

# FIVE FOUNDATIONS FOR A BETTER BUILT ENVIRONMENT

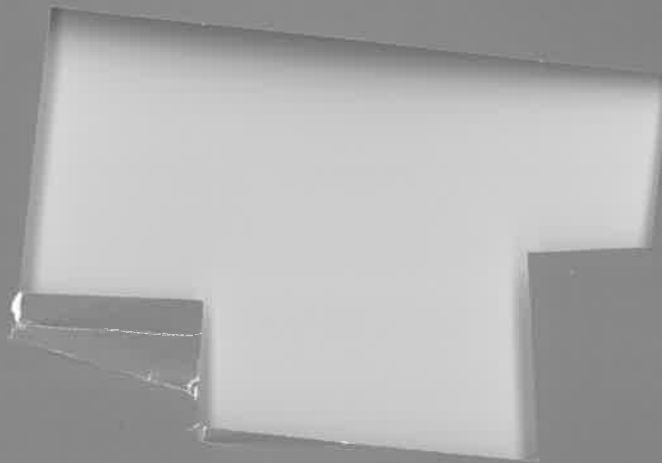


Report of the  
Governor's Building Codes Study Commission  
December, 1997

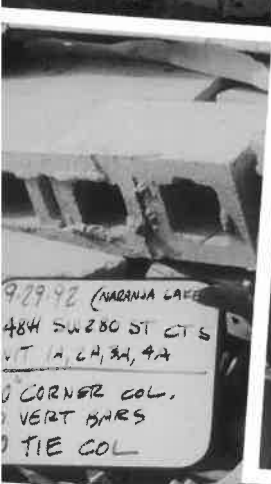


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*"A strong, effective building Code and Code Process is essential to the overall welfare of the entire state. Accordingly, Florida should have one building code for use statewide which governs all administrative and technical requirements applicable to Florida's public and private built environment."*



# Shoddy Construction Left Homes Vulnerable To Storm, Engineers Say

... roofs toppled walls



## THE MEMBERS OF THE GOVERNOR'S BUILDING CODES STUDY COMMISSION

### **Chairman Appointed by the Governor:**

- Tom Lewis, Jr., Celebration, Vice President of Walt Disney Imagineering

### **Vice-Chairman Appointed by the Chairman:**

#### **A Person Representing the State's Building Officials:**

- Dominic Sims, West Palm Beach, Executive Director with Palm Beach County

#### **Two Members of the Florida Senate:**

- Honorable Matthew Meadows, Fort Lauderdale, Member of the Florida Senate
- Honorable Charlie Clary, Destin, Member of the Florida Senate

#### **Two Members of the House of Representatives:**

- Honorable Ken Pruitt, Port St. Lucie, Member of the Florida House of Representatives
- Honorable Mary Brennan, Pinellis Park, Member of the Florida House of Representatives

#### **The State Insurance Commissioner or His Designee:**

- Pete J. Mitchell, Tallahassee, Chief of Staff with the Office of Treasurer and Insurance Commissioner

#### **The Secretary of the Department of Community Affairs or His Designee:**

- Steve Pfeiffer, Tallahassee, Assistant Secretary with the Department of Community Affairs

#### **The Secretary of the Department of Business and Professional Regulation or His Designee:**

- George W. Harrell, Tallahassee, Attorney with the Department of Business and Professional Regulation

#### **The Secretary of the Department of Labor and Employment Security or His Designee:**

- Arnell Bryant-Willis, Tallahassee, Bureau Chief with the Department of Labor and Employment Security

#### **A Citizen of the State Representing the State University System:**

- Wayne Drummond, Gainesville, Dean and Professor with the University of Florida

#### **A Person Belonging to a Statewide Organization Representing Persons With Disabilities:**

- Frank Bosak, Bradenton, Self-Employed as a Consultant

#### **A Person Representing the Florida League of Cities:**

- Larry Schultz, Rockledge, City Councilman with the City of Rockledge

#### **A Person Representing the Florida Association of Counties:**

- Katy Sorensen, Miami, County Commissioner with Dade County

#### **A Person Representing General Contractors:**

- Robert L. Mathews, Jacksonville, President of Bob Mathews Construction Co., Inc.

#### **A Person Representing the Industry of Engineering Professionals:**

- Roger Jeffrey, Ft. Myers, President of Jenkins and Charland, Inc.

#### **A Person Representing Building Owners:**

- Douglas L. Bartley, Ft. Myers, Senior Managing Director of Operations with Faison

#### **A Person Representing the Residential Construction Industry:**

- Leonard A. Tylka, West Palm Beach, Principal of LTL Associates, Inc.

#### **A Person Representing Commercial Building Contractors:**

- John Kalaf, Tampa, Vice President of Operations, A.D. Morgan Corp.

#### **A Person Representing the Industry of Manufacturing Building Construction:**

- Charles Weeder, Bartow, President/Chairman of Homes of Merit, Inc.

#### **A Person Representing the Industry of Architectural Professionals:**

- Melody Starr Linger, Jacksonville, Project Manager/Architect with Akel Logan Shafer, P.A. Architects

#### **A Person Representing Real Estate Professionals:**

- Victoria Robbins, Jacksonville, Director of Sales and Marketing with Pulte Homes Corp.

#### **A Person Representing the Insurance Industry:**

- Peter H. Billing, Boston, Mass., Director with Institute for Business and Home Safety

#### **A Person Representing the Banking Industry:**

- Michael Smith, Orlando, Assistant Vice President with SunTrust Bank

#### **A Person Representing Union Members of the Building Construction Industry:**

- Jack A. Ricketson, Orlando, U.A. Local Union 803

#### **A Private Citizen in Private Real Estate Development:**

- Edward Lee, Jr., Panama City, Self-Employed as a Builder

#### **A Private Citizen Involved in the Construction Industry:**

- Eduardo A. Camet, Pembroke Pines, President of CAMETCO Construction

#### **A Private Citizen Representing the General Public Interest:**

- Gussie F. Young, Pensacola, Owner of A&G Young Properties





Tom Lewis, Jr.  
Commission Chairman



THE FOLLOWING FOUNDATIONS AND RECOMMENDATIONS are the product of 16 months of exhaustive study, hearings, panels and debates by this Commission. They represent input from all key stakeholders in Florida's Building Codes System and a consensus on what is appropriate for a major overall reform of all facets of that System – the Family of Codes, the strengthened Administration and Enforcement of the Codes and enhanced Compliance with the Codes through Education, Training and Discipline.

The Commission believes that to be effective, a Building Codes System must not only address the issues presented by too many codes and inadequate and inconsistent administration and enforcement of those codes, but must also address the issues of weak and inadequate compliance with those codes resulting from a need for more education, training and discipline within all categories of code users about the codes and the Codes System.

As a result of its study and deliberations, the Commission found that the current Building Codes System is ineffective and that the problems with Florida's current System are caused by weaknesses in all these facets. As such, the Commission's recommended reform package is appropriately a comprehensive approach, and it needs to be taken as a whole. No one major piece can or should stand alone. The consensus that was built within the Commission Membership and with numerous other stakeholders, was based upon a collegial process of compromise and the understanding that all the major areas of reform would remain connected.

Therefore, it is the Commission's request and initial recommendation that the Governor and Legislature consider these Foundations and Recommendations in light of the overall, comprehensive and connected context in which they were developed and adopted.

Tom Lewis, Jr. FAIA

## EXECUTIVE SUMMARY

**H**ISTORICALLY, REGULATION OF FLORIDA'S BUILT ENVIRONMENT,

including the promulgation of codes and standards, was the sole responsibility of local jurisdictions. In the early seventies, however, the State of Florida began to recognize the importance of regulating as a whole and on a Statewide basis, the way in which the State is developed. To that end, the Florida Legislature enacted such laws as the Environmental Land and Water Management Act of 1972, the Florida Housing Planning Act of 1973, Thermal Efficiency Standards in a statewide energy code and in 1974, for the first time, an Act establishing Chapter 553 of the Florida Statutes, "Building Construction Standards," setting forth the State Minimum Building Codes approved for use in Florida.

Since the mid-seventies, however, the vision of statewide consistency and predictability in building construction standards has been impaired because of focus on home rule powers, coupled with the economic boom of the 1980's. The system's evolution has left the State with the responsibility of selecting and adopt-

ing the allowable minimum codes for Florida, but with no responsibility for the administration and enforcement of those codes – those functions are left solely to the discretion of local governments, including local school boards, and state agencies with building code regulation responsibilities. As a result of this local discretion, today's "system" is a patchwork of codes and regulations developed, amended, administered and enforced differently by more than 400 local jurisdictions, and state agencies with building code regulation responsibilities.

The reform of pieces of Florida's Building Codes System has been an issue for various elements within the construction industry for the last 10 years or more as evidenced by a 1987 academic study performed by Florida A & M University on behalf of the Florida Department of Community Affairs on the viability of a Statewide Building Code. (That study was concluded in 1996 and found that, in fact, a Statewide Building Code was appropriate for Florida). In addition to that academic study, the Florida Legislature has dealt with issues such as education and licensing of building inspectors, plans reviewers, building officials, and contractors; journeyman requirements on the job-site; specialty licensing; and the grading of building departments based upon the effectiveness of the departments' administration and enforcement of the Minimum Building Codes.

**T**oday's "system" is a patchwork of codes and regulations developed, amended, administered and enforced differently by more than 400 local jurisdictions and state agencies with building code responsibilities.

### How Many Different Codes?

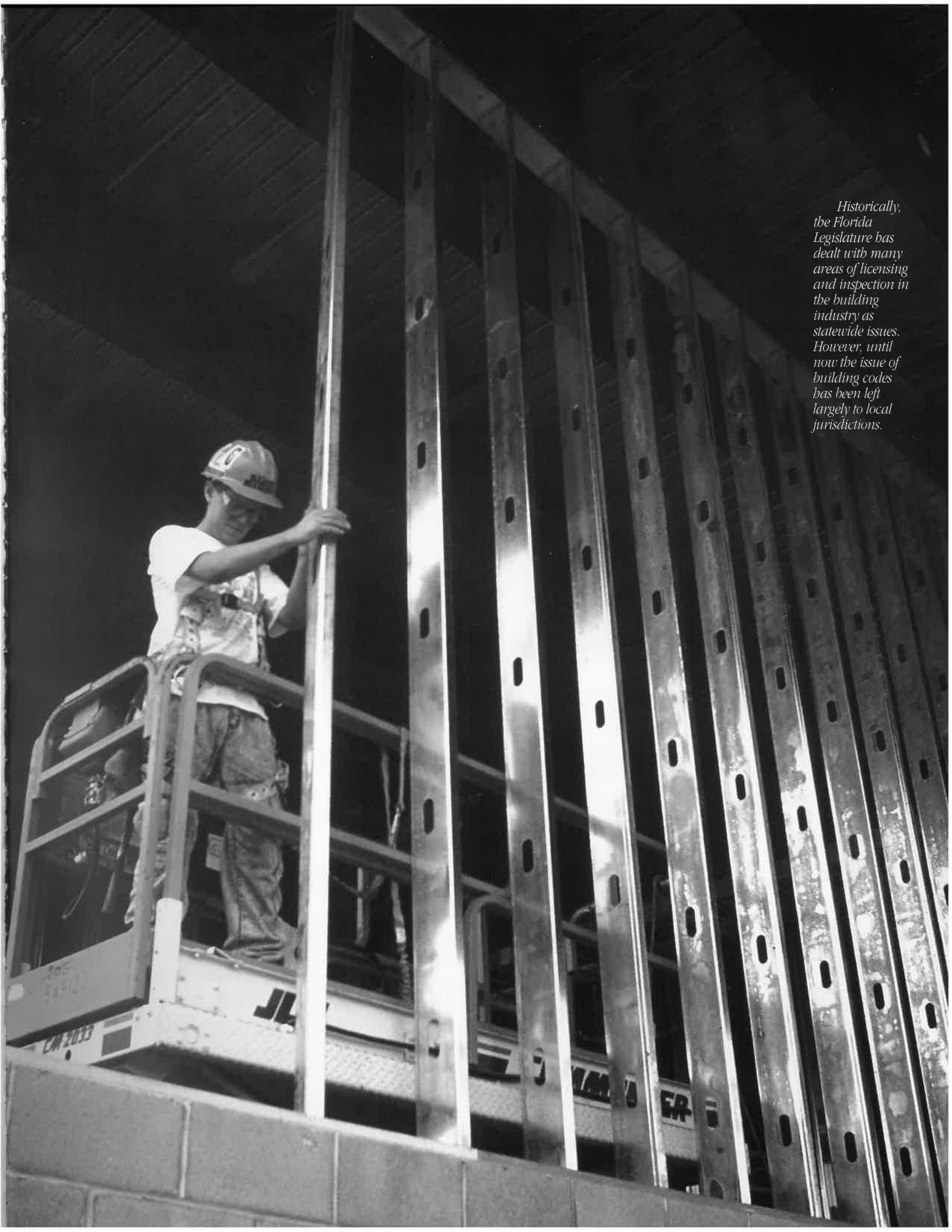
**67** Counties  
**400** Municipalities

