

COMPARATIVE COSTS OF HISTORIC BUILDING REFURBISHMENT PROJECTS

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Introduction

There is a strong, pervasive and long standing belief in Barbados that repairing and restoring old buildings is much more costly than building anew. The phrase “Throwing good money after bad” is often heard, when decisions have to be made about old buildings that have been badly neglected. (Some of this misperception relates simply to a trendy desire for all things new, and some of it simply to a failure to recognise the importance and economic wisdom of preventive maintenance.) But the Barbados National Trust, after following events closely and consulting (pro bono) on many projects for the past 30 years, has ample evidence that nothing could be further from the truth – in fact, in most cases restoration is much cheaper than building anew, as this paper will show, from the data relating to recent restorations.

This point was first made some 25 years ago by the Barbados Light and Power Company, when they proposed demolishing their headquarters building at Garrison Hill – the historic old Garrison’s Commissariat Provision Store, built between 1793 and 1801. Architect Andrew Steel of Gillespie and Steel compared the feasibility of demolition versus restoration and expansion, with internal re-fitting, to provide the more effective office space needed. The BL & P accepted his recommendations and it was reported in their Annual Report, on completion of the work, **that the magnificent restoration came in at 60 % of the estimated cost of the proposed new building** to provide the desired floor space! The restoration won wide acclaim and a Barbados National Trust Restoration Award in its 25th Anniversary Awards.

A similar experience was observed at the Lodge School in the mid-eighties when, on the advice of World Bank consultants, the Ministry of Education proposed demolishing the oldest building on site, the Principal’s Lodge (18th century, and now Headmaster’s Office) and the Boarding Establishment buildings (mid and late 19th century). Inspection by the National Trust and its consulting engineer found no structural problems, and the entire, enormous complex was restored for the same quarter of a million dollars as a single, hideous World Bank classroom structure now blemishing the landscape at the Lodge.

The UNESCO property, Historic Bridgetown and its Garrison, includes almost a dozen important derelict buildings ... some eight within the historic city core itself. The National Trust has been lobbying both for these and many other historic treasures – in and out of Bridgetown – to undergo restoration and adaptive re-use, to save the enormous sums which Government spends on rental. Restoration of historic buildings has multiple advantages, both economic and added value:

1. It will produce great savings in producing productive real estate, reducing the enormous cost of commercial rental of office space by multiple ministries of government and other government entities.

2. It will save foreign exchange, with emphasis on labour rather than the enormous amount of imported materials used in most major new buildings today.
3. It will hugely improve the aesthetics and quality of our environment, leading to further restoration and improvement of the built environment
4. It will help to ensure that our very, very tenuous award of UNESCO World Heritage status, with its huge tourism, economic and other benefits, is not withdrawn through increased dereliction of historic treasures in the historic core of the city.

This article is therefore reviewing some six important historic buildings recently restored. Data made available by architects, contractors and project managers have provided costs per square foot. In addition, costs of a large new building and an average size home built recently are included for comparison.

All of these buildings were in very poor condition, after years of neglect and in some cases abandonment for a decade or more. Only Verona had lost its roof AND had trees and shrubs growing within. The first one, Hastings House, did not utilise an architect, so those fees were saved.

Hastings House (c. 1700 / 1830s expansion), Balmoral Gap, Hastings (Restored in 2012/13)

This important building was the residence of the Governor, Sir Evan McGregor from 1835 until 1841

Extensive repairs – floors gutted throughout, 1950s concrete additions demolished, altered windows and doors made good, new double entrance portico and staircase built, major restoration work out and in, complete rewiring, A/C. plumbing, bathrooms, elegant refurbishment and redecoration to a high standard. Only partial roof replacement.

\$204 / sq. foot



(Photo shows the South Entrance, with the new portico and verandah, and restored fenestration)

Verona (c. 1830s), Bank Hall (Restored in 2012/13)

Major restoration of this building of both architectural, historic and social importance, as it was the country's Maternity Hospital from 1947 to 1965, and a great many Barbadians of my generation and much younger were born there, when domiciliary deliveries were recognised to be no longer the ideal or in many instances the safest mode of delivery.

The restoration required removal of bush and saplings from parts of the INTERIOR of the building; it was re-roofed, retro-fitted for adaptive re-use, and redecorated, with some internal adaptations for its new functions.

Costs include estimates of all labour costs

It was re-wired, with new plumbing etc.

\$220 / sq. foot including sophisticated full AC, Fire alarms & Security systems & Generator

\$188 / sq. foot excluding above special fittings



(Photo shows the splendid Entrance facade, impeccably and exactly restored, with welcoming arms front steps, and recessed panels and string lines of parapet highlighted)

Lodge School original School Building (classrooms of 1829 / 1854), St. John (Restored in 2013)

Major restoration, accomplished in 8 months. Removing plaster and pointing of external rubble and block coral stone, replacing staircases, accurate replacement of original neo-gothic window tracery, internal remodelling, state of art office design fittings and redecorating, wiring and plumbing with extensive rest rooms, roof and parapet treatments.

