

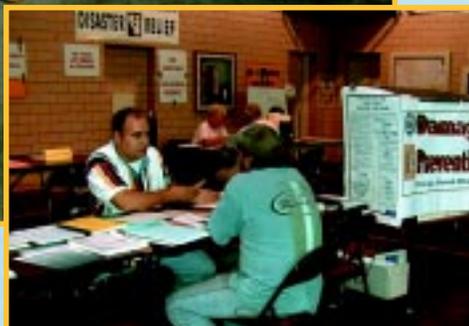
Section 2



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2.1 Introduction

The flood recovery process necessarily encompasses a broad range of concerns, most notably housing and repair of public property. However, it should be emphasized that this study is focused on identifying business impacts as a means to determine the short- and long-term effects on the statewide and local economies. The primary purpose of this economic impact assessment was twofold:

- ▣ **Accelerate business recovery.** By identifying the nature and extent of damages sustained by the business community, it was possible to recommend a specific recovery strategy that will bring viable businesses back to full production and employment as soon as possible. By helping to quicken the recovery process, the long-term negative implications for individuals, businesses, and local communities will be significantly reduced.
- ▣ **Support creation of sustainable business enterprises and disaster-resistant jobs.** Incorporating appropriate mitigation measures as an integral part of the business recovery process will reduce the potential impacts of a future similar disaster on the businesses and jobs that provide the economic backbone for these communities. Therefore, this assessment also helps point

Section 2

the way to innovative technological as well as common sense approaches to rebuild the business community “stronger and smarter.”

This assessment also included the following secondary objectives:

- Provide guidance for communities not affected by Hurricane Floyd, but which may be vulnerable to widespread and severe flooding, on steps they can take now to reduce vulnerability.
- Continue the development of a comprehensive database begun earlier this year following disasters in Kansas, Oklahoma, and Texas that will provide information necessary to help assess the economic costs of disasters in the United States.

An initial assessment of the impacts of Hurricane Floyd on the economy of the Commonwealth of Virginia was prepared, followed by a considerably more focused assessment of a Study Area in the southeastern portion of the State consisting of the City of Franklin and Isle of Wight and Southampton Counties. This multi-jurisdictional region experienced particularly serious flooding along the Blackwater and Nottoway Rivers and is contiguous with Hurricane Floyd ravaged areas in northeastern North Carolina.

Generally the team’s approach was to:

- Assess the pre-disaster economies of the Commonwealth, the City of Franklin, and Isle of Wight and Southampton Counties.
- Determine direct and indirect economic impacts in the Study Area using a survey questionnaire developed by FEMA and EDA in response to past disaster events. The survey was administered voluntarily to business owners and managers in the Study Area that directly experienced flooding and/or were not able to conduct business operations for longer than forty-eight hours.
- Develop conclusions and recommendations for immediate use by the Commonwealth of Virginia and local authorities in planning strategies for business recovery and sustainability.

The following is a more detailed description of the methodology used in the study.

2.2 Pre-Disaster Economy

The EDA team first characterized the pre-disaster economy of the Commonwealth of Virginia, and the Study Area of the City of Franklin and the Counties of Southampton and Isle of Wight, using data collected from existing sources. The Virginia Cooperative Extension offices, the Virginia Employment Commission, the U.S. Census, the

Hampton Roads Planning District Commission, the Franklin-Southampton Economic Development Commission, Commissioners of the Revenue, and various other city and county departments were all valuable contributors of information and ideas. Data were gathered about agricultural production and farm income, primary non-farm industries and income, tax structures, and employment.

2.3 Post-Disaster Economy

A survey instrument developed by FEMA and EDA for similar reports prepared earlier in 1999 for disasters in the Midwest was used to gather data from a number of flood impacted businesses in the Study Area. Given that the majority of these businesses were concentrated in the downtown commercial district of the City of Franklin (182 out of a total of 206 affected businesses), and these businesses could be readily accessed through the cooperative efforts of the City of Franklin and the Franklin-Southampton Economic Development Commission, it was decided to focus formal survey efforts within the downtown business community.

The EDA and Hampton University Business Assistance Center personnel conducted personal interviews and received survey results for 86 affected downtown businesses from owners and/or managers, representing 47.3% of the estimated 182 damaged downtown business enterprises within the Study Area. A different technique was employed for a handful of large businesses that were also affected by the flooding. An EDA representative visited major employers known to have experienced flood damage to obtain general information concerning business impacts and recovery intentions. The interviews also provided each business owner with the opportunity to discuss issues of concern, such as availability of relocation properties, loss of customer base, and infrastructure limitation.

The downtown business district is remarkably homogenous in terms of the size and types of retail and service businesses. For this reason, survey data was assumed to be representative of the downtown business community as a whole and was used to extrapolate overall economic impacts. However, it is important to note here that secondary, or indirect economic impacts may take months or even years to be identified and understood. Continued monitoring of events is crucial as adjustments to mitigation and recovery operations may be appropriate.

Section 2

Data was collected for both direct and indirect impacts. Direct impacts include the cost of repair and replacement of damaged and destroyed buildings; costs of damage to building contents; losses of building inventory; relocation expenses; loss of productivity; services or sales; wage loss; rental income loss (to building owners); and tax base losses.

Indirect impacts are the long-term economic impacts on the region that occur as a result of direct economic losses. Examples might be changes in employment or local tax revenues. In this case, since it was apparent that local tax revenues would be impacted, the EDA representatives worked with the City of Franklin and county officials in the development of projections for potential lost revenue by generating a series of future scenarios reflecting a range of economic recovery times.

Finally, it is worth noting that the results of this study will be used to help assess the economic impact of future disasters. FEMA has developed the Earthquake Loss Estimation Methodology (HAZUS), which employs national averages for losses from past events to determine projected losses for subsequent earthquakes. Using actual data from the effects of Hurricane Floyd in Virginia and other States as well as similar future events, FEMA intends to broaden the application of the HAZUS methodology to account for the impacts of a variety of natural disasters including hurricanes, flooding, and tornadoes. The basic elements of the HAZUS methodology are included in Appendix C of this report (excerpted from the 1997 FEMA HAZUS Technical Manual).