*No one really knows how many different building codes there are in Florida. Every local jurisdiction essentially creates their own codes through the adoption, amendment and interpretation processes. The result is a maze of conflicting and confusing building codes, making effective enforcement and compliance practically impossible.*



*The current building codes system places a hardship on all those engaged in the building trade who must deal with differences in building codes in each jurisdiction. And as recent natural disasters have shown, the current system makes compliance and enforcement a major problem.*

*Historically, the Florida Legislature has dealt with many areas of licensing and inspection in the building industry as statewide issues. However, until now the issue of building codes has been left largely to local jurisdictions.*



**I**T WAS NOT UNTIL FLORIDA ENDURED BACK-TO-BACK NATURAL DISASTERS –

Hurricane Andrew in August, 1992; the “Storm of the Century” in March, 1993; Tropical Storms Alberto and Beryl in the Summer, 1994; and Hurricanes Erin and Opal during the 1995 Hurricane Season – that the issue has taken on a statewide significance for not only the construction industry, but for all of the stakeholders in the Building Codes System, including local governments, the banking and real estate industries, the insurance industry, labor unions, state agencies, manufacturers and, probably the most affected group, the citizenry of Florida.

While it is fortunate that these storms set no records with respect to loss of life, they (particularly Andrew) did break all records for insured losses, and were the direct cause of Florida’s insurance crisis, which has essentially affected every homeowner in the state. Surprisingly, it was not weaknesses in the codes themselves that contributed to the extensive storm damage, but the failure to comply with and enforce today’s complex and confusing system of multiple codes and administrative processes.

Moreover, the complex and confusing system made it difficult, if not impossible, to mobilize plans reviewers, building inspectors and builders from around the State to immediately move in and provide re-build services to disaster-struck areas, thereby exacerbating the physical and economic damages wrought by the storms. The re-build effort suffered as a result of the lack of this mutual aid. Finally, these storm events demonstrated that a process which historically had been handled jurisdiction-by-jurisdiction had become a pressing affair with Statewide significance.

The physical damage caused by the impact of these storms, the resultant insurance crisis, conclusions by the prior academic study by Florida A& M University on the potential for a Statewide Building Code, and a recognition that some of the damages, costs, and inability to obtain insurance were the result of the system itself were the impetus for Governor Chiles to establish the Governor’s Building Codes Study Commission in July, 1996, through Executive Order Number 96-234 (Appendix 1). The Commission represents the first time in the history of Florida that the panoply of building codes, together with their adoption, administration, and enforcement, has been reviewed as a whole, by a balanced group acting in the interests of the State as a whole.

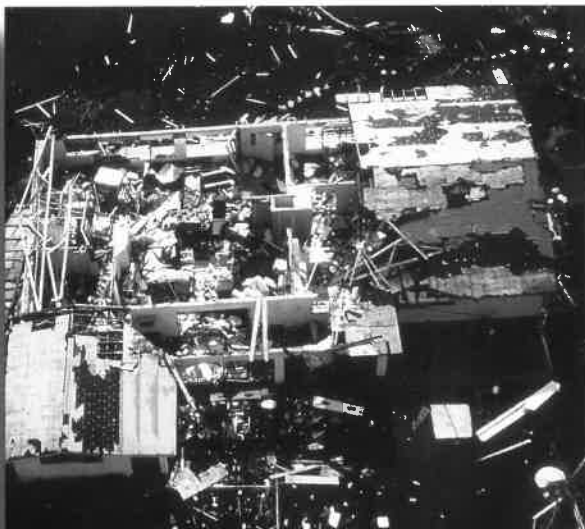
*The costs of rebuilding destruction from hurricanes like Andrew and Opal is borne by every homeowner in Florida through higher insurance rates, making the question of building codes – and their enforcement – clearly a statewide issue.*

## Major Insurance Companies Pull Out of Florida Insurance Market

MIAMI – Major carriers of homeowner’s insurance in the state of Florida, reeling from massive losses due to Hurricane Andrew, are now saying they are going to pull out of the Florida market entirely. Property losses from the storm, which wreaked havoc in South Florida, are now predicted to top \$30 billion, or possibly even more. Prior to Andrew, insurers had predicted a worst-case disaster would cause no more than \$7-8 billion in

*Following huge losses from Hurricane Andrew, many insurance companies withdrew from the Florida market entirely, penalizing not only potential damage victims in coastal areas, but homeowners in every part of Florida.*

**S**urprisingly, it was not weakness in the codes themselves that contributed to the extensive storm damage. Rather, it was the inability to enforce and comply with today’s complex and confusing system of multiple codes and administrative processes.

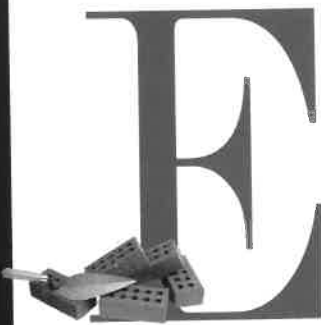




*The experience of Pensacola Beach in Hurricane Opal showed that effective code compliance and enforcement makes all the difference. While more than 100 homes in Pensacola Beach were totally destroyed by Opal in 1995, not one home built to the current code – which was strictly enforced – was lost.*







## EFFECTIVELY, THE EXECUTIVE ORDER ACTS

AS THE "CONSTITUTION" FOR THE COMMISSION, setting forth the framework within which the Commission would perform its work. Among other concerns, the Executive Order cites a disturbing reduction in the availability of insurance, concerns with continued, sustainable economic growth, threats to local, state, and federal government ability to respond to public safety concerns and adverse economic impacts from natural disasters as justification for a comprehensive review of the "complex web of codes." The Executive Order charges the Commission with evaluating the present system and with consensus development of recommendations to reform and improve the Florida Building Codes System, if found necessary.

The Governor appointed 28 members to the Commission, representing the diverse stakeholders in the system, including building officials, local government officials, banking and real estate interests, the disabled, the design and construction industries, labor unions, state agencies, and the general public. In order to ensure that the Commission's process was as open and participatory as possible, the Chairman created Work Groups of both Commission and Non-Commission Members, including the additional representatives of local government, the manufacturing interests, and Fire Officials (Appendix 2).

In order to assess Florida's current Building Codes System and to recom-

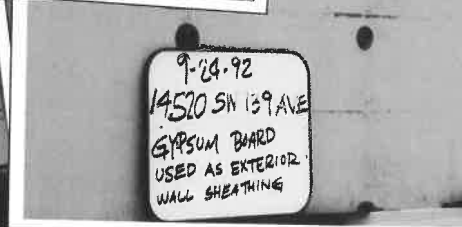
mend any necessary changes to produce a more effective system for a better Built Environment, it was necessary for the Commission to first agree upon the elements of an effective system. During its first phase of work, the Assessment Phase (October, 1996 – January, 1997), the Commission held public hearings, heard panel discussions and received a variety of presentations in numerous locations around the State. (Appendix 3). As a result of these initial hearings and the evaluation of all of the information received, the Commission determined that an effective system must protect the health, safety and welfare of the citizens of Florida, and in doing so:

1. Be simple to use and clearly understood;
2. Be uniform and consistent in its administration and application;
3. Be flexible;
4. Be affordable; and
5. Promote innovation and new technology.

Applying these criteria to the current system, the Commission developed a Preliminary Assessment Statement (Appendix 4) which sets forth the finding that based on the above criteria, Florida's current Building Codes System is protective of the health, safety and welfare of the citizens of Florida, but is ineffective in its execution. The Commission found the system to be particularly deficient in the areas of the large number of

codes found around the State, the inconsistencies among and between them, the administration and enforcement of those codes (i.e., the adoption of and amendments to the codes, and the plan review and inspection processes) and compliance with the codes by the design and construction industries (i.e., education, discipline and training issues). To delve into these deficiencies in detail, the Chairman established four Work groups on major topic areas based on these deficiencies (Appendix 5).

**The Commission found the system to be particularly deficient in the areas of the large number of codes found around the State, the inconsistencies among and between them and the administration and enforcement of those codes.**



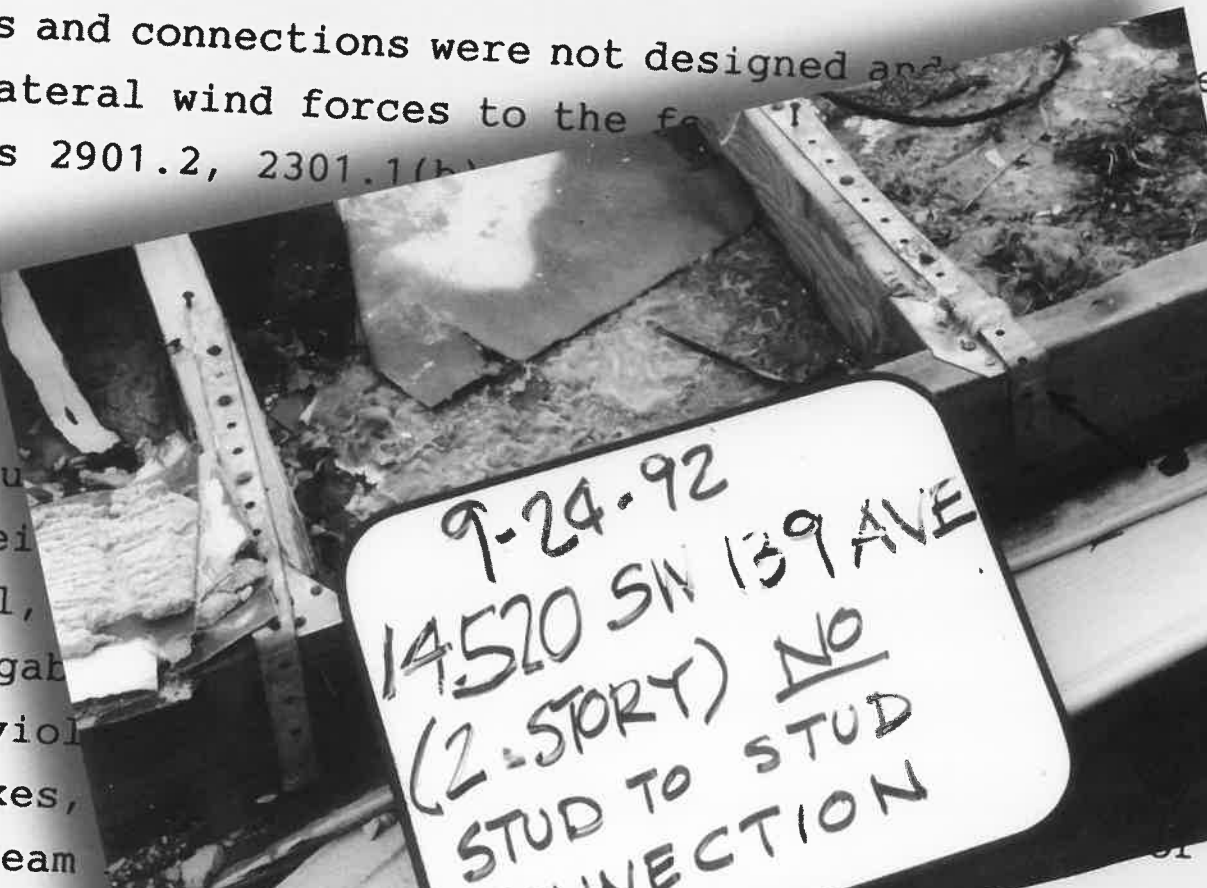
*Following Hurricane Andrew, investigators discovered literally thousands of building code violations that led directly to catastrophic structural failure of homes and businesses. Proper*

*In stark contrast to the Opal experience, hundreds of homes built to current local codes were devastated in Hurricane Andrew. Investigation revealed massive shortcomings in compliance and enforcement.*

violation of Subsections 2901.2, 2301.1 (b), (c) and 2306.1 through (h).

