ceiling structures. The costs of these components are included in the various floor levels as follows:

Explanation of the Cost Tables

The first or main floor includes the cost of a floor structure built at ground level, foundation costs for a one-story building, a complete ceiling and roof structure, and a roof cover. The basement includes the basement floor structure and the difference between the cost of the first floor structure built at ground level and its cost built over a basement. The second floor includes the difference between the cost of a foundation for a one-story building and the cost of the second story floor structure.

Location Adjustments

The figures in this manual are intended as national averages for metropolitan areas of the United States. Use the information on page 7 to adapt the basic building costs to any area listed. Frequently building costs outside metropolitan areas are 2% to 6% lower if skilled, productive, lower cost labor is available in the area. The factors on page 7 can be applied to nearly all the square foot costs and some of the "additional" costs in this book.

Temporary working conditions in any community can affect construction and replacement costs. Construction which must be done under deadline pressure or in adverse weather conditions or after a major fire, flood, or hurricane or in a thin labor market can temporarily inflate costs 25% to 50%. Conditions such as these are usually temporary and affect only a limited area. But the higher costs are real and must be considered, no matter how limited the area and how transient the condition.

Depreciation

Depreciation is the loss in value of a structure from all causes and is caused primarily by three forms of obsolescence: (1) physical (2) functional, and (3) economic.

Physical obsolescence is the deterioration of building components such as paint, carpets or roofing. Much of this deterioration is totally curable. The physical life tables on pages 43, 235 and 269 assume normal physical obsolescence. Good judgment is required to evaluate how deferred maintenance or rehabilitation will reduce or extend the anticipated physical life of a building.

Functional obsolescence is due to some deficiency or flaw in the building. For example, too few bathrooms for the number of bedrooms or an

exceptionally high ceiling can reduce the life expectancy of a residence. Some functional obsolescence can be cured. The physical life tables do not consider functional obsolescence.

Economic obsolescence is caused by conditions that occur off site and are beyond control of the owner. Examples of economic obsolescence include a store in an area of declining economic activity or obsolescence caused by governmental regulation (such as a change in zoning). Because this kind of obsolescence is particularly difficult to measure, it is not considered in the physical life tables.

age" considers "Effective all forms of depreciation. It may be less than chronological age, if recently remodeled or improved, or more than the actual age, if deterioration is particularly bad. Though effective age is not considered in the physical life tables, it may yield a better picture of a structure's life than the actual physical age. Once the effective age is determined, considering physical, functional and economic deterioration, use the percent good tables on pages 43, 235 or 269 to determine the present value of a depreciated building. Present value is the result of multiplying the replacement cost (found by using the cost tables) by the appropriate percent good.

Limitations

This manual will be a useful reference for anyone who has to develop budget estimates or replacement costs for buildings. Anyone familiar with construction estimating understands that even very competent estimators with complete working drawings, full specifications and precise labor and material costs can disagree on the cost of a building. Frequently exhaustive estimates for even relatively simple structures can vary 10% or more. The range of competitive bids on some building projects is as much as 20%. Estimating costs is not an exact science and there's room for legitimate disagreement on what the "right" cost is. This manual can not help you do in a few minutes what skilled estimators may not be able to do in many hours. This manual will help you determine a reasonable replacement or construction cost for most buildings. It is not intended as a substitute for judgment or as a replacement for sound professional practice, but should prove a valuable aid to developing an informed opinion of value.

Area Modification Factors

Construction costs are higher in some cities than in other cities. Add or deduct the percentage shown on this page or page 8 to adapt the costs in this book to your job site. Adjust your estimated total project cost by the percentage shown for the appropriate city in this table to find your total estimated cost. Where 0% is shown it means no modification is required. Factors for Canada adjust to Canadian dollars.

These percentages were compiled by comparing the construction cost of buildings in nearly 600 communities throughout North America. Because these percentages are based on completed projects, they consider all construction cost variables, including labor, equipment and material cost, labor productivity, climate, job conditions and markup.

Modification factors are listed alphabetically by state and city, followed by the first three digits of the postal zip code.

These percentages are composites of many costs and will not necessarily be accurate when estimating the cost of any particular part of a building. But when used to modify costs for an entire structure, they should improve the accuracy of your estimates.

