Historic Building Controls

PINK Block (Information Only). Enter a "**YES**" or "**NO**" in **Historic Building Controls** to indicate whether this building has been entered or is eligible to be entered in the Register of Historic Buildings, or is affected by any similar legislation. Historic status may limit allowable flood hazard mitigation projects and result in higher than normal costs for both flood damage repair and mitigation projects.

BUILDING SIZE AND USE

Total Floor Area

GREEN Block (Data Input). The **Total Floor Area** in square feet (sf) is the size of the entire building.

Area Occupied by Owner or Public/Nonprofit Agencies

GREEN Block (Data Input). The **Area Occupied by Owner or Public/Nonprofit Agencies (sf)** may be the same as the total area or less if commercial businesses occupy part of the building. For single family residences, the total area and area occupied by the owner are generally the same.

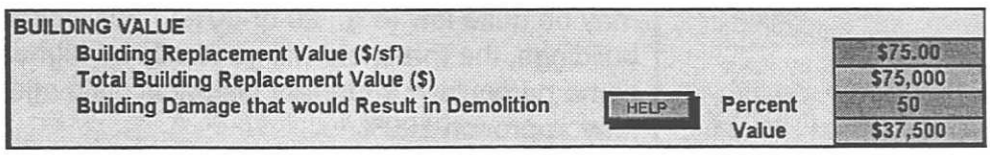
These two areas are distinguished because some of the economic data (displacement costs, rental and business income, value of public/nonprofit services) depend on the space occupied by public/nonprofit agencies and commercial businesses.

Both area data entries must be completed because building replacement value depends on the first, while displacement costs and the value of public/nonprofit services depend on the second.

Remember to enter numerical values without a dollar sign ($) or commas; see page 3-13 for more information.

BUILDING VALUE

The data entries in these blocks describe several aspects of the value of the building.



Building Replacement Value ($/sf)

GREEN Block (Data Input). Building Replacement Value ($/sf) is a measure of the economic value of the building, including the structural and non-structural permanent parts of the building, but excluding contents.

Replacement value means the cost to provide a functionally-equivalent structure of the same size. Replacement value does not include recreating historical or archaic materials, finishes or features.

For historic buildings, the distinction between "reproduction" and "replacement" value may be important. Reproduction duplicates the design and architectural details of a specific building. For historic buildings, the reproduction value rather than the replacement value may be a more appropriate measurement of a building's value. If desired, an historic building's reproduction value (in $/sf) can be entered in the "**Building Replacement Value**" block.

Total Building Replacement Value

YELLOW Block (Result). Total Building Replacement Value ($) is calculated from the value per square foot and the building size.

Demolition Threshold

GREEN Block (Data Input). Building Damage that would Result in Demolition, the "demolition threshold," is the percentage of building damage at which demolition and replacement (rather than repair) would be expected to occur as the economically efficient choice. Many buildings will be demolished rather than repaired when the cost to repair the damage exceeds some percentage of the replacement cost.

The Demolition Threshold Percentage MUST NOT be set at zero or left blank because doing so would cause the Modified Building Depth-Damage Function to be 100% at all flood depths. This unrealistic data input would produce substantially distorted and invalid benefit-cost results.

For older, somewhat substandard buildings, the demolition threshold may be quite low (e.g., 20 or 30%). For typical, relatively modern buildings, the threshold will generally be higher (e.g., 50 or 60%). For some particularly important historical buildings, the demolition threshold may approach 100%.

The demolition threshold damage percentage is an important policy parameter which may significantly affect the benefit-cost results because it may have a major impact on the depth-damage function. Therefore the demolition threshold damage percentages should be chosen carefully in accord with the condition and viability of the existing building. For example, a brand new city hall building would probably be repaired from a higher level of damage than would a decrepit building badly in need of refurbishing.

YELLOW Block (Result). The demolition threshold in dollars of damage is calculated from the entered percentage and the building replacement value.

BUILDING CONTENTS

Contents Description	Office furniture, computers & files.
Total Value of Contents	$22,500
Value of Contents ($/sf)	$22.50

Contents Description

PINK Block (Information Only). The **Contents Description** block is for a brief summary of the building's contents (e.g., computers, office furniture).

Total Value of Contents

GREEN Block (Data Input). Total Value of Contents is the estimated total value of the building's contents, including furniture, carpet, equipment, computers, supplies, etc.

The exact value of building contents is rarely known. Estimates can be obtained from owners, or from a general knowledge of the nature of the contents and common sense. For example, an art museum or a building filled with computers will have a much higher contents value than a building storing used bricks or recycled newspapers.

For most buildings, the value of contents is significantly smaller than the building value. However, in some cases where contents are unusually valuable (e.g., an art museum) or usually vulnerable to flood damages, then avoiding contents damage may be as important or more important than avoiding building damages in determining total project benefits.

Default estimates of the **Contents Depth-Damage Function** (i.e., contents damage as a percentage of total contents value) are based on the building type selected. To view the default contents depth-damage function for the building type selected, choose **Level Two Data | Contents Depth-Damage Function** from the Benefit-Cost Program menu; for more information see page 8-8.

Value of Contents ($/sf)

YELLOW Block (Result). The **Value of Contents ($/sf)** is calculated from the **Total Value of Contents** and the **Total Floor Area** of the building. The **Value of Contents ($/sf)** may be useful in comparing contents values from building to building and as a guide as to whether estimated contents values are reasonable.

DISPLACEMENT COSTS DUE TO FLOOD DAMAGE

Rental Cost of Temporary Building Space ($/sf/month)	$1.50
Rental Cost of Temporary Building Space ($/month)	$1,500
Other Costs of Displacement ($/month)	$500
Total Displacement Costs ($/month)	$2,000

Displacement Costs due to Flood Damage may be incurred when occupants must operate from a temporary site while flood-related damage to the original building is repaired. Costs for temporary rent and other displacement expenses are entered here.

Rental Cost of Temporary Building Space ($/sf/month)

GREEN Block (Data Input). Rental Cost of Temporary Building Space ($/sf/month) is an estimate of the rental rate paid for temporary quarters. Major floods may cause extensive damage to many structures, thus reducing the available supply of alternate space and leading to higher rental costs throughout the area.

Rental Cost of Temporary Building Space ($/month)

YELLOW Block (Result). The **Rental Cost of Temporary Building Space ($/month)** is calculated from the **Area Occupied by Owner or Public/Nonprofit Agencies (sf)** and the **Rental Cost of Temporary Building Space ($/sf/month)**.

Other Displacement Costs

GREEN Block (Data Input). Other Costs of Displacement ($/month) include moving and extra operating costs incurred because of the disruption and displacement from normal quarters.

Total Displacement Costs

YELLOW Block (Result). Total Displacement Costs ($/month) are calculated as the sum of **Rental Cost of Temporary Building Space ($/month)** and **Other Costs of Displacement ($/month)**.

Default estimates of displacement times depend on building damages at each flood depth. To view the default displacement time estimates choose **Level Two Data | Displacement Time** from the Benefit-Cost Program menu. For more information, see page 8-11.