- Scissor trusses were placed adjacent to the end gable and tie beam did not follow the lower rake of the trusses, thus providing no diaphragm action for the tie beam, a violation of Subsection 2301.1(b),(c) and 2306.1 (a) through (h).
- No wind bracing provided to transmit lateral wind forces to the substructure, a violation of Subsections 2901.2, 2301.1 (b), (c) and 2306.1 (a) through (h).
- No "L" bracing or alternate horizontal brace was provided for the gable end truss where the rise exceeded 3'- 10". The gable end members would therefore not be capable of carrying the lateral loads, a violation of Subsection 2901.2, 2301.1(b) (c), 2306.1(a) through (h).
- Exterior walls and connections were not designed and constructed to transmit lateral wind forces to the foundation, a violation of Subsections 2901.2, 2301.1(b) (c), 2306.1 (a) through (h).

No special provisions for tie beam unit in the floor joist beams occur, a violation of 2306.1(a) through (h). The tie beam reinforcement at the end of the wall, a 25 foot half gable end fourplexes, a violation of 2306.1(a) through (h). In the fourplexes, walls. A wood beam used at the end of the wall.



9-24-92  
14520 SW 139 AVE  
(2-STORY) NO  
STUD TO STUD  
CONNECTION



## SING THAT ASSESSMENT OF DEFICIENCY AND THE CRITERIA for

an effective system, the Commission and its Work Groups conducted an extensive series of discussions during the Deliberation/Initial

Recommendation Phase (February, 1997 – August, 1997). Each Work Group developed Initial Sets of Recommendations which the Commission ultimately used during its Final

Recommendation/Report Phase (September, 1997 – December, 1997) to develop "Five Foundations for a Better Built

Environment" supported by a single text of Recommendations which implement those Foundations. The Foundations and underlying Recommendations establish a system with the following characteristics:

1. A single, Statewide Building Code ("The Code") will be implemented which will govern all technical requirements for Florida's public and private Built Environment and which will take into account appropriate local variations such as, climatic conditions, soil types, termites, weather-related events, risks associated with coastal development, life safety issues and maintenance inspections. The Code will be effective for use statewide, without the need for subsequent adoption by local jurisdictions.

2. Enforcement of The Code will occur solely at the local level with updates accomplished by a newly constituted state Building Codes

Commitments will have the ability to address local and regional concerns through an amendments process.

3. To ensure strong consistency, decisions of local Officials or Boards of Appeal will be reviewable by The Board, and The Board will have the power to issue Binding

Interpretations.

4. There will be a strengthened Enforcement and Compliance Program, based on a clear and precise definition of roles and responsibilities for all participants in the System and reinforced with expanded education, training and discipline.

5. There will be a strong Product Evaluation and

Approval Process which is responsible, but streamlined and affordable and which will promote innovation and new technology.

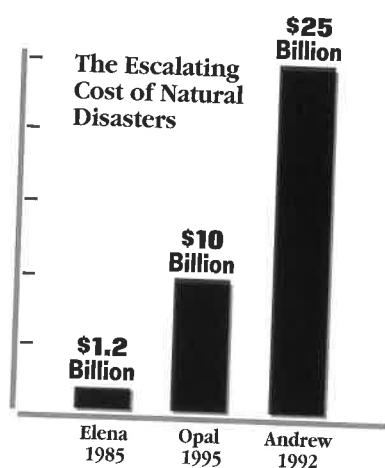
Based upon 18 months of study and deliberation, including extensive input and feedback from all of the stakeholders in the Building Codes System, the Governor's Building Codes Study Commission recommends adoption and implementation of the Five Foundations and underlying Recommendations set forth in this Report. The Commission believes implementing these Recommendations will provide the entire State of Florida with a Building Codes System which protects

citizens of Florida in an efficient, coherent and effective manner and which will provide Florida with a better Built Environment.

**Based upon 18 months of study and deliberation, including extensive input and feedback from all of the stakeholders in the Building Codes System, the Governor's Building Codes Study Commission recommends adoption and implementation of the Five Foundations and underlying Recommendations set forth in this Report.**


*Massive destruction from Hurricane Andrew that was traceable to building code compliance, interpretation and enforcement affected far more than the people whose homes were destroyed. The \$30 billion price tag was picked up by everyone in Florida who saw their home insurance rates double.*

*Next time could be even worse.*

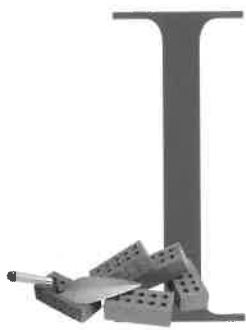


*Florida's insurance base cannot continue to absorb the cost of property damage like that in recent storms. Implementation of a state-wide Building Codes system can help reverse the trend of ever-higher losses to natural disasters.*



A black and white photograph showing a construction worker in a hard hat and safety harness working on a large steel beam. The worker is positioned on a vertical beam, surrounded by a complex network of horizontal and diagonal steel members. The perspective is looking up, emphasizing the scale and height of the structure. The sky is visible in the background.

*After extensive study of the problem, the Commission has recommended implementation of a single statewide building code combined with a strengthened compliance and enforcement program.*



## THE COMMISSION'S WORK

**I**N ORDER TO BE AS ACCESSIBLE AND INCLUSIVE AS POSSIBLE, the

Commission met monthly in various locations around the State, in meetings of one or two days (Appendix 6). During those meetings, time was set aside each day for public input and comment, and during the months of January (Jacksonville) and December (Orlando), special times were set aside for Public Workshops. The Public Workshops were designed to provide the Commission with interactive input from the public specifically on the Commission's work product, including the Progress Report submitted to the Governor in January and the Final Recommendations contained in this Report.

The Commission organized its work into four phases:

1. Assessment Phase (October, 1996 – January, 1997)

Establishing a framework for defining an effective system and for assessing the current system.

2. Deliberation/Initial Recommendation Phase (February, 1997 – August, 1997)

Forming and utilizing Work Groups to work through the issues identified during the Assessment Phase and to formulate initial recommendations.

3. Final Recommendation/Report Phase (September, 1997 – December, 1997)

Refining, revising and finalizing the initial recommendations developed by the Work Groups during the Deliberation/Initial recommendation Phase.

4. Legislative Phase (January, 1998 – June, 1998)

If the Commission's work results in legislative action, the Commission,

through its Chairman and Executive Director, will provide information and support regarding any legislation proposed.

The first task of the Commission was to make an initial determination of the effectiveness of the current system. In pursuit of that task, the Commission, during its Assessment Phase, (1) obtained information which would educate the Members to help them gain a broad understanding of the current system; (2) worked in both small groups and as the full Commission to make a preliminary determination of what an effective system might look like; (3) identified issues and topics to be used by the Work Groups during the next Phase; (4) developed Work Group organization and membership; and (5) generated a Preliminary Assessment Statement which reflects the Commission's initial assessment of the current Building Codes System.

In order to educate the Commission Members on the current system, each meeting during the Assessment Phase included presentations by various stakeholders, representing a broad variety of interests, experience and perspective in the Building Codes System. The speakers were provided guidance for their presentations through written questions provided by the Commission. Speakers included:

Code Promulgators, including the Southern Building Code Congress International, Reedy Creek Improvement District and Dade and Broward Counties;

State authorities which promulgate their own codes or standards, including the Department of

**E**ach meeting during the assessment phase included presentations by various stakeholders, representing a broad variety of interests, experience and perspective in the building codes system.

Community Affairs, the Department of Business and Professional Regulation, and the Department of Education;

Local and State authorities which administer the various codes, including building and fire officials;

Users of the codes, including design professionals, contractors, subcontractors, and manufacturers;

State Licensing Boards, including the Construction Industry Licensing Board; and

Representatives from North Carolina, Virginia and New Jersey regarding their Statewide Codes.

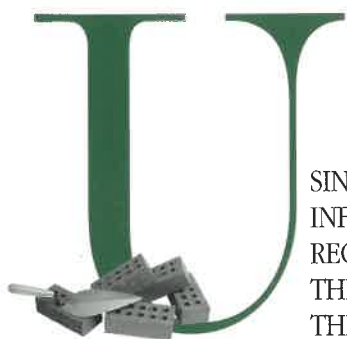
*The Governor's charge to the Commission was to evaluate the "current effectiveness of and recommend any necessary steps to reform Florida's Building Codes System" through general consensus of the Commission members. The ineffectiveness of the current complex system quickly became apparent to the Commission.*







*In 16 months of meetings all over Florida, the Commission went to great lengths to solicit input from all stakeholders in the building codes system.*



SING THE  
INFORMATION  
RECEIVED  
THROUGH  
THE EDUCA-

TION PROCESS, the knowledge brought to the Commission through its Members, and public input, the Commission determined that in order for a Building Codes System to be effective, it **must protect the health and safety of the citizens of Florida, and in doing so:**

- 1. Be simple to use and clearly understood;**
- 2. Be uniform and consistent in its administration and application;**
- 3. Be flexible;**
- 4. Be affordable; and**
- 5. Promote innovation and new technology.**



*Work groups were appointed to facilitate examination of specific issues and provide initial recommendations for consideration. The work groups also expanded the reach of the commission by including representatives of stakeholders not directly represented on the commission.*

Applying these criteria to the current System, the Commission determined that Florida's current Building Codes System is generally ineffective. The following areas of ineffectiveness were then described by the Commission (Appendix 4):

1. Organization, Relationships and Standards (relating to the number of codes and code-like laws, rules and regulations; coordination within and among those "codes"; definition of the roles of the various players in the

ongoing building maintenance);

2. Adoption, Appeals and Inspections (relating to the process by which "codes" are initially adopted; the process by which decisions relating to the "codes" and violations of the "codes" are handled; the inspections process; and the dissemination of information relating to the Building Codes System such as, interpretations, amendments, product approvals, etc.);

3. Amendments and Interpretations (relating to the process by which already existing "codes" are updated; the process by which already adopted "codes" are amended, including who, if anyone, should have the authority to amend; and how and by whom interpretations should be made); and

4. Education, Discipline and Licensing (relating to the general education of the public and the players in the system on the system itself; the basic and continuing education of the players in the system; and the discipline process, including who should be disciplined, who should do the disciplining, and under what circumstances should discipline occur).

The Chairman established and made appointments to four Work Groups to facilitate the examination of these issues during the Deliberation/Initial

Recommendation Phase. The purpose of the Work Groups was to develop initial recommendations for periodic consideration, input and guidance from the full Commission, leading to a final consensus process for adopting the Commission's recommendations pursuant to the Executive Order. In order to expand the reach of the Commission, the Chair appointed both Members and Nonmembers to each Work Group, concentrating on those stakeholders not directly represented on the

**Work groups expanded the reach of the commission by including representatives of groups not directly represented, such as subcontractors and manufacturers.**

The Work Groups each developed several sets of Initial Recommendations which were deliberated upon by the full Commission. The four separate products ultimately were merged into a Single Text of recommendations, which the Commission revised and refined during its Final Recommendation/Report Phase, the final text of which is provided in this Report.