Alabama Averag	je	-3%	Salinas	939	2%	Atlanta	303	21%	Muncie	473 🔺	-9%	Camden		-10%
Anniston	362	-5%	San Bernardino	923-924	2%	Augusta	308-309	-7%	South Bend	466	-3%	Cutler	46	-9%
Auburn	368	-5%	San Diego	919-921	8%	Buford	305	1%	Terre Haute	478	2%	Dexter	49	-3%
Bellamy	369	1%	San Francisco San Jose	941 950-951	28% 24%	Calhoun Columbus	307 318-319	-2% -6%	1			Northern Area	47	-9%
Birmingham	350-352	3% -6%	San Mateo	943-944		Dublin/Fort Valley		-7%	Iowa Average Burlington	526	- 5%	Portland	41	4%
Dothan Evergreen	363 364	-0% -9%	Santa Barbara	931	3%	Hinesville	313	-2%	Carroll	514	-8%	Memilend Avere		00/
Gadsden	359	-8%	Santa Rosa	954	5%	Kings Bay	315	-8%	Cedar Falls	506	-4%	Maryland Average Annapolis	ge 214	2% 9%
Huntsville	358	2%	Stockton	952	4%	Mačon	312	2%	Cedar Rapids	522-524	0%	Baltimore	210-212	
Jasper	355	-7%	Sunnyvale	940	24%	Marietta	300-302	8%	Cherokee	510	-3%	Bethesda	208-209	
Mobile	365-366		Van Nuys Whittier	913-916 906	8% 9%	Savannah	314	-1%	Council Bluffs	515	-5%	Church Hill	216	-4%
Montgomery	360-361		wintlei	900	9 /0	Statesboro	304	-8%	Creston	508	-8%	Cumberland		-10%
Scottsboro	357	-1%	Colorado Averag	٥	1%	Valdosta	316	-6%	Davenport Decorah	527-528 521	0% -7%	Elkton	219	3%
Selma Sheffield	367 356	-6% -1%	Aurora	800-801	10%	Howeii Averege		19%	Des Moines	500-503	3%	Frederick	217	4%
Tuscaloosa	354	-5%	Boulder	803-804	6%	Hawaii Average Aliamanu	968	21%	Dubuque	520	-3%	Laurel	206-207	8%
1030010030	004	0 /0	Colorado Springs	808-809		Ewa	967	18%	Fort Dodge	505	-5%	Salisbury	218	-8%
Alaska Average		14%	Denver	802	11%	Halawa Heights	967	18%	Mason City	504	-3%			100/
Anchorage	995	17%	Durango	813	-6%	Hilo	967	18%	Ottumwa	525	-9%	Massachusetts A		13%
Fairbanks	997	20%	Fort Morgan Glenwood Springs	807	-4% 3%	Honolulu	968	21%	Sheldon	512	-5%	Ayer	015-016 17	9% 16%
Juneau	998	13%	Grand Junction	814-815		Kailua	968	21%	Shenandoah Sioux City	516 511	-16% -2%	Bedford Boston	021-022	
Ketchikan	999	7%	Greeley	806	6%	Lualualei	967	18%	Spencer	513	-8%	Brockton	023-022	
King Salmon	996	13%	Longmont	805	3%	Mililani Town Pearl City	967 967	18% 18%	Waterloo	507	-5%	Cape Cod	26	5%
A.:		E0/	Pagosa Springs	811	-4%	Wahiawa	967	18%				Chicopee	10	7%
Arizona Average		-5% -17%	Pueblo	810	-3%	Waianae	967	18%	Kansas Average		-8%	Dedham	19	16%
Chambers Douglas		-10%	Salida	812	-3%	Wailuku (Maui)	967	18%	Colby		-10%	Fitchburg	14	13%
Flagstaff	860	-9%	Connections Ave.		110/				Concordia		-15%	Hingham	20	20%
Kingman	864	-10%	Connecticut Aver Bridgeport	66	11% 12%	Idaho Average		-7%	Dodge City	678 668	-9% -12%	Lawrence	18	13%
Meša	852	6%	Bristol	60	13%	Boise	837	0%	Emporia Fort Scott	667	-7%	Nantucket New Bedford	25 27	9% 8%
Phoenix	850	6%	Fairfield	64	13%	Coeur d'Alene	838	-8%	Hays	676	-12%	Northfield	13	8%
Prescott	863	-6%	Hartford 🔺 🎽	61 65	12%	Idaho Falls Lewiston	834 835	-8% -9%	Hutchinson	675	-9%	Pittsfield	12	2%
Show Low Tucson	859 856-857	-10%	New Haven	65	11%	Meridian	836	-9%	Independence	673	-6%	Springfield	11	5%
Yuma	853	-0 % 5%	Norwich	63 068-069	6%	Pocatello		-10%	Kansas City	660-662				
runna	000	0 /0	Stamford Waterbury	67	11%	Sun Valley	833	-8%	Liberal Salina	679 674	-10% -9%	Michigan Averag	le	1%
Arkansas Avera	ne	-8%		62	6%						J /0	Battle Creek	490-491	0%
		-0/0	west martionu	02	070				Topeka	664-666	-3%	Dallie Gleek		
Batesville	725	-11%	West Hartford	02	070	Illinois Average		3%	Topeka Wichita	664-666 670-672		Detroit	481-482	7%
Batesville Camden	725 717	-11% -4%	Delaware Averag	16	3%	Arlington Heights		12%			-4%	Detroit Flint	481-482 484-485	7% 0%
Batesville Camden Fayetteville	725 717 727	-11% -4% -2%	Delaware Averag Dover	je 199	3% -3%	Arlington Heights Aurora	605	12% 14%	Wichita Kentucky Averag	670-672	-4% - 5%	Detroit Flint Grand Rapids	481-482 484-485 493-495	7% 0% 1%
Batesville Camden Fayetteville Fort Smith	725 717 727 729	-11% -4% -2% -8%	<mark>Delaware Averaŭ</mark> Dover Newark	je 199 197	3% -3% 7%	Arlington Heights Aurora Belleville	605 622	12% 14% -1%	Wichita Kentucky Averag Ashland	670-672 e 411-412	-4% - 5% -8%	Detroit Flint Grand Rapids Grayling	481-482 484-485 493-495 497	7% 0% 1% -5%
Batesville Camden Fayetteville Fort Smith Harrison	725 717 727 729 726	-11% -4% -2% -8% -14%	Delaware Averag Dover	je 199	3% -3%	Arlington Heights Aurora Belleville Bloomington	605 622 617	12% 14% -1% -1%	Wichita Kentucky Averag Ashland Bowling Green	670-672 e 411-412 421	-4% - 5% -8% -2%	Detroit Flint Grand Rapids Grayling Jackson	481-482 484-485 493-495 497 492	7% 0% 1% -5% 0%
Batesville Camden Fayetteville Fort Smith Harrison Hope	725 717 727 729	-11% -4% -2% -8%	Delaware Averag Dover Newark Wilmington	je 199 197 198	3% -3% 7%	Arlington Heights Aurora Belleville	605 622 617 629 601	12% 14% -1% -1% -7% 13%	Wichita Kentucky Averag Ashland Bowling Green Campton	670-672 411-412 421 413-414	-4% - 5% -8% -2% -10%	Detroit Flint Grand Rapids Grayling	481-482 484-485 493-495 497	7% 0% 1% -5%
Batesville Camden Fayetteville Fort Smith Harrison Hope Hot Springs Jonesboro	725 717 727 729 726 718 719 724	-11% -4% -2% -8% -14% -10% -13% -6%	Delaware Averag Dover Newark Wilmington District of Colum	je 199 197 198	3% -3% 7%	Arlington Heights Aurora Belleville Bloomington Carbondale Carol Stream Centralia	605 622 617 629 601 628	12% 14% -1% -1% -7% 13% -8%	Wichita Kentucky Averag Ashland Bowling Green Campton Covington	670-672 411-412 421 413-414 410	-4% - 5% -8% -2% -10% 1%	Detroit Flint Grand Rapids Grayling Jackson Lansing Marquette Pontiac	481-482 484-485 493-495 497 492 488-489 498-499 483	7% 0% 1% -5% 0% 0% -4% 11%
Batesville Camden Fayetteville Fort Smith Harrison Hope Hot Springs Jonesboro Little Rock	725 717 727 729 726 718 719 724 720-722	-11% -4% -2% -8% -14% -10% -13% -6% -4%	Delaware Averag Dover Newark Wilmington	je 199 197 198	3% -3% 7% 5%	Arlington Heights Aurora Belleville Bloomington Carbondale Carol Stream Centralia Champaign	605 622 617 629 601 628 618	12% 14% -1% -7% 13% -8% -2%	Wichita Kentucky Averag Ashland Bowling Green Campton Covington Elizabethtown Frankfort	670-672 411-412 421 413-414 410 427 406	-4% -8% -2% -10% 1% 5% -4%	Detroit Flint Grand Rapids Grayling Jackson Lansing Marquette Pontiac Royal Oak	481-482 484-485 493-495 497 492 488-489 498-499 483 480	7% 0% -5% 0% -4% 11% 7%
Batesville Camden Fayetteville Fort Smith Harrison Hope Hot Springs Jonesboro Little Rock Pine Bluff	725 717 727 729 726 718 719 724 720-722 716	-11% -4% -2% -8% -14% -10% -13% -6% -4% -11%	Delaware Averag Dover Newark Wilmington District of Colum Average	199 197 198 Ibia	3% -3% 7% 5%	Arlington Heights Aurora Belleville Bloomington Carbondale Carol Stream Centralia Champaign Chicago	605 622 617 629 601 628 618 606-608	12% 14% -1% -7% 13% -8% -2% 14%	Wichita Kentucky Averag Ashland Bowling Green Campton Covington Elizabethtown Frankfort Hazard	670-672 411-412 421 413-414 410 427 406 417-418	-4% -8% -2% -10% 1% 5% -4% -13%	Detroit Flint Grand Rapids Grayling Jackson Lansing Marquette Pontiac Royal Oak Saginaw	481-482 484-485 493-495 497 492 488-489 498-499 483 480 486-487	7% 0% -5% 0% -4% 11% 7% -4%
Batesville Camden Fayetteville Fort Smith Harrison Hope Hot Springs Jonesboro Little Rock Pine Bluff Russellville	725 717 727 729 726 718 719 724 720-722 716 728	-11% -4% -2% -8% -14% -10% -13% -6% -4% -11% -7%	Delaware Averat Dover Newark Wilmington District of Colum Average Washington Florida Average	je 199 197 198 bia 200-205	3% -3% 7% 5% 12% -2%	Arlington Heights Aurora Belleville Bloomington Carbondale Carol Stream Centralia Champaign Chicago Decatur	605 622 617 629 601 628 618 606-608 623	12% 14% -1% -7% 13% -8% -2% 14% -10%	Wichita Kentucky Averag Ashland Bowling Green Cavington Elizabethtown Frankfort Hazard Hopkinsville	670-672 411-412 421 413-414 410 427 406 417-418 422	-4% -8% -2% -10% 1% 5% -4% -13% -4%	Detroit Flint Grand Rapids Grayling Jackson Lansing Marquette Pontiac Royal Oak	481-482 484-485 493-495 497 492 488-489 498-499 483 480	7% 0% -5% 0% -4% 11% 7%
Batesville Camden Fayetteville Fort Smith Harrison Hope Hot Springs Jonesboro Little Rock Pine Bluff	725 717 727 729 726 718 719 724 720-722 716	-11% -4% -2% -8% -14% -10% -13% -6% -4% -11%	Delaware Averat Dover Newark Wilmington District of Colum Average Washington Florida Average Altamonte Springs	Je 199 197 198 bia 200-205	3% -3% 7% 5% 12% -2% -1%	Arlington Heights Aurora Belleville Bloomington Carbondale Carol Stream Centralia Champaign Chicago Decatur Galesburg	605 622 617 629 601 628 618 606-608 623 614	12% -1% -1% -7% 13% -8% -2% 14% -10% -4%	Wichita Kentucky Averag Ashland Bowling Green Cavington Elizabethtown Frankfort Hazard Hopkinsville Lexington	670-672 411-412 421 413-414 410 427 406 417-418 422 403-405	-4% -8% -2% -10% 1% 5% -4% -13% -4% 2%	Detroit Flint Grand Rapids Grayling Jackson Lansing Marquette Pontiac Royal Oak Saginaw Traverse City	481-482 484-485 493-495 497 492 488-489 498-499 483 480 486-487 496	7% 0% -5% 0% -4% 11% 7% -4%
Batesville Camden Fayetteville Fort Smith Harrison Hope Hot Springs Jonesboro Little Rock Pine Bluff Russellville West Memphis	725 717 727 726 718 719 724 720-722 716 728 728 723	-11% -4% -2% -8% -14% -10% -3% -6% -4% -11% -7% -1%	Delaware Averat Dover Newark Wilmington District of Colum Average Washington Florida Average Altamonte Springs Bradenton	199 197 198 200-205 327 342	3% -3% 7% 5% 12% -2% -1% -3%	Arlington Heights Aurora Belleville Bloomington Carbondale Carol Stream Centralia Champaign Chicago Decatur	605 622 617 629 601 628 618 606-608 623	12% 14% -1% -7% 13% -8% -2% 14% -10%	Wichita Kentucky Averag Ashland Bowling Green Campton Covington Elizabethtown Frankfort Hazard Hopkinsville Lexington London	670-672 411-412 421 413-414 410 427 406 417-418 422 403-405 407-409	-4% -5% -8% -2% -10% 1% 5% -4% -13% -4% 2% -9%	Detroit Flint Grand Rapids Grayling Jackson Lansing Marquette Pontiac Royal Oak Saginaw Traverse City Minnesota Avera	481-482 484-485 493-495 497 492 488-489 498-499 483 480 486-487 496	7% 0% 1% -5% 0% 0% -4% 11% 7% -4% -4% 2%
Batesville Camden Fayetteville Fort Smith Harrison Hope Hot Springs Jonesboro Little Rock Pine Bluff Russellville	725 717 727 726 718 719 724 720-722 716 728 728 723	-11% -4% -2% -8% -14% -10% -3% -6% -4% -13% -4% -11% -7% -1%	Delaware Averat Dover Newark Wilmington District of Colum Average Washington Florida Average Altamonte Springs Bradenton Brooksville	199 197 197 198 bia 200-205 327 342 346	3% -3% 7% 5% 12% -2% -1% -3% -6%	Arlington Heights Aurora Belleville Bloomington Carbondale Carol Stream Centralia Champaign Chicago Decatur Galesburg Granite City Green River Joliet	605 622 617 629 601 628 618 606-608 623 614 620 612 604	12% 14% -1% -7% 13% -2% 14% -10% -4% 0% 0% 12%	Wichita Kentucky Averag Ashland Bowling Green Campton Covington Elizabethtown Frankfort Hazard Hopkinsville Lexington Louisville Owensboro	670-672 411-412 421 413-414 410 427 406 417-418 422 403-405 407-409 400-402 423	-4% -8% -2% -10% 1% 5% -4% -13% -4% 2% -9% 6% -6%	Detroit Flint Grand Rapids Grayling Jackson Lansing Marquette Pontiac Royal Oak Saginaw Traverse City Minnesota Avera Bemidji	481-482 484-485 493-495 497 492 488-489 498-499 483 480 486-487 496	7% 0% 1% -5% 0% 0% -4% 11% 7% -4% -4% 2% 0%
Batesville Camden Fayetteville Fort Smith Harrison Hope Hot Springs Jonesboro Little Rock Pine Bluff Russellville West Memphis California Avera Alhambra Bakersfield	725 717 729 726 718 719 724 720-722 716 728 723 917-918 932-933	-11% -4% -2% -8% -14% -14% -10% -6% -4% -7% -1% -1% 8% 10% 0%	Delaware Averat Dover Newark Wilmington District of Colum Average Washington Florida Average Altamonte Springs Bradenton	199 197 198 200-205 327 342	3% -3% 7% 5% 12% -2% -1% -3%	Arlington Heights Aurora Belleville Bloomington Carbondale Carol Stream Centralia Champaign Chicago Decatur Galesburg Granite City Green River Joliet Kankakee	605 622 617 629 601 628 618 606-608 623 614 620 612 604 609	12% 14% -1% -7% 13% -2% 14% -10% -4% 0% 0% 12% -1%	Wichita Kentucky Averag Ashland Bowling Green Campton Covington Elizabethtown Frankfort Hazard Hopkinsville Lexington Loudon Louisville Owensboro Paducah	670-672 411-412 421 413-414 410 427 406 417-418 422 403-405 407-409 400-402 423 420	-4% - 5% -2% -10% 1% 5% -4% -3% -4% 2% 6% -6% -6% -1%	Detroit Flint Grand Rapids Grayling Jackson Lansing Marquette Pontiac Royal Oak Saginaw Traverse City Minnesota Avera Bemidji Brainerd	481-482 484-485 493-495 497 492 488-489 488-489 488-489 480 486-487 496 age 566 564	7% 0% 1% -5% 0% 0% -4% 11% 7% -4% -4% -4% 2%
Batesville Camden Fayetteville Fort Smith Hore Hot Springs Jonesboro Little Rock Pine Bluff Russellville West Memphis California Avera Alhambra Bakersfield El Centro	725 717 729 729 726 718 724 720-722 716 728 723 723 917-918 932-933 922	-11% -4% -2% -8% -14% -13% -6% -4% -11% -7% -1% 8% 10% 0% 0%	Delaware Averag Dover Newark Wilmington District of Colum Average Washington Florida Average Altamonte Springs Bradenton Brooksville Daytona Beach Fort Lauderdale Fort Lauderdale	99 199 197 198 bbia 200-205 342 346 321 333 339	3% -3% 7% 5% 12% - 2% -1% -3% -6% -5% -3%	Arlington Heights Aurora Belleville Bloomington Carol Stream Centralia Champaign Chicago Decatur Galesburg Granite City Green River Joliet Kankakee Lawrenceville	605 622 617 629 601 628 618 606-608 623 614 620 614 620 614 620 614 609 624	12% 14% -1% -7% 13% -2% 14% -10% -4% 0% 12% -1% -6%	Wichita Kentucky Averag Ashland Bowling Green Campton Covington Elizabethtown Frankfort Hazard Hopkinsville Lexington Louisville Owensboro Paducah Pikeville	670-672 411-412 421 413-414 410 427 406 417-418 422 403-405 407-409 400-402 423 420 415-416	-4% -8% -2% -10% 1% 5% -4% 2% -9% 6% -6% -6% -1% -1%	Detroit Flint Grand Rapids Grayling Jackson Lansing Marquette Pontiac Royal Oak Saginaw Traverse City Minnesota Avera Bemidji	481-482 484-485 493-495 497 492 488-489 498-499 483 480 486-487 496 566 564 556-558 565	7% 0% 1% -5% 0% -4% 11% -4% -4% -4% -4% 2% 0% -2% 2% -6%
Batesville Camden Fayetteville Fort Smith Harrison Hope Hot Springs Jonesboro Little Rock Pine Bluff Russellville West Memphis California Avera Alhambra Bakersfield El Centro Eureka	725 717 727 729 726 718 719 724 720 728 728 723 917-918 932-933 922 955	-11% -4% -2% -8% -14% -10% -3% -6% -3% -4% -11% -1% -1% 8% 10% 0% -2%	Delaware Averat Dover Newark Wilmington District of Colum Average Washington Florida Average Altamonte Springs Bradenton Brooksville Daytona Beach Fort Lauderdale Fort Myers	99 199 197 198 bia 200-205 342 346 321 333 339 349	3% -3% 7% 5% 12% - 2% -1% -3% -6% -8% 5% -3% -3%	Arlington Heights Aurora Belleville Bloomington Carol Stream Centralia Champaign Chicago Decatur Galesburg Granite City Green River Joliet Kankakee Lawrenceville Oak Park	605 622 617 629 601 628 618 606-608 614 620 614 620 614 609 624 609 624 603	12% 14% -1% -7% 13% -2% 14% -10% -4% 0% 12% -1% -6% 16%	Wichita Kentucky Averag Ashland Bowling Green Campton Covington Elizabethtown Frankfort Hazard Hopkinsville Lexington London Loudon Loudon Loudon Paducah Pikeville Somerset	670-672 411-412 421 413-414 410 427 406 417-418 422 403-405 407-409 400-402 423 420 415-416 425-426	-4% -8% -2% -10% 1% 5% -4% -4% -2% -9% 6% -6% -1% -12% -12%	Detroit Flint Grand Rapids Grayling Jackson Lansing Marquette Pontiac Royal Oak Saginaw Traverse City Minnesota Avera Bemidji Brainerd Duluth Fergus Falls Magnolia	481-482 484-485 493-495 497 492 488-489 498-499 483 480 486-487 496 age 5666 564 5565 565 565 561	7% 0% 1% -5% 0% 0% -4% 11% 7% -4% -4% 2% 0% -2% 2% -6% -9%
Batesville Camden Fayetteville Fort Smith Harrison Hope Hot Springs Jonesboro Little Rock Pine Bluff Russellville West Memphis California Avera Alhambra Bakersfield El Centro Eureka Fresno	725 717 727 729 726 718 719 724 720-722 716 728 723 917-918 932-933 922 955 936-938	-11% -4% -2% -8% -14% -10% -13% -6% -4% -11% -7% -1% -1% 8% 10% 0% 0% 0% 0%	Delaware Averag Dover Newark Wilmington District of Colum Average Washington Florida Average Altamonte Springs Bradenton Brooksville Daytona Beach Fort Lauderdale Fort Myers Fort Pierce Gainesville	9 199 197 198 bia 200-205 327 342 346 341 333 339 349 326	3% -3% 7% 5% 12% -2% -1% -3% -6% -6% -8% 5% -3% -3% -8% -7%	Arlington Heights Aurora Belleville Bloomington Carlo Stream Centralia Champaign Chicago Decatur Galesburg Granite City Green River Joliet Kankakee Lawrenceville Oak Park Peoria	605 622 617 629 601 628 618 606-608 623 614 620 612 604 609 624 603 615-616	12% 14% -1% -7% 13% -2% 14% -2% 14% -0% 0% 12% -6% 16% 4%	Wichita Kentucky Averag Ashland Bowling Green Campton Covington Elizabethtown Frankfort Hazard Hopkinsville Lexington Louisville Owensboro Paducah Pikeville	670-672 411-412 421 413-414 410 427 406 417-418 422 403-405 407-409 400-402 423 420 415-416	-4% -8% -2% -10% 1% 5% -4% 2% -9% 6% -6% -6% -1% -1%	Detroit Flint Grand Rapids Grayling Jackson Lansing Marquette Pontiac Royal Oak Saginaw Traverse City Minnesota Avera Bemidji Brainerd Duluth Fergus Falls Magnolia Mankato	481-482 484-485 493-495 497 492 488-489 488-489 488-489 486-487 496 396 396 566 565 565 565 565 565 560	7% 0% 1% -5% 0% 0% -4% 11% 7% -4% 2% 0% -2% 2% -2% 2% -6% -9% -1%
Batesville Camden Fayetteville Fort Smith Hore Hor Springs Jonesboro Little Rock Pine Bluff Russellville West Memphis California Avera Alhambra Bakersfield El Centro Eureka Fresno Herlong	725 717 727 729 726 718 719 724 720-722 716 728 723 972-972 932-933 922 955 936-938 961	-11% -4% -2% -8% -14% -10% -13% -6% -4% -1% -1% -1% -1% -1% -1% -1% -1% -1% -1	Delaware Averag Dover Newark Wilmington District of Colum Average Washington Florida Average Altamonte Springs Bradenton Brooksville Daytona Beach Fort Lauderdale Fort Lauderdale Fort Lauderdale Fort Pierce Gainesville Jacksonville	199 197 197 198 bia 200-205 327 342 346 321 333 339 349 326 322	3% -3% 7% 5% 12% - 2% -1% -3% -6% -8% 5% -3% -8% -3% -7% 2%	Arlington Heights Aurora Belleville Bloomington Carol Stream Centralia Champaign Chicago Decatur Galesburg Granite City Green River Joliet Kankakee Lawrenceville Oak Park Peoria Peru	605 622 617 629 601 628 618 606-608 623 614 604 620 612 604 609 624 609 624 603 615-616 602	12% 14% -1% -7% 13% -2% 14% -10% -4% 0% 0% 12% -1% -6% 4% 1%	Wichita Kentucky Averag Ashland Bowling Green Campton Covington Elizabethtown Frankfort Hazard Hopkinsville Lexington Loudon Louisville Owensboro Paducah Pikeville Somerset White Plains	670-672 411-412 421 413-414 410 427 406 417-418 422 403-405 407-409 400-402 423 415-416 425-426 424	-4% -8% -2% -10% 1% 5% -4% -4% -4% 2% -6% -6% -6% -1% -12% -8%	Detroit Flint Grand Rapids Grayling Jackson Lansing Marquette Pontiac Royal Oak Saginaw Traverse City Minnesota Avera Bemidji Brainerd Duluth Fergus Falls Magnolia Mankato Minneapolis	481-482 484-485 493-495 497 492 488-489 488-489 483 480 486-487 496 566 564 566 564 566 565 565 565 565 56	7% 0% 1% -5% 0% -4% 11% 7% -4% 11% 7% -4% 2% 0% -2% 2% -6% -9% -1% 17%
Batesville Camden Fayetteville Fort Smith Horpe Hot Springs Jonesboro Little Rock Pine Bluff Russellville West Memphis California Avera Alhambra Bakersfield El Centro Eureka Fresno Herlong Inglewood	725 717 727 729 726 718 719 724 720-722 716 728 723 917-918 932-933 922 955 936-938 961 902-905	-11% -4% -2% -8% -14% -10% -3% -6% -4% -11% -7% -1% -1% 0% 0% 0% -2% 0% 0% -2% 0% 1% 10%	Delaware Averat Dover Newark Wilmington District of Colum Average Washington Florida Average Altamonte Springs Brodksville Daytona Beach Fort Lauderdale Fort Myers Fort Pierce Gainesville Jacksonville Lakeland	199 197 197 198 200-205 327 342 346 321 333 339 349 326 322 338	3% -3% 5% 12% -2% -6% -3% -6% -3% -3% -3% -3% -6%	Arlington Heights Aurora Belleville Bloomington Carlo Stream Centralia Champaign Chicago Decatur Galesburg Granite City Green River Joliet Kankakee Lawrenceville Oak Park Peoria	605 622 617 629 601 628 618 604 623 614 623 614 623 614 604 604 604 604 603 615-616 613 602 610-611	12% 14% -1% -7% 13% -2% 14% -0% 0% 12% -6% 16% 4% 16% 4% 14% 3%	Wichita Kentucky Averag Ashland Bowling Green Carnpton Covington Elizabethtown Frankfort Hazard Hopkinsville Lexington Louisville Owensboro Paducah Pikeville Somerset White Plains Louisiana Avera	670-672 411-412 421 413-414 410 427 406 407-409 400-402 403-405 407-409 400-402 423 420 415-416 425-426 424 ge	-4% -5% -2% -2% -10% 5% -4% -4% -4% -3% -2% -9% 6% -6% -1% -12% -12% -18% -2%	Detroit Flint Grand Rapids Grayling Jackson Lansing Marquette Pontiac Royal Oak Saginaw Traverse City Minnesota Avera Bemidji Brainerd Duluth Fergus Falls Magnolia Mankato Minneapolis Rochester	481-482 484-485 493-495 497 492 488-489 498-499 483 480 486-487 496 566 564 556 564 556 565 561 565 561 565 559	7% 0% 1% -5% 0% 0% -4% 11% -4% -4% -4% -2% 2% -6% -9% -1% 17% 17%
Batesville Camden Fayetteville Fort Smith Hore Hor Springs Jonesboro Little Rock Pine Bluff Russellville West Memphis California Avera Alhambra Bakersfield El Centro Eureka Fresno Herlong	725 717 727 729 726 718 719 724 720-722 716 728 723 972-972 932-933 922 955 936-938 961	-11% -4% -2% -8% -14% -10% -3% -6% -4% -11% -7% -1% -1% 0% 0% 0% -2% 0% 0% -2% 0% 1% 10%	Delaware Averag Dover Newark Wilmington District of Colum Average Washington Florida Average Altamonte Springs Bradenton Brooksville Daytona Beach Fort Lauderdale Fort Myers Fort Pierce Gainesville Jacksonville Lakeland Melbourne	199 197 197 198 bia 200-205 327 342 346 321 333 339 349 326 322	3% -3% 5% 5% 12% -2% -1% -3% -6% -6% -3% -3% -7% 2% -6% -3%	Arlington Heights Aurora Belleville Bloomington Carobondale Carol Stream Centralia Champaign Chicago Decatur Galesburg Granite City Green River Joliet Kankakee Lawrenceville Oak Park Peoria Peru Quincy Rockford Springfield	605 622 617 629 601 628 618 606-608 623 614 620 612 604 609 624 609 624 603 615-616 613 602 615-616 613 612-611 625-627	12% 14% -1% -7% 13% -2% 14% -0% 0% 12% -6% 16% 4% 16% 4% 14% 3%	Wichita Kentucky Averag Ashland Bowling Green Campton Covington Elizabethtown Frankfort Hazard Hopkinsville Lexington Loudon Louisville Owensboro Paducah Pikeville Somerset White Plains	670-672 411-412 421 413-414 410 427 406 417-418 422 403-405 407-409 400-402 423 415-416 425-426 424	-4% -5% -2% -2% -10% 5% -4% 2% -3% -4% 2% -9% -6% -6% -1% -12% -12% -12% -7%	Detroit Flint Grand Rapids Grayling Jackson Lansing Marquette Pontiac Royal Oak Saginaw Traverse City Minnesota Avera Bernidji Brainerd Duluth Fergus Falls Magnolia Mankato Minneapolis Rochester St Cloud	481-482 484-485 493-495 497 492 488-489 488-489 488-489 486-487 496 396 566 564 556-558 565 561 560 553-555 559 563	7% 0% 1% -5% 0% 0% -4% 11% 7% -4% -4% 0% -2% 2% -6% -9% -1% 17% 11%
Batesville Camden Fayetteville Fort Smith Horpe Hot Springs Jonesboro Little Rock Pine Bluff Russellville West Memphis California Avera Alhambra Bakersfield El Centro Eureka Fresno Herlong Inglewood Irvine Lompoc Long Beach	725 717 727 729 726 718 719 724 720-722 716 728 723 917-918 932-933 922 955 936-938 961 902-905 926-927 934 907-908	-11% -4% -2% -8% -14% -10% -13% -6% -4% -11% -7% -11% -7% -1% 8% 0% -2% 0% -2% 0% -2% 0% 1% 10% 11% 11%	Delaware Averat Dover Newark Wilmington District of Colum Average Washington Florida Average Altamonte Springs Brodksville Daytona Beach Fort Lauderdale Fort Myers Fort Pierce Gainesville Jacksonville Lakeland	199 197 197 198 (bia) 200-205 342 346 321 333 346 321 339 326 329 328 329 330-332 341	3% -3% 7% 5% 12% -1% -3% -6% -3% -8% -3% -3% -8% -7% 2% -6% -3% 3% 0%	Arlington Heights Aurora Belleville Bloomington Carbondale Carol Stream Centralia Champaign Chicago Decatur Galesburg Granite City Green River Joliet Kankakee Lawrenceville Oak Park Peoria Peru Quincy Rockford	605 622 617 629 601 628 618 604 623 614 623 614 623 614 604 604 604 604 603 615-616 613 602 610-611	12% 14% -1% -7% 13% -2% 14% -10% -4% 0% 12% -1% -6% 16% 4% 1% 14%	Wichita Kentucky Averag Ashland Bowling Green Campton Covington Elizabethtown Frankfort Hazard Hopkinsville Lexington Louisville Owensboro Paducah Pikeville Somerset White Plains Louisiana Avera Alexandria Baton Rouge Houma	670-672 (e 411-412 421 413-414 410 427 406 407-418 407-418 407-409 407-409 407-409 407-409 407-409 407-409 407-409 407-409 407-409 407-407 407-408 407-407 407-408 407-40	-4% -5% -2% -2% -10% 5% -4% 5% -4% 2% -3% -6% -6% -6% -6% -6% -12% -12% -12% -12% -12% -12% -10% -10% -10% -2% -10% -2% -2% -4% -2% -2% -4% -2% -4% -2% -4% -2% -2% -4% -2% -6% -6% -6% -7% -12% -12% -12% -12% -12% -12% -12% -12% -12% -12% -10% -12% -10% -12% -7% -10% -12% -10%	Detroit Flint Grand Rapids Grayling Jackson Lansing Marquette Pontiac Royal Oak Saginaw Traverse City Minnesota Avera Bemidji Brainerd Duluth Fergus Falls Magnolia Mankato Minneapolis Rochester St Cloud St Paul	481-482 484-485 493-495 497 492 488-489 488-489 480 486-487 496 566 564 556-558 561 550-558 563 550-551	7% 0% 1% -5% 0% 0% -4% 11% -4% -4% -4% -2% 2% -6% -9% -1% 17% 11% 16%
Batesville Camden Fayetteville Fort Smith Harrison Hope Hot Springs Jonesboro Little Rock Pine Bluff Russellville West Memphis California Avera Alhambra Bakersfield El Centro Eureka Fresno Herlong Inglewood Irvine Lompoc Long Beach Los Angeles	725 717 727 729 726 718 719 724 720 724 720 724 720 724 723 917-918 932-933 922 935-938 961-905 926-927 934 900-901	-11% -4% -2% -8% -14% -10% -13% -6% -4% -11% -7% -1% -1% 8% 0% 0% 0% 0% 0% 0% 0% 10% 10% 14% 1% 8%	Delaware Averag Dover Newark Wilmington District of Colum Average Washington Florida Average Altamonte Springs Bradenton Brooksville Daytona Beach Fort Lauderdale Fort Myers Fort Pierce Gainesville Jacksonville Lakeland Melbourne Miami Naples Ocala	327 342 346 321 333 329 324 344	3% -3% 5% 12% -1% -3% -6% 5% -3% -3% -3% -3% -3% 3% -6% -3% 3% -8%	Arlington Heights Aurora Belleville Bloomington Carbondale Carol Stream Centralia Champaign Chicago Decatur Galesburg Granite City Green River Joliet Kankakee Lawrenceville Oak Park Peoria Peru Quincy Rockford Springfield Urbana	605 622 617 629 601 628 618 604 612 604 603 612 604 603 615-616 603 615-616 602 610-611 625-627 619	$\begin{array}{c} 12\% \\ 14\% \\ -1\% \\ -7\% \\ -7\% \\ 13\% \\ -2\% \\ 14\% \\ -10\% \\ -4\% \\ 0\% \\ 12\% \\ -16\% \\ 16\% \\ 4\% \\ 16\% \\ 4\% \\ 14\% \\ 3\% \\ -2\% \\ -5\% \end{array}$	Wichita Kentucky Averag Ashland Bowling Green Campton Campton Elizabethtown Frankfort Hazard Hopkinsville Lexington Loudon Louisville Owensboro Paducah Pikeville Somerset White Plains Louisiana Avera Alexandria Baton Rouge Houma Lafayette	670-672 411-412 421 413-414 410 427 406 417-418 402 403-405 407-409 400-402 423 420 415-416 425-426 424 9e 713-714 707-708 705	-4% -8% -2% -10% -1% -5% -4% -3% -9% -6% -12% -6% -12% -12% -8% 2% -7% 18% 0% 5%	Detroit Flint Grand Rapids Grayling Jackson Lansing Marquette Pontiac Royal Oak Saginaw Traverse City Minnesota Avera Bemidji Brainerd Duluth Fergus Falls Magnolia Mankato Minneapolis Rochester St Cloud St Paul Thief River Falls	481-482 484-485 493-495 497 492 488-489 488-489 483 480 486-487 496 566 564 565 565 565 565 565 565 565 553-555 559 563 550-551 567	7% 0% 1% -5% 0% -4% -4% -4% -4% -4% -4% -2% -6% -9% -17% 17% 11% 16% -3%
Batesville Camden Fayetteville Fort Smith Harrison Hope Hot Springs Jonesboro Little Rock Pine Bluff Russellville West Memphis California Avera Alhambra Bakersfield El Centro Eureka Fresno Herlong Inglewood Irvine Lompoc Long Beach Los Angeles Marysville	725 717 727 729 726 718 719 724 724 720-722 716 728 723 917-918 922-923 925 936-938 961 902-905 926-927 934 907-908 907-908	-11% -2% -2% -8% -14% -10% -13% -6% -4% -13% -4% -7% -1% -7% -1% -0% 0% -2% 0% 0% -2% 0% 1% 1% 1% 1%	Delaware Averag Dover Newark Wilmington District of Colum Average Washington Florida Average Altamonte Springs Bradenton Brooksville Daytona Beach Fort Lauderdale Fort Lauderdale Fort Lauderdale Fort Dierce Gainesville Lakeland Melbourne Miami Naples Ocala Orlando	327 342 346 321 333 329 324 344	3% -3% 5% 12% -1% -1% -3% -6% -8% -3% -8% -3% -2% -6% -3% -3% -3% -3% -3% -3% 3% 0% -8% 3%	Arlington Heights Aurora Belleville Bloomington Carbondale Carol Stream Centralia Champaign Chicago Decatur Galesburg Granite City Green River Joliet Kankakee Lawrenceville Oak Park Peoria Peru Quincy Rockford Springfield Urbana	605 622 617 629 601 628 618 604 623 614 623 614 623 604 604 609 624 603 615-616 613 602 610-611 625-627 619	12% 14% -1% -7% 13% -2% 14% -2% -10% -4% 0% 12% -1% -6% 16% 4% 14% 3% -2% -5% - 2%	Wichita Kentucky Averag Ashland Bowling Green Campton Covington Elizabethtown Frankfort Hazard Hopkinsville Lordon Louisville Owensboro Paducah Pikeville Somerset White Plains Louisiana Avera Alexandria Baton Rouge Houma Lafayette Lake Charles	670-672 411-412 421 413-414 410 427 406 417-418 422 403-409 400-402 423 407-409 400-402 422 407-409 400-402 423 420 415-416 424 9 9 9 9 9 9 1 1 1 1 1 1 1 1	-4% -5% -2% -10% -1% 5% -4% -13% -4% -13% -4% -13% -4% -9% 6% -6% -6% -6% -6% -1% -12% -18% 2% 2% -1%	Detroit Flint Grand Rapids Grayling Jackson Lansing Marquette Pontiac Royal Oak Saginaw Traverse City Minnesota Avera Bemidji Brainerd Duluth Fergus Falls Magnolia Mankato Minneapolis Rochester St Cloud St Paul	481-482 484-485 493-495 497 492 488-489 488-489 480 486-487 496 566 564 556-558 561 550-558 563 550-551	7% 0% 1% -5% 0% 0% -4% 11% -4% -4% -4% -2% 2% -6% -9% -1% 17% 11% 16%
