

## **Innovative Solutions from Other Cities**

### **1. Katrina cottages**

Katrina cottages were designed as an alternative to the American Federal Emergency Management Agency (FEMA) trailer (which is similar to industrial trailers used in Alberta). The Katrina Cottage is a detached dwelling that is safe, affordable and can be built quickly, while maintaining a reasonable visual appearance. They range from 300 to 1800 square feet in size.

The popularity of Katrina cottages became publicised when the plans and building material packages became available throughout the United States for retail purchase at a major American home improvement store. The success of the Katrina cottage for personal purchase was short lived. When the uptake did not meet the projected sales, the line was discounted and eventually discontinued.

The main benefit to prefabricated cottages was the standardised appearance. It was known in advance how they would look. The price and time to construct the cottages are not as affordable and efficient as originally thought. Research has shown that time from design to contract to delivery can be up to 10 to 12 weeks. Information from local manufacturers of prefabricated cottages indicate that the cost is not that much different from conventional homes but the gain is the onsite work is done much faster. It is estimated their packages range from \$250 to \$300 per square foot when everything is included.

The application of Katrina type cottages could have merit in Calgary. These prefabricated cottages are designed to be permanent and should be evaluated as such when an application comes in. The prefabricated cottages could be used in the following three ways:

- i) Temporary home: Rebuilding of a house can take months or in some cases years. A prefabricated cottage could be purchased and installed on the rear of a property. This would provide the homeowner an opportunity to live in the cottage, in their neighbourhood while their principal dwelling was rebuilt. Technically if the primary dwelling unit was being rebuilt the cottage would be classified as a Secondary Suite - Detached Garden, and would be required to meet the related rules in the LUB.
- ii) Secondary Suite: A prefabricated cottage may provide a landowner who is contemplating developing a Secondary Suite with a simpler design solution. The homeowner could select a cottage of choice, obtain the appropriate permits and have the building assembled at the rear of the parcel.
- iii) Clustered together on a large site: These units could be purchased and built on a large parcel to create a village atmosphere.

### **2. Container housing**

Container housing is an emerging form of housing that involves the stacking of shipping containers that are repurposed into self-contained units with approximately 300 square feet of living space.

Container housing could be used in Calgary provided the placement and density of the development met the rules of the Land Use Bylaw, Alberta Building Code and Alberta Fire

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Code. Professional involvement for structural, fire protection, separation, detection and egress would be required.

An affordable housing development for women was created in Vancouver using container housing. The containers were stacked three high providing 12 self-contained units measuring 325 square feet each. Each unit has its own private bathroom, kitchen and in-suite laundry.

The cost was \$82,500 each to build, or \$254 a square foot not including land.

#### **3. Retrofit existing buildings with housing options**

Existing buildings such as office towers or surplus schools have been converted into multi-family residential buildings in various locations, including Edmonton and Vancouver, as well as throughout North America. This option is generally successful in areas experiencing an economic downturn with high vacancy rates in office buildings and surplus school sites. The uptake for this in Calgary is more than likely little to none because of low vacancy rates in office and high land values on surplus school sites. This has occurred on occasion in Calgary in the past, but tends to be higher end housing (warehouse/loft conversion in Beltline, conversion of institutional buildings, etc.)

#### **4. Inclusionary Zoning**

Inclusionary zoning is an American term that usually means a municipality requires that a given share of new construction must be affordable for people with low to moderate incomes. American zoning, and the statutory authority given to many U.S. cities to manage rent, is different from the system of 'Land Use' which is used in Alberta.

This is typically done by placing a restrictive covenant (deed restriction) on a percentage of new dwelling units to require the rental cost to be geared to lower-income households. While this can be a tool to provide a wider range of housing options, it may negatively impact the supply of rental housing through pricing controls. Many inclusionary zoning programs prevent or limit price appreciation, control the types of units that can be considered 'affordable', and often require a municipality to play an on-going role in the definition of 'affordable' and determining who would qualify.

The goal of inclusionary zoning is to incorporate households of different economic stature into the same community; however, through gentrification, the opposite can often occur where older buildings are no longer seen as profitable, are demolished and replaced with much higher priced units and a small percentage of affordable ones. This may increase the disparity between economic classes and further pushes affordable housing to the minimum requirement.

The City of Calgary does not have the authority to control the rent or sale price of dwelling units, or the type of tenancy (rental or owned). It does have authority to control many of the physical aspects of housing, such as minimum or maximum floor area of individual dwellings, and type of dwelling, such as apartment, or detached. It also has the authority to regulate the timing, location and phasing of construction. The City can require multi-residential development to be mixed with low density development to a greater degree than it does currently, or some forms of new development to be constructed prior to other forms, such as requiring multi-residential development to be constructed prior to single detached development.