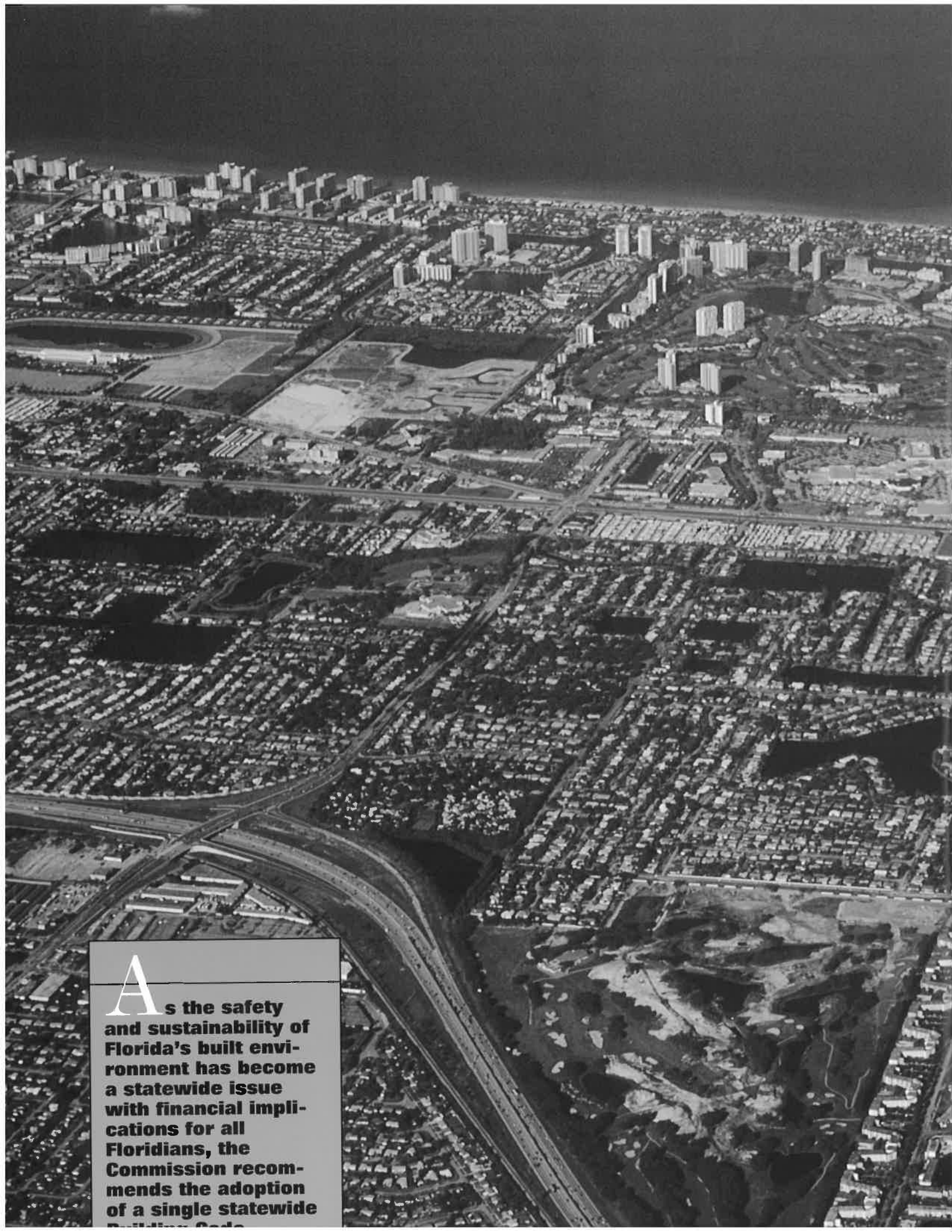
During the final phase of the Commission's work, the Legislative Phase, the Commission, through the Chairman and the Executive Director will provide information and support, as requested, to the Governor regarding any legislation which might be or is proposed as a result of the Commission's work.

The information and Recommendations contained in this Report are based on the 18 months of information received through hearings, panel testimony and a variety of presentations and discussions, debates, and deliberations had by the Work Group Members, the Commission Members and the public. The Commission has concluded that our current Building Codes System is ineffective in protecting the health, safety, and welfare of the citizens of Florida, and is having detrimental impacts on Florida's economic development opportunities, including the difficulties in obtaining property insurance, increased cost of housing and commercial structures and the limiting of competition among manufacturers. The Commission is confident that its recommendations will go a long way to resolving the issues

*In the final analysis,  
the Commission's efforts –  
and recommendations –  
are all aimed at one goal:  
creating a safer and more  
sustainable built environ-  
ment for the citizens of  
Florida.*







**A**s the safety and sustainability of Florida's built environment has become a statewide issue with financial implications for all Floridians, the Commission recommends the adoption of a single statewide Building Code.

# FOUNDATIONS AND RECOMMENDATIONS

## FOUNDATION I THE CODE



he Building Codes System is one of the major pressing affairs of the State. A strong, effective Building

Code and Code Process is essential to the overall welfare of the entire State. Accordingly, Florida should have one building code for use statewide which governs all administrative and technical requirements applicable to Florida's public and private Built Environment. That building code should be called the Florida Building Code ("The Code") and should become effective for use statewide.



## FOUNDATION I

### Recommendations

**I-1.** In order to have a Building Codes System which effectively protects the health, safety and welfare of all of Florida's citizens, Florida should adopt a single building code for use statewide called the Florida Building Code ("The Code"). The Code should be a single set of documents and should apply to the design, construction, code enforcement, erection, alteration, modification, maintenance (specifically related to code compliance), and demolition of Florida's public and private Built Environment. The Code should be organized so as to offer consistency and simplicity of use. It should be applied, administered, and enforced uniformly and consistently from jurisdiction to jurisdiction. It should allow flexibility that is exercised in a manner that meets minimum requirements, is affordable, does not inhibit competition, and promotes innovation and new technology.

**I-2.** The purpose of The Code is to:

1. Serve as a comprehensive regulatory document to guide decisions aimed at protecting the health, safety and welfare of all of Florida's citizens.
2. Provide uniform standards and requirements through the adoption by reference of applicable national codes where appropriate and providing exceptions when necessary.
3. Establish the standards and requirements through performance-based criteria when possible. Provide both performance-based and prescriptive-based criteria when practical.
4. Permit and promote innovation and new technology.
5. Require adequate maintenance of buildings and structures, specifically related to code compliance, throughout the State.
6. Eliminate restrictive, obsolete, conflicting and unnecessary construction regulations that tend to increase construction costs unnecessarily or that restrict the use of innovation and new technology.

**I-3.** To ensure The Code effectively and efficiently protects all of Florida's citizens and the general welfare of the entire State, The Code shall address regional

and local concerns and variations, such as but not limited to, climatic conditions, soil types, termites, weather related events, risks associated with coastal development, life safety issues, and code compliance maintenance programs.

**I-4.** The Recommendations set forth in this Report significantly reform Florida's Building Codes System at its very foundation—that is, the way in which Florida's Building Code is adopted, updated, administered and enforced, and the way in which those who must comply with and enforce the System are educated, trained, licensed and disciplined.

The adoption and implementation of a Statewide Code and Code Process which meets the criteria set forth in these Recommendations will make a major contribution to the recovery of Florida's property insurance market by improving protection against hurricane perils through more uniform and consistent administration and enforcement of The Code, encouraging former and new insurance underwriters to come into Florida, increasing rate competitiveness and requiring improved and increased education and training for all those involved in the Building Codes System.

There already exists in the Insurance Industry an insurance rate reduction program tied to the results of evaluation of the effectiveness of an individual building department's performance (the Insurance Services Office (ISO) Building-Code Effectiveness Grading Schedule). This program provides insurance rate reduction for buildings constructed after the community's building department has been evaluated by the ISO. It does not address existing construction unless the building has been independently evaluated by a licensed design professional. The Commission embraces such a program that recognizes the range of those individual performances.

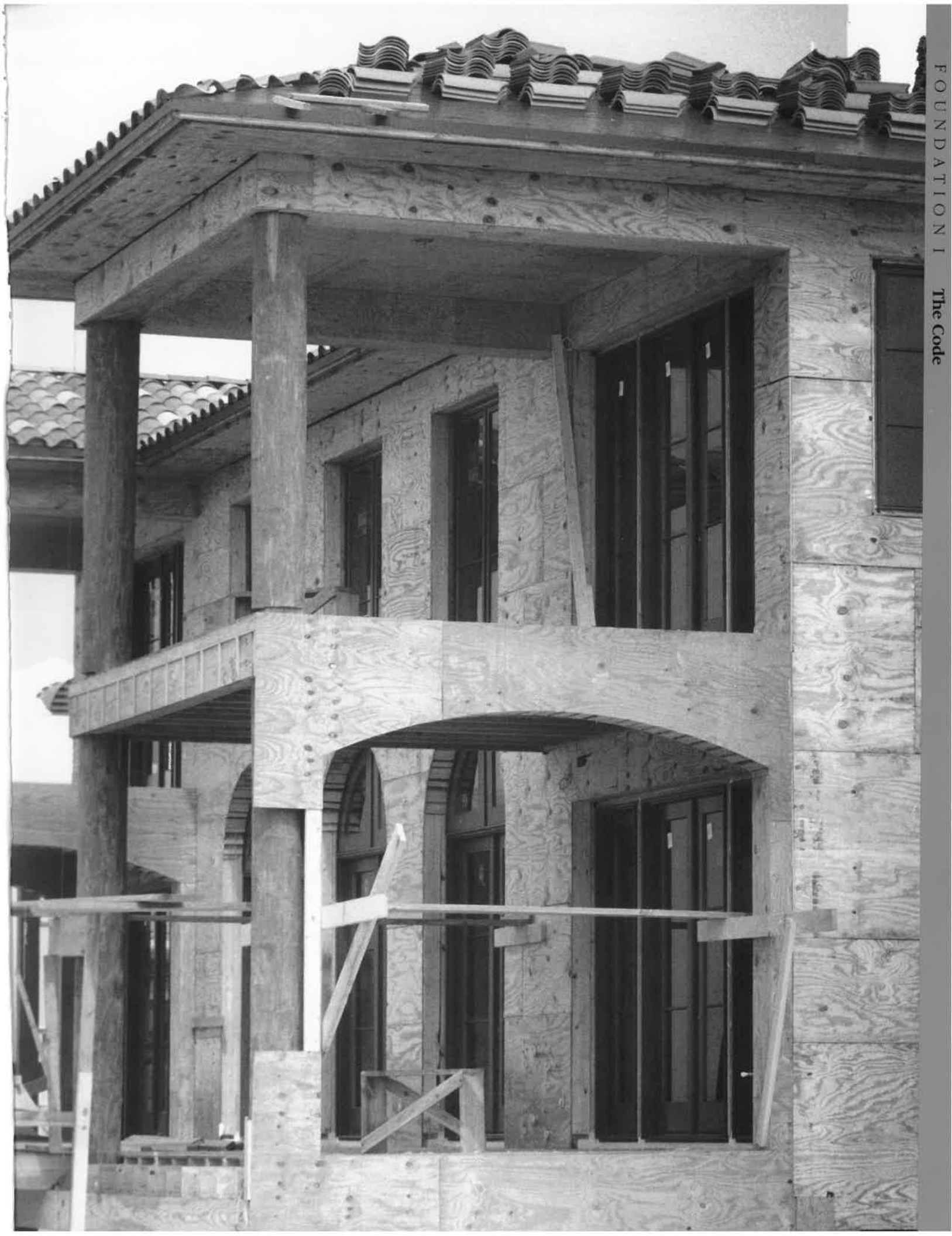
Since Hurricane Andrew struck Florida in 1992, the Legislature has funded the following innovative mitigation programs that are designed to improve preparedness and reduce potential losses when another catastrophic event occurs: the Residential Construction Mitigation Program, Florida DOI training centers, Local Mitigation Strategy, the