Batesville Camden Fayetteville Fort Smith Harrison Hot Springs Jonesboro Little Rock Pine Bluff Russellville West Memphis California Avera Alhambra Bakersfield El Centro Eureka Fresno Herlong Inglewood Irvine Lompoc Long Beach Los Angeles Marysville Modesto	725 717 727 729 726 718 719 724 720-722 716 728 723 917-918 932-933 922 955 936-938 961 902-905 926-927 934 900-901 959 955	-11% -4% -2% -8% -14% -10% -3% -4% -13% -4% -11% -7% -11% -7% -1% 0% 0% -2% 0% -2% 0% 1% 10% 10% 14% 11% 8% 0%	Delaware Averag Dover Newark Wilmington District of Colum Average Washington Florida Average Attamonte Springs Brodsville Daytona Beach Fort Lauderdale Fort Avers Fort Pierce Gainesville Jacksonville Lakeland Melbourne Miami Naples Ocala Orlando Panama City	Image: 199 197 197 198 Ibia 200-205 327 346 321 333 329 322 338 329 330-332 341 324 324	3% -3% 7% 5% 12% -1% -3% -6% -3% -8% -3% -8% -3% -6% -3% 3% -6% -3% 3% -8% -8%	Arlington Heights Aurora Belleville Bloomington Carbondale Carol Stream Centralia Champaign Chicago Decatur Galesburg Granite City Green River Joliet Kankakee Lawrenceville Oak Park Peoria Peru Quincy Rockford Springfield Urbana	605 622 617 629 601 628 618 606-608 623 614 620 612 604 609 612 604 609 612 604 613 612 610 613 610-611 625-627 619 470	12% 14% -1% -7% -7% 13% -2% 14% -2% 0% 14% 0% 0% 12% -6% 16% 4% 1% 14% 3% -2% -5% -2% 0%	Wichita Kentucky Averag Ashland Bowling Green Campton Cavington Elizabethtown Frankfort Hazard Hopkinsville Lexington Louisville Owensboro Paducah Pikeville Somerset White Plains Louisiana Avera Alexandria Baton Rouge Houma Lafayette Lake Charles Mandeville	670-672 411-412 421 413-414 410 427 406 417-418 403-405 407-409 400-402 423 420 415-416 425-426 424 ge 713-714 705 706 706 704	-4% -8% -2% -10% 11% 5% -4% -3% -2% -2% -4% -3% 6% -6% -12% -12% -8% -12% -12% -8% -12% -12% -12% -12% -10% -10% -10% -10% -12% -10% -2% -2% -2% -2% -2% -2% -2% -2% -2% -2	Detroit Flint Grand Rapids Grayling Jackson Lansing Marquette Pontiac Royal Oak Saginaw Traverse City Minnesota Avera Bemidji Brainerd Duluth Fergus Falls Magnolia Mankato Minneapolis Rochester St Cloud St Paul Thief River Falls Willmar	481-482 484-485 493-495 497 492 488-489 488-489 488-489 486-487 496 566 564 556-558 561 560 553-551 563 559 563 559 563 559 563 559 563 559 563	7% 0% 1% -5% 0% -4% 11% 7% -4% 2% 2% -2% 2% -6% -9% -1% 17% 11% 17% -1% 17% -3% -4%
Batesville Camden Fayetteville Fort Smith Harrison Hope Hot Springs Jonesboro Little Rock Pine Bluff Russellville West Memphis California Avera Alhambra Bakersfield El Centro Eureka Fresno Herlong Inglewood Irvine Lompoc Long Beach Los Angeles Marysville Modesto Mojave	725 717 727 729 726 718 719 724 720 722 716 728 723 720 724 720 724 932 933 932 933 922 935 936 938 936 934 902-903 926 926 926 927 934 900-901 959 935	-11% -4% -2% -8% -10% -10% -10% -3% -4% -7% -1% -7% -1% -7% -1% 0% 0% 0% 0% 0% 0% 0% 0% 1% 1% 14% 14% 14% 14% 1% 6% 6%	Delaware Averag Dover Newark Wilmington District of Colum Average Washington Florida Average Altamonte Springs Bradenton Brooksville Daytona Beach Fort Lauderdale Fort Myers Fort Pierce Gainesville Jacksonville Lakeland Melbourne Miami Naples Ocala Orlando Panama City Pensacola	JP 199 197 198 bia 200-205 327 342 346 321 333 329 3226 329 330-332 344 328 324 324 322	3% -3% 5% 12% -1% -3% -6% -3% -3% -6% -3% -3% -3% -8% -6%	Arlington Heights Aurora Belleville Bloomington Carol Stream Centralia Champaign Chicago Decatur Galesburg Granite City Green River Joliet Kankakee Lawrenceville Oak Park Peoria Peru Quincy Rockford Springfield Urbana Indiana Average Aurora Bloomington	605 622 617 629 601 628 618 6028 618 6028 614 623 614 602 612 604 604 603 615-616 602 602 610-611 625-627 619	12% 14% -1% -7% 13% -2% 14% -10% -4% 0% 12% -1% 16% 16% 4% 14% 3% -2% -5% - 2% 0% -3%	Wichita Kentucky Averag Ashland Bowling Green Campton Campton Elizabethtown Frankfort Hazard Hopkinsville Lexington Loudon Louisville Owensboro Paducah Pikeville Somerset White Plains Louisiana Avera Alexandria Baton Rouge Houma Lafayette Lafayette Lafayette Lafayette Minden	670-672 411-412 421 413-414 410 427 406 417-418 402 403-405 407-409 400-402 423 420 415-416 425-426 424 9e 713-714 707-708 705 706 704 710	-4% -8% -2% -10% -1% 5% -4% -13% -4% -3% -9% 6% -1% -12% -8% 2% -7% 18% 5% -1% -1% -6%	Detroit Flint Grand Rapids Grayling Jackson Lansing Marquette Pontiac Royal Oak Saginaw Traverse City Minnesota Avera Bemidji Brainerd Duluth Fergus Falls Magnolia Mankato Minneapolis Rochester St Cloud St Paul Thief River Falls	481-482 484-485 493-495 497 492 488-489 488-489 488-489 486-487 496 566 564 556-558 561 560 553-551 563 559 563 559 563 559 563 559 563 559 563	7% 0% -5% 0% -4% 11% -4% -4% -2% 2% 2% 2% -2% 2% -9% -1% 11% 11% 11% 16% -2%
Batesville Camden Fayetteville Fort Smith Harrison Hope Hot Springs Jonesboro Little Rock Pine Bluff Russellville West Memphis California Avera Alhambra Bakersfield El Centro Eureka Fresno Herlong Inglewood Irvine Lompoc Long Beach Los Angeles Marysville Modesto Mojave Novato	725 717 727 729 726 718 719 724 720-722 716 728 723 917-918 932-933 922 955 936-938 961 902-905 926-927 934 900-901 959 955	-11% -4% -2% -8% -14% -10% -13% -6% -4% -11% -7% -11% -7% -1% 0% 0% -2% 0% 0% -2% 0% 1% 10% 1% 1% 1% 1%	Delaware Averag Dover Newark Wilmington District of Colum Average Washington Florida Average Attamonte Springa Bradenton Brooksville Daytona Beach Fort Lauderdale Fort Myers Fort Pierce Gainesville Jacksonville Lakeland Melbourne Miami Naples Ocala Ordando Panama City Pensacola Saint Augustine Saint Cloud	Je 199 197 198 bia 200-205 327 346 321 333 326 322 333 328 324 322 334 328 324 325 320 341 344 328 324 325 320 347	3% -3% 5% 12% -2% -1% -3% -6% -3% -3% -3% -3% -3% -3% -3% -8% -6% -3% 3% -8% -6% -8% -8% -6% -1% 0%	Arlington Heights Aurora Belleville Bloomington Carbondale Carol Stream Centralia Champaign Chicago Decatur Galesburg Granite City Green River Joliet Kankakee Lawrenceville Oak Park Peoria Peru Quincy Rockford Springfield Urbana	605 622 617 629 601 628 618 602 614 620 612 604 609 612 604 609 612 604 609 612 604 603 615-616 613 610-611 625-627 619 470 474 472 465	12% 14% -1% -7% 13% -2% 14% -2% 14% -2% -10% -4% 0% 12% -6% 16% 4% 14% 3% -2% -5% -2% 0% -3% -6% -4%	Wichita Kentucky Averag Ashland Bowling Green Campton Cavington Elizabethtown Frankfort Hazard Hopkinsville Lexington Loudon Louisville Owensboro Paducah Pikeville Somerset White Plains Louisiana Avera Alexandria Baton Rouge Houma Lafayette Lake Charles Mandeville	670-672 411-412 421 413-414 410 427 406 417-418 403-405 407-409 400-402 423 420 415-416 425-426 424 ge 713-714 705 706 706 704	-4% -5% -2% -2% -10% 1% 5% -4% -3% -4% -13% -4% -3% -6% -6% -6% -6% -7% 18% 10% 5% -1% 4% -6% -9%	Detroit Flint Flint Grand Rapids Grayling Jackson Lansing Marquette Pontiac Royal Oak Saginaw Traverse City Minnesota Avera Bemidji Brainerd Duluth Fergus Falls Magnolia Mankato Minneapolis Rochester St Cloud St Paul Thief River Falls Willmar Mississippi Aver Clarksdale Columbus	481-482 484-485 493-495 497 492 488-489 488-489 488-489 488-487 496 age 566 564 556-558 561 560 553-555 563 559 563 559 563 559 563 559 563 559 563 559 563 559 563 559 563 559 563 559 563 563 559 563 559 563 563 559 563 563 559 563 563 559 563 563 559 563 563 559 563 563 559 563 563 559 563 563 559 563 563 559 563 563 559 563 563 563 559 563 563 559 563 563 559 563 563 559 563 563 559 563 563 559 563 563 559 563 563 563 563 563 563 563 563 563 559 563 566 559 563 563 559 563 563 559 566 563 559 563 563 559 566 563 559 566 563 559 566 563 569 566 558 566 558 566 558 559 566 567 569 559 566 567 569 559 566 567 569 559 566 567 569 569 569 569 569 569 569 569 569 569	7% 0% -5% 0% -4% 11% -4% -4% -4% 0% -2% -6% -9% -6% -9% -1% 11% 11% 16% -3% -4% 0% -2% 5%
Batesville Camden Fayetteville Fort Smith Harrison Hope Hot Springs Jonesboro Little Rock Pine Bluff Russellville West Memphis California Avera Alhambra Bakersfield El Centro Eureka Fresno Herlong Inglewood Irvine Lompoc Long Beach Los Angeles Marysville Modesto Mojave Novato Oakland Orange	725 717 727 729 726 718 719 724 720 720 724 720 724 720 722 720 728 723 924 932-933 922 935-938 961-905 926-927 934 900-901 959 935 945 945 945 945 945 945 928	-11% -4% -2% -8% -10% -10% -3% -6% -10% -3% -2% -10% -7% -1% -7% -1% -7% -7% -1% 0% 0% 0% 0% 0% 0% 0% 0% 1% 1% 14% 1% 14%	Delaware Averag Dover Newark Wilmington District of Colum Average Washington Florida Average Altamonte Springs Bradenton Brooksville Daytona Beach Fort Lauderdale Fort Myers Fort Pierce Gainesville Jacksonville Ja	Je Jag 199 197 197 198 bia 200-205 327 342 344 333 329 330-332 344 328 324 324 325 320 347 337	3% -3% 5% 12% -2% -3% -6% -3% -3% -6% -3% -3% -8% -3% -8% -3% -8% -3% -8% -3% -8% -3% -8% -3% -8% -3% -8% -8% -2% -1% -1% -2%	Arlington Heights Aurora Belleville Bloomington Carol Stream Centralia Champaign Chicago Decatur Galesburg Granite City Green River Joliet Kankakee Lawrenceville Oak Park Peoria Peru Quincy Rockford Springfield Urbana Indiana Average Aurora Bloomington Columbus Eikhart Evansville	605 622 617 629 601 628 618 604 623 614 623 614 623 614 604 604 604 603 615-616 613 602 610-611 625-627 619 470 474 472 465 476-477	12% 14% -1% -7% 13% -2% 14% -10% -4% 0% 12% -1% 16% 16% 4% 14% 3% -2% -5% - 2% 0% -3% -6% -4% -2%	Wichita Kentucky Averag Ashland Bowling Green Campton Covington Elizabethtown Frankfort Hazard Hopkinsville Lexington Loudon Louisville Owensboro Paducah Pikeville Somerset White Plains Louisiana Avera Alexandria Baton Rouge Houma Lafayette Lake Charles Mandeville Minden Monroe	670-672 411-412 421 413-414 410 427 406 417-418 422 403-409 400-402 423 407-409 400-402 424 420 415-416 425-426 424 713-714 707-708 703 705 706 704 710 712	-4% -5% -2% -2% -10% 1% 5% -4% -3% -4% -13% -4% -3% -6% -6% -6% -6% -7% 18% 10% 5% -1% 4% -6% -9%	Detroit Flint Grand Rapids Grayling Jackson Lansing Marquette Pontiac Royal Oak Saginaw Traverse City Minnesota Avera Bemidji Brainerd Duluth Fergus Falls Magnolia Mankato Minneapolis Rochester St Cloud St Paul Thief River Falls Willmar Mississippi Aver Clarksdale Columbus Greenville	481-482 484-485 493-495 497 492 488-499 483 480 488-487 496 566 564 566 564 566 566 553-555 559 563 550-551 567 562 ***********************************	7% 0% -5% 0% -4% 11% -4% -4% -4% 2% -6% -2% -6% -6% -9% -1% 11% 11% -3% -4% 2% -2% -6% -6%
Batesville Camden Fayetteville Fort Smith Harrison Hope Hot Springs Jonesboro Little Rock Pine Bluff Russellville West Memphis California Avera Alhambra Bakersfield El Centro Eureka Fresno Herlong Inglewood Irvine Lompoc Long Beach Los Angeles Marysville Modesto Mojave Novato Oakland Orange Oxnard	725 717 727 729 726 718 719 724 724 720-722 716 728 723 932-933 932-935 932-933 932-935 932-935 932-933 932-935 934 907-908 907-908 907-908 907-908 907-908 907-908 934 945-947 928 930	-11% -4% -2% -8% -14% -10% -10% -3% -10% -3% -4% -11% -7% -1% -7% -1% -0% 0% 0% -2% 0% 1% 10% 1% 1% 1% 1% 1% 0% 6% 61% 1% 2%	Delaware Averag Dover Newark Wilmington District of Colum Average Washington Florida Average Altamonte Springs Bradenton Brooksville Daytona Beach Fort Lauderdale Fort Myers Fort Dierce Gainesville Jacksonville Lakeland Melbourne Miami Naples Ocala Oritando Panama City Pensacola St Petersburg Tallahassee	Je 199 197 198 bia 200-205 327 342 344 321 333 329 330-332 341 342 324 329 330-332 341 324 324 324 324 325 320 347 337 323	3% -3% 5% 12% - 2% -1% -3% -6% -8% -3% -6% -3% -3% -6% -3% -3% -8% -3% -8% -3% -8% -1% 0% -4% -6%	Arlington Heights Aurora Belleville Bloomington Carbondale Carol Stream Centralia Champaign Chicago Decatur Galesburg Granite City Green River Joliet Kankakee Lawrenceville Oak Park Peoria Peru Quincy Rockford Springfield Urbana Indiana Average Aurora Bloomington Columbus Elkhart Evansville Fort Wayne	605 622 617 629 601 628 618 606-608 623 614 602 604 603 612 604 603 612 604 603 615-616 613 602 615-616 613 602-617 619 4774 472 472 465-477	12% 14% -1% -7% 13% -2% -2% -2% 0% -2% -2% 0% 14% 0% 0% 12% -6% 16% 1% 14% 3% -2% -5% -2% 0% -3% -6% -3% -2% -3%	Wichita Kentucky Averag Ashland Bowling Green Campton Covington Elizabethtown Frankfort Hazard Hopkinsville Lexington Loudon Louisville Owensboro Paducah Pikeville Somerset White Plains Koursiana Avera Alexandria Baton Rouge Houma Lafayette Lafayette Lafayette Lafayette Lafayette Lafayette Lafayette Lafayette Minden Monroe New Orleans Shreveport	670-672 411-412 421 413-414 410 427 406 417-418 402 403-405 407-409 400-402 423 420 415-416 425-426 424 9e 713-714 705 706 705 706 704 710 712 700-701	$\begin{array}{c} -4\% \\ \textbf{-5\%} \\ -8\% \\ -2\% \\ -2\% \\ -10\% \\ 1\% \\ 5\% \\ -4\% \\ -13\% \\ -4\% \\ -13\% \\ -4\% \\ -9\% \\ 6\% \\ -6\% \\ -9\% \\ 12\% \\ -1\% \\ 12\% \\ -8\% \end{array}$	Detroit Flint Grand Rapids Grayling Jackson Lansing Marquette Pontiac Royal Oak Saginaw Traverse City Minnesota Avera Bemidji Brainerd Duluth Fergus Falls Magnolia Mankato Minneapolis Rochester St Paul Thief River Falls Willmar Mississippi Aver Clarksdale Columbus Greenville Greenwood	481-482 484-485 493-495 497 492 488-489 488-489 483 480 486-487 496 566 564 565 565 565 565 565 565 565 553-555 567 563 550-555 567 562 ************ ********	7% 0% -5% 0% -4% 11% -4% -4% -2% 2% 2% -2% 2% -9% -1% 11% 11% 16% -2% 5% -3%
Batesville Camden Fayetteville Fort Smith Harrison Hope Hot Springs Jonesboro Little Rock Pine Bluff Russellville West Memphis California Avera Alhambra Bakersfield El Centro Eureka Fresno Herlong Inglewood Irvine Lompoc Long Beach Los Angeles Marysville Modesto Mojave Novato Oakland Orange Oxnard Pasadena	725 717 727 729 726 718 719 724 720 728 723 917-918 932-933 922 955 936-938 961 902-905 926-927 934 907-908 907-908 907-908 907-908 945-947 928 945-947 928 930 910-912	-11% -2% -2% -8% -14% -13% -6% -13% -7% -11% -7% -1% 10% 0% -2% 0% -2% 0% -2% 0% 10% 11% 11% 8% 10% 6% 11% 19% 14% 2%	Delaware Averag Dover Newark Wilmington District of Colum Average Washington Florida Average Attamonte Springton Brodoksville Daytona Beach Fort Lauderdale Fort Myers Fort Pierce Gainesville Jacksonville Lakeland Melbourne Miami Naples Occlaa Orlando Panama City Pensacola Saint Augustine Saint Cloud	JP 199 197 198 whia 200-205 327 342 346 321 333 329 324 324 324 328 329 324 324 325 320 344 325 320 347 337 323 335-336	3% -3% 5% 12% - 2% -1% -3% -6% -8% -3% -6% -3% -3% -6% -3% -3% -8% -3% -8% -3% -8% -1% 0% -4% -6%	Arlington Heights Aurora Belleville Bloomington Carbondale Carol Stream Centralia Champaign Chicago Decatur Galesburg Granite City Green River Joliet Kankakee Lawrenceville Oak Park Peoria Peru Quincy Rockford Springfield Urbana Indiana Average Aurora Bloomington Columbus Elkhart Evansville Fort Wayne Gary	605 622 621 617 629 601 628 618 606-608 623 614 620 604 609 624 603 615-616 613 602 610-611 625-627 619 470 472 465 463-464 463-464 463-464	12% 14% -1% -7% 13% -2% 14% -2% 0% -2% 0% -2% 0% -2% 14% 0% -2% 14% 0% -2% -6% 16% 4% 1% 14% 3% -2% -5% -2% 0% -3% -6% -3% -2% -2% -3% -2% -2% -2% -2% -2% -2% -2% -2% -2% -2	Wichita Kentucky Averag Ashland Bowling Green Campton Covington Elizabethtown Frankfort Hazard Hopkinsville Loudon Louisville Owensboro Paducah Pikeville Somerset White Plains Louisiana Avera Alexandria Baton Rouge Houma Lafayette Lake Charles Mandeville Minden Monroe New Orleans Shreveport Maine Average	670-672 411-412 411-412 413-414 410-427 406 417-418 422 403-409 400-402 423 407-409 400-402 423 407-409 400-402 423 420 415-416 425-426 424 9 9 7 703-708 703 705 706 704 712 700-701 711	-4% -5% -2% -2% -10% 1% 5% -4% -3% -4% -3% -6% -6% -6% -6% -7% 18% 10% 5% -1% -4% -1% -1% -4% -13% -4% -13% -4% -13% -4% -13% -4% -13% -4% -13% -6% -13% -6% -12% -13% -6% -12% -13% -6% -12% -13% -6% -13% -6% -12% -13% -6% -12% -13% -6% -13% -6% -13% -6% -12% -13% -6% -6% -12% -13% -6% -6% -6% -6% -6% -6% -1% -1% -6% -1% -1% -1% -1% -1% -1% -6% -6% -6% -6% -7% -1% -1% -7% -1% -1% -1% -7% -1% -1% -6% -6% -6% -6% -6% -6% -6% -6	Detroit Flint Flint Grand Rapids Grayling Jackson Lansing Marquette Pontiac Royal Oak Saginaw Traverse City Minnesota Avera Bemidji Brainerd Duluth Fergus Falls Magnolia Mankato Minneapolis Rochester St Cloud St Paul Thief River Falls Willmar Mississippi Aver Clarksdale Columbus Greenville Greenwood Gulfport	481-482 484-485 493-495 497 492 488-489 498-499 483 480 486-487 496 566 564 556 566 564 556 555 556 555 559 563 550 5559 563 550-551 567 566 567 5567 567 567 567 567 567 56	7% 0% -5% 0% -4% 11% -4% -4% -2% 2% 2% -2% 2% -9% -1% 11% 11% 16% -2% 5% -3%
Batesville Camden Fayetteville Fort Smith Harrison Hope Hot Springs Jonesboro Little Rock Pine Bluff Russellville West Memphis California Avera Alhambra Bakersfield El Centro Eureka Fresno Herlong Inglewood Irvine Lompoc Long Beach Los Angeles Marysville Modesto Mojave Novato Oakland Orange Oxnard Pasadena Rancho Cordova	725 717 727 729 726 718 719 724 720 726 718 723 720 724 720 722 716 728 723 924 932-933 922 935 936-938 960-901 953 945 945 945 945 945 945 945 945 945 945	-11% -4% -2% -8% -10% -10% -13% -6% -4% -7% -1% -1% -7% -1% -7% -1% -7% -1% 0% 0% 0% 0% 0% 0% 0% 0% 1% 1% 1% 1% 1% 1% 1% 1% 6% 6%	Delaware Averag Dover Newark Wilmington District of Colum Average Washington Florida Average Altamonte Springs Bradenton Brooksville Daytona Beach Fort Lauderdale Fort Myers Fort Dierce Gainesville Jacksonville Lakeland Melbourne Miami Naples Ocala Oritando Panama City Pensacola St Petersburg Tallahassee	JP 199 197 198 whia 200-205 327 342 346 321 333 329 324 324 324 328 329 324 324 325 320 344 325 320 347 337 323 335-336	3% -3% 5% 12% -1% -3% -6% -3% -3% -8% -3% -6% -3% -3% -8% -3% -8% -3% -8% -3% -8% -3% -8% -6% -1% 0% -4% -6%	Arlington Heights Aurora Belleville Bloomington Carbondale Carol Stream Champaign Chicago Decatur Galesburg Granite City Green River Joliet Kankakee Lawrenceville Oak Park Peoria Peru Quincy Rockford Springfield Urbana Indiana Average Aurora Bloomington Columbus Elkhart Evansville Fort Wayne Gary Indianapolis	605 622 617 629 601 628 618 604 623 614 620 612 604 603 612 604 603 612 604 603 615-616 613 612 610-611 625-627 619 470 4772 475 477-468 463-462	$\begin{array}{c} 12\% \\ 14\% \\ -1\% \\ -7\% \\ -7\% \\ 13\% \\ -2\% \\ 14\% \\ -2\% \\ 10\% \\ -4\% \\ 0\% \\ -4\% \\ 10\% \\ -6\% \\ 16\% \\ 4\% \\ 14\% \\ 3\% \\ -2\% \\ -5\% \end{array}$	Wichita Kentucky Averag Ashland Bowling Green Campton Campton Elizabethtown Frankfort Hazard Hopkinsville Lexington Louisville Owensboro Paducah Pikeville Somerset White Plains Louisiana Avera Alexandria Baton Rouge Houma Lafayette Lafayette Lafayette Lafayette Mandeville Minden Monroe New Orleans Shreveport Maine Average Auburn	670-672 411-412 413-412 413-414 410 427 406 417-418 403-405 407-409 400-402 423 420 415-416 425-426 424 9 9 7 7 7 1 7 1 1 1 1 1 1 1 1	-4% -8% -2% -10% -10% -13% -4% -3% -2% -9% 6% -12% -6% -12% -7% 18% 2% -7% 18% 5% -1% -6% -9% -6% -9% -6% -9% -6% -9% -3%	Detroit Flint Grand Rapids Grayling Jackson Lansing Marquette Pontiac Royal Oak Saginaw Traverse City Minnesota Avera Bemidji Brainerd Duluth Fergus Falls Magnolia Mankato Minneapolis Rochester St Cloud St Paul Thief River Falls Willmar Mississippi Aver Clarksdale Columbus Greenville Greenwood Gulfport Jackson	481-482 484-485 493-495 497 492 488-499 483 480 488-487 496 566 564 566 566 566 556-558 560 5553-555 550 563 550-551 567 562 567 562 567 562 563 550-551 567 562 57 562 583 583 583 583 583 583 583 583 583 583	7% 0% -5% 0% -4% 11% -4% -4% -4% -4% -2% -6% -9% -1% 11% 11% 16% -3% -2% -6% -6% -3% 2%
Batesville Camden Fayetteville Fort Smith Harrison Hope Hot Springs Jonesboro Little Rock Pine Bluff Russellville West Memphis California Avera Alhambra Bakersfield El Centro Eureka Fresno Herlong Inglewood Irvine Lompoc Long Beach Los Angeles Marysville Mojave Novato Oakland Orange Oxnard Pasadena Racho Cordova	725 717 727 729 726 718 719 724 724 720-722 716 728 723 932-933 932-935 936-938 902-905 926-927 934 907-908 902-905 926-927 934 907-908 959 953 935 949 945-947 928 930 910-912 956-957 960	-11% -4% -2% -8% -14% -10% -13% -6% -4% -11% -7% -1% -1% -0% 0% 0% 0% 0% 0% 0% 0% 0% 1% 10% 1% 11% 1	Delaware Averag Dover Newark Wilmington District of Colum Average Washington Florida Average Altamonte Springs Bradenton Brooksville Daytona Beach Fort Lauderdale Fort Myers Fort Pierce Gainesville Lakeland Melbourne Miami Naples Ocala Orlando Panama City Pensacola Saint Cloud St Petersburg Tallahassee Talma	Je 199 197 198 bia 200-205 327 342 343 333 326 322 338 329 330-332 344 325 320 344 325 320 347 337 323 335-336 334	3% -3% 7% 5% 12% -1% -3% -6% -3% -3% -8% -3% -3% -8% -3% -8% -3% -8% -3% -8% -3% -8% -3% -8% -3% -8% -3% -1% 0% -4% -1% -1% -1% -2% -2% -2% -2% -2% -2% -2% -2% -2% -2	Arlington Heights Aurora Belleville Bloomington Carbondale Carol Stream Centralia Champaign Chicago Decatur Galesburg Granite City Green River Joliet Kankakee Lawrenceville Oak Park Peoria Peru Quincy Rockford Springfield Urbana Indiana Average Aurora Bloomington Columbus Elkhart Evansville Fort Wayne Gary Indianapolis Jasper	$\begin{array}{c} 605\\ 622\\ 617\\ 629\\ 601\\ 628\\ 618\\ 606-608\\ 623\\ 614\\ 609\\ 612\\ 604\\ 609\\ 612\\ 609\\ 612\\ 609\\ 615-616\\ 613\\ 602\\ 615-616\\ 613\\ 602\\ 615-616\\ 613\\ 602\\ 615-616\\ 613\\ 602\\ 472\\ 472\\ 465\\ 476-477\\ 467-468\\ 463-464\\ 460-462\\ 475\\ \end{array}$	12% 14% -1% 13% -2% 13% -2% 14% -2% 0% 0% 12% -6% 16% 14% 14% 2% -3% -3% -2% 0% -6% -3% 2% 7% -7%	Wichita Kentucky Averag Ashland Bowling Green Campton Covington Elizabethtown Frankfort Hazard Hopkinsville Lexington Louidon Louisville Cowensboro Paducah Pikeville Somerset White Plains Louisana Avera Alexandria Baton Rouge Houma Lafayette Lafayette Lafayette Lafayette Lafayette Lafayette Lafayette Lafayette Shreveport Minden Monroe New Orleans Shreveport Maine Average Auburn Augusta	670-672 411-412 413-414 410 427 406 417-418 422 403-405 407-409 400-402 423 407-409 400-402 423 420 415-416 425-426 424 9e 713-714 707-708 705 706 704 710 712 700-701 711 42 43	$\begin{array}{c} -4\% \\ \hline -5\% \\ -8\% \\ -2\% \\ -2\% \\ -10\% \\ 5\% \\ -4\% \\ -13\% \\ -4\% \\ 2\% \\ -9\% \\ 6\% \\ -6\% \\ -9\% \\ 6\% \\ -1\% \\ 12\% \\ -12\% \\ -8\% \\ \hline 2\% \\ -7\% \\ 18\% \\ 10\% \\ -7\% \\ 18\% \\ 10\% \\ -9\% \\ 13\% \\ -6\% \\ -9\% \\ 13\% \\ -6\% \\ -9\% \\ 13\% \\ -6\% \\ -2\% \end{array}$	Detroit Flint Grand Rapids Grayling Jackson Lansing Marquette Pontiac Royal Oak Saginaw Traverse City Minnesota Avera Bemidji Brainerd Duluth Fergus Falls Magnolia Mankato Minneapolis Rochester St Paul Thief River Falls Willmar Mississippi Aver Clarksdale Columbus Greenwille Greenwood Guffport Jackson Laurel	481-482 484-485 493-495 497 492 488-489 488-489 483 480 486-487 496 566 564 565 565 565 565 565 565 553-555 559 563 550-551 567 562 ************ ********* ********* ********	7% 0% -5% 0% -4% 11% -4% -4% -2% 2% 2% 2% 2% 2% 0% -2% 5% -3% 2% 2%
Batesville Camden Fayetteville Fort Smith Harrison Hope Hot Springs Jonesboro Little Rock Pine Bluff Russellville West Memphis California Avera Alhambra Bakersfield El Centro Eureka Fresno Herlong Inglewood Irvine Lompoc Long Beach Los Angeles Marysville Modesto Mojave Novato Oakland Orange Oxnard Pasadena Rancho Cordova	725 717 727 729 726 718 719 724 720-722 716 728 723 926-927 936-938 961-959 926-927 934 900-901 959 935 949 945-947 935 949 945-947 928 930 910-912 956-957 960 948 925	-11% -4% -2% -8% -10% -10% -3% -6% -4% -7% -1% -7% -1% -7% -1% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 1% 1% 1% 1% 1% 1% 1% 6% -6% -4% 19% 6% -4% 19% 4%	Delaware Averag Dover Newark Wilmington District of Colum Average Washington Florida Average Attamonte Springton Brodoksville Daytona Beach Fort Lauderdale Fort Myers Fort Pierce Gainesville Jacksonville Lakeland Melbourne Miami Naples Occlaa Orlando Panama City Pensacola Saint Augustine Saint Cloud	Je 199 197 198 bia 200-205 327 342 343 333 326 322 338 329 330-332 344 325 320 344 325 320 347 337 323 335-336 334	3% -3% 5% 12% - 2% -1% -3% -6% -8% -3% -6% -3% -3% -6% -3% -3% -8% -3% -8% -3% -8% -1% 0% -4% -6%	Arlington Heights Aurora Belleville Bloomington Carbondale Carol Stream Champaign Chicago Decatur Galesburg Granite City Green River Joliet Kankakee Lawrenceville Oak Park Peoria Peru Quincy Rockford Springfield Urbana Indiana Average Aurora Bloomington Columbus Elkhart Evansville Fort Wayne Gary Indianapolis	605 622 617 629 601 628 618 604 623 614 620 612 604 603 612 604 603 612 604 603 615-616 613 612 610-611 625-627 619 470 4772 475 477-468 463-462	12% 14% -1% -7% 13% -2% 14% -2% 0% -2% 0% -2% 0% 14% 0% 14% 2% -6% 16% 4% 1% 14% 3% -2% -5% -2% 0% -3% -6% -3% -2% -7% -7% -7%	Wichita Kentucky Averag Ashland Bowling Green Campton Campton Elizabethtown Frankfort Hazard Hopkinsville Lexington Louisville Owensboro Paducah Pikeville Somerset White Plains Louisiana Avera Alexandria Baton Rouge Houma Lafayette Lafayette Lafayette Lafayette Mandeeville Minden Monroe New Orleans Shreveport Maine Average Auburn	670-672 411-412 413-412 413-414 410 427 406 417-418 403-405 407-409 400-402 423 420 415-416 425 424 9 9 7 713-714 707-708 705 706 704 710 712 700-701 711 42 43 44 45	-4% -8% -2% -10% -13% -4% -13% -4% -2% -9% 6% -12% -8% -7% 18% -7% 18% 5% -12% -8% -3% -3% -3% -3%	Detroit Flint Grand Rapids Grayling Jackson Lansing Marquette Pontiac Royal Oak Saginaw Traverse City Minnesota Avera Bemidji Brainerd Duluth Fergus Falls Magnolia Mankato Minneapolis Rochester St Cloud St Paul Thief River Falls Willmar Mississippi Aver Clarksdale Columbus Greenville Greenwood Gulfport Jackson	481-482 484-485 493-495 497 492 488-499 483 480 488-487 496 566 564 566 566 566 556-558 560 5553-555 550 563 550-551 567 562 567 562 567 562 563 550-551 567 562 563 386 397 387 389 395 390-392	7% 0% -5% 0% -4% 11% -4% -4% -4% 2% -2% -6% -9% -1% 11% 11% 11% -3% -4% 0% -2% -6% -3% 2% -3% 2% 2% -1%
Batesville Camden Fayetteville Fort Smith Harrison Hope Hot Springs Jonesboro Little Rock Pine Bluff Russellville West Memphis California Avera Alhambra Bakersfield El Centro Eureka Fresno Herlong Inglewood Irvine Lompoc Long Beach Los Angeles Marysville Modesto Mojave Novato Oakland Orange Oxnard Pasadena Rancho Cordova Redding Richmond	725 717 727 729 726 718 719 724 724 720-722 716 728 723 932-933 932-935 936-938 902-905 926-927 934 907-908 902-905 926-927 934 907-908 959 953 935 949 945-947 928 930 910-912 956-957 960	-11% -2% -2% -8% -14% -10% -3% -4% -13% -4% -7% -11% -7% -1% -7% -1% 0% 0% -2% 0% -2% 0% -2% 0% -1% 10% 11% 11% 8% 11% 11% -1% -1% -1% -1% -1% -1% -1% -1	Delaware Averag Dover Newark Wilmington District of Colum Average Washington Florida Average Atamonte Springs Bradenton Brooksville Daytona Beach Fort Lauderdale Fort Myers Fort Pierce Gainesville Jacksonville Lakeland Melbourne Miami Naples Ocala Orlando Panama City Pensacola Saint Augustine Saint Cloud St Petersburg Tallahassee Tampa West Palm Beach	Je 199 197 198 bia 200-205 327 346 321 333 324 322 338 329 330-332 341 344 325 320 347 323 3347 323 334	3% -3% 7% 5% 12% -4% -1% -3% -6% -3% -8% -3% -8% -3% -3% -8% -3% -3% -8% -3% -8% -2% 3% -8% -6% 2% 3% -1% -1% -1% -1% -1% -1% -1% -2% -2% -1% -3% -2% -2% -1% -3% -2% -1% -3% -2% -1% -3% -2% -1% -3% -2% -2% -1% -3% -2% -3% -2% -2% -3% -3% -2% -3% -3% -2% -3% -2% -3% -2% -3% -3% -6% -3% -3% -6% -3% -3% -6% -3% -3% -6% -3% -6% -3% -3% -6% -3% -3% -6% -3% -3% -6% -3% -3% -6% -3% -3% -6% -3% -3% -6% -3% -3% -6% -3% -3% -6% -3% -3% -6% -3% -3% -6% -3% -3% -6% -3% -6% -3% -6% -3% -6% -3% -6% -3% -6% -3% -6% -3% -6% -3% -6% -3% -6% -3% -6% -3% -6% -8% -3% -6% -8% -3% -6% -8% -3% -6% -8% -8% -6% -3% -8% -6% -3% -8% -6% -3% -8% -6% -3% -2% -2% -2% -2% -2% -2% -2% -2% -2% -2	Arlington Heights Aurora Belleville Bloomington Carbondale Carol Stream Centralia Champaign Chicago Decatur Galesburg Granite City Green River Joliet Kankakee Lawrenceville Oak Park Peoria Peru Quincy Rockford Springfield Urbana Indiana Average Aurora Bloomington Columbus Elkhart Evansville Fort Wayne Gary Indianapolis Jasper Jetfersonville	605 622 617 629 601 628 618 606-608 623 614 620 612 604 609 612 604 609 612 604 609 612 604 609 612 614 609 612 614 609 612 614 609 612 614 609 612 614 609 612 614 609 617 612 614 612 612 614 612 612 614 612 612 614 612 612 614 612 612 614 612 612 614 612 612 612 614 612 612 614 612 612 614 612 612 614 612 612 614 612 612 614 612 614 612 612 614 612 612 614 612 612 614 612 612 614 612 614 612 614 612 614 612 614 614 612 614 614 614 612 614 614 614 614 615 616 614 615 616 616 617 616 617 617 617 617 617 617	12% 14% -1% 13% -2% 13% -2% 14% -2% 0% 0% 12% -6% 16% 14% 14% 2% -3% -3% -2% 0% -6% -3% 2% 7% -7%	Wichita Kentucky Averag Ashland Bowling Green Campton Cavington Elizabethtown Frankfort Hazard Hopkinsville Lexington Louisville Owensboro Paducah Pikeville Somerset White Plains Louisiana Avera Alexandria Baton Rouge Houma Lafayette Lake Charles Mandeville Minden Monroe New Orleans Shreveport Maine Average Auburn Augusta Bangor	670-672 411-412 411-412 413-414 410 427 406 417-418 422 403-409 400-402 423 407-409 400-402 423 420 415-416 425-426 424 713-714 707-708 703 705 706 704 710 711 711 711 700-701 711 712 700-701 711 712 700-701 711 712 700-701 711 712 700-701 711 712 700-701 711 711 711 711 711 711 711	-4% -8% -2% -10% -13% -4% -13% -4% -2% -9% 6% -12% -8% -7% 18% -7% 18% 5% -12% -8% -3% -3% -3% -3%	Detroit Flint Flint Grand Rapids Grayling Jackson Lansing Marquette Pontiac Royal Oak Saginaw Traverse City Minnesota Avera Bemidji Brainerd Duluth Fergus Falls Magnolia Mankato Minneapolis Rochester St Cloud St Paul Thief River Falls Willmar Mississippi Aver Clarksdale Columbus Greenville Greenville Greenvodd Gulfport Jackson Laurel McComb	481-482 484-485 493-495 497 492 488-489 498-499 483 480 486-487 496 566 564 556 566 565 566 565 559 563 550-555 567 563 550-551 567 562 rage 386 397 387 389 399-392 394	7% 0% -5% 0% -4% 11% 7% -4% -4% 2% 2% -2% 2% -9% -1% 11% 16% -6% -9% -1% 11% 16% 5% -6% -6% -2% 2% 2% 2% 2% 2%