\$221 / sq. foot *(Photo shows the North façade of the original 1829 school building)*



George Washington House (c.1720 / 1780s restoration and 1860s alterations), Bush Hill, Garrison

(Restored in 2006)

Major restoration, extensive research and consultations, restoring to original form, demolition of 20th century additions, very high quality finish, dealing with major problems of rising damp

\$302 / sq. foot



Nightingale Nurses Home (c.1936), Jemmotts Lane, for new Clinical Teaching Complex, Faculty of Medical Sciences, UWI (Restored in 2012/13)

Major restoration of a very large building of coral stone, in two stages, six – seven years apart, including in stage 1 a new roof, replacing the old asbestos roof, and some rewiring; Stage 2: considerable internal modifications and additions internally to accommodate new functions for teaching, library, clinical laboratories, offices, etc., elevator, new staircases, facilities for the disabled, rewiring and plumbing and extensive new bathrooms, as the new Clinical Teaching Complex of the Faculty of Medical Sciences, UWI.

\$308 / sq. foot



(Photo shows the South wing of the Nightingale Nurses Home building)

Old Masonic Lodge (1733/ 1880s top storey), Spry Street (Restored in 2011/2012)

Major restoration of 3 storey structure, including complete, temporary protective over roof, required in order to save decorative domed ceiling and plaster work on Masonic chamber on top storey, with new structure and support for this unique domed ceiling, replacing roof, gutting of floors, new concrete supporting structure internally, and authentic replacement of complex woodwork, timber floors and windows throughout, restoring and conserving ancient plaster decorations, etc. to highest standard, ...

New structure: Elegant glass tower with high quality large elevator, foyers at each level and stairway.

Restoration \$540 / sq. foot

New glass tower \$857 / sq. foot

(Photo shows North façade, with immaculate restoration of the historic brick building and reflecting glass tower with elevator and stair hall, replacing the shabby “lean to” infill section of the 1880s.)



COMPARE:

The new Medical Faculty Building, at UWI Cave Hill (2008)

A completely new building on a green field site, of three storeys, with standard laboratory fittings on parts of two floors, auditorium, restrooms, spacious foyer, elevator, A/C., etc.

\$464 / sq. foot

Modern bungalow, 3 bedrooms, 2.5 bathrooms (2011) (2,000 sq. feet)

A fairly standard modern, concrete block house, on a green field site, with medium quality finish,

Marble bathroom and kitchen countertops; large open verandah, no carport.

\$325 / sq. foot built. (Other tenders were \$350 and \$400 / sq. foot)

COMMENT:

There is, as stated above, a widely popular misconception that restoration of old buildings is not cost effective. However current building costs for modern, reasonably finished domestic buildings (residences) range between a little under \$300 to \$400 / sq. foot, although luxury villas, with highest quality and unique finishes are closer to \$ 6 – 700 / sq. foot., all far exceeding examples above. (Personal communication from several architects)

Commercial buildings are also almost always more costly, at closer to \$ 500 to 800 / sq. foot, depending on the finish, number and quality of elevators etc.

The historic buildings considered here (Five moderately large, of 6,000 plus to 10,000 square feet) and one very large (26,000) have all been abandoned for many years (except for the 1830 Lodge School Classroom building, which was in use but very badly maintained and “botched up” over the years) and yet have undergone major restoration and upgrading for costs between \$200 and 300 per sq. foot (most closer to \$200 per square foot), with the single exception of the Masonic Lodge, where there were special circumstances, requiring very detailed work and where the restored three storey brick structure came in at a similar cost to a modern office block. In contrast the modern glass tower with splendid elevator was a much more costly structure.

The George Washington House, which came in at \$304 /square foot may be somewhat higher today, although 2006 was at the height of our building boom when there were agreed that there were somewhat inflated building costs. But again there were special circumstances for this very important house, which led to both delays and on-going changes in details in the restoration process. In contrast, Hastings House, Verona and the Lodge School building – all three ancient coral stone buildings some 200 years old, badly neglected – all came in at around \$200 / square foot – less than two thirds the cost of a replacement new building. And of course these buildings with their two foot thick walls and higher ceilings are much cooler and have a long life compared with the apparent life of many modern structures. And they provide the aesthetic, historic and other additional “added value”.

The case for cost effectiveness is clear when the data is reviewed carefully, and the evidence provided by these important buildings – recently saved – is convincing. The much higher costs of both a University building and a residence on a green field site (land costs, surveying etc. excluded) is impressive. Of course, if a building has been abandoned for many decades, and large tree roots have penetrated the structure (as at Farley Hill) restoration costs would be hugely magnified – perhaps doubled, depending on the extent of the structural damage caused by invading roots and cracks in the foundation and perimeter walls. But where both foundations and external and support walls are solid, undamaged and not in danger, even if the roof has to be replaced and some foliage removed, as at Verona, restoration costs are still far lower than “new build”.

So congratulations to Rotherley (Hastings House), Innotech (Lodge School and Nightingale Nurses Home), Markham Construction (Masonic Lodge), Clarke and Associates (George Washington House) and Public Works (Verona) for good jobs in producing wonderful results at low cost, and saving both government, university and the private sector many millions of dollars. May many others follow these examples and restore more of our treasures on sound economic principles.

A national approach to conservation and restoration is crucial, not only for economic reasons, but for aesthetic, cultural and tourism reasons, which ultimately results in improving the economy and lives of everyone. Involvement of government, developers, architects, builders, realtors and all private citizens are stakeholders in the nation’s interest.