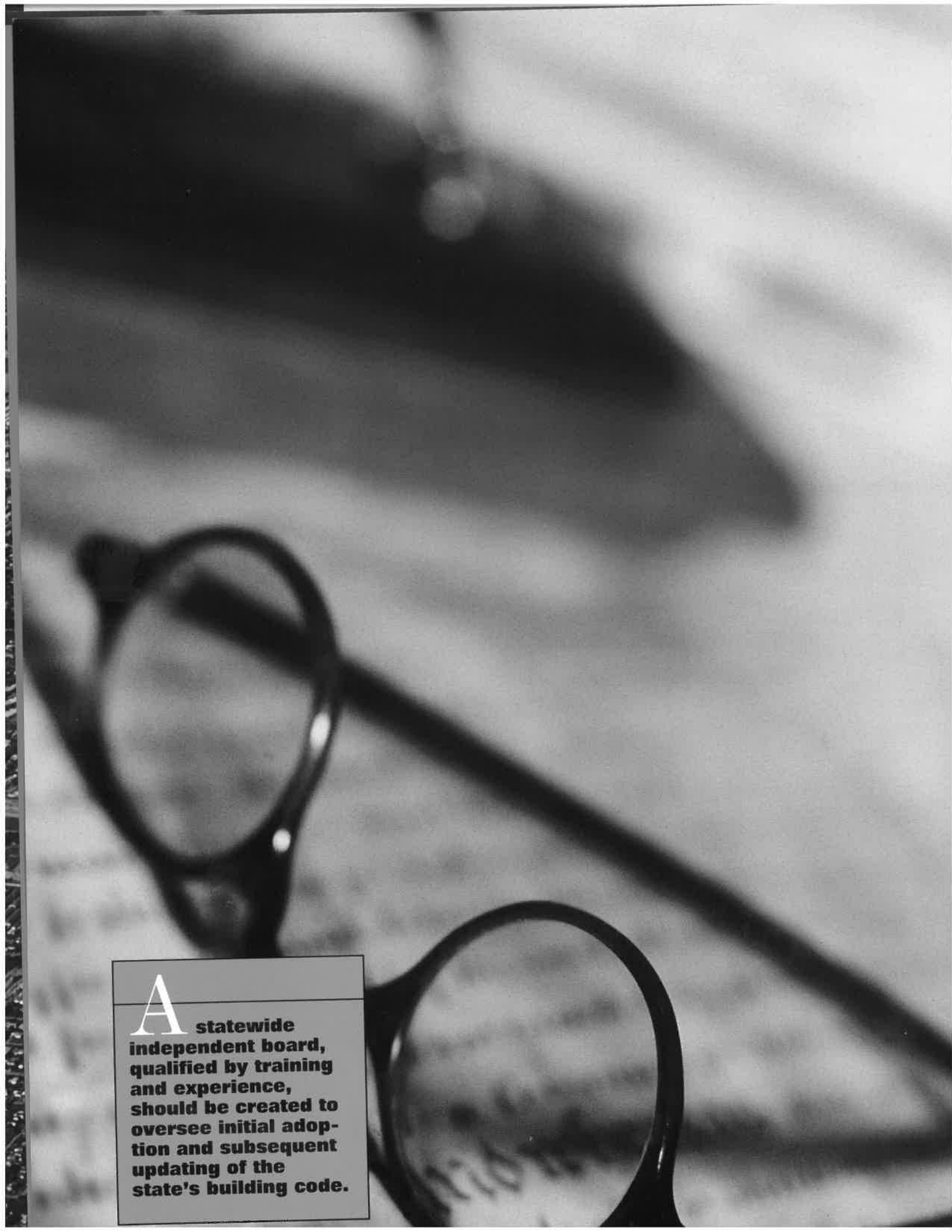
Building Codes Triage Team, the Emergency Management Preparedness and Assistance Trust Fund, the Flood Mitigation Assistance Program, the Showcase Community Program and the Hazard Mitigation Grant Program.

Since several of these programs have taken effect within the last 12 months, their positive impact on Florida's building and insurance industries has not been fully realized. In addition to these programs, there have been significant improvements at the state and local levels regarding the enforcement of building codes and the training and professionalization of personnel who work in this field. Finally, through the establishment of the ISO's Building-Code Effectiveness Grading Schedule, a strong link has been established between an effective Building Codes System and insurance rates.

The implementation of the Recommendations contained in this Report constitute another major improvement to the policies that provide for the safety and insurability of Florida's Built Environment. In fact, the systemic changes proposed herein will complement, consolidate and, in many respects, complete this era of reform. The outcome of these major reforms must be significant, particularly as they apply to the availability and affordability of homeowners' insurance in Florida.

The Commission recognizes that a Statewide Building Code which is stringent, appropriate and effectively enforced will reduce the severity of losses from hurricanes, although any significant impact may take some time as the current stock of older homes is replaced with better built, new homes. Therefore, this Commission strongly recommends that the Department of Insurance pursue additional premium credits, rate reductions and coverage enhancements for all of Florida citizens.

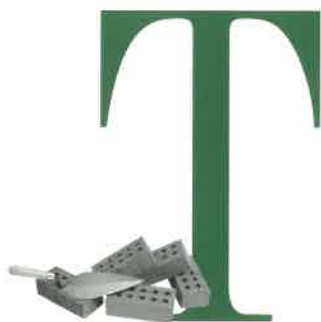




**A** statewide independent board, qualified by training and experience, should be created to oversee initial adoption and subsequent updating of the state's building code.

## FOUNDATIONS AND RECOMMENDATIONS

### FOUNDATION II **THE BOARD**



he Code should be initially adopted and subsequently updated on a 3 year cycle, except as required for emer-

gencies. Once adopted, The Code should become effective for use statewide without further, subsequent adoption by local jurisdictions. The initial adoption and subsequent updating of The Code shall be done by an independent Board that for administrative purposes is housed in the Department of Community Affairs, called the Florida Building Code Board ("The Board"). The Board should include persons who are qualified by experience and training to provide a broad or specialized expertise on matters pertaining to building design and construction, building code enforcement, building material manufacturing, fire prevention, life safety, finance, property insurance and general business. The Board may make both Administrative and Technical Amendments to The Code and shall appoint Technical Advisory Committees (TAC) covering the various areas addressed in The Code.



## FOUNDATION II

### Recommendations

**II-1.** The Code should be initially adopted and subsequently updated on a 3 year cycle, except as required for emergencies, through rulemaking by an independent Board that for administrative purposes is housed in the Department of Community Affairs. The Board should be called the Florida Building Code Board ("The Board"). Once adopted or updated by The Board, The Code should be deemed adopted for use statewide upon the effective date specified by The Board, without subsequent adoption by local jurisdictions.

**II-2.** The Board should be established by July 1, 1998 and should consist of 9 members, appointed by the Governor and confirmed by the Florida Senate for staggered four year terms. The Board should adopt The Code no later than January 1, 2001. In appointing members to The Board, the Governor shall consider persons, from the public and private sector, who are qualified by experience or training to provide a broad or specialized expertise on matters pertaining to building design and construction, building code enforcement, building material manufacturing, fire prevention, life safety, finance, property insurance and general business. In selecting from these categories, the Governor shall consider local building and fire officials, local elected officials, the disabled and the general public.

**II-3.** The Board shall appoint one or more Technical Advisory Committees (TAC) covering the major areas addressed in The Code, including but not limited to mechanical, electrical, plumbing, structural, manufactured buildings, energy conservation, historic buildings, fire, life safety and accessibility. The purpose of the various TAC is to provide technical expertise and input to The Board on all matters in its jurisdiction, including review and evaluation of proposed Amendments. Members of the various TAC shall be persons, from the public and private sector, who are qualified by experience or training to provide a broad and specialized expertise on relevant matters pertaining to the major areas addressed by The Code. In establishing the TAC that will deal with Fire Prevention Code and Life Safety Code issues, The Board shall strongly consider appointing the Florida Fire Safety Board as it is set forth in Section 633.511 of the Florida Statutes.

**II-4.** The Code should contain or reference all laws, rules and regulations which pertain to and govern the design, construction, code enforcement, erection, alteration, modification, maintenance (specifically related to code compliance) and demolition of Florida's public and private Built Environment. The Board should establish the need for exemptions and when estab-

should consider, but not limit itself to, the following:

- Any buildings or structures specifically regulated and preempted by the Federal Government;
- Railroads and ancillary facilities associated with the railroad (buildings associated with the ancillary facilities and infrastructure should not be exempt);
- Construction, modification or installation of infrastructure elements owned and operated by public or private utilities, water management districts or special purpose districts (buildings associated with the ancillary facilities and infrastructure should not be exempt); and
- Zoning requirements, land use requirements, or owner specifications or programmatic requirements which are outside of or beyond the scope of The Code.

**II-5.** In order to achieve the proper balance between a code which is simple to use and which promotes innovation and new technology, The Code should be organized around a framework that clearly states the objective or intent of each requirement and should include, when feasible, both performance-based standards or criteria (which use requirements stated in a manner that recognizes new innovations and flexibility of design) and prescriptive standards or criteria (which allow for the use of specific construction means and methods).

**II-6.** The Code should contain provisions or requirements relative to building, structural, mechanical, electrical, plumbing, energy, radon, gas, maintenance, fire prevention, life safety, accessibility, manufactured building, elevators, termite infestation, unsafe buildings, coastal construction, historical buildings, amusement rides, health care facilities, educational facilities, swimming pools, correctional facilities and any other code-related subject which The Board deems appropriate.

In determining the contents of The Code, The Board should not develop its own new codes and standards. Instead, in establishing The Code, The Board should select from the National or International Family of model codes, or other codes and standards currently recognized by the laws of Florida.

**II-7.** As part of the initial adoption process, The Board should modify the selected codes and standards if needed to accommodate specific needs of the State of Florida, which The Board determines are not adequately contained therein and to ensure consistency among them. In developing The Code, The Board should ensure that The Code remains in compliance with Federal laws and regulations that set building requirements, such as code provisions adopted by the Department of Justice that

Agency regulations that relate to construction within flood prone areas, and Federal laws and rules related to Energy Conservation. When updating The Code, The Board should consider, among other things, changes made by the promulgating entity of the selected code, its own Binding or Advisory Interpretations, appellate decisions and previously approved, locally applied amendments.

**II-8.** Upon selecting the model code and framework to be used, in accordance with the procedures set forth in Recommendation II-13, The Board should review provisions of existing statutes and should make recommendations to the Legislature for the 1999 regular Legislative Session regarding statutes that should be revised or rescinded in order to accommodate The Code. The portion of such existing laws and codes relating to the process should sunset upon the effective date of the Florida Building Code. Any legislation providing for the revision, repeal or sunset of existing laws and codes related to technical requirements applicable to building structures also should expressly state that such legislation is not intended to imply any repeal or sunset of existing general or special laws that are not specifically identified in the legislation. The Board should have the responsibility for examining legislative provisions and making recommendations to fulfill its responsibility to develop a consistent, single code. This task should involve broad participation by and coordination with State and local governments, industry and other affected stakeholders.

**II-9.** It is recognized that there will be a large and broad list of standards referenced in the model code selected by The Board. As such, those standards or criteria shall be referenced in The Code. If a standard or criteria needs amplification or modification to make it appropriate for use in Florida, only the amplification or modification shall be specifically printed in The Code.

**II-10.** To ensure that the effectiveness of Florida's Building Codes System does not cease upon construction completion of a new facility or the modification of an existing facility, The Code shall include maintenance provisions specifically related to code compliance. Programs to enforce such maintenance provisions shall be enforced at the local level and an appropriate inspection fee schedule should be established by local government. These programs should address how and when commercial, institutional and multifamily residential structures should be inspected through a regular, periodic program. This program shall incorporate the Building Code, the Property Maintenance Code (for code-related items), the Life Safety Code and the Fire Prevention Code enforcement criteria. The local code official shall set the

of building, regular cycle, etc.) upon which such inspections would be made. The inspections shall cover all structures and premises, except single-family dwellings and the interior of dwelling units in two-family or multiple-family dwellings, for the purposes of ascertaining and causing to be corrected any conditions which may affect the structural stability of the building, cause fire, contribute to the spread of fire, interfere with fire-fighting operations, endanger life or violate any provisions or the intent of the applicable codes.