Area Modification Factors

Columbus

Missouri Averag Cape Girardeau Caruthersville Chillicothe Solumbia East Lynne Farmington Hannibal Independence Jefferson City Joplin Kansas City Kirksville Knob Noster Lebanon Poplar Bluff Saint Charles Saint Joseph Springfield St Louis	637 638 646 652 647 636 634 640 650-651 648 641 635 653 653 654-655-	-4% -7% -6% -5% -7% -9% 10% -7% -7% -8% -9% -9% -13% 0% -8% 8%
Montana Averag Billings Butte Fairview Great Falls Havre Helena Kalispell Miles City Missoula	590-591 597 592 594 595 596 599	-4% 4% 2% -4% -7% -5% -7% -12% -5%
Nebraska Averag Alliance Columbus Grand Island Hastings Lincoln McCook Norfolk North Platte Omaha Valentine	693 686 688 689 683-685 690 687 691 680-681	-6% -2% -6% -7% -3% -9% -9% -2% 1%
Nevada Average Carson City Elko Ely Fallon Las Vegas Reno	897 898 893 894 889-891 895	2% 0% 2% -2% 3% 4% 2%
New Hampshire Charlestown Concord Dover Lebanon Littleton Manchester New Boston	Average 36 34 38 37 35 032-033 030-031	2% -4% 6% 6% -5% 6% 1% 6%
New Jersey Aver Atlantic City Brick Dover Edison Hackensack Monmouth Newark Passaic Paterson Princeton Summit Trenton	rage 080-084 87 78 088-089 76 77 071-073 70 071-073 70 074-075 85 79 86	9% 2% 2% 10% 11% 9% 9% 8% 9% 7% 11% 14% 10%
New Mexico Ave Alamogordo Albuquerque Clovis Farmington Fort Sumner Gallup Holman Las Cruces Santa Fe Socorro Truth or Consequences Tucumcari	883 - 870-871 881 - 874 882 873 - 877 880 875 875 878 - 879	-8% -2% -14% -1% 1% -1% -9% -9% -7% 19% -6% -11%
New York Averaç Albany Amityville Batavia	je 120-123 117 140	5% 9% 8% 0%

Binghamton	137-139	-1%	Oregon Average		-2%
Bronx Brooklyn	104 112	9% 4%	Adrian		·14%
Buffalo	142	4%	Bend	977	1%
Elmira	149	-2%	Eugene Grants Pass	974 975	-3% -3%
Flushing	113	-2% 11%	Klamath Falls	976	-7%
Garden City	115	12%	Pendleton	978	-1%
Hicksville	118	11%	Portland	970-972	13%
Ithaca Jamaica	148 114	-5% 9%	Salem	973	-1%
Jamestown	147	-7%	Demonstration Aug		00/
Kingston	124	-2%	Pennsylvania Ave Allentown	181	-3% 3%
Long Island	111	31%	Altoona	166	-7%
Montauk New York	119	8%	Beaver Springs	178	-8%
(Manhattan)	100-102	32%	Bethlehem	180	4%
New York City	100-102	32%	Bradford	167 · 160	·12% -3%
Newcomb	128	4%	Butler Chambersburg	172	-3%
Niagara Falls	143	-9%	Clearfield	168	-1%
Plattsburgh Poughkeepsie	129 125-126	1% 1%	DuBois		10%
Queens	110	13%	East Stroudsburg	183	-9%
Rochester	144-146	3%	Erie Genesee	164-165 169	-8% -8%
Rockaway	116	6%	Greensburg	156	-5%
Rome	133-134	-6%	Harrisburg	170-171	3%
Staten Island Stewart	103 127	7% 3%	Hazleton	182	-5%
Svracuse	130-132	4%	Johnstown	159	-6%
Tónawanda	141	-2%	Kittanning Lancaster	162 175-176	-8% 0%
Utica	135	-7%	Meadville		-12%
Watertown West Point	136 109	-4% 2%	Montrose	188	-7%
White Plains	105-108		New Castle	161	-4%
Winto Filanio	100 100	1070	Philadelphia	190-191	8%
North Carolina A	verage	-1%	Pittsburgh Pottsville	152 179	5% -6%
Asheville	287-289	-4%	Punxsutawney		11%
Charlotte	280-282	8%	Reading	195-196 184-185	0%
Durham Elizabeth City	277 279	6% -8%	Scranton	184-185	-3%
Fayetteville	283	-3%	Somerset	155 193	-9%
Goldsboro	275	7%	Southeastern Uniontown	154	8% -8%
Greensboro	274	1%	Valley Forge	194	10%
Hickory	286 285	-6% -9%	Warminster	189	6%
Kinston Raleigh	205	10%	Warrendale	150-151	5%
Rocky Mount	278	-5%	Washington	153 186-187	2% -4%
Wilmington	284	-3%	Wilkes Barre Williamsport	177	-4 //
Winston-Salem	270-273	-1%			
	210 210	-1 /0	York	173-174	1%
North Dakota Av	erage	-1%	Rhode Island Ave	erage	5%
	erage 585		Rhode Island Ave Bristol	erage 28	5%
North Dakota Ave Bismarck Dickinson Fargo	erage 585 586 580-581	-1% -1% 4% 2%	Rhode Island Ave Bristol Coventry	erage 28 28	5% 5%
North Dakota Av Bismarck Dickinson Fargo Grand Forks	erage 585 586 580-581 582	-1% -1% 4% 2% -3%	Rhode Island Ave Bristol	erage 28	5% 5% 6% 5%
North Dakota Av Bismarck Dickinson Fargo Grand Forks Jamestown	erage 585 586 580-581 582 584	-1% -1% 4% 2% -3% -4%	Rhode Island Ave Bristol Coventry Cranston Davisville Narragansett	28 28 28 29 28 28 28 28	5% 5% 6% 5% 5%
North Dakota Av Bismarck Dickinson Fargo Grand Forks	erage 585 586 580-581 582 584 587	-1% -1% 4% 2% -3% -4% -2% -14%	Rhode Island Ave Bristol Coventry Cranston Davisville Narragansett Newport	28 28 29 28 28 29 28 28 28 28	5% 5% 6% 5% 5% 5%
North Dakota Av Bismarck Dickinson Fargo Grand Forks Jamestown Minot	erage 585 586 580-581 582 584 587	-1% -1% 4% 2% -3% -4% -2%	Rhode Island Ave Bristol Coventry Cranston Davisville Narragansett	28 28 28 29 28 28 28 28	5% 5% 6% 5% 5% 5% 6%
North Dakota Av Bismarck Dickinson Fargo Grand Forks Jamestown Minot Nekorna Williston	erage 585 586 580-581 582 584 587 583	-1% -1% 4% 2% -3% -4% -2% -14% 14%	Rhode Island Ave Bristol Coventry Cranston Davisville Narragansett Newport Providence	28 28 29 28 29 28 28 28 28 28 29	5% 5% 6% 5% 5% 5%
North Dakota Av Bismarck Dickinson Fargo Grand Forks Jamestown Minot Nekoma Williston Ohio Average	erage 585 586 580-581 582 584 587 583 588	-1% -1% 4% 2% -3% -4% -2% -14% 14% -1%	Rhode Island Ave Bristol Coventry Cranston Davisville Narragansett Newport Providence Warwick South Carolina A	28 28 29 28 29 28 28 28 28 29 29 28 verage	5% 5% 5% 5% 5% 5% 6% 5% 0%
North Dakota Av Bismarck Dickinson Fargo Grand Forks Jamestown Minot Nekoma Williston Olio Average Akron	erage 585 586 580-581 582 584 587 583	-1% -1% 4% 2% -3% -4% -2% -14% 14%	Rhode Island Ave Bristol Coventry Cranston Davisville Narragansett Newport Providence Warwick South Carolina A Aiken	28 28 29 28 28 28 28 28 29 28 29 28 verage 298	5% 5% 5% 5% 5% 5% 6% 5% 0%
North Dakota Av Bismarck Dickinson Fargo Grand Forks Jamestown Minot Nekoma Williston Ohio Average Akroh Canton Chillicothe	erage 585 586 580-581 582 584 587 583 588 442-443 446-447 456	-1% -1% 2% -3% -2% -2% -4% -2% 14% 14% 14% -1% 3% -3% -6%	Rhode Island Ave Bristol Coventry Cranston Davisville Narragansett Newport Providence Warwick South Carolina A Aiken Beaufort	28 28 29 28 28 28 28 28 29 28 29 28 verage 298 299	5% 5% 6% 5% 5% 5% 6% 5% 0% 4%
North Dakota Av Bismarck Dickinson Fargo Grand Forks Jamestown Minot Nekoma Williston Dhio Average Akron Canton Chillicothe Cincinnati	erage 585 586 580-581 582 582 584 587 583 588 442-443 446-447 456 450-452	-1% -1% 2% -3% -2% -2% -14% 14% 14% -3% -3% -6% 3%	Rhode Island Ave Bristol Coventry Cranston Davisville Narragansett Newport Providence Warwick South Carolina A Aiken Beaufort Charleston	27 28 29 28 28 28 28 28 29 29 298 298 299 299	5% 5% 6% 5% 5% 6% 5% 6% 5% 0% 4% -2% 5%
North Dakota Av Bismarck Dickinson Fargo Grand Forks Jamestown Minot Nekoma Williston Ohio Average Akron Canton Chillicothe Cincinhati Cieveland	erage 585 586 580-581 582 584 587 583 583 583 588 442-443 446-447 450-452 440-441	-1% -1% 4% 2% -3% -4% -2% -14% 14% -1% 3% -3% -3% -6% 3% 1%	Rhode Island Ave Bristol Coventry Cranston Davisville Narragansett Newport Providence Warwick South Carolina A Aiken Beaufort Charleston Columbia Greenville	verage 28 29 28 29 28 29 28 29 28 29 28 29 28 29 28 29 298 299 294 290-292 296	5% 5% 5% 5% 5% 5% 5% 5% 4% -2% 5% -1% 6%
North Dakota Av Bismarck Dickinson Fargo Grand Forks Jamestown Minot Nekorna Williston Dito Average Akron Canton Chillicothe Cincinnati Cleveland Columbus	erage 585 586 580-581 582 584 587 583 588 442-443 446-447 456 450-452 440-441 432	-1% -1% 4% 2% -3% -2% -4% -2% -4% -2% -4% -3% -3% -3% -6% 3% 1% 6%	Rhode Island Ave Bristol Coventry Cranston Davisville Narragansett Newport Providence Warwick South Carolina A Aiken Beaufort Charleston Columbia Greenville Myrtle Beach	28 28 29 28 29 28 28 29 28 29 29 298 299 294 299 290-292 296 295	5% 5% 5% 5% 5% 5% 6% 5% 0% 4% -2% 5% -1% 6% -6%
North Dakota Av Bismarck Dickinson Fargo Grand Forks Jamestown Minot Nekoma Williston Chio Average Akron Chillicothe Cincinhati Cieveland Columbus Dayton Lima	erage 585 585 586 580-581 582 584 587 588 442-443 446-447 450 450-452 440-441 432 453-455 453	-1% -1% 2% -3% -4% -4% -14% 14% -3% -3% -3% -6% 3% 6% 0% -6%	Rhode Island Ave Bristol Coventry Cranston Davisville Narragansett Newport Providence Warwick South Carolina A Aiken Beaufort Charleston Columbia Greenville Myrtle Beach Rock Hill	Prage 28 28 29 28 29 28 28 29 28 29 28 299 298 299 294 290-292 294 290-292 295 297	5% 5% 5% 5% 5% 6% 5% 0% 4% -2% 5% 6% 5% 0% 2%
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North Dakota Av Bismarck Dickinson Fargo Grand Forks Jamestown Minot Nekoma Williston Ohio Average Akron Canton Chillicothe Cincinhati Cleveland Columbus Dayton Lima Marietta Marion Newark	erage 585 585 586 580-581 582 584 587 588 442-443 446-447 456 450-452 440-441 432 453-455 453 453 453 453 453 453 453 453 453	-1% -1% 4% 2% -3% -2% 14% 14% -3% -3% -6% 3% -6% 0% -6% -6% -7% 6%	Rhode Island Ave Bristol Coventry Cranston Davisville Narragansett Newport Providence Warwick South Carolina A Aiken Beaufort Charleston Columbia Greenville Myrtle Beach Myrtle Beach Rock Hill Spartanburg South Dakota Ave Aberdeen	Prage 28 28 29 28 28 28 29 29 298 299 294 299 294 290-292 296 295 297 293 297 293 Prage 574	5% 5% 5% 5% 5% 5% 6% 5% 0% 4% -2% 5% 0% 4% -2% 5% -1% 6% -6% 2% -4% -8%
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North Dakota Av Bismarck Dickinson Fargo Grand Forks Jamestown Minot Nekoma Williston Ohio Average Akron Canton Chillicothe Cincinhati Cleveland Columbus Dayton Lima Marietta Marion Newark Sandusky Steubenville Toledo	erage 585 585 586 580-581 582 584 587 588 442-443 446-447 450-452 440-441 432 453-455 453 453 453 443-445 453 434 434-443 633 434-436 635 635 635 635 635 635 635 6	-1% -1% 4% 2% -3% -2% 14% -2% 14% -3% -6% 3% -6% 6% -6% -6% -6% -6% -6% -6% -6% -6%	Rhode Island Ave Bristol Coventry Cranston Davisville Narragansett Newport Providence Warwick South Carolina A Aiken Beaufort Charleston Columbia Greenville Myrtle Beach Rock Hill Spartanburg South Dakota Ave Aberdeen Mitchell Mobridge	verage 28 29 28 29 28 29 28 29 298 299 294 296 297 293 297 293 297 293 297 293 297 293 297 293 297 293 297 293	5% 5% 5% 5% 5% 5% 6% 5% 0% 4% -2% 6% -2% 6% -4% -4% -8% -8% -11%
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Lewisburg Martinsburg Morgantown New Martinsville Parkersburg Romney Sugar Grove Wheeling	261	-9% -6% -10% -8% -9% -12% 0%
Wisconsin Avera Amery Beloit Clam Lake Eau Claire Green Bay La Crosse Ladysmith Madison Milwaukee Oshkosh Portage Phairie du Chien Wausau	ge 540 535 545 547 541-543 546 548 537 530-534 549 539 538 544	0% 0% 4% -7% -3% -2% -4% 6% 5% 5% 5% 0% -7% -5%
Wyoming Averag		- 4% 0%
Casper Cheyenne/ Laramie Gillette Powell Rawlins Riverton Rock Springs Sheridan Wheatland	826 820 827 824 823 825 829-831 828 822	-2% -4% -11% -4% -8% -1% -5% -3%
UNITED STATES TERRITORIES		100/
Guam Puerto Rico		18% -21%
VIRGIN ISLANDS St. Croix St. John St. Thomas	(U.S.)	2% 20% 5%
CANADIAN AREA MODIFIERS These figures ass exchange rate of Canadian to \$.76	ume an \$1.00 U.S.	
Alberta Average Calgary Edmonton Fort McMurray		13% 14% 14% 12%
British Columbia Average Fraser Valley Okanagan Vancouver		7% 6% 6% 9%
Manitoba Averag North Manitoba Selkirk South Manitoba Winnipeg	e	0% 0% 0% 0%
New Brunswick		
Average		13%
Average Moncton Newfoundland/La	brador	- 13% -13% -3%
Moncton	brador	- 13% -13% -3% -8% -8% -7% -8%
Moncton Newfoundland/La Nova Scotia Aver Amherst Nova Scotia	brador	-13% -3% - 8% -8% -7%
Moncton Newfoundland/La Amherst Nova Scotia Sydney Ontario Average London Thunder Bay	brador	-13% -3% -8% -7% -8% -7% -8%
Moncton Newfoundland/La Nova Scotia Aver Amherst Nova Scotia Sydney Ontario Average London Thunder Bay Toronto Quebec Average Montreal	brador	-13% -3% -8% -7% -7% -8% 7% 6% 7% -1%

Building Cost Historical Index

Use this table to find the approximate current dollar building cost when the actual cost is known for any year since 1958. Multiply the figure listed below for the building type and year of construction by the known cost. The result is the estimated 2025 construction cost.

