Title: Tall Tales of Transformation: Height Alterations

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Subjects: Architectural/Design
          Construction
          Structural Engineering

Keyword: Height

Publication Date: 2023

Original Publication: CTBUH Journal 2023 Issue IV

Paper Type: 1. Book chapter/Part chapter
            2. Journal paper
            3. Conference proceeding
            4. Unpublished conference paper
            5. Magazine article
            6. Unpublished

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Tall Tales of Transformation: Height Alterations

Even after construction has commenced, it is not uncommon for alterations to be made to a tall building’s design, which can result in subsequent changes in the building’s planned architectural height. Evolving pressures from economic conditions, aviation considerations, design preferences, and an enhanced focus on sustainability have reduced the anticipated height of some of the world’s tallest planned buildings. Conversely, new heights have been reached on existing buildings, where the original structure has been expanded upon to intensify the density of the site.

This data study explores 35 buildings that have undergone height changes of 50 meters or greater after construction has commenced, and compared against the original anticipated architectural height prior to redesign or renovation. Explore the interactive version of this data study by scanning the QR code or visiting: skyscrapercenter.com/tall-transformations

The Most Significant Height Changes
The graphic skylines represent the five buildings that have undergone the largest height decreases (this page) and increases (opposite page).

Most height increases occurred after the completion of the original design. Only 6 of the increases (38 percent) happened during the active construction period of the original design. More than half of the tall buildings that have had a height cut of 30 percent or greater have had construction put on hold indefinitely.
Tracking Changes in Architectural Height
The below tables track the degree to which heights of the tall buildings have changed, by height in meters (left) and by proportion (center and right), compared against the original anticipated architectural height prior to redesign or renovation. While the largest differences in height were experienced by buildings that underwent reductions, buildings that experienced increases had the largest differences proportionally. Buildings that have experienced the largest height changes are labeled, corresponding with their ranking and color coding in the skyline below.

Characteristics of Buildings with Height Changes
The below graph shows buildings that have undergone height changes of 50 meters or greater, by building location (left) and current building status (right), broken down by height increases and decreases.

Only five buildings have undergone height changes of 150 meters or greater, all of which were height decreases from the original design. Proportionally, the AC Hotel/Residence Inn Charlotte City Center had the largest height change, dropping from an anticipated 183.3 meters to a final height of 91.5 meters upon completion.