**II-11.** The Code in its entirety should be contained in and promulgated and updated by rule, including the technical portions of the Florida specific accessibility requirements and including the entire Fire Prevention and Life Safety Codes. The Civil Rights portions of Florida's Accessibility Code and the powers, duties and responsibilities of the Building and Fire Officials should remain as currently contained in the Florida Statutes. The Code and subsequent amendments thereto shall not weaken the Life Safety requirements as provided in The Fire Prevention Code, the Life Safety Code and any existing Florida Statutes.

**II-12.** To have an effective Building Codes System, there must be baseline plan review, permitting, and inspection requirements stated within The Code. Those requirements must result in clear and adequate construction documents which comply with The Code, effective application of those documents by contractors, and uniform and effective enforcement of those documents and The Code by the various levels of building and fire officials in the local jurisdictions. Likewise, there should be standards of conduct regarding code compliance and enforcement related to design professionals, the construction industry and the various levels of building and fire officials in the local jurisdiction. To that end, The Board shall include all Administrative Provisions in The Code, with a specific emphasis on streamlining and making more uniform the permitting and inspection requirements, standards for plan review and emergency procedures to effectuate the responses of the industry and local building and fire departments in the wake of disaster. These requirements should take into account the type and complexity of construction. Local jurisdictions may amend the Administrative Provisions of The Code on a limited basis as provided in Recommendation III-1 herein. The Board shall update the Administrative Provisions of The Code as part of its triennial update cycle. Upon adoption, such Amendments shall apply statewide.

**II-13.** The initial selection, development and adoption of The Code and the subsequent updating of The Code should be an open and fully participatory process

parties. In order to ensure such a process, The Board should go beyond the rulemaking requirements set forth in Chapter 120 of the Florida Statutes for noticing of workshops and hearings, number of workshops and hearings, and location of workshops and hearings. To obtain broad general public, State and local government, and industry stakeholders input, The Board should hold a minimum of 6 public workshops and hearings around the State when initially selecting The Code, and when updating The Code every 3 years. When updating The Code, The Board shall apply, but not be bound by, the criteria set forth in Recommendation II-14a.-f., below.

**II-14.** The Technical provisions of The Code can only be amended by The Board after review and recommendations by the TAC. The TAC will review the proposed amendment and perform due diligence with respect to the merit of the proposed amendment and must consider and specifically determine that the amendment meets the following criteria:

- a. The amendment shall have a reasonable and substantial connection with the health, safety and welfare of the general public;
- b. The amendment will strengthen or improve The Code, or in the case of innovation or new technology, will provide equivalent or better products, methods or systems;
- c. The amendment addresses specific, local conditions that justify the more stringent or improved code provisions necessary to protect life and property;
- d. The amendment does not discriminate against material, products, methods or systems of demonstrated capabilities;
- e. The amendment does not degrade the effectiveness of The Code or Code System; and
- f. The proposed amendment includes a fiscal impact statement which documents the cost and benefits of the proposed amendment.

While the overall net benefit to the health, safety and welfare of the public is the primary factor when considering amendments to The Code, The Board must also specifically consider information on the potential cost and benefits of the proposed amendment and shall establish criteria for the fiscal impact statement. Included in that criteria should be the impact to local government relative to enforcement, the impact to property and building owners, as well as to industry relative to the cost of compliance. If the information is not relevant or is unobtainable, a statement to that effect should be provided. Failure, however, to include this information may be cause for rejection of the proposed amendment.

The TAC may recommend to The Board that the proposed amendment has merit for

the TAC must be by a majority of the TAC. The Board may accept or reject any of the TAC's recommendations.

The Board should establish the milestone events and dates of its recurring 3 year amendment cycle. Except as provided herein, Technical Amendments may be proposed at anytime up to the cut-off date established by The Board, and all Technical Amendments approved by The Board will become effective in conjunction with the issuance of the next version of The Code, as amended, at the conclusion of its 3 year cycle.

In addition to The Boards' emergency powers set forth in Recommendation II-17, during the initial 3 year period of The Code, The Board may approve Technical Amendments once a year, for statewide application, based upon a supermajority vote that delaying the application of the amendment would be contrary to the health, safety and welfare of the public or the amendment provides an economic advantage to the consumer. All interim amendments considered by The Board shall be approved utilizing the process set forth above. The updating of The Code, however, is not subject to this review process. The Code is, instead, updated through the rule-making and public workshop process set forth in Recommendation II-13, above.


Local Technical Amendments to The Code should be published by The Board on a statewide basis, including publication in the Florida Administrative Weekly. The Board should maintain copies of all proposed (during the cycle) and adopted (after the cycle) Technical Amendments in a format which is usable and obtainable by the public, including through electronic means.

**II-15.** The Board should maintain a list of interested parties and provide those individuals with notices of rulemaking and of workshops and hearings. The Board should disseminate information on code adoption, updates and amendments to all interested parties and stakeholders, making maximum use of electronic means such as the Internet and WEB pages.

**II-16.** All of The Board's actions are subject to the processes as set forth in Section 120.57 of the Florida Statutes, except that the Administrative Law Judge's order shall be final agency action.

**II-17.** If The Board finds that an immediate danger to the public health, safety, or welfare requires emergency action, The Board may adopt any rule necessitated by the immediate danger in accordance with section 120.54(9), Florida Statutes.

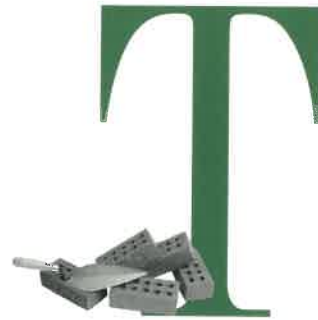
The Board shall provide technical assistance to local building and fire departments in order to promote maximum compliance with the ISO's Building-Code Effectiveness Grading Schedule. Florida is scheduled to be re-evaluated by the ISO in

A black and white photograph of two men wearing hard hats and work clothes, leaning over a large sheet of paper (blueprints) on a construction site. The man on the left wears a white hard hat and a light-colored button-down shirt. The man on the right wears a dark hard hat and a plaid shirt. In the background, the wooden frame of a building under construction is visible, including a large window opening and roof trusses.

**L**ocal governments will continue to administer, enforce and interpret The Code and have the ability to address local concerns through an amendments process.

## FOUNDATIONS AND RECOMMENDATIONS

### FOUNDATION III LOCAL ADMINISTRATION OF THE CODE



he Code shall be administered, interpreted and enforced by local government Building and Fire Officials. Local government may amend certain defined portions of the Administrative Provisions of The Code on an annual basis, so long as such amendments improve or are more stringent than The Code. With the exception of emergencies, Technical Amendments to The Code may only be made by The Board. Decisions by Municipal and County Building and Fire Officials may be appealed to the local Board of Appeals and may be subsequently appealed to The Board. The Board shall have the power to render written Binding Interpretations, applied prospectively, of any provision of The Code, at any time, including upon the written request of any substantially affected party.



## FOUNDATION III

### Recommendations

**III-1.** A Statewide Building Code should not dictate the business practices of local building or fire departments, except as such practices are essential to producing a sound, effective Building Codes System which is vital to the overall welfare of the entire State. Subject to and consistent with the Recommendations in this Report, local government should establish the business practices of its building and fire departments, including the setting of permit fees. At the same time, however, to have an effective Building Codes System, there must be baseline plan review, permitting, and inspection requirements stated within The Code that result in only clear and adequate construction documents which comply with The Code being permitted, effective application of those documents by contractors and owner/builders, and uniform and effective enforcement of those documents and The Code by the various levels of building and fire officials in the local jurisdiction. Likewise, there should be standards of conduct regarding code compliance and enforcement related to design professionals, residential designers, the construction industry and the various levels of building and fire officials in the local jurisdiction.

To that end, all Administrative Provisions of The Code, including local amendments thereto, should emphasize streamlining and making more uniform the permitting and inspection requirements, standards for plan review, and emergency procedures to effectuate the responses of the industry and local building and fire departments in the wake of disaster. Therefore, local amendments to the Administrative Provisions of The Code should be limited to the following:

- number and type of inspection requirements above the minimum established in The Code;
- number and additional qualifications of the various levels of building and fire officials in the local jurisdiction above the minimums established in The Code;
- the form for a building permit application above the minimum established in The Code;
- submittal requirements for plan review;
- permit fee schedule;
- reinspection fee schedule;
- abandonment;
- time extensions;
- commencement of work; and
- build-out period.

**III-2.** All locally adopted Administrative Amendments shall be transmitted in their entirety to The Board and shall become effective upon transmission or the effective date contained in the amendment, whichever is later. The Board shall include in the initial adoption of The Code a clear definition of what constitutes "Administrative" relative to The Code and shall designate what areas within the Administrative Provisions of The Code may be amended locally. The Commission believes the Administrative Provisions of The Code should be defined as those subject areas that do not physically effect the design or construction of a building, structure or service system. The issue of whether an amendment is in fact "Administrative" is first appealable by a substantially affected party to a local Board of Appeals (if one exists) and then to The Board.

**III-3.** All locally adopted Administrative Amendments shall be published by title in a newspaper of general circulation in and by the jurisdiction where the amendment was adopted. That publication should include information on the availability of the full text of the Amendment. The Board shall maintain copies of, and publish, all adopted Administrative Amendments as part of The Code in a format which is usable and obtainable by the public, including through electronic means. The adopting jurisdiction shall make readily available, in a single document, all active locally adopted Administrative Amendments.

**III-4.** It is the responsibility of the various levels of the building and fire code officials in the local jurisdiction to enforce The Code on all public and private development which is subject to The Code. Owners of all projects requiring a building permit, including State agencies and local school boards, should be required to pay a fee established by the local authority in order to cover the cost of administering the permitted activities of the owner's project. Such fees should be established by the local governing body and should be used solely to support the local building and fire departments in carrying out code enforcement responsibilities. Municipalities and counties should strongly consider interlocal agreements with one another or contracts with private entities for purposes of performing their enforcement functions. The Board should establish criteria which shall be met by private entities which contract to perform such functions. In establishing that criteria, The Board shall address such things as equivalency of service, conflict of interest, liability, insurance

on building code related responsibilities should provide support to the local governments, as requested. Nothing in The Code should diminish the role or authority of the owner to ensure that its specific non-code requirements are met. This Recommendation is not intended to preempt the State Fire Marshal or the Division of Risk Management from conducting inspections deemed necessary for safety and insurance purposes.

**III-5.** The fundamental purpose of the Plan Review Process is to ensure that the submitted plans are in compliance with The Code. That purpose will be successfully achieved by ensuring that requirements are established and met by all individuals involved in the Plan Review Process, specifically the Licensed Design Professional, Residential Designer and the Plans Reviewer. The primary responsibility of the Licensed Design Professional or Residential Designer in the Plans Review Process is to ensure that the documents submitted are in compliance with The Code. The Plans Reviewer's primary responsibility is to conduct a review of submitted documents to help ensure they are in compliance with The Code. In order to promote an effective, efficient and uniform plan review process and to effectuate that purpose, The Board should develop requirements and guidelines for the local plan review process, to be incorporated in The Code, including:

#### Requirements

- Minimum qualifications and experience for plan review personnel;
- Minimum plan content and submittal requirements (in the form of a checklist);
- Baseline permitting documents such as, permit applications, checklists, etc. to which local government can add, but not detract;
- Procedures for handling technically incomplete or inaccurate plan submittals, including informing the applicable authority when technically incomplete or inaccurate plans are consistently submitted; and
- Uniform standards for evaluating licensed design professionals' and residential designers' performance with regard to permitting documents they submit.