988 17.19 17.57 13.74 13.63 16.53 1988 960 16.27 16.70 13.20 12.86 12.99 1980 961 15.33 16.64 12.86 12.62 12.95 1981 962 15.57 16.15 12.66 12.47 12.76 1982 964 14.30 15.55 12.34 11.82 12.15 1984 966 14.77 15.14 11.91 11.62 11.62 11.63 1985 967 13.45 14.00 10.71 10.52 19.65 1986 9670 12.49 13.23 10.22 9.95 0.055 1986 9670 12.49 12.64 9.88 9.57 9.05 1970 971 10.20 10.25 8.14 7.86 8.20 1971 972 0.20 10.25 8.71 7.48 8.20 1977 975 7.38 6.16 <	'ear	Masonry Buildings	Concrete Buildings	Steel Buildings	Wood-Frame Buildings	Agricultural Buildings	Year of Construction
960 16.27 16.70 13.20 12.86 12.99 1961 961 15.83 16.64 12.96 12.62 12.95 1961 962 15.54 15.73 16.15 12.26 12.47 12.75 1963 964 14.40 15.55 12.24 11.52 1964 965 1.4.42 15.14 11.91 11.56 11.53 1965 966 13.77 14.70 11.45 11.56 11.53 1965 970 11.69 12.05 8.14 7.66 1969 1970 971 10.66 11.07 8.71 7.44 9.81 1971 972 10.20 10.25 8.14 7.66 6.03 1972 973 9.31 9.71 7.23 7.26 7.70 1973 976 7.73 7.33 7.86 6.10 6.33 6.37 1975 977 6.57 7.03 5.50 <td>958</td> <td>17.19</td> <td>17.57</td> <td>13.74</td> <td>13.63</td> <td>16.53</td> <td>1958</td>	958	17.19	17.57	13.74	13.63	16.53	1958
6f1 15.93 16.64 12.98 12.62 12.83 1961 962 15.57 16.15 12.66 12.47 12.76 1992 963 14.42 15.14 11.91 11.86 11.83 1996 966 14.42 15.14 11.91 11.86 11.83 1996 967 13.76 14.70 11.44 11.02 11.83 1996 968 12.16 12.29 955 19.65 1969 1969 970 11.69 12.09 9.38 9.17 9.45 1975 972 10.20 10.25 6.14 7.84 8.81 1971 973 9.31 9.71 7.83 7.26 7.70 1973 974 8.29 8.00 6.70 6.38 6.37 7.74 1975 975 7.55 7.67 5.57 6.57 6.57 6.57 6.57 6.57 6.57 6.57 6.57	959	16.65	17.02	13.41	13.05	13.26	1959
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Residential Structures Section

The figures in this section include all costs associated with normal construction:

Foundations as required for normal soil conditions. Excavation for foundations, piers, and other foundation components given a fairly level construction site. Floor, wall, and roof structures. Interior floor, wall, and ceiling finishes. Exterior wall finish and roof cover. Interior partitions as described in the quality class. Finish carpentry, doors, windows, trim, etc. Electric wiring and fixtures. Rough and finish plumbing as described in applicable building specifications. Built-in appliances as described in applicable building specifications. All labor

Single Family Residences

Single family residences vary widely in quality and the quality of construction is the most significant factor influencing cost. Residences are listed in six quality classes. Class 1 is the most expensive commonly encountered and Class 6 is the minimum required under most building codes. Nearly all homes built from stock plans or offered to the public by residential tract developers will fall into Class 3, 4, 5, or 6. For convenience, these classes are labeled *Best Standard*, *Good Standard, Average Standard* or *Minimum Standard*. Class 1 residences are labeled *Luxury*. Class 2 residences are labeled *Semi-Luxury*. Class 1 and 2 residences are designed by professional architects, usually to meet preferences of the first owner.

The shape of the outside perimeter also has a significant influence on cost. The more complex the shape, the more expensive the structure per square foot of floor. The shape classification of multiple story or split-level homes should be based on the outline formed by the outer-most exterior walls, including the garage area, regardless of the story level. Most residences that fall into Classes 3, 4, 5 or 6 have 4, 6, 8 or 10 corners, as illustrated below. Small insets that do not require a change in the roof line can be ignored when evaluating the outside perimeter.

Class 1 and 2 (*Luxury* and *Semi-Luxury*) residences have more than ten corners and are best evaluated by counting the "building masses." A building mass is a group of contiguous rooms on one or more levels with access at varying angles from a common point or and materials including supervision. All design and engineering fees, if necessary. Permits and fees. Utility hook-ups. Contractors' contingency, overhead and profit.

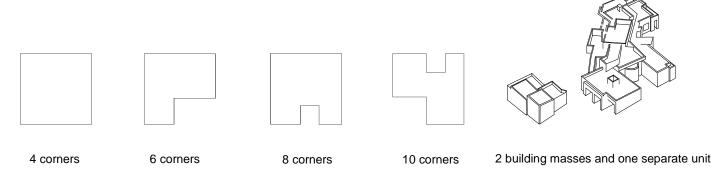
The square foot costs do not include heating and cooling equipment or the items listed in the section "Additional Costs for Residential Structures" which appear on pages 27 to 31. The costs of the following should be figured separately and added to the basic structure cost: porches, basements, balconies, exterior stairways, built-in equipment beyond that listed in the quality classifications, garages and carports.

hallway. The illustration at the right below represents a residence with two building masses. Most Class 1 and Class 2 residences have from one to four building masses, ignoring any attached garage. For convenience, cost tables for Class 1 and 2 single family residences with one, two, three or four building masses have been appended to cost tables for Class 3, 4, 5 and 6 residences with 4, 6, 8 and 10 building corners.

Residences on larger lots often include a separate housekeeping unit, either remote from the main structure (as illustrated below at the right) or joined to the main structure by a hallway (no common wall). Evaluate any separate housekeeping unit as a separate residence. The quality class of separate housekeeping units will usually be the same as the main residence if designed and built at the same time as the main residence.

Residences which have features of two or more quality classes can be placed between two of the six labeled classes. The tables have five half-classes (1 & 2, 2 & 3, etc.) which can be applied to residences with some characteristics of two or more quality classes. If a portion of a residence differs significantly in quality from other portions, evaluate the square footage of each portion separately.

These figures can be applied to nearly all single-family residences built using conventional methods and readily available materials, including the relatively small number of highly decorative, starkly original or exceptionally wellappointed residences.



10 Residential Structures Section

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Single Family Residences

	Class 1 Luxury	Class 2 Semi-Luxury	Class 3 Best Std.	Class 4 Good Std.	Class 5 Average Std.	Class 6 Minimum Std.
Foundation (9% of total cost)	Reinforced concrete.	Reinforced concrete.	Reinforced concrete.	Reinforced concrete or concrete block.	Reinforced concrete or concrete block.	Reinforced concrete.
Floor Structure (12% of total cost)	Engineered wood or steel exceeding code minimums.	Engineered wood or steel or reinforced concrete slab.	Engineered wood or steel or reinforced concrete slab.	Wood frame or slab on grade, changes in shape and elevation.	Standard wood frame or slab on grade with elevation changes.	Slab on grade. No changes in elevation.
Wall Framing and Exterior Finish (14% of total cost)	Wood or steel, very irregular walls, stone veneer, many architectural doors and windows	masonry veneer, better grade doors	Wood or steel, several wall offsets, wood or masonry accents, good grade doors and windows.	Wood or steel, stucco or wood siding, some trim or veneer, average doors and windows.	Wood or steel, stucco or wood siding, few offsets, commodity grade doors and windows.	Wood or steel, stucco or hardboard siding, minimum grade doors and windows.
Roof (10% of total cost)	Complex plan, tile, slate or metal, highly detailed.	Multi-level, slate, tile or flat surface, decorative details.	Multi-pitch, shake, tile or flat surface, large closed soffit.	Wood trusses, tile or good shingles, closed soffit,	Wood frame, shingle or built-up cover, open 24" soffit.	Wood frame, composition shingle cover, open soffit.
Floor Finish (5% of total cost)	Terrazzo, marble, granite, or inlaid hardwood or best carpet throughout.	Marble or granite entry, hardwood, good carpet or sheet vinyl elsewhere.	Simulated marble tile entry, good carpet, hardwood or vinyl elsewhere.	Better sheet vinyl and average carpet, some areas with masonry or tile.	Good sheet vinyl and standard carpet, small area with tile or hardwood.	Composition tile or minimum grade sheet vinyl.
Interior Wall and Ceiling Finish (8% of total cost)	Plaster or gypsum wallboard with artistic finish, many offsets and wall openings, decorative details in nearly all rooms.	Plaster on gypsum or metal lath or 2 layers of 5/8" gypsum wallboard, decorative details, many irregular wall openings.	Gypsum wallboard with putty or texture coat finish, some irregular walls, decorative details in living room, entry and kitchen.	1/2" gypsum wallboard with textured finish, several irregular walls and wall openings, some. decorative details.	1/2" gypsum wallboard with textured finish, most walls are rectangular, doors and windows are the only openings.	1/2" gypsum wallboard, smooth or orange peel finish. Nearly all walls are regular, no decorative details.
Interior Detail (5% of total cost)	Exposed beams or decorative ceiling, 12' to 16' ceiling in great room, many sky widows, built-in shelving and alcoves for art.	Great room has 12' to 16' ceiling, most rooms have windows on two sides, formal dining area, several framed openings.	Cathedral ceiling at entry, one or more floor level changes, several wall openings or pass-throughs, formal dining area.	8' or 9' ceiling throughout, walk- in closet in master bedroom, separate dining area, some decorative wood trim.	8' or 9' ceiling throughout, sliding mirrored closet doors, standard grade molding and trim, breakfast bar or nook.	Drop ceiling in kitchen, other rooms have 7'6" to 8' ceiling, minimum grade molding and trim.
Bath Detail (4% of total cost)	Custom large tile showers, separate elevated spa in master bathroom.	Large tile showers, at least one bathtub, glass block or large window by each bath.	Tile or fiberglass shower, at least one built-in bathtub, window in bathroom.	Good plastic tub and shower in at least one bathroom, one small window in each bath.	Average plastic tub and shower in at least one bathroom.	Minimum plastic tub and shower in one bathroom.
Kitchen Detail (8% of total cost)	Over 30 LF of deluxe wall and base cabinets, stone counter top, island work area, breaktast bar.	Over 25 LF of good custom base and wall cabinets, synthetic stone counter top, desk and breakfast bar.	Over 20 LF of good stock wall and base cabinets, tile or acrylic counter top, desk and breakfast bar or nook.	Over 15 LF of stock standard grade wall and base cabinets, low-cost tile or acrylic counter top, breakfast nook.	Over 10 LF of stock standard grade wall and base cabinets, low-cost acrylic or laminated plastic counter top.	Less than 10 LF of low-cost wall and base cabinets, laminated plastic counter top, space for table.
Plumbing (12% of total cost)	4 deluxe fixtures per bathroom, more bathrooms than bedrooms.	4 good fixtures per bathroom, more bathrooms than bedrooms.	3 good fixtures per bathroom, as many bathrooms as bedrooms.	3 standard fixtures per bathroom, less bathrooms than bedrooms.	3 standard fixtures per bathroom, less bathrooms than bedrooms.	3 minimum fixtures per bathroom, 2 bathrooms.
Special Features (3% of total cost)	10 luxury built-in appliances, wet bar, home theater, pantry, wine cellar.	8 good built-in appliances, wet bar, walk-in pantry, central vacuum.	6 good built-in appliances, walk-in pantry, wet bar, central vacuum.	5 standard built-in appliances, sliding glass or French doors, laundry room.	4 standard grade kitchen appliances.	4 minimum grade kitchen. appliances.
Electrical System (10% of total cost)	Over 100 recessed or track lights, security system, computer network.	80 to 100 recessed lighting fixtures. security system, computer network.	Ample recessed lighting on dimmers, computer network, multiple TV outlets.	Limited recessed lighting on dimmers, multiple TV outlets.	12 lighting fixtures, switch-operated duplex plug outlets in bedrooms.	10 or less lighting fixtures, switch- operated plug outlets in most rooms.
If Exterior Walls are Masonry	Reinforced split face concrete block or brick with face brick veneer.	Reinforced block or brick with masonry veneer or stucco coat.	Textured or coated concrete block or good quality detailed brick.	Colored or coated concrete block or good quality brick.	Colored concrete block or painted common brick.	Painted concrete block or common- brick.

Quality Classification

Note: Use the percent of total cost to help identify the correct quality classification.

Manufactured Housing

Quality Classification

	Class 1 Best Quality	Class 2 Good Quality	Class 3 Average Quality	Class 4 Low Quality	Class 5 Lowest Quality
Design	Indistinguishable from site- built construction, good floor plan and sight lines, superior fit and finish	Comparable to site-built construction, good floor plan, shelves and alcoves, good fit and finish	Clearly manufactured housing but with good design and materials, adequate fit and finish	Mobile home design, utilitarian floor plan, commodity-grade materials	Poor design, often sold unfinished, common only in Sun Belt states
Roof (12% of total cost)	Complex roof line, 30-year architectural shingles, roof pitch at least 4" in 12", good overhang on all sides, R-38 insulation	Decorative roof line, gable accents, 25-year shingles, 4" in 12" pitch, 12" overhang on all sides, R-33 insulation	Gable accents, 25-year shingles, 4" in 12" pitch, 8" to 12" overhang front and back, R-21 insulation	Simple roof line, less than 4" in 12" pitch, small overhang front and back, R-19 insulation	Straight roof line, minimum pitch, little or no overhang, minimum roof cover, R-7 insulation
Exterior Walls (18% of total cost)	Good fiber-cement siding, 9' to 10' high, decorative trim, 6" exterior walls, R-19 insulation, 7/16" plywood sheathing	Painted fiber cement siding, 9' high, some trim, 6" exterior walls, R-15 insulation, 7/16" OSB sheathing	Good foam-backed vinyl siding, 8' to 9' high, 4" exterior walls, R-13 insulation, 7/16" OSB sheathing	Vinyl siding, 8' high, 4" exterior walls, R-11 insulation, 3/8" plywood sheathing	Hardboard or economy siding, 7' high, 4" exterior walls, R-7 insulation
Doors and Windows (9% of total cost)	Two 36" wide insulated steel panel exterior doors, solid core wood panel interior doors, good hardware, large insulated low-E vinyl sash windows, recessed entry	Two 36" wide insulated steel exterior doors, hollow core wood interior doors, good hardware, good insulated low-E vinyl sash windows, recessed entry	36" wide steel front door with deadbolt, hollow core wood interior doors, average hardware, insulated vinyl windows, recessed entry	36 ⁴ wide steel front door, hollow core wood interior doors, economy hardware, smaller dual glazed vinyl windows, 6 ⁴ sliding bedroom door	34" or 32" wide aluminum exterior doors, hollow core wood interior doors, economy hardware, aluminum windows with storm sash
Interior (5% of total cost)	Hardwood paneling or ½" gypsum board with good workmanship and trim throughout, coffered/ vaulted/beamed ceilings, plank-type acoustical tile, mirrored walls, built-in buffet cabinets, custom drapes, skylights, window sills, good drapes with sheers throughout	Pre-finished hardwood paneling and trim or ½" gypsum board in all rooms, vaulted/beamed, ceiling in main rooms, good floor to ceiling drapes over sheer underlays in living room and dining room, several wall mirrors, some acoustic treatments	Pre-finished and grooved hardwood, plywood paneling or ½" gypsum board, no exposed fasteners, coordinated drapes in all rooms except kitchen and baths, one vaulted ceiling, acoustic tile, pre-finished wood trim	Pre-finished fire rated plywood paneling or 3/8" gypsum board, some exposed fasteners, acoustical tile ceiling, economy drapes in living room, dining room, and bedrooms, vinyl on composition molding.	Stapled 3/8" vinyl- covered wallboard with battens at seams and corners, exposed fasteners or holding strips, unit may have been sold with interior finishing incomplete.
Floors (8% of total cost)	Hardwood or ceramic tile entry, 30-50 oz. carpet, good vinyl in utility and guest bath. Good vinyl or hardwood in kitchen.	26-30 oz. carpet with 1/2" pad in all rooms except guest bath and utility, vinyl in kitchen, utility, and guest bath	22-26 oz. carpet with 1/2" rebond pad in all rooms except baths and kitchen, vinyl in kitchen and baths	16- 22 oz. carpet with 5 lb. pad in living, dining and bedrooms, economy vinyl sheet or tile in other areas	Glued or stapled foam- backed carpet in living room and bedroom, economy vinyl elsewhere
Heating (7% of total cost)	110,000 BTU upflow air- condition-ready forced air furnace with exterior access door, metal ducting to all rooms, fireplace, dual-zone heating	80,000 to 110,000 BTU uptiow or downflow air- condition-ready furnace with exterior access door, metal ducting to all rooms, fireplace	80,000 BTU upflow or downflow forced air condition-ready furnace, ducting to all rooms, simulated fireplace	Forced air furnace, fiberglass attic ducting to all rooms, under-door return vents, ready for air conditioning unit.	Forced air furnace, minimum taped fiberglass duct, registers at the room center, return vents under doors
Kitchen (23% of total cost)	18± LF of 25" wide stone or ceramic counter, 4" splash, luxury cabinets, roller drawers, dropped luminous cerling, island work space, walk-in pantry, name-brand fixtures, cast iron sink, wet bar	16± LF of tile or Corian counter, 4" splash, quality wood cabinets, dropped luminous ceiling, island work space, walk-in pantry, good quality fixtures, stainless or integrated 8" deep sink	14± LF of Corian counter, 2" splash, average quality wood-face cabinets and hardware, built-in range and oven with hood and fan, pantry cabinet, 7" deep stainless or porcelain sink	12± LF laminate counter, smaller commodity-grade cabinets with wood raised panel doors, no lining, built-in range and oven, hood and fan, add for dishwasher if present	10± LF of 24" wide laminate counter, plastic-faced MDF cabinets, stapled and glued, economy range and oven, minimum grade sink and fixtures, add for dishwasher if present
Baths and Plumbing (14% of total cost)	2 to 2¾ baths, 8 fixtures, master bath with two basins, sunken 60" tub, fiberglass shower with glass door, quality medicine cabinets, 6± feet of mirror over 8± feet of cultured marble or ceramic tile lavatory top, decorative faucets, 40-gal. water heater, separate commode closet	2 baths, vent fans, master bath will have two basins, sunken 60" tub and stall shower, quality medicine cabinets and fixtures, cultured marble vanities, good cabinets, 60" one- piece shower in guest bath, 30- to 40-gallon water heater, separate commode closet	2 baths, vent fans, fiberglass shower with glass or plastic door, fiberglass 60" tub, acrylic round toilets, 6 to 8 LF cultured marble vanity in each bath, twin basin master bath with $4\pm$ foot mirror, good cabinets, 30- to 40-gallon water heater	1¾ baths, fiberglass shower with plastic door, fiberglass one-piece 54" tub, acrylic round toilets, 4 to 5 linear foot cultured marble vanity with single basin, average quality cabinets and hardware, 30-gallon water heater	1¾ baths, fiberglass 54" one-piece tub and shower with curtain, acrylic round toilets, small 4' plastic marble vanity, minimum quality cabinets and hardware, 20-gallon electric water heater, plastic supply and drain pipe
Bedrooms (4% of total cost)	9 to 14 linear foot floor-to- ceiling sliding mirrored wardrobe doors, or large walk- in closets, phone and cable TV jacks	9 to 14 linear foot floor-to- ceiling mirrored sliding wardrobe doors in master bedroom or walk-in closets, phone and cable TV jacks	10± linear foot wardrobe, floor-to-ceiling mirrored sliding doors in master bedroom, cable TV jacks	8± linear foot wardrobe, pre-finished and grooved plywood doors, mirrored wardrobe door in master bedroom	Five to six linear foot wardrobe, plain plywood sliding doors

16 Residential Structures Section

Manufactured Housing

A manufactured home is a structure in one or more sections intended to be delivered for erection as a unit on a construction site. No wheels, axles or towbars are included in these costs. Units can be from 8 to 36 feet wide and up to 80 feet long. Manufactured homes assembled from two or three sections are referred to as double wide or triple wide units. The cost FOB the manufacturer is usually about 2/3 of the installed cost. These figures include all costs: typical delivery to the site, setting on piers, finishing ("button up"), connection to utility lines, permits and inspections. Tip-out, expando, or tag-a-long units have one or more telescoping or attached rooms to the side. Include this floor area in your calculations. Do not use area modification factors for manufactured housing.

Estimating Procedure

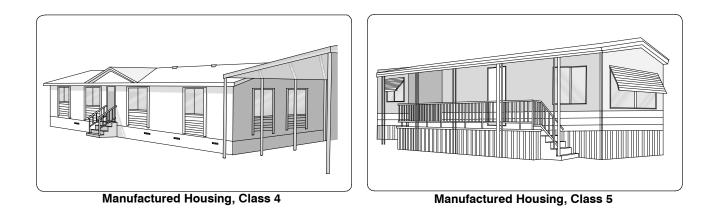
- 1. Establish the structure quality class by applying the information on page 16.
- 2. Multiply the structure floor area (excluding any garage or storage area) by the appropriate square toot cost below.
- 3. Add, when appropriate, the cost of a permanent foundation, air conditioning, built-ins, porch, skirting, tie-downs, carport, garage or storage building, screen walls and roof snow load rating. See the following page.

Quality Class	500	700	900	1100	1300	1500	1700	1900	2100	2300	2500
1, Best	164.11	162.04	160.07	157.97	155.96	153.94	151.95	149.84	147.89	145.87	143.82
1, & 2	154.47	152.45	150.44	148.50	146.38	144.30	142.22	140.32	138.23	136.26	134.18
2, Good	144.79	142.78	140.81	134.88	133.01	131.09	128.99	127.08	125.02	123.12	121.19
2&3	135.26	133.14	131.21	123.24	121.28	119.38	117.43	115.55	113.58	111.61	109.75
3, Average	126.09	124.15	121.95	114.56	109.43	107.47	105.69	103.81	101.91	100.07	98.19
3&4	117.99	115.93	114.01	106.89	101.91	100.07	98.19	96.28	94.39	92.51	90.60
4, Low Average	e109.86	107.92	105.83	99.11	94.39	92.51	90.60	88.70	86.90	85.00	83.12
4 & 5	103.30	101.17	99.25	92.76	88.28	86.41	84.55	82.66	80.82	78.94	76.97
5 Lowest	97.19	95.21	93.18	84.55	82.66	80.82	78.94	76.97	75.09	73.29	71.40





Manufactured Housing, Class 3



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Manufactured Housing

Additional Costs

Permanent Foundation, in place of setting on piers

Single Story

Less than 1,000 square feet of floor area

Over 1,000 square feet to 1,800 square feet of floor area

Over 1,800 square feet to 2,500 square feet of floor area

For two-story units, use the footprint of the first floor and select a figure higher in the range of costs. For difficult site conditions, such as a high water table, heavy clay soil, rock, over 3' foundation depth or a sloping site, use a figure in the higher range of costs.

