

Fiscal Impact Analysis and proposal for adoption of the 2018 International Residential Code, as Amended by the State of Indiana, as the 2020 Indiana Residential Code.

Statement of need:

This proposed rule amends the 2018 International Residential Code (IRC) for adoption as the 2020 Indiana Residential Code (InRC) with an approximate effective date of March 1, 2020. Amended twice and over thirteen years old, the current 2005 Indiana Residential Code, based on the 2003 International Residential Code, does not reference new technologies, safety products and other products that are available for new homes. New expanded tables and text in the 2018 IRC make the code a more user-friendly document allowing the user to find answers easier. The review committee for this proposed rule estimates the rule will affect 14,068 new homes/owners and all builders of new homes in the State of Indiana. Architects, engineers, fire safety officials, homebuilders and building safety officials populated the review committee for the proposed rule.

A secondary effect of the adoption of a new residential code will also allow local jurisdictions to receive higher Insurance Services Organization (ISO) ratings that will allow for reduced insurance rates for homeowners. This issue has plagued local building departments for over seven years because of the old code and has kept rating scores for the local departments unnecessarily low. In addition, disaster mitigation authorities estimate that for every dollar of preventative construction saves up to eleven dollars in disaster mitigation. The inclusion of flood resistant construction in the rule (already a requirement for structures in flood-prone areas but previously not included in the residential code text) will aid in reducing disaster costs. The 2018 IRC also includes upgraded framing requirements that will result in structures that are more resilient.

The proposed new code is also in response to the legislative mandate of the 2018 Senate Bill 393 (IC 22-13-2-2.5) which requires the Fire Prevention and Building Safety Commission to adopt a new Indiana Residential Code by January 1, 2020.

There is no federal requirement for this proposed rule or alleged market failure.

The compliance of Class 2 structures with the commission's rules is the responsibility of local jurisdictions so the impact on state government will be minimal.

The fiscal impact on local governmental units will include the cost of at least two codebooks at \$108.00 each, \$216.00. Inspection costs will not increase since inspection programs are already in place and the code will not require ~~and~~ any additional inspections. Costs for training vary as some jurisdictions may provide any needed training in house. Inspection and record retention programs will not need to change so administrative costs to local jurisdictions are not expected to increase.

See exhibit #1 for cost analysis. The analysis is based on the change in cost for a minimum single-family dwelling. The review committee set the following parameters to use when applicable for the cost analysis: 14,068 single family dwellings of which one-third are slab-on-grade foundations, one-third crawlspace foundations and one-third basement foundations. One-story structures make up thirty percent of the total and the other seventy percent are two-story structures for the analysis. The study makes assumptions in other areas based on actual and anticipated construction trends. The basis of this analysis of costs in residential construction is the minimum requirements of the code and, because of the innumerable variations available to homeowners, cannot be scientific in nature. Many changes in

the code that both increase and decrease costs may not apply to some, if any, structures. For instance, the southern yellow pine tables in the 2005 InRC are outdated (newer tables show about an 8% reduction in load bearing capacity) but designers and lumber estimators have been using the newer tables for years so in effect the 2018 requirements have been in use even though the 2005 InRC tables have not been updated. In addition, the reduction has not been significant enough to require lumber sizes to have to change in most instances for floor joists, rafters, ceiling joists and studs. Some of the other lumber species have stayed the same, or increased, their load bearing capacity is in the tables. This analysis only shows cost impact if the reduction would require increased lumber size that in most cases has not happened. However, the review committee considered changes that will apply to every single-family dwelling or previously mentioned type of single-family dwelling; the study addresses these changes and related costs. A major change between the 2005 IRC and the 2018 IRC is that the 2005 requires at least one room to be one hundred twenty square feet in size. The 2018 does not have that requirement and requires only seventy square feet in minimum room size, a change that allows dwellings to be, by code, fifty square feet smaller than is now required. This situation highlights the difficulty with providing an analysis of costs when reviewing a construction code. While the code states a dwelling can be fifty square feet smaller, homeowners will probably not want that small of a room for the primary living area room, but to what extent the room will be larger than the minimum code requirement will vary in almost every instance depending on the homeowners' desires. The attached analysis will show the estimated reduced cost of the dwelling according to the code text. The analysis also shows anticipated increases in costs based on estimated construction trends. These estimated increases are probably in excess of actual costs that will happen in the field when the proposed rule is adopted. The analysis does not show all the possible changes between the 2005 InRC and the proposed 2020 InRC but does cover the anticipated major cost increases and decreases between the two codes.