#### Guidelines

- Provisions for coordination among and between local offices with review responsibilities (like building and fire officials with respect to building code, life safety code and fire prevention code and State or regional agencies with special expertise on building and fire and life safety code related

- Provisions for timely reviews based on construction project complexity; and
- Provisions for out-sourcing of plan reviews.

**III-6.** The fundamental purpose of the Inspection Process is to assure that the building or structure is being constructed in substantial compliance with the permitted documents and codes. In order to promote an effective, efficient and uniform inspection process and effectuate that purpose, The Board should develop requirements and guidelines for the inspection process to be followed by the Contractor, Residential Designer, Licensed Design Professional and the various levels of Building Officials in the local jurisdiction, and to the extent not duplicated by requirements and guidelines established by the State Fire Marshal, to be followed by the Fire Official in the local jurisdiction and to be incorporated in The Code, as follows:

**Requirements:**

- mandatory minimum number and types of inspection;
- mandatory issuance of certificates of occupancy/completion;
- documentation for noticing of failed inspections as to non-compliance to code sections;
- provisions for availability of permitted plans and documents on the job-site;
- procedures for notification of code violation to the contractor or a responsible agent of the contractor; and
- signature of contractor or licensed design professional (when one is required), or their designee, on permit inspection forms at the job-site at major milestone inspection points, prior to local government inspection, verifying that work has been done as required by The Code.

**Guidelines:**

- rotation of inspectors work area assignment (where there is more than one inspector in a jurisdiction) in order to, among other things, provide ample opportunity for experienced, cross-trained personnel to be available to assist other local governments as appropriate, but especially in the event of a disaster, and to minimize the potential for conflicts of interest;
- reasonable time frames between receipt of requests for an inspection and the conducting of the inspection;
- access to work being inspected;
- provisions for out-sourcing of inspection services;
- equating the number of inspections to which an inspector is assigned to the complexity and time allocation given to the inspector;
- pre-inspection checklists to be used by the residential designer or licensed

to achieve adequate code compliance of the construction in preparation for an inspection; and

- components of the contractor quality assurance/control plans as referenced in Recommendation IV-9, including use of private inspectors and suggested frequency for maintenance of property inspections.

**III-7.** In effectuating sound, uniform and streamlined plan review and inspection processes, local government should consider contracting with private individuals or entities who hold a current license under Part XIII of Chapter 468 of the Florida Statutes, for some or all of the plan review and inspection functions. The Board should develop guidelines and qualifications for local government to utilize when pursuing partial or full privatization of building department functions, including equivalency of service, conflict of interest, requirements for competency, liability, insurance and long-term accountability.

**III-8.** The Board should develop a "Mutual Aid Program" which is organized through the Department of Community Affairs. Since Florida would have a single Statewide Code, the primary purpose of such a Program would be to provide an efficient supply of various levels of building and fire officials, design professionals, and various levels of construction industry individuals, taken from around the State, to be dispatched to assist in the rebuilding effort in an area which has been hit with disaster.

The Program should include:


1. Provisions for minimum post-disaster structural inspections and procedures (Unsafe occupancy);
2. Provisions for emergency permitting and inspection procedures; and
3. Provisions for establishing contact with emergency management personnel and other State and federal agencies.

**III-9.** Field Interpretations of The Code shall be rendered by the local jurisdiction's Building Official or designee except on issues relating to the Life Safety Code and Fire Prevention Code, in which case Field Interpretations shall be rendered by the local Fire Official or designee and whenever feasible, communicated to the Building Official. It is essential to the overall effectiveness of a Building Codes System that a close, regular communication and cooperation occur between the building and fire officials. Local jurisdictions should take all steps practical to physically co-locate these officials and to organize to limit overlapping responsibilities. Even in the best of circumstances, there may be conflicting interpretations by Building and

between Building and Fire Officials in favor of the requirement which offers the greatest degree of life safety or alternatives which would provide an equivalent degree of life safety and an equivalent method of construction.

**III-10.** Appeals from the Field Interpretations shall be heard and determined by the Building Official on matters relating to The Code, except relative to issues of the Life Safety Code or Fire Prevention Code, in which case, such appeals shall be heard and determined by the Fire Official. Further interpretation of the Building Official/Code Administrator and the Fire Official shall be appealable to a local Board of Appeal, if one exists. The decisions of either the local Boards of Appeal (if one exists) or the Building Official or Fire Official shall be subsequently appealable to The Board. However, decisions of a Building Official which, based on The Code, declare structures to be unsafe and subject to repair or demolition shall not be appealable to The Board if the local governing body finds there is an immediate danger to the health and safety of its citizens. All appeals shall be heard in the county of the jurisdiction defending the appeal. Actions of The Board are subject to the appellate process as set forth in Section 120.57 of the Florida Statutes, except that the Administrative Law Judge's order shall be final agency action.

**III-11.** The Board shall be authorized to issue written Binding Interpretations, which shall only apply prospectively, of any provision of The Code at anytime, including those currently under dispute, and shall render such Binding Interpretations upon the written request of any interested party, including local government. The Binding Interpretations of The Board are subject to the processes as set forth in Section 120.57 of the Florida Statutes, except that the Administrative Law Judge's order shall be final agency action.




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**A**s shown by the experience of South Florida in Hurricane Andrew, a strong compliance and enforcement system is an essential component of an effective building codes system.

## FOUNDATIONS AND RECOMMENDATIONS

### FOUNDATION IV **STRENGTHENING COMPLIANCE AND ENFORCEMENT**

 Without knowledgeable and consistent compliance by users and strong enforcement by government, Florida will not have an effective overall Building Codes System. In addition to a strong code, a major cornerstone of an effective Building Codes System is a clear delineation of each participant's role and accountability for performance in that role. Reward and recognition balanced with strong, appropriate discipline are keys to success. There must be a formal process to obtain credentials, and the System must hold credentialed design, construction and enforcement professionals accountable for their performance in their respective roles. The System must require and provide opportunity for education and training necessary for each participant to fulfill their role competently.



## FOUNDATION IV

### Recommendations – Roles:

**IV-1.** At a minimum, The Board shall develop and publish a document which contains detailed descriptions of the roles and responsibilities of the *Owner*, *Licensed Design Professional*, *Residential Designer*, *Contractor*, and *Local Building and Fire Code Officials*. That document may also contain descriptions for other participants involved in the Building Codes System. In developing these descriptions, The Board should consider the following:

- a) *Owners* are responsible for the general requirements of their project and hiring qualified design professionals, residential designers and other consultants, and contractors. It is the Owner that the public ultimately looks to for final compliance with The Code, so the Owner shares in the responsibility for compliance.
- b) The Code process recognizes that not every project requires a *Licensed Design Professional*. However, for those projects and permit applications where a Licensed Design Professional is required, the Licensed Design Professional is responsible for producing and filing quality, clear, and accurate documents which are in compliance with The Code.

For those projects where multiple Licensed Design Professionals are required by contract or law, a *Principal Design Professional* should be identified and that name submitted to the Building Official as part of the permit application submitted. The Principal Design Professional is responsible for coordination of each and every aspect of the design package, including acting as a point of contact for the rest of the licensed design professionals involved and the project team during the design, review, and construction phases of the project and for verifying that the work is complete, consistent, competent, and complies with the approved plans. The Principal Design Professional should be a Florida licensed architect, engineer, or landscape architect and should have contractual responsibility and authority for coordination of all required design disciplines. In addition, the Principal Design Professional must have the appropriate registration, experience and competence to serve in their capacity based on specific project requirements.

- c) In Florida, a major percentage of single-family residential housing which is at risk of weather-related damage is designed by non-licensed *Residential*

meet The Code. However, it is the Contractor or Owner who is ultimately responsible for that design because it is the Contractor or Owner who obtains the building permit and secures required inspections and the certificate of occupancy. Current Florida law for Design Professionals, therefore exempts a major portion of the single-family design industry from licensure and regulation, resulting in thousands of structures being constructed each year without any participation by a licensed design professional. All Residential Designers should be required to hold an occupational license and should, at a minimum, complete a core module of education, such as the one that would be offered by the Code Training Program (set forth in Recommendation IV-10, herein), with a focus on residential codes as a requirement to obtain and retain an Occupational License.

- d) *Contractors* are responsible for quality control and compliance with The Code relative to their activities in the construction process. In fulfilling that obligation, the Contractor should be responsible for:
  - 1) obtaining building permits and arranging for inspections of the work as required by governmental agencies;
  - 2) constructing the work and in accordance with code requirements;
  - 3) utilizing code-compliant construction documents;
  - 4) developing a strong quality control program to ensure the quality of the work by performing or supervising any or all parts of the project; and
  - 5) directing all job-site safety programs, means and methods of construction and the orderly coordination of subcontractors and suppliers.
- e) *Local Government Building and Fire Code Officials*, as defined by current law, are responsible for compliance and enforcement of The Code. In doing so, they are responsible for assuring that the project is in compliance with The Code through plan review; the issuance of construction permits and certificates of occupancy; and through the periodic inspection of the project. These functions help ensure that the project is in compliance with The Code. In fulfilling these obligations, the Local Building and Fire Code Officials must:
  - 1) render interpretations of The Code;
  - 2) advise the appropriate State Board of suspected improper or illegal conduct of a contractor, licensed

forming services;

- 3) require correction of errors in the document and the on-site construction;
- 4) order discontinuance of the use of any building or structure, whether public or private, which is being used contrary to the provisions of The Code or which is structurally unsafe or otherwise dangerous to human life; and
- 5) authorize the connections of buildings, structures, or service systems to utilities.

### Recommendations – Board Structure

**IV-2.** Buildings regulated by a Building Codes System are constructed as a complete facility requiring the close cooperation and communication between all elements of the construction industry. Consistency and uniformity in the licensing and discipline of that industry is a key component of an effective Building Codes System. Therefore, the licensure, discipline and enforcement programs for Florida's construction industry shall be organized under a newly created, single board called the Construction Industry Licensing Board, which for administrative purposes shall be housed at the Department of Business and Professional Regulation. The Construction Industry Licensing Board shall be responsible for the licensing and discipline of the following:

General Contractors, Building Contractors, Underground Utility Contractors, Residential Contractors, Roofing Contractors, Pool Contractors, Specialty Structures Contractors, Manufactured Home Installers, Plumbing Contractors, HVAC Contractors, Mechanical/Sheet Metal Contractors, and Electrical Contractors.

The current Electrical Contractor's Licensing Board and the current Construction Industry Licensing Board should be restructured as appropriate to create this new Board.

### Recommendations – Licensing

**IV-3.** With respect to those categories of licenses currently licensed under Chapter 489 of the Florida Statutes, Florida should have a single-tier licensing scheme. Those Contractors currently licensed under Chapter 489, F.S. should be licensed only by the State with meaningful discipline and enforcement powers granted to local governments, including enforcement of the Statewide Records of Performance System pursuant to Recommendation IV-8; fining a licensee; and suspending, within a respective local jurisdiction, a license for code violations and other violations established by the Florida Statutes. All other disciplinary

Existing registered contractors shall remain as registered contractors and may renew licenses for the purposes of practicing only within the jurisdiction in which they previously held licenses. Effective no later than one year after single-tier licensing becomes law, all local governments shall cease issuing new licenses. Local licensees who are in-active shall be eligible to initially register with the State boards on an in-active basis.

Because of the implementation of a Statewide Code and more streamlined and uniform administration and enforcement of The Code, the need for specialty licenses by local government would seem to be minimized. However, local government should have limited authority to establish categories of specialty licenses, if considered essential to protect the general public or provide the consumer with a reasonable competitive opportunity, and if such specialty licenses do not interfere with the ability of a Contractor who holds a license under Chapter 489, F.S. to pull a permit or otherwise do business as a Contractor in the local jurisdiction. In addition, local government shall not require a Contractor licensed under Chapter 489, F.S. to use specialty contractors, so long as the contractor himself is qualified to do or oversee the work.