Air Conditioning

Central air for use by existing furnace and due	cts \$3.600
2 ton, up to 1,100 S.F.	• •
2-1/2 to 3 ton, over 1,100 to 1,600 S.F.	\$4,130
4 to 5 ton, over 1,600 to 2,500 S.F. \$4,535	to \$5,340
Cost per unit	
Thru-wall small unit 1/2 H.P., 6,000 Btu	\$1,250
Thru-wall large unit 1 H.P., 12,000 Btu	\$1,660
Evaporative cooler, roof mounted \$1,180	to \$1,870
Wiring for air conditioning \$22	7 to \$478

Built-Ins

Dishwasher (included in classes 1, 2 & 3) \$970 - \$1,290 Garbage disposal (included in all base cost, deduct if \$200 - \$1,200 missing) \$540 - \$750 Built-in microwave oven Trash compactor \$880 - \$1,110 Wet bar (walk-up - if not included in class) \$770 - \$930 Wet bar (walk behind - if not included in class) \$2,540 -Separate shower in master bath \$880 - \$1,110 One-half bath: toilet, sink, and pullman \$1,740 - \$1,850 Bathroom sink or laundry sink \$370 Fireplace (permanent - includes flue) \$3,400 - \$4,600 Fireplace (free standing - includes flue) \$1,550 - \$2,770

Whirlpool tub in master bath

\$1,170 - \$1,475 \$1,420 - \$1,740

Porches and Decks (no roofs included)

Built-in buffet-hutch (included in classes 1 and 2)

Wood deck at home floor level with handrail, skirting, steps and outdoor carpet, per square foot of porch or deck \$20.20 to \$28.30

Skirting, cost per linear foot of skirt

Lightweight aluminum panels	\$7.05
Lap aluminum siding	\$12.55
Painted hardboard panels	\$16.30
Flagstone-type aluminum panels	\$12.60
Concrete composite panels	\$21.05 - \$26.30
Vinyl panels	\$14.00
Brick or stone	\$22.10

Storage Buildings, Garages, per S.F. of

floor

Aluminum exterior	\$21.42
Enameled steel exterior	\$16.89
Hardboard panel exterior	\$37.54
Figure the garage cost per SF at 2/3 of the h	iome cost per
SF.	

Tie Downs

Cork screw anchor and straps, per each \$108 - \$161

Steps and Rails, per flight to 36" high

Fiberglass steps Handrail

\$273 - \$427 \$62 - \$93

Carport, Porch, or Deck Roof, per S.F. covered

Aluminum supports and roof cover, free standing \$15.35 - \$20.60 Aluminum supports and roof cover, attached to house \$9.90 - \$14.45 Wood supports and enameled steel cover, free standing \$18.15 - \$22.60

Screen Wall Enclosure, per linear foot of 8' wall

Wood frame with screen walls and door\$71.00Wood or aluminum frame with screen and glass walls,
with door\$124.00

Roof Snowload Capability

Cost per square foot of roof	
30 pound design load	\$.78 - \$1.25
40 pound design load	\$1.24 - \$2.25
50 pound design load	\$2.25 - \$2.98
60 pound design load	\$2.97 - \$3.97
80 pound design load	\$3.76 - \$5.97
100 pound design load	\$4.95 - \$6.85
175 pound design load	\$6.28 - \$7.57

\$9,400 to \$16,500 \$16,500 to \$30,000 \$30,000 to \$49,400

Multi-Family Residences – Apartments

Quality Classification

	Class 1 Best Quality	Class 2 Good Quality	Class 3 High Average Quality	Class 4 Low Average Quality	Class 5 Minimum Quality
Foundation (9% of total cost)	Conventional crawl space built on a sloping site.	Conventional crawl space built on a sloping site.	Conventional crawl space, footing over 40" deep.	Concrete slab or crawl space with 30" footing.	Concrete slab.
Floor Structure (12% of total cost)	Engineered wood, steel or concrete exceeding code requirements, complex plan, changes in elevation.	Engineered wood or steel built to meet code requirements, changes in shape and elevation.	Standard wood frame with irregular shape and changes in elevation.	Standard wood frame or concrete slab, simple floor plan.	Simple slab on grade with no changes in elevation.
Walls and Exterior Finish (12% of total cost)	Complex wood or light steel frame, stone or masonry veneer, 10' average wall height.	Wood or light steel frame, masonry veneer at entrance, good wood or stucco siding.	Wood or light steel frame, decorative trim at entrance, plywood or stucco siding, simple framing plan.	Wood frame, some ornamental details at entrance, plywood or hardboard siding.	Wood frame, little or no ornamentation, inexpensive stucco or hardboard siding.
Roof & Cover (10% of total cost)	Complex roof plan, good insulation, tile or good shake cover.	Good insulation, good shake, tile or 5-ply built-up roof.	4-ply built-up roof, some portions heavy shake or tile.	4-ply built-up roof, some portions shake or composition shingles.	4-ply built-up roof or minimum grade composition single.
Windows and Doors (5% of total cost)	Many large, good quality vinyl or metal windows, architectural grade doors.	Large, good-quality vinyl or metal windows, commercial grade doors.	Good quality vinyl or metal windows, residential grade doors.	Standard residential- grade doors and windows.	Minimum grade doors and windows.
Interior Finish (8% of total cost)	Gypsum board with heavy texture or plaster, some paneled walls, cathedral ceiling at entry, built-in cases, several wall offsets and level changes.	Textured gypsum board, some paneled walls, decorative or stain grade trim at entrance or living room, several irregular walls and wall openings.	Textured 1/2" gypsum board, several irregular walls or wall openings, few ornamental details, standard grade trim and wall molding.	Textured 1/2" gypsum board, some wall-cover or hardboard paneling, most walls are rectangular, standard grade trim and wall molding.	1/2" gypsum board with smooth finish, no ornamental details, doors and windows are the only wall openings.
Floor Finish (5% of total cost)	Masonry or stone tile entry, good hardwood or deluxe carpet in most rooms, good sheet vinyl in other rooms.	Masonry or tile at entry, hardwood or good carpet in most rooms, sheet vinyl in other rooms.	Hardwood or tile at entry, standard carpet in most rooms, sheet vinyl in kitchen and bath.	Average quality carpet or hardwood in most rooms, sheet vinyl or resilient tile in kitchen.	Minimum carpet or resilient tile throughout.
Interior Features (5% of total cost)	Breakfast bar or nook, formal dining room, one walk-in closet, linen closet utility room or pantry.	Formal dining room ample closet space linen closet and utility closet, extra shelving.	Separate dining area, good closet space, linen closet and small utility closet.	Dining area is in the kitchen, small closet in each bedroom, linen closet.	Dining area is part of kitchen, minimum closet space, minimum shelving.
Bath Detail (4% of total cost)	Good tile shower, 8' simulated marble top.	Tile shower, 6' vanity cabinet and top.	Better vanity cabinet and good wall cabinet.	Good vanity cabinet, good medicine cabinet.	Vanity and one small medicine cabinet.
Kitchen (8% of total cost)	16 LF of better hardwood wall and base cabinets, synthetic stone top, 6 very good built-in appliances.	12 LF of good hardwood wall and base cabinets, tile or acrylic top, 5 good built-in appliances.	8 LF of standard hardwood wall and base cabinets, acrylic top, 4 standard grade built-in appliances.	6 LF of low-cost wall and base cabinets, laminate counter top, 4 standard grade appliances.	5 LF of low-cost. wall & base cabinets, laminate counter top, low cost appliances.
Electrical (10% of total cost)	Ample recessed lighting, task lighting in kitchen and bath, security & computer, networks, good chandelier.	Recessed lighting in most rooms, good task lighting in kitchen & bath, security & computer networks.	Recessed lighting in kitchen and living room, switched receptacles in bedrooms, wired for cable TV.	Low-cost recessed lighting in kitchen and living room, switched receptacles in other rooms, cable TV.	Fluorescent ceiling fixture in kitchen, switched receptacles in other rooms.
Plumbing (12% of total cost)	Four excellent fixtures per bathroom, copper supply and drain lines.	Three good fixtures per bathroom, copper supply and drain lines.	Three standard fixtures per bathroom, copper supply and plastic drain lines.	Three low cost fixtures per bathroom, plastic supply and drain lines.	Three minimum-grade fixtures per bathroom, plastic supply & drains.
Plumbing costs assume	e 1 bathroom per unit. See page	e 30 for the costs of additional	bathrooms.		
For Masonry Walls	Good textured block, tile or decorative brick.	Colored or detailed block tile or decorative brick.	Colored concrete block, tile or decorative brick.	Colored concrete block or brick.	Concrete block or common brick.
When masonry walls ar	e used in lieu of wood or light s	steel frame walls, add 9% to th	e appropriate S.F. cost.		

Note: Use the percent of total cost to help identify the correct quality classification. Exceptional class multi-family residences have architectural details and features uncommon in conventional apartment buildings. Many exceptional class multi-family structures are designed for sale or conversion to condominium ownership.

Multi-Family Residences – Apartments

4 to 9 Units

Estimating Procedure

- 1. Establish the structure quality class by applying the information on page 19.
- 2. Multiply the average unit area by the appropriate square foot cost below. The average unit area is found by dividing the building area on all floors by the number of units in the building. The building area should include office and utility rooms, interior hallways and interior stairways.
- 3. Multiply the total from step 2 by the correct location factor listed on page 7 or 8.
- 4. Add, when appropriate, the cost of balconies, porches, garages, heating and cooling equipment, basements, fireplaces, carports, appliances and plumbing fixtures beyond that listed in the quality classification. See the cost of these items on pages 27 to 31.
- 5. Costs assume one bathroom per unit. Add the cost of additional bathrooms from page 30.



Multi-Family, Class 3 & 4

Multi-Family, Class 3

Average Unit Area in Square Feet

Quality Class	400	450	500	550	600	650	700	750	800	900	1,000
Exceptional	264.63	252.93	246.49	241.29	236.67	232.94	230.18	226.97	224.87	220.54	217.01
1, Best	232.59	222.23	216.54	211.94	208.05	204.67	202.16	199.38	197.57	193.86	190.76
1, & 2	203.84	194.86	189.82	185.90	182.32	179.47	177.33	174.77	173.25	170.01	167.22
2, Good	178.41	170.55	166.20	162.59	159.61	157.07	155.13	152.88	151.47	148.70	146.29
2&3	163.23	155.96	152.07	148.76	145.97	143.64	141.95	139.89	138.69	135.96	133.95
3, Hi Average	149.31	142.79	139.02	136.03	133.37	131.38	129.86	127.86	126.90	124.34	122.57
3 & 4	137.95	131.78	128.30	125.58	123.33	121.40	119.82	118.05	117.18	114.93	113.00
4, Lo Average	127.30	121.60	118.68	116.01	113.85	112.01	110.57	109.14	108.19	106.09	104.35
4 & 5	117.53	112.35	109.58	107.12	105.07	103.45	102.26	100.77	99.86	97.97	96.45
5 Minimum	108.54	103.70	101.03	98.94	97.06	95.53	94.45	93.07	92.13	90.42	88.94

Average Unit Area in Square Feet

Quality Class	s 1,100	1,200	1,300	1,400	1,500	1,600	1,700	1,800	1,900	2,000	2,200
Exceptional	214.86	212.56	210.64	208.94	207.63	206.22	205.20	204.38	203.35	202.66	202.16
1, Best	188.65	186.75	185.01	183.53	182.45	181.19	180.30	179.50	178.59	178.06	177.63
1, & 2	165.49	163.70	162.30	160.94	159.88	158.85	158.12	157.42	156.65	156.18	155.72
2, Good	144.83	143.31	142.03	140.81	139.91	139.05	138.40	137.73	137.11	136.62	136.26
2&3	132.50	131.07	129.86	128.76	128.12	127.30	126.59	126.04	125.35	124.93	124.64
3, Hi Average	121.24	119.82	118.78	117.96	117.18	116.35	115.79	115.23	114.69	114.39	113.99
3 & 4	111.95	110.57	109.67	108.77	108.12	107.44	106.92	106.47	106.01	105.48	105.32
4, Lo Average	103.30	102.26	101.28	100.50	99.86	99.21	98.86	98.35	97.89	97.46	97.21
4&5	95.40	94.45	93.57	92.74	92.13	91.63	91.12	90.77	90.28	89.99	89.72
5 Minimum	88.10	87.23	86.38	85.62	85.13	84.64	84.19	83.87	83.43	83.02	82.92

Note: Work outside metropolitan areas may cost 2 to 6% less. Add 2% to the costs for second floor areas and 4% for third floor areas. Add 9% when the exterior walls are masonry.

Motels

	Class 1 Best Quality	Class 2 Good Quality	Class 3 Average Quality	Class 4 Low Quality
Foundation (4%) Foundation costs will vary	Concrete slab greatly with substrate, type, a	Concrete slab Ind location.	Concrete slab	Concrete slab
Framing* (20% of total Cost)	Wood frame.	Wood frame.	Wood frame.	Wood frame.
Windows (2% of total Cost)	Large, good quality.	Average number and quality.	Average number and quality.	Small, few, low cost.
Roofing (8% of total Cost)	Heavy, shake, tile or slate.	Medium shake or good built-up with large rock, inexpensive tile.	Wood or good composition shingle, light shake, or good built-up with rock.	Inexpensive shingles or built-up with rock.
Overhang (2% of total Cost)	36" open or 24" closed.	30" open or small closed.	16" open.	12" to 16" open.
Exterior Walls (10% of total Cost)	Good wood or stucco, masonry veneer on front.	Good wood siding or stucco with som e veneer.	Hardboard, wood shingle, plywood or stucco.	Low cost stucco, hardboard or plywood.
Flooring (5% of total Cost)	Good carpet, good sheet vinyl.	Good carpet, sheet vinyl or inlaid resilient,	Average carpet, average resilient tile in bath.	Minimum tile or low cost carpet.
Interior Finish (23% of total cost including inish carpentry, wiring, ighting, etc.)	Gypsum board with heavy texture or plaster with putty coat. Some good sheet wall cover or paneling.	Gypsum board, taped, textured and painted or plaster. Some wall- paper.	Gypsum board taped and textured or colored interior stucco.	Minimum gyp- sum board.
Baths (15% of total Cost)	Vinyl or foil wall cover, ceramic tile over tub with glass shower door, ample mirrors.	Ceramic tile over tub with glass shower door.	Plastic coated hard- board with low cost glass shower door.	Plastic coated hardboard with one small mirror.
Plumbing** (9% of total Cost)	Copper tube, good quality fixtures.	Galvanized pipe, good fixtures.	Average cost fixtures.	Plastic pipe, low cost fixtures.
Special Features (2% of total Cost)	8' sliding glass door, 8' to 10' tile pullman in bath.	8' sliding glass door, good tile or plastic top pullman in bath.	Small tile or plastic pullman in bath.	None.
*For Masonry Walls	reinforced masonry.	8" colored or detailed reinforced masonry. ame walls add 8% to the appropriat	8" colored block or common brick, reinforced. te cost	8" painted concrete block.
**Add the Following Kitchens	g Amounts per Kitchen Good sink, 8' to 10' of good cabinets and drainboard - \$4,300	Unit Average sink and 6' to 8' average cabinet and drainboard - \$3,940	Low cost sink, and 5' of cabinets and drainboard - \$2,840	Minimum sink, cabinets and drainboard - \$2,41
Add the cost of built-in ki		f costs for built-in appliances on pa		

Quality Classification

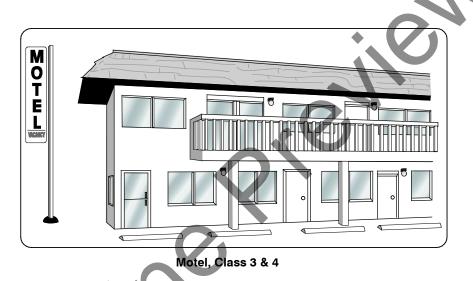
Note: Use the percent of total cost to help identify the correct quality classification.

Motels

9 Units or Less

Estimating Procedure

- 1. Establish the structure quality class by applying the information on page 23.
- 2. Multiply the average unit area by the appropriate cost below. The average unit area is found by dividing the total building area on all floors (including office and manager's area, utility rooms, interior hallways and stairway area) by the number of units in the building.
- 3. Multiply the total from step 2 by the correct location factor listed on page 7 or 8.
- 4. Add, when appropriate, the cost of heating and cooling equipment, porches, balconies, exterior stairs, garages, kitchens, built-in kitchen appliances and fireplaces. See pages 23 and 27 to 31.



Average Unit Area in Square Feet

Quality Class	; 200	225	250	275	300	330	375	425	500	600	720
1, Best	224.18	216.14	209.85	204.52	200.13	195.79	190.56	185.94	180.78	175.84	171.79
1&2	205.94	198.53	192.77	187.90	183.89	179.81	174.94	170.75	166.02	161.58	157.75
2, Good	191.09	184. 31	178.87	174.41	170.65	166.95	162.42	158.56	154.10	149.91	146.45
2&3	175.59	169.39	164.36	160.23	156.82	153.38	149.18	145.66	141.59	137.81	134.64
3, Average	162.96	157.14	152.57	148.70	145.49	142.29	138.48	135.09	131.38	127.83	124.92
3 & 4	149.57	144.24	140.02	136.47	133.57	130.61	127.05	124.08	120.55	117.35	114.59
4, Low	136.73	131.79	127.90	124.76	122.02	119.41	116.15	113.40	110.18	107.19	104.70

Note: Add 2% for work above the first floor. Work outside metropolitan areas may cost 2 to 6% less. Add 8% when the exterior walls are masonry. Deduct 2% for area built on a concrete slab.

Covered Porches

Estimate covered porches by applying a fraction of the main building square foot cost.

Porch Description	Suggested Fraction
Ground level floor (usually concrete) without banister, with no ceiling and shed-type roof.	1/4 to 1/3
High (house floor level) floor (concrete or wood) with light banister, no ceiling and shed-type roof.	1/3 to 1/2
Same as above with a finished ceiling and roof like the residence (most typical).	1/2
Same as above but partially enclosed with screen or glass.	1/2 to 2/3
Enclosed lean-to (sleeping porch, etc.) with lighter foundation, wall structure, interior finish or roof than that of house to which it is attached. Roofed, enclosed, recessed porch, under the same roof as the main building and with	1/2 to 3/4
the same type and guality foundation (includes shape costs).	3/4
Roofed, enclosed, recessed porch with the same type roof and foundation as the main building (includes shape costs). Good arbor or pergola with floor.	4/4 1/4 to 1/3

Uncovered Concrete Decks, cost per square foot, 4" thick concrete

	On Grade	1' High	2' High	3' High	4' High
Less than 100 square feet	\$11.71	\$16.37	\$26.34	\$37.01	\$53.82
100 to 200 square feet	10.77	14.77	21.35	30.04	40.01
200 to 400 square feet	9.05	11.71	18.32	26.62	34.45
Over 400 square feet	8.78	10.77	16.09	21.37	27.76

Uncovered Wood Decks, cost per square foot, 2" thick deck with typical steps and railing

1' to 4' above ground. Over 4' to 6' above ground Over 6' to 9' above ground Over 9' to 12' above ground Over 12' above ground	\$26.57 to \$28.51 31.24 to 40.32 32.55 to 42.11 33.87 to 44.75 35.49 to 46.40

Porch Roofs, cost per square foot based on wood shingle cover

Туре	Cost per Square Foot	Alternate Roof Covers	Cost Differe	ence per S.F.
Unceiled shed roof	\$9.70 to \$11.50	Corrugated aluminum	Deduct \$.	84 to\$1.05
Ceiled shed roof	16.33 to 18.41	Roll asphalt	Deduct .	83 to .92
Unceiled gable roof	10.89 to 14.15	Fiberglass shingles	Deduct 1.	03 to 1.14
Ceiled gable roof	18.40 to 20.49	Wood shakes	Add 1.	13 to 1.75
(See the figures at the right	for other roof cover)	Clay or concrete tile	Add 6.5	53 to 7.96
		Slate	Add 7.2	24 to10.01

Residential Basements, cost per square foot, including stairs

Size	Unfinished Basements	Finished Basements
Less than 400 square feet	\$33 to \$54	\$50 to \$75
400 - 1,000 square feet	25 to 36	41 to 46
Over 1,000 square feet	22 to 26	38 to 44

These basement costs assume normal soil conditions, 7' headroom, no plumbing, partitions or windows. Unfinished basements have reinforced concrete floors and concrete or concrete block walls, a floor drain, stairway with a landing and handrail, open ceilings and one switched light fixture. Finished residential basements have a tile ceiling, resilient flooring, wood panel walls and lighting similar to Class 5 residences. Residential basements are common in climates where footing depths must be 4' or more to prevent frost heaving. These figures assume the residence is in an area where minimum footing depth is 4 feet. Where climate doesn't influence footing depth, unfinished basement costs will be 20% to 50% higher.

Balconies, Standard Wood Frame, cost per square foot, including foundations

Supported by 4" x 4" posts, 2" wood floor, open on underside, open 2" x 4" railing. Supported by 4" x 4" posts, 2" wood floor, sealed on underside, solid stucco or wood siding on railing.	\$23.30 to \$25.10 27.60 to 29.70
Supported by steel columns, lightweight concrete floor, sealed on underside, solid stucco or	
open grillwork railing.	41.90 to 46.20

Heating and Cooling Equipment

Prices include wiring and minimum duct work.

Use the higher figures for smaller residences and in more extreme climates where greater heating and cooling density is required. Cost per square foot of heated or cooled area.

Туре		Perimeter	Outlets	Overhead Outlets
Central Ducted Air Systems, Single	Family			
Forced air heating	,	\$5.93 to	\$6.60	\$4.65 to \$5.33
Forced air heating and cooling		6.72 to	8.00	6.29 to 6.77
Gravity heat		4.31 to	5.80	_
Central Ducted Air Systems, Multi-F	amilv			
Forced air heating		5.24 to	5.66	4.92 to 5.65
Forced air heating and cooling		7.12 to	7.83	6.23 to 6.70
Motel Units				
Forced air heating		6.04 to	6.51	5.88 to 6.42
Forced air heating and cooling		7.25 to		7.01 to 7.26
Circulating hot and cold water syste	m	13.86 to		14.07 to 16.78
Floor and Wall Furnace	S, cost each	Electri	ic Baseboa	rd Units, cost each
Single fleer unit			to 0	4015 to 4050
Single floor unit Dual floor unit	\$1,140 to \$1,320 1,980 to 2,160	500 wat 1,000 wat	,	\$215 to \$252 331 to 380
Single wall unit	765 to 900	1,500 wat	,	363 to 410
Dual wall unit	1,395 to 1,650		,	460 to 530
Thermostat control, add	126 to 151	2,500 wat	,	540 to 606
		3,000 wat		660 to 720

Outside Stairways, cost per square foot of horizontal step area

Standard wood frame, wood steps with open risers, open on underside, open 2" x 4" railing, unpainted.	\$19.19 to \$21.12
Standard wood frame, solid wood risers, sealed on underside, solid stucco or wood siding on railing.	23.11 to 27.30
Precast concrete steps with open risers, steel frame, pipe rail with ornamental grillwork.	50.38 to 56.18

Electric vehicle (EV) charging station hookup. 220 volt Level 2 wall mounted NEMA 14-50 receptacle, 60 amp breaker and 10' of 6-gauge 3 conductor cable.

	\$ 000
32 amp	\$260
40 amp	290
50 amp	350
Add for Level 2 charging station, hard wired	830

Ductless mini-split heating and cooling unit. Includes pad-mounted compressor-condenser, 8' of insulated copper refrigerant lines, PVC condensate drain, control wiring, PVC wall chase, clamps, brackets, interior wall-mounted evaporator and wireless control.

9,500 BTU (3/4 ton, 110 volt) 18,000 BTU (1-1/2 ton, 230 volt) 24,000 BTU (2 ton, 230 volt) 42,000 BTU (3-1/2 ton, 230 volt, 5-zone)

Window Type or Thru-the-Wall

Refrigerated Room Coolers, cost each

1/3 ton	\$165 to \$205
1/2	590 to 720
3/4	297 to 357
1	363 to 430
1-1/2	515 to 610
2	880 to 1,050
Ton = 12,000 Btu	

28

Residential Structures Section

Electric Wall Heaters, cost each

500 watts 1,000 2,000 3.000	156	to to	\$186 190 216 244
Add for circulating fan Add for thermostat	203 86 57	to	126 126

\$1,130

1,420

1,780

5,730

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Appliances. Add these costs only when the appliance is not included in the quality class. Includes installation.

Built-in single wall oven with broiler	\$655 to	\$790	Range hood and fan	\$196 to \$	\$464
Built-in double wall oven with microwave	1,185 to	2,240	Franklin or Buck stove		
Drop-in range with single oven, economy	524 to	790	Steel, cast iron front	1,566 to 2	,370
Drop-in range with single oven, excellent	1,309 to	1,309 to 2,460 Steel, cast iron front, glass door		2,370 to 3	,280
Range top, four elements			All cast iron, glass panel door	4,070 to 5	,870
Residential grade, without grill	589 to	1,110	Under counter 5 CF refrigerator	726 to 1	,050
Residential grade, with grill	974 to	1,650	Central vacuum, 3 to 5 outlets 🔺	2,235 to 4	,470
Commercial grade	4,470 to	7,480	Dishwasher	357 to 1	,320
Hot water circulator	726 to	786	Garbage disposal	238 to	555
Instant hot water dispenser	595 to	840	Trash compactor	449 to	753

Fireplaces, cost each, including reinforced foundation, flue, cap, gas line and valve

Freestanding wood burning heat circulating prefab metal fireplace	1 Story	2 Story
with interior flue, base and cap	\$2,245	\$2,750
36" wide zero-clearance enclosed metal firebox, brick face, wood mantel	2,600	2,990
48" wide zero-clearance enclosed metal firebox, raised hearth, brick face and mantel	3,590	4,040
Masonry, 5' base, common brick or block on interior face, wood or brick mantle	5,730	6,480
Masonry, 6' base, used brick or natural stone on interior face, raised hearth	11,300	13,500
Masonry, 8' base, used brick or natural stone on interior face, raised hearth	13,600	19,900

Residential Garages and Carports

Attached and detached garages for single family dwellings usually fall in the same quality class as the main structure. Costs are per SF of floor based on wood or light steel construction. Add 8% if exterior walls are masonry. Attached garages assume a common roof and a 20 foot wall in common with the main structure. Multiply the square foot cost below by the correct location factor on page 7 or 8 to find the square foot cost for any garage. Costs include interior finish and one light fixture per 300 SF of floor. Deduct 10% to 18% if interior walls are unfinished. Where dwelling and exterior garage walls are in vertical alignment with second floor walls, the garage cost per SF will be about 2/3 of the main dwelling cost per SF if finished and 1/2 of the main dwelling cost if unfinished. Carports with wood or steel posts, an asphalt floor, and built-up or metal roof will cost \$15.80 to \$18.30 per SF.

Square Foot Area for Attached Garages for Single Family Dwellings

						•					
Quality Class	220	260	280	320	360	400	440	480	540	600	720
1, Luxury	193.29	184.17	180.29	174.64	168.06	163.89	158.98	155.07	151.23	147.46	143.80
1, & 2	167.69	159.92	156.71	151.53	146.35	142.70	138.46	135.02	131.65	128.39	125.19
2, Semi-Luxury	126.04	120.37	118.08	114.23	110.32	107.58	104.38	101.79	99.27	96.79	94.37
2&3	101.97	95.51	94.04	92.80	89.60	87.39	84.77	82.70	80.63	78.62	76.68
3, Best Std.	84.76	81.06	79.58	77.05	74.67	72.80	70.64	68.85	67.17	65.49	63.85
3&4	71.77	68.86	67.70	65.64	63.25	61.70	59.85	58.36	56.90	55.50	54.13
4, Good Std.	63.55	60.62	59.54	57.94	56.00	54.59	52.97	51.65	50.37	49.12	47.91
4&5	59.96	56.74	55.44	53.61	51.71	50.42	48.89	47.69	46.49	45.36	44.22
5 Avg. Std.	56.15	52.71	51.46	49.50	47.39	46.19	44.81	43.71	42.64	41.55	40.54
5&6	49.82	47.04	45.99	44.21	42.59	41.50	40.26	39.26	38.31	37.35	36.41
6, Min. Std.	43.65	41.39	40.73	39.39	37.88	36.93	35.85	34.94	34.05	33.24	32.39

Square Foot Area for Detached Garages for Single Family Dwellings

		-				-	-	-	-		
Quality Class	s 220	260	280	320	360	400	440	480	540	600	720
1, Luxury	219.86	203.20	197.15	186.62	182.92	177.14	169.42	165.22	161.11	157.11	153.21
1, & 2	189.43	175.64	170.03	161.33	158.41	153.37	146.72	143.06	139.50	136.02	132.65
2, Semi-Luxury	141.19	131.28	127.41	120.91	118.83	115.06	110.02	107.31	104.64	102.05	99.49
2&3	114.15	106.04	102.81	97.64	96.06	92.98	88.95	86.74	84.56	82.48	80.43
3, Best Std.	94.50	87.76	85.18	81.01	79.70	77.18	73.78	71.97	70.16	68.45	66.74
3&4	83.71	77.91	75.58	71.95	70.89	68.58	65.63	64.01	62.39	60.86	59.34
4, Good Std.	73.83	68.75	66.72	63.42	62.48	60.49	57.86	56.40	55.03	53.66	52.32
4&5	68.21	63.49	61.64	58.08	57.83	56.00	53.55	52.22	50.93	49.64	48.42
5 Avg. Std.	64.45	59.01	56.90	53.66	52.50	50.83	48.60	47.39	46.22	45.07	43.96
5&6	54.23	50.10	48.36	45.87	45.10	43.67	41.76	40.71	39.70	38.73	37.75
6, Min. Std.	47.24	43.64	42.40	40.23	39.68	38.43	36.75	35.85	34.93	34.04	33.24

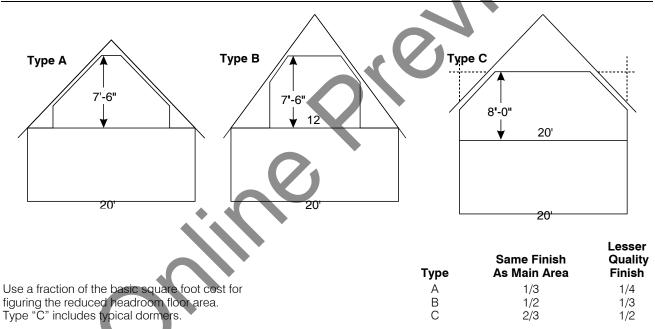
Residential Structures Section 29

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	3		5		
	Class 1 Best Quality	Class 2 Good Quality	Class 3 High Average	Class 4 Low Average	Class 5 Minimum Quality
2 or 3 units					
2 fixture bath	\$9,846	\$7,924	\$6,702	\$5,584	\$4,726
3 fixture bath	14,293	12,185	10,109	8,701	6,966
4 fixture bath	18,187	15,720	14,034	11,498	9,844
4 to 9 units					
2 fixture bath	9,088	7,534	6,297	5,262	4,338
3 fixture bath	12,860	11,170	9,614	7,993	6,431
4 fixture bath	17,796	15,068	12,457	10,380	8,575
10 or more units					
2 fixture bath	8,183	6,966	5,912	4,598	3,793
3 fixture bath	12,602	10,523	8,836	6,963	5,717
4 fixture bath	16,627	14,293	11,431	9,354	7,145

Costs for Multi-Family Residential Bathrooms beyond 1 per unit

Half Story Areas



Elevators, per shaft cost for car and machinery

Hydraulic based on two stops

100 F.P.M.	200 F.P.M.
\$50,800	\$83,800
54,100	86,400
56,800	93,800
	98,800
_	102,700
	\$50,800 54,100

Add for deluxe car, \$10,500. Add for each additional stop over 2: \$3,940, baked enamel doors \$10,790, stainless steel doors \$11,300.

Homes Raised on Piles or Columns

Concrete columns on driven piles Concrete columns on grade beams Braced timber piles or poured concrete columns

Electric based on six stops

200 F.P.M.	250 F.P.M.	300 F.P.M.
\$127,400	\$134,600	\$139,800
134,800	142,300	151,100
144,500	158,100	163,500
158,200	168,300	176,700
168,100	182,200	190,800
	\$127,400 134,800 144,500 158,200	134,800 142,300 144,500 158,100 158,200 168,300

Add \$8,990 for a deluxe car. Add \$9,800 for each additional stop over 6.

Add per SF of floor

\$27.40 plus \$1.13 per foot over 5' high \$12.20 plus \$0.84 per foot over 5' high \$3.90 plus \$1.13 per foot over 5' high

Multi-Family and Motel Garages Cost Per Square Foot

Garages built at ground level under a multi-family or motel unit. The costs below include the following components:

- 1. A reinforced concrete floor in all areas.
- 2. Exterior walls, on one long side and two short sides, made up of a wood frame and good quality stucco, wood siding or masonry veneer.
- 3. A finished ceiling in all areas.
- 4. The difference between the cost of a standard wood frame floor structure at second floor level and one at ground level.
- 5. An inexpensive light fixture for each 600 square feet.

Where no exterior walls enclose the two short sides, use $^{2}\!/_{3}$ of the square foot cost.

Garages built as separate structures for multi-family or motel units. The costs below include the following

components:

- 1. Foundations.
- 2. A reinforced concrete floor in all areas.
- Exterior walls on one long side and two short sides, made up of a wood frame and good quality stucco, wood siding or masonry veneer.
- 4. Steel support columns supporting the roof.

- A wood frame roof structure with composition tar and gravel, wood shingle or light shake cover. No interior ceiling finish.
- 6. An inexpensive light fixture for each 600 square feet.

Use the location modifiers on page 7 or 8 to adjust garage costs to any area.

Basement Garages

Costs listed below are per square foot of floor, including the horizontal area of stairs and the approach ramp. These costs assume a single-level garage is built on one level, approximately 5 feet below grade, directly below 2 to 4 story multi-family structure with perimeter walls in vertical alignment. These costs include:

- 1. Excavation to 5 below ground line.
- 2. Full wall enclosure.
- 3. Typical storage facilities.
- 4. Minimum lighting.
- 5. Concrete floors.

Use the location modifiers on page 7 or 8 to adjust garage costs to the site.

Ground Level Garages 1.200 Area 400 800 2,000 3,000 5,000 10,000 20,000 43.08 38.48 Cost 48.14 33.81 31.65 30.36 29.52 28.13 Separate Structure Garages

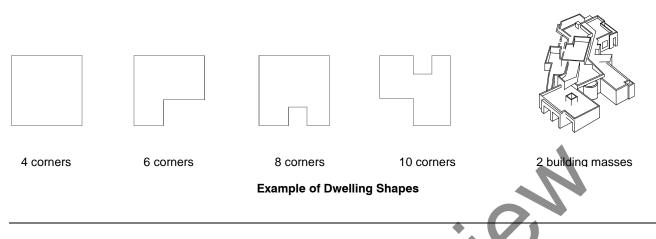
Area	400	800	1,200	2,000	3,000	5,000	10,000	20,000	
Cost	55.22	49.16	45.12	42.82	40.98	39.33	37.65	36.83	

Basement Garages

Туре	5,000	7,500	10,000	15,000	20,000	30,000	40,000	60,000
Reinforced concrete exterior walls and colum Flat concrete roof slab.	nns. 73.52	67.24	64.35	63.43	61.56	60.83	59.97	59.31
Concrete block exterior walls, reinforced concrete columns. Flat concrete roof slab.	73.08	68.48	64.01	62.25	60.94	60.12	59.25	57.29
Concrete block exterior walls, steel posts and beams, light concrete/metal roof fireproofed with spray plaster.	68.55	62.69	59.69	51.71	49.46	55.47	53.73	52.90
Concrete block exterior walls, wood posts and beams, light concrete/metal roof fireproofed with spray plaster.	61.17	58.11	54.50	50.76	49.16	48.49	47.71	46.84
Add for each security gate	4.46	3.25	2.74	2.03	1.71	1.39	1.20	1.06



Cabins and Recreational Dwellings



Cabins and recreational dwellings are designed for single family occupancy, usually on an intermittent basis. These structures are characterized by a more rustic interior and exterior finish and often have construction details which would not meet building requirements in metropolitan areas. Classify these structures into either "conventional type" or "A-frame" construction. Conventional dwellings have an exterior wall which is approximately 8 feet high on all sides. A-frame cabins have a sloping roof which reduces the horizontal area 8 feet above the first floor to between 50% and 75% of the first floor area.

Conventional recreational dwellings vary widely in quality and the quality of construction is the most significant factor influencing cost. Conventional recreational dwellings are listed in six quality classes. Class 1 is the most expensive commonly encountered and Class 6 is the minimum commonly encountered. Nearly all conventional recreational dwellings built from stock plans will fall into Class 3, 4, 5, or 6. For convenience, these classes are labeled *Best Standard, Good Standard, Average Standard* or *Minimum Standard.* Class 1 residences are labeled *Luxury.* Class 2 residences are labeled *Semi-Luxury.* Class 1 and 2 residences are designed by professional architects, usually to meet preferences of the first owner.

The shape of the outside perimeter also has a significant influence on cost: The more complex the shape, the more expensive the structure per square foot of floor. The shape classification of multiple story or split-level conventional recreational dwellings should be based on the outline formed by the outermost exterior walls, including the garage area, regardless of the story level. Most conventional recreational dwellings fall into Classes 3, 4, 5 or 6 and have 4, 6, 8 or 10 corners, as illustrated above. Small insets that do not require a change in the roof line can be ignored when evaluating the outside perimeter.

Class 1 and 2 *(Luxury and Semi-Luxury)* conventional recreational dwellings have more than ten corners and are best evaluated by counting the "building masses." A building mass is a group of contiguous rooms on one or more levels with access at varying angles from a common point or hallway. The illustration at the right above represents a conventional recreational dwelling with two building masses. Most Class 1 and Class 2 conventional recreational dwellings have from one to four building masses, ignoring any attached garage. For convenience, cost tables for Class 1 and 2 conventional recreational dwellings with one, two, three or four building masses have been appended to cost tables for Class 3, 4, 5 and 6 conventional recreational dwellings with 4, 6, 8 and 10 building corners.

Conventional recreational dwellings which have features of two or more quality classes can be placed between two of the six labeled classes. The tables have five half-classes (1 & 2, 2 & 3, etc.) which can be applied to conventional recreational dwellings with some characteristics of two or more quality classes. If a portion of a conventional recreational dwelling differs significantly in quality from other portions, evaluate the square footage of each portion separately.

Cabins and recreational dwellings are often built under difficult working conditions and in remote sites. Individual judgments may be necessary in evaluating the cost impact of the dwelling location. The costs assume construction by skilled professional craftsmen. Where non-professional labor or second quality materials are used, use the next lower quality classification that might otherwise apply. If the structure is assembled from prefabricated components, use costs for the next lower half class.

Conventional Recreational Dwellings

		Qual	ity Classii	ICation		
	Class 1 Luxury	Class 2 Semi-Luxury	Class 3 Best Std.	Class 4 Good Std.	Class 5 Average Std.	Class 6 Minimum Std.
Foundation (8% of total cost)	Reinforced concrete on a sloping site.	Reinforced concrete.	Reinforced concrete.	Reinforced concrete or concrete block.	Reinforced concrete or concrete block.	Wood piers, light concrete or block
Floor Structure (11% of total cost)	Engineered wood or steel, complex plan, elevation changes.	Engineered wood or steel trusses, good floor insulation.	Engineered wood or steel trusses, T&G sub-floor, good floor insulation.	Good wood frame with OSB sub-floor, some floor insulation.	Standard wood frame with OSB sub-floor, some floor insulation.	2" floor joists 16" on center with OSB sub-floor.
Wall Framing and Exterior Finish (14% of total cost)	Wood or steel, irregular walls, wood siding, stone, veneer, top-grade doors and windows	Wood or steel, irregular walls, wood siding, stone veneer, better doors and windows.	Wood or steel, several wall offsets, plywood or lap siding good grade doors and windows.	Wood or steel, shingle or plywood , siding, some trim or veneer, average doors and windows.	Wood or steel, wood panel siding few or no offsets, commodity grade doors and windows.	Wood or steel, panel hardboard siding, minimum grade doors and windows.
Roof (13% of total cost)	Complex, heavy tile or metal cover, highly detailed.	Multi-pitch, shake, metal or good tile surface.	Dual-pitch, wood single or tile surface, gable over entrances.	Wood trusses, wood or good fiberglass shingle surface.	Simple wood frame, fiberglass shingle surface.	Wood frame, fiberglass shingle or roll roofing cover.
Floor Finish (5% of total cost)	Stone or masonry tile entry, inlaid hardwood or best carpet throughout.	Masonry entry, good hardwood or carpet in most rooms, good sheet vinyl elsewhere.	Hardwood or tile entry carpet in most rooms sheet vinyl in kitchen and bathrooms.		Sheet vinyl or tile on most areas, carpet in living room.	Composition tile or minimum grade sheet vinyl.
Interior Wall and Ceiling Finish (8% of total cost)	Top-grade paneling or wallboard with artistic finish, many offsets and wall openings, decorative details in most rooms.	Good wood paneling or textured wallboard with decorative details in most rooms, many wall openings, several racks and shelves.	Good hardwood veneer paneling or gypsum wallboard, some irregular walls, decorative details in living room, entry and kitchen.	1/2" gypsum wallboard with smooth finish, plywood paneling. at entry and living room, some decorative details.	1/2" gypsum wallboard with smooth finish, most walls are rectangular, doors and windows are the only openings.	Taped 1/2" gypsum wallboard, smooth or orange peel finish. Nearly all walls are regular, few decorative details.
Interior Features (5% of total cost)	Exposed beams or decorative details, 10' to 14' ceiling in great room, many sky widows, built-in shelving.	Great room has exposed beams, most rooms have windows on two sides, several framed openings.	Cathedral ceiling at entry or in master bedroom, floor level changes, several wall openings or pass-throughs.	Cathedral ceiling in master bedroom, sliding glass door, decorative wood molding and trim.	Rustic exposed ceiling beams, sliding closet doors, standard grade wood molding and trim.	Minimum grade molding and trim.
Bath Detail (4% of total cost)	At least 1 large tile shower, good tile counter in master bath.	Tile in 1 bathroom, glass block or good window in each bath, good vanity cabinet.	Tile or fiberglass shower, at least one built-in bathtub, good window in each bath.		Average plastic tub and shower in at least one bathroom, small vanity cabinet.	
Kitchen Detail (8% of total cost)	Over 20 LF of good custom wall & base cabinets, synthetic stone counter top, island work area.	and wall cabinets,	12 to 15 LF of good stock wall and base cabinets, tile or acrylic counter top, desk and shelf or breakfast nook.	10 to 12 LF of stock standard grade wall and base cabinets, low-cost tile or laminated plastic counter top.	8 to 10 LF of stock standard grade wall and base cabinets, laminated plastic or resin coated hardboard top.	Less than 8 LF of low-cost wall and base cabinets, resin- coated hardboard counter top.
Plumbing (11% of total cost)	12 good fixtures, 2 water heaters, laundry room, copper piping.	10 good fixtures large water heater, laundry area, copper piping.	9 average grade fixtures, copper supply and plastic drain piping.	8 standard grade, fixtures, plastic supply and plastic drain lines.	7 low-cost fixtures, y plastic supply and plastic drain lines.	6 or less minimum grade fixtures, plastic supply and drain lines.
Special Features (4% of total cost)	10 deluxe built-in appliances, good weather-protection throughout.	7 good built-in appliances, good wall and ceiling insulation.	6 good built-in appliances, good wall and ceiling, insulation.	5 average built-in appliances, adequate wall and ceiling insulation.	4 standard grade kitchen appliances, adequate ceiling insulation.	3 minimum grade built-in kitchen appliances, limited insulation.
Electrical System (9% of total cost)	Ample area and track lighting in most rooms, task light in bathrooms.	Good area and track lighting, simple light fixture in each bathroom.	Good light fixtures in kitchen and baths, limited fixtures in other rooms.	Good light fixture in most rooms, switch-operated outlet in bedrooms.	Simple light fixture in most rooms, switch-operated plugs in bedrooms.	5 or less lighting fixtures, switch- operated plug outlet in most rooms.

Quality Classification

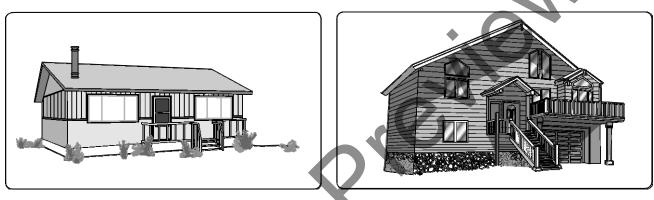
Note: Use the percent of total cost to help identify the correct quality classification.

Conventional Recreational Dwellings

4 Corners (Classes 3, 4, 5, and 6) or One Building Mass (Classes 1 and 2 Only)

Estimating Procedure

- 1. Establish the structure quality class by applying the information on page 33.
- 2. Multiply the structure floor area by the appropriate cost listed below.
- 3. Multiply the total from step 2 by the correct location factor listed on page 7 or 8.
- 4. Add, when appropriate, the cost of a deck or porch, paving, fireplace, garage or carport, heating, extra plumbing fixtures, supporting walls, half story areas, construction on hillside lots, and construction in remote areas. See page 42.



Conventional Recreational Dwelling, Class 5

Conventional Recreational Dwelling, Class 3

Quality Class	400	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400
1, Luxury	_	_	_	_	500.90	479.16	460.99	446.52	434.14	423.43	413.73
1, & 2		—		464.14	440.24	421.21	405.18	392.67	381.49	372.39	363.79
2, Semi-Luxury	/	-	435.56	407.38	386.31	369.64	355.59	344.79	334.87	326.82	319.16
2&3	_	409.03	378.02	353.50	335.07	320.75	308.41	299.37	290.38	283.42	277.01
3, Best Std.	341.66	306.46	283.26	264.89	251.17	240.30	231.11	224.25	217.69	212.39	207.57
3 & 4	312.25	280.11	258.75	241.98	229.53	219.64	211.38	204.93	199.03	194.17	189.71
4, Good Std.	285.36	255.93	236.61	221.12	209.85	200.71	192.99	187.29	181.79	177.56	173.41
4 & 5	263.34	236.08	218.23	204.15	193.56	185.24	178.06	172.82	167.60	163.70	160.03
5 Avg. Std.	242.84	217.78	201.42	188.23	178.56	170.81	164.28	159.32	154.79	151.10	147.54
5 & 6	224.03	201.00	185.70	173.66	164.67	157.58	151.58	146.94	142.84	139.21	136.13
6, Min. Std.	206.58	185.37	171.41	160.14	151.89	145.47	139.82	135.69	131.58	128.57	125.60

Square Foot Area

Square Foot Area

Quality Class	s 1,500	1,600	1,700	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200
1, Luxury	407.63	399.37	393.53	387.83	377.76	368.73	362.58	355.79	351.69	345.87	342.54
1, & 2	356.59	351.20	345.89	340.95	332.17	323.95	318.81	312.71	309.29	304.20	301.05
2, Semi-Luxur	y 314.22	308.34	303.58	299.27	291.64	284.18	279.87	274.50	271.39	267.02	264.22
2&3	272.41	267.54	263.41	259.59	252.90	246.60	242.72	238.17	235.48	231.59	229.19
3, Best Std.	204.29	200.39	197.35	194.58	189.60	184.84	182.05	178.36	176.44	173.61	171.66
3 & 4	186.53	183.17	180.40	177.81	173.11	168.87	166.22	163.16	161.24	158.56	157.01
4, Good Std.	170.50	167.46	164.77	162.53	158.28	154.20	151.92	149.12	147.49	144.94	143.44
4 & 5	157.27	154.37	152.23	149.80	145.90	142.33	140.24	137.48	136.05	133.70	
5 Avg. Std.	145.13	142.50	140.26	138.32	134.61	131.40	129.42	126.85	125.48		
5&6	133.90	131.45	129.43	127.67	124.32	121.20	119.34	116.96			
6, Min. Std.	123.59	121.25	119.41	117.66	114.61	111.80	109.99	_		_	

Note: Add 4% to the square foot cost for floors above the second floor level.

Conventional Recreational Dwellings

8 Corners (Classes 3, 4, 5, and 6) or Three Building Masses (Classes 1 and 2 only)

Estimating Procedure

- 1. Establish the structure quality class by applying the information on page 33.
- 2. Multiply the structure floor area by the appropriate cost listed below.
- 3. Multiply the total from step 2 by the correct location factor listed on page 7 or 8.
- 4. Add, when appropriate, the cost of a deck or porch, paving, fireplace, garage or carport, heating, extra plumbing fixtures, supporting walls, half story areas, construction on hillside lots, and construction in remote areas. See page 42.



Conventional Recreational Dwelling, Class 3

Conventional Recreational Dwelling, Class 1 & 2

Quality Class	400	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400
1, Luxury	_	_	_	—	525.41	500.57	482.31	468.64	455.35	445.46	435.15
1, & 2	_	_		483.67	461.77	440.24	423.93	412.01	400.30	391.66	382.57
2, Semi-Luxury	/		453.06	424.41	405.18	386.43	372.15	361.55	351.51	343.58	335.77
2&3	-	425.02	393.03	368.21	351.53	335.29	322.90	313.52	305.01	298.11	291.29
3, Best Std.	353.26	318.45	294.58	275.82	263.43	251.28	241.98	234.95	228.60	223.47	218.28
3 & 4	323.00	291.22	269.17	252.27	240.85	229.62	221.25	214.80	208.86	204.15	199.54
4, Good Std.	295.12	266.09	246.10	230.44	220.10	209.91	202.14	196.25	190.87	186.48	182.36
4 & 5	272.32	245.40	227.01	212.56	203.02	193.62	186.44	181.13	176.23	172.10	168.37
5 Avg. Std.	251.22	226.39	209.37	196.17	187.26	178.58	172.02	167.11	162.53	158.71	155.13
5 & 6	231.70	208.86	193.08	180.90	172.82	164.77	158.61	154.16	149.80	146.38	143.25
6, Min. Std.	213.70	192.68	178.13	166.90	159.32	151.92	146.37	142.26	138.32	135.16	132.17

Square Foot Area

Square Foot Area

Quality Class	s 1,500	1,600	1,700	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200
1, Luxury	428.58	420.37	414.11	409.96	398.69	390.13	383.50	377.42	373.02	366.86	363.41
1, & 2	376.68	369.64	364.18	360.38	350.47	342.65	337.20	331.75	330.31	322.48	319.55
2, Semi-Luxur	y 330.69	324.54	319.79	316.16	307.74	300.63	295.96	290.98	287.60	283.05	280.47
2&3	286.74	281.47	277.39	274.25	266.94	260.65	256.81	252.48	249.47	245.57	243.35
3, Best Std.	214.89	210.86	207.84	205.53	200.13	195.34	192.47	189.23	187.04	184.12	182.32
3&4	196.51	192.79	189.83	187.83	183.05	178.58	175.86	173.01	170.86	168.36	166.72
4, Good Std.	179.55	176.23	173.65	171.66	167.23	163.23	160.72	158.11	156.22	153.60	152.36
4&5	165.51	162.53	160.10	158.61	154.19	150.65	148.33	145.82	144.12	141.81	
5 Avg. Std.	152.72	149.84	147.72	146.08	142.29	138.90	136.92	134.51	132.93		
5 & 6	140.84	138.35	136.43	134.61	131.26	128.06	126.22	124.05			
6, Min. Std.	129.92	127.67	125.70	124.32	121.20	118.26	116.45	—	—	—	—

Note: Add 4% to the square foot cost for floors above the second floor level.

Quality Classification

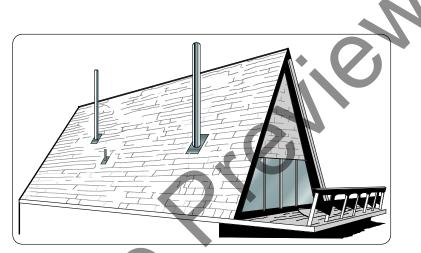
	Class 1 Best Quality	Class 2 Good Quality	Class 3 Average Quality	Class 4 Low Quality
Framing (10% of total cost)	Wood frame.	Wood frame.	Wood frame.	Wood frame.
Floor Framing (5% of total cost)	4" x 8" girders 48" o.c. with 2" T&G subfloor, or 2" x 6" to 2" x 8" joists 16" o.c. with 1" subfloor.	4" x 8" girders 48" o.c. with 1-1/4" plywood or 2" T&G subfloor, or 2" x 6" to 2" x 8" joists 16" o.c. with 1" subfloor.	4" x 6" girders 48" o.c. with 1-1/4" plywood or 2" T&G subfloor, or 2" x 6" joists 16" o.c. with 1" subfloor.	4" x 6" girders 48" o.c. with 1-1/4" plywood or 2" T&G subfloor, or 2" x 6" joists 16" o.c. with 1" subfloor.
Roof Framing (8% of total cost)	4" x 8" at 48" o.c. with 2" or 3" T&G sheathing.	4" x 8" at 48" o.c. with 2" or 3" T&G sheathing.	4" x 8" at 48" o.c. with 2" T&G sheathing.	4" x 8" at 48" o.c. with 1-1/4" plywood or 2" T&G sheathing.
Gable End Finish (5% of total cost)	Good plywood, lap board or board and batt.	Average to good plywood, or boards.	Average plywood, board or wood shingle.	Low cost plywood, shingle or composition siding.
Windows (2% of total cost)	Good quality large insulated wood or metal windows.	Average quality insulated wood or metal windows.	Average quality wood or metal windows.	Small glass area of low cost windows.
Roofing (10% of total cost)	Heavy wood shakes.	Medium wood or aluminum shakes.	Wood or composition shingles.	Low cost composition shingles.
Flooring (5% of total cost)	Good carpet or hardwood with sheet vinyl in kitchen and baths.	Average to good qua- lity carpet with good tile or sheet vinyl in kitchen and baths.	Average quality carpet with resilient tile in kitchen and baths.	Composition tile.
Interior Finish (25% of total cost including finish carpentry, wiring, lighting, fireplace, etc.)	Good quality hard- wood veneer paneling.	Good fextured gypsum wallboard, good plywood or knotty pine paneling.	Textured gypsum wallboard or plywood paneling.	Low cost paneling or wallboard.
Bathrooms (5% of total cost)	Two 3-fixture baths and one 2-fixture bath, good fixtures.	Two 3-fixture baths, good fixtures.	Two 3-fixture baths, average fixtures.	One 3-fixture bath.
Kitchen (5% of total cost)	15' to 18' good quality hardwood veneer base cabinet with matching wall cabinets. 15' to 18' of good quality plastic or ceramic tile drain board.	12' to 16' of hard- wood veneer base cabinet with match- ing wall cabinets. 12' to 16' of plastic or ceramic tile drainboard.	8' to 12' of average quality veneer or painted base cabinets with matching wall cabinets. 8' to 12' of plastic drainboard.	6' to 8' of minimum base cabinets with matching wall cabinets. 6' to 8' of minimum plastic drainboard.
Plumbing (15% of total cost)	Nine good quality fixtures and one larger or two 30 gallon water heaters. Copper supply piping.	Seven good quality fixtures and one water heater.	Seven average quality fixtures and one water heater.	Four low cost fixtures and one water heater. Plastic supply pipe.
Special Features (5% of total cost)	Built-in oven, range, dishwasher, disposer, range hood with good insulation, good lighting fixtures, insulated sliding glass door and ornate entry door.	Built-in range, oven and range hood, some insulation, 8' sliding glass door, average electric fixtures.	Drop-in range and hood, some insulation, low cost electric fixtures.	Minimum electric fixtures.

Note: Use the percent of total cost to help identify the correct quality classification.

4 Corners

Estimating Procedure

- 1. Establish the structure quality class by applying the information on page 38.
- 2. Multiply the structure floor area by the appropriate cost listed below.
- 3. Multiply the total from step 2 by the correct location factor listed on page 7 or 8.
- 4. Add, when appropriate, the cost of a deck or porch, paving, fireplace, garage or carport, heating, extra plumbing fixtures, supporting walls, half story areas, construction on hillside lots, and construction in remote areas. See page 42.



'A-Frame" Cabin, Class 3 & 4

Quality Class	s 400	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400
1, Best	279.33	252.04	233.08	219.16	208.27	199.66	192.55	186.61	181.58	177.14	173.34
1&2	256.66	231.59	214.17	201.33	191.43	183.29	176.93	171.45	166.78	162.80	159.27
2, Good	235.48	212.46	196.61	184.73	175.68	168.32	162.39	157.30	153.12	149.40	146.16
2&3	222.32	200.60	185.54	174.42	165.80	158.92	153.22	148.56	144.51	141.02	137.96
3, Average	210.60	190.04	175.77	165.20	157.01	150.51	145.13	140.66	136.92	133.57	130.71
3 & 4	191.14	172.49	159.45	149.94	142.55	136.65	131.80	127.70	124.24	121.21	118.68
4, Low	171.45	154.74	143.14	134.57	127.93	122.58	118.24	114.62	111.42	108.78	106.42

Square Foot Area

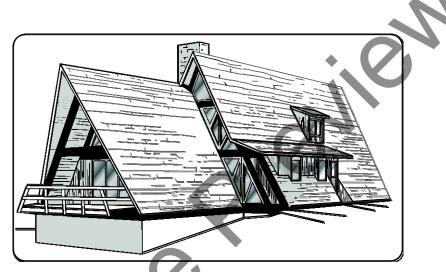
Square Foot Area

Quality Class	s 1,500	1,600	1,700	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200
1, Best	167.18	164.48	162.05	159.80	155.94	152.71	150.01	147.63	145.56	143.68	142.12
1&2	154.28	151.80	149.46	147.44	143.92	140.91	138.43	136.23	134.37	132.67	131.19
2, Good	142.35	139.98	137.91	136.00	132.77	130.05	127.71	125.71	123.89	122.37	121.04
2&3	135.12	132.89	130.92	129.16	126.01	123.47	121.21	119.32	117.63	116.19	114.85
3, Average	128.35	126.25	124.33	122.73	119.76	117.27	115.14	113.35	111.80	110.37	109.14
3 & 4	118.09	116.17	114.39	112.91	110.19	107.91	105.99	104.30	102.85	101.58	100.40
4, Low	105.66	103.57	102.50	101.05	99.76	97.73	95.95	94.41	93.12	91.94	90.92

6 Corners

Estimating Procedure

- 1. Establish the structure quality class by applying the information on page 38.
- 2. Multiply the structure floor area by the appropriate cost listed below.
- 3. Multiply the total from step 2 by the correct location factor listed on page 7 or 8.
- 4. Add, when appropriate, the cost of a deck or porch, paving, fireplace, garage or carport, heating, extra plumbing fixtures, supporting walls, half story areas, construction on hillside lots, and construction in remote areas. See page 42.



"A-Frame" Cabin, Class 2 & 3

Square Foot Area											
Quality Class	s 400	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400
1, Best	283.83	256.14	237.11	223.02	212.23	203.67	196.61	190.73	185.82	181.43	177.69
1&2	260.27	234.94	217.46	204.58	194.71	186.82	180.31	174.93	170.37	166.40	162.80
2, Good	239.10	215.78	199.77	187.89	178.77	171.55	165.66	160.67	156.50	152.88	149.74
2&3	225.81	203.72	188.55	177.38	168.87	162.05	156.41	151.70	147.68	144.36	141.36
3, Average	212.85	192.06	177.73	167.23	159.08	152.66	147.40	143.01	139.30	135.99	133.23
3&4	194.18	175.26	162.25	152.62	145.23	139.34	134.52	130.58	127.06	124.17	121.60
4, Low	173.82	156.86	145.17	136.65	130.05	124.78	120.42	116.84	113.75	111.10	108.80

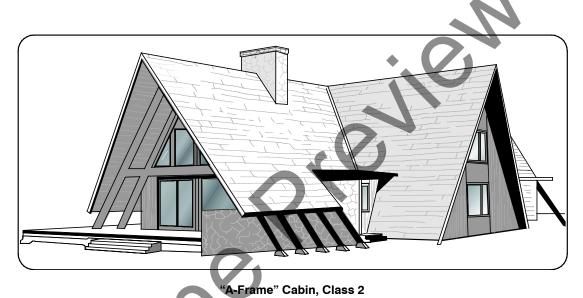
Square Foot Area

Quality Class	s 1,500	1,600	1,700	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200
1, Best	171.85	169.02	166.49	164.27	160.37	157.11	154.28	151.89	149.78	147.87	146.28
1&2	158.27	155.63	153.38	151.26	147.67	144.68	142.13	139.88	137.92	136.23	134.72
2, Good	146.01	143.60	141.52	139.61	136.29	133.51	131.16	129.11	127.31	125.73	124.31
2&3	138.56	136.29	134.26	132.44	129.35	126.69	124.39	122.52	120.84	119.28	118.01
3, Average	132.00	129.87	128.00	126.22	123.22	120.73	118.68	116.75	115.11	113.72	112.40
3 & 4	121.21	119.28	117.47	115.89	113.15	110.85	108.93	107.22	105.69	104.35	103.24
4, Low	107.89	106.27	104.84	102.30	100.24	98.51	96.89	95.62	94.37	93.33	91.92

8 Corners

Estimating Procedure

- 1. Establish the structure quality class by applying the information on page 38.
- 2. Multiply the structure floor area by the appropriate cost listed below.
- 3. Multiply the total from step 2 by the correct location factor listed on page 7 or 8.
- 4. Add, when appropriate, the cost of a deck or porch, paving, fireplace, garage or carport, heating, extra plumbing fixtures, supporting walls, half story areas, construction on hillside lots, and construction in remote areas. See page 42.



					1441010						
Quality Class	400	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400
1, Best	288.48	260.86	241.86	227.79	216.97	208.25	201.18	195.18	190.13	185.82	181.91
1&2	264.51	239.31	221.84	208.93	198.93	190.97	184.50	179.04	174.35	170.37	166.87
2, Good	242.54	219.35	203.40	191.51	182.43	175.12	169.09	164.09	159.90	156.22	152.92
2&3	228.90	207.03	191.94	180.75	172.16	165.22	159.61	154.88	150.89	147.40	144.38
3, Average	216.50	195.85	181.47	170.94	162.84	156.32	150.95	146.58	142.70	139.38	136.61
3 & 4	196.70	178.00	164.93	155.31	147.93	142.00	137.18	133.16	129.68	126.75	124.09
4, Low	176.36	159.47	147.83	139.24	132.64	127.30	123.00	119.32	116.22	113.56	111.25

Square Foot Area

Square Foot Area

Quality Class	s 1,500	1,600	1,700	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200
1, Best	176.21	173.40	170.84	168.62	164.68	161.39	158.56	156.23	154.11	152.31	150.74
1&2	159.33	156.73	154.43	152.37	148.84	145.89	143.36	141.23	139.30	137.71	136.15
2, Good	149.72	147.23	145.09	143.23	139.85	137.07	134.72	132.67	130.87	129.35	127.97
2&3	141.75	139.38	137.39	135.58	132.43	129.75	127.61	125.62	123.89	122.50	121.17
3, Average	135.02	132.79	130.84	129.11	126.11	123.64	121.54	119.71	118.09	116.62	115.38
3&4	123.85	121.82	119.99	118.45	115.68	113.40	111.47	109.79	108.34	107.04	105.87
4, Low	110.37	108.78	107.34	104.81	102.75	100.95	99.41	98.07	96.89	95.94	94.45

Cabins and Recreational Dwellings

Additional Costs

Half-Story Costs

For conventional recreational dwellings, use the suggested fractions found on page 30 in the section "Additional Costs for Residential Structures." For "A-Frame" cabins, use one of the following costs: A simple platform with low cost floor cover, minimum partitions, and minimum lighting costs \$69 to \$101 per square foot. Average quality half story area with average quality carpet, average number of partitions finished with gypsum wallboard or plywood veneer and average lighting costs \$101 to \$112 per square foot. A good quality half story area with good carpet, decorative rustic partitions, ceiling beams and good lighting costs \$133 to \$155 per square foot.

Decks and Porches, per square foot

2" wood deck with steps and railing (300 S.F. base)								
1' to 4' above ground	\$26.85 to \$31.51							
Over 4' to 6' above ground	31.20 to 40.43							
Over 6' to 9' above ground	32.66 to 42.81							
Over 9' to 12' above ground	33.85 to 44.82							
Over 12' above ground	35.68 to 46.36							

Fireplaces, 2-story, including foundation

Metal hood with concrete slab	\$3,010	to	\$3,756
Prefabricated, zero clearance	4,320	to	6,300
Simple concrete block			8,670
Concrete block with stone facing	6,920	to	10,500
Simple natural stone	11,900	to	17,200

Extra Plumbing, cost each \$1,680 to \$2,4 Lavatory Water closet or bidet 2,050 to 2.516Tub and shower 160 to 2.880 1.612 to Stall shower 2,350 Laundry or utility sink 1.390 75 to

Supporting Wall Costs

Heating, cost each

Wall furnace, 35,000 Btu	\$1,438
Wall furnace, 65,000 Btu	1,764
Baseboard hot water, per SF*	5.6
Central heating, perimeter ducts, per S.F.*	7.90
*Cost is per SF of floor area heated.	

Garages, Carports and Basements

For garage, carport and basement costs for conventional recreational dwellings, see pages 27 and 29.

Flatwork, per square foot

Asphalt paving	\$5.70 to \$8.53
4" concrete	5.84 to 8.90
6" concrete	6.16 to 9.00

Reinforced concrete walls, per C.F.

Formed one side only	\$24.30 to	\$28.12
Formed both sides	30.80 to	34.60

Cabins and recreational dwellings built on sloping lots cost more than if they are built on level lots. The cost of supporting walls of a building that do not enclose any living area should be estimated by using the figures below. These costs include everything above a normal foundation (12" to 18" above ground) up to the bottom of the next floor structure where square foot costs can be applied. In addition to the cost of supporting walls, add the cost of any extra structural members and the higher cost of building on a slope. A good rule of thumb for this is to add \$960 for each foot of vertical distance between the highest and the lowest points of intersection of foundation and ground level.

Wood posts, per foot of height

4" x 4"	\$2.59 to \$4.20
4" x 6"	4.20 to 7.10
6" x 6"	5.40 to 10.10
8" x 8"	12.10 to 19.90
10" x 10"	22.50 to 32.20
12" x 12"	33.80 to 46.80

Brick, per square foot of wall

8" common brick	\$43.50	to	\$53.10
12" common brick	65.70	to	82.60
8" common brick, 1 side face brick	55.00	to	67.90
12" common brick, 1 side face brick	85.05	to	107.00

Reinforced concrete block,

per square foot of wall

8" natural	\$11.60	to	\$14.10
8" colored	15.90	to	19.00
8" detailed blocks, natural	13.10	to	17.30
8" detailed blocks, colored	18.10	to	20.50
8" sandblasted	13.90	to	16.54
8" splitface, natural	12.00	to	14.20
8" splitface, colored	17.70	to	21.30
8" slump block, natural	12.90	to	16.10
8" slump block, colored	17.80	to	20.80
12" natural	22.80	to	25.20

Life in Years and Depreciation for Residences

Quality Class	1	2	3	4	5	6
Single family residences	70	70	70	60	60	55
Manufactured housing	55	50	45	40	30	
Multi-family residences	60	60	55	55	50	
Motels	60	55	55	50		
Conventional recreational dwellings	70	60	60	55	55	50
A-frame cabins	60	55	55	50		

This table shows typical physical lives in years in the absence of unusual physical, functional or economic obsolescence. Raise half classes to the next higher whole class.

To Find the Present Value of an Existing Residence

Present value is the replacement cost less depreciation (inverse of the "% Good" column below). Multiply the appropriate figure in the "% good" column by the current replacement cost developed using this manual to find the present value. For newer residences, the chronological age ("Age" column) is usually the best indicator of percent good. The present value of older residences may be influenced more by physical, functional or economic obsolescence than by age. When physical, functional or economic conditions limit or extend the remaining useful life of a residence, estimate that life in years and use the "Rem. Life" column (rather than the "Age" column) to find the percent good.

	20 \	'ears	25 V	/ears	30 \	Y ears	40 \	/ears		45 V	ears	50 \	(ears	55 \	/ears	60 \	/ears	70 V	'ears
	Rem.	6413 %	Rem.		Rem.		Rem.			Rem.	cais %	Rem		Rem.		Rem		Rem.	
Age	Life	Good		Good		Good		Good	Age	Life		Life			Good		Good		Good
0	20	100	25	100	30	100	40	100	0	45	100	50	100	55	100	60	100	70	100
1	19	94	24	95	29	96	39	98	2	43	97	48	97	53	98	58	98	68	99
2 3	18 17	88 81	23 22	90 86	28 27	93 89	38 37	96 94	4	41 39	93 89	46 44	94 91	51 49	96 94	56 54	96 95	66 64	98 98
4	16	75	21	81	26	86	36	94 92	8	37	85	44	88	49	94 91	52	93 92	62	96 96
5	15	69	20	77	25	82	35	90	10	35	81	39	85	45	88	50	90	60	94
6	14	63	19	72	24	79	34	87	12	33	77	38	82	43	85	48	87	58	92
7	13	59	18	68	23	75	33	84	14	32	73	36	78	41	82	46	85	56	91
8 9	12	57 55	17 16	63	22 21	71 67	32 31	82 80	16 18	30 28	69	35 33	74 70	40 38	79 76	45	83	54 52	89 87
9 10	11 11	53	16	60 58	21	67 64	30	77	20	28 26	65 60	33 31	70 67	38 36	78	43 41	80 77	52 50	87 84
11	10	50	15	56	19	60	29	74	22	24	58	29	63	34	70	39	74	48	82
12	9	48	14	54	19	59	28	72	24	23	56	28	60	32	67	37	71	46	80
13	8	46	13	53	18	57	27	70	26	22	54	26	58	31	64	35	68	44	77
14	7	44	12	51	17	56	27 26	67	28	20	52	24	56	29	61	34	65	42	74
15 16	7 6	42 40	11 11	49 48	16 15	54 53	26	65 62	30 32	18 17	50 48	23 21	54 53	27 26	58 56	32 30	63 61	40 38	73 71
17	5	38	10	46	-14	52	24	60	34	15	47	20	51	24	55	29	60	36	70
18	5	36	9	44	13	50	23	59	36	14	45	18	49	23	53	27	58	34	68
19	4	33	8	43	13	49	22	58	38	12	43	17	47	21	51	26	56	32	66
20	4	31	7	41	12	47	21	58	40	11	41	16	45	20	50	24	55	30	65
21 22	3 3	29 27	7 6	39 37	11 11	46 44	21 20	55 54	42 44	10 9	39 37	14 13	44 42	19 17	48 46	23 21	53 51	28 26	63 61
23	3	25	6	35	10	43	19	53	44	8	35	12	42	16	40	20	50	25	60
24	3	23	5	34	9	42	18	52	48	7	33	11	38	15	43	19	48	23	58
25	2	21	5	32	9	40	17	51	50	6	31	10	37	14	41	18	46	21	56
26	2	19	4	30	8	39	17	50	52	5	29	9	35	12	40	16	45	19	55
27 28	2 2	16 14	4 4	29 27	7 7	37 36	16 15	49 48	54 56	5 4	28 26	8 7	33 31	11 10	38 36	15 14	43 41	18 16	53 51
20 29	2	12	4	25	6	30 34	14	40 47	58	4	20 24	6	30	9	35	13	41	15	50
30	1	10	3	24	6	33	14	46	60	3	22	5	28	8	33	12	38	14	47
31	_	-	3	22	5	31	13	45	62	3	20	4	26	7	31	11	36	12	45
32	-	-	3	20	5	30	12	44	64	3	17	4	24	6	30	10	35	11	44
33	-	_	2	18 17	5	29	12	43	66	2	16	3	22	5 5	28	9	33	10 9	42
34 35	_	_	2 2	17	4 4	27 26	11 11	42 41	68 70	2 2	14 12	3 3	21 19	5 4	27 25	8 7	32 30	9	41 38
36	_	_	2	13	4	20	10	40	70	1	10	2	13	4	23	6	28	8	36
38	_	-	1	10	3	21	9	38	74	_	_	2	15	4	21	5	26	7	34
40	-	-	-	-	2	19	7	35	76	-	-	2	14	3	19	5	24	7	32
42	-	-	-	-	2	16	6	33	80	-	-	1	10	2	17	4	22	7	28
46 50	-	-	-	_	1	10	5 4	29 25	82 84	-	_	-	-	2 1	15 13	3 2	18 16	6 5	25 22
50 55	_	_	_	_	_	_	4	25 20	84 96	_	_	_	_	 _	13	2	10	э З	22 14
60	_	_	_	_	_	_	2	14	98	_	_	_	_	_	10	_	_	2	13
64	_	_	-	-	-	-	1	10	100	-	-	-	-	-	-	-	-	1	11

Residential Structures Section 43

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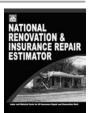
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