**IV-4.** In general, the current requirements of Florida law regarding the education, experience, examination, licensure, practice standards, continuing education and discipline of Licensed Professional Engineers, Architects, Interior Designers, and Landscape Architects shall remain as in current law, with the exception of the following changes:

- Licensed Engineering Professionals who sign and seal plans and specifications shall identify their specific professional engineering discipline or area of expertise below their signature for the type of engineering they are responsible for on a specific project, and shall be held fully accountable and liable for the performance of their signed and sealed professional work.
- Each of the design and engineering professions shall have continuing education programs specifically related to their profession. Specific requirements regarding The Code and The Code related issues may be mandated by the various State licensing boards (through the "Code Training Program") as a portion of the continuing education program for all professions.

**IV-5.** Any person desiring to be licensed by the State of Florida for which licensure is currently required under Part XIII of Chapter 468 of the Florida Statutes (Building Code Administrators and Inspectors), and Chapter 633 of the Florida Statutes (Fire Prevention and

1. Demonstrate that the applicant meets the eligibility requirements for the licensing category sought;
2. Upon demonstrating that the applicant meets the eligibility requirements, the applicant must successfully complete the "Code Training Program" or the State Fire College core curriculum and module course work, as appropriate, for the licensing category sought; and
3. After successfully completing the core curriculum and module course work, the applicant must take and pass the licensing examination for the category sought.

To the extent not already provided by current law, the State Fire Marshal shall develop in Chapter 633 of the Florida Statutes, the appropriate categories within the regulated fire services industry to parallel those categories of building code administrators and inspectors found in Chapter 468, Part XIII, F.S. (e.g., Official, Plans Reviewer, and Inspector).

#### **Recommendations – Discipline**

**IV-6.** For any category of licensee in the design profession, code administrators, plans examiners, inspectors, fire official, and construction industry, the offense of willfully practicing without a license or proper certification should constitute a 3rd degree felony.

**IV-7.** A person who willfully violates or has a pattern of violations or who recklessly disregards The Code shall have their license suspended. A willful violation or a pattern of violations or reckless disregard of The Code which may reasonably result or does actually result in physical harm to persons should constitute a 3rd degree felony. This standard should apply to all categories of licensees and to those exempt from licensure or certification who commit such violations.

**IV-8.** In addition to the power vested in local governments to require corrections of code violations, The Board, together with the Department of Business and Professional Regulation (DBPR), shall establish a Statewide Records of Performance System and set forth the criteria for the categories of code violations which shall be included in the Performance System. Under the Performance System, local governments will report code violations to DBPR. Lack of code compliance may be noted at the time of plan review and code violations may be discovered during inspections conducted by code enforcement officials. Code violations will be given point equivalents that mirror the State driver's license system. Points shall be assessed against the licensed design professional or licensed contractor who is responsible for the plans or for the on-site construction, based upon the severity of the violation.

lenge the imposition of points within a reasonable period of time under Chapter 120 of the Florida Statutes. Upon the accumulation of a specified number of points within a specified period, DBPR shall require the licensed design professional or contractor to attend educational courses relating to building codes as a condition of maintaining their licensure. Upon the accumulation of a higher number of points within the period, DBPR should suspend the licensed design professional or contractor's license. Upon the accumulation of an even higher number of points within the period, DBPR should revoke the licensed design professional's or contractor's license. The licensed designer or contractor shall have the right to challenge whether the specified level of points has been accumulated within a reasonable period of time under Chapter 120 of the Florida Statutes.

#### **Recommendation – Certified Quality Control Programs**

**IV-9.** The Code should recognize and promote outstanding Quality Control Programs to be maintained by licensed design professionals and licensed contractors. The Board shall develop and include in The Code standards for Quality Control Programs that provide incentives in the areas of oversight and performance. The standards should include requirements that the licensed design professional or contractor have a demonstrated record of outstanding compliance with requirements of The Code, that the designer or contractor uses supervisors and journeymen that have been certified by the Code Training Program in accordance with Recommendation IV-10 herein, at specified levels on job-sites, and that the contractor uses private licensed building inspectors to inspect work prior to any inspections being conducted by code enforcement jurisdictions. It shall be the responsibility of the code enforcement officials to monitor these Quality Control Programs to ensure that they are being implemented in accordance with the standards. Incentives should be offered for licensed design professionals and contractors who adopt and implement Quality Control Programs that meet standards set by The Board, including expedited plan review or permitting, priority inspection scheduling, and fewer required inspections.

#### **Recommendations – "Building Code Training Program":**

**IV-10.** As one of the major elements of strengthening Compliance and Enforcement, the State of Florida should establish a "Building Code Training Program" (Program) to develop and provide a core curriculum relating to The Code and its system of administration

mented and administered by The Board in coordination with the Department of Education, Department of Community Affairs (DCA), Department of Business and Professional Regulations (DBPR), the State Fire Marshal, the State University System and the Division of Community Colleges. The Board should enter into contracts with the Department of Education, the State University System, the Division of Community Colleges, model code organizations, professional organizations, trade organizations, and private industry for administration of the Program.

DBPR, and the respective licensing boards, in coordination with DCA and the State Fire Marshal, should develop or cause to be developed, as part of the Program, a core curriculum which is a prerequisite to advance, specialized module course work, Continuing Education Units (CEU's) and standardized examinations for all categories currently licensed under Chapters 468, Part XIII (Building Code Administrators and Inspectors); 471 (Engineering); 481 (Architecture, Interior Design and Landscape Architecture); 489 (Contracting) and 633 (Fire Prevention and Control) of the Florida Statutes.

The Program should be affordable, accessible, meaningful, be financially self-sufficient and should make maximum use of existing sources, systems, institutions, and programs available through private sources. This recommendation does not intend to create a new bureaucratic entity.

The core curriculum should be a prerequisite to the module course work and should be completed within a 2 year period after establishment of the Program. The core program is defined as the information required to have all categories of participants appropriately informed as to their technical and administrative responsibilities in the effective execution of the code process by all individuals currently licensed under the Statutes set forth above. The Program should provide for a test for individuals who wish to be exempted from the core curriculum requirements. Credits for taking the core curriculum should apply to the CEU requirements. An individual who passes the examination for exemption from the core curriculum shall receive full CEU credit for the course or courses exempted by each examination.

DBPR shall develop, cause to be developed, or approve as a part of the Code Training Program, specialized and advanced module course work, Continuing Education Units and standardized certification examination for superintendents and journeymen. Upon satisfactory completion of the course work and

vide CEU's to serve the design and engineering professions involved in the design of buildings. Some of these course modules should be required by the appropriate State Boards as a part of their regular Continuing Education Programs.

### **Recommendations – Education and Training Standards**

**IV-12. Inspectors, Plans Examiners, Building Officials, and Contractors** In order to obtain a license as a Building Inspector, Plans Examiner, Building Official or Contractor, an individual must have a mixture of education and experience. The amount of such education and experience should be determined by the appropriate regulatory board.

Because the current licensing programs for Inspectors, Plans Examiners and Building Officials is relatively new, the Department of Business and Professional Regulation should closely monitor those licensing programs and report to the 1999 Legislature the need for reform, if any, of those programs. Should there be a need to change those programs, the Commission's recommended guidelines on this issue is shown in Table I (attached to this document) and, in general, reflect more specific educational requirements (i.e., degree) and, in some cases, additional experience requirements for these categories.

#### **IV-13. Fire Official**

The education and certification of the Fire Inspector and Fire Official must be considered as an integral component of The Code and inspection process. In addition to the current requirements in the Florida Statutes, the Commission recommends The Board enhance current cross-training course work and continuing education programs and develop requirements for multiple programs to increase and strengthen communication and cooperation between Building and Fire Officials.

#### **IV-14. Licensed Design Professionals**

In general, the current requirements of Florida law regarding the education, experience, examination, licensure, practice standards, continuing education, and disciplinary procedures of Licensed Professional Engineers, Architects, Interior Designers, and Landscape Architects shall remain as in current law, with the exception of those things set forth in Recommendation IV-4, herein.

#### **IV-15. Construction Workers**


Workers are the most important link in the entire Building Codes Process. It is imperative they receive on-going, consistent and effective on-the-job training. At a minimum, it is recommended that The Board should work with the respective professional licensing boards within the

Labor and Employment Security, the State University System, Community Colleges, and the entity administering The Code Training Program to develop a program and standards to provide:

- Long-term Training for entry level personnel, intended to produce crafts people who are competent to perform all tasks associated with a specific trade. The traditional apprenticeship courses, which produce qualified workers capable of completing work in the trade independent of supervision, are the best example of this.
- Short-term Intensive Training intended to teach specific skills within a trade to entry-level workers. The Florida Home Builders Association ("FHBA") "qualified framer" six month program which trains workers specifically in residential framing carpentry, is one example of short-term training.
- Brief In-Service Training intended to inform workers regarding new code requirements, construction techniques and materials. FHBA is developing one-day onsite training on code updates which target framers. FRSA is developing onsite training for roofers. The Board should develop incentives to encourage other similar associations to develop such training programs.
- IV-16.** The Board and the Florida Department of Labor and Employment Security should develop a Construction Worker Training Program which has a blend of the following three methods:
  - Mandatory Licensing: This enforces initial (pre-licensing) requirements for licensees, and could enforce continuing education requirements throughout the licensee's working life. The existing local government licensing of journeymen is an example.
  - Mandatory Training: Standards for training of workers enforced by requiring contractors to maintain records which demonstrate that designated employees have received training required by government agency. One example of this is the regulation of asbestos contractors under Chapter 469 of the Florida Statutes, where contractors are required to retain/produce evidence of worker training.
  - Voluntary Training: Evidence of worker training used as a marketing tool, and to operate more efficiently. No enforcement of worker training by any agency of government.







**T**he Building Codes system must encourage research and advancement in building materials and techniques. As such, Florida should have a responsible, but streamlined, cost effective and affordable Product Evaluation and

## FOUNDATIONS AND RECOMMENDATIONS

### FOUNDATION V **PRODUCT APPROVAL**



One of the essential criteria for an effective Building Codes System is that the System promote innovation and new technology. A Product Evaluation and Approval Process is the cornerstone of fulfilling that criteria. Florida should have a responsible, but streamlined, cost-effective and affordable Product Evaluation and Approval process. That Process should have specific compliance criteria and strong steps to determine that a product or system is appropriately tested and complies with The Code. Quality Control should be performed by independent agencies or testing laboratories which meet stated criteria and are periodically inspected. A listing, product evaluation system and quality assurance program must be an integral part of such a Product Evaluation Process.

## FOUNDATION V

### Recommendations

**V-1.** The Board shall establish guiding principles for development of Florida's Product Evaluation and Approval Process. For purposes of these recommendations, a Product Evaluation Report is a report by an approved testing laboratory, agency, or Licensed Professional Engineer or Architect certifying that the product, material, or assembly of products or materials and methods of installation complies with the specifications of the manufacturer or design and is in compliance with the requirements of The Code for its intended use. Product Approval is an authorization of use of a product, material or system as a result of Product Evaluation. The Product Evaluation and Approval Process shall:

- appropriately promote innovation and new technology;
- process submittals from manufacturers of products in a timely manner;
- educate building code personnel on product acceptance issues;
- ensure the Process is followed by The Board, local government, and industry;
- provide for independent, third-party qualified and accredited testing and laboratory facilities;
- provide an easily accessible product acceptance list to users of The Code;
- require testing of products or systems where appropriate;
- include periodic, no-notice observation of testing products;
- develop strong, but reasonable testing criteria based upon existing consensus standards for products;
- provide for long-term approvals, where feasible;
- provide for recall or renovation of a Product Approval; and
- is cost-effective.

**V-2.** The Board should determine the types of products requiring approval prior to their use in Florida, whether such use is for local or statewide.

**V-3.** In order to effectuate a sound system of Product Approval, The Board should recognize and include in The Code regional, national, and international consensus standards (e.g., ASTM, ANSI, etc.), third party quality control agencies, and Product Evaluation Entities (e.g., Underwriters Laboratories, National Evaluation Service, Factory Mutual, etc.). The Board should consider the inclusion of other standards or Product Evaluations Entities, such as the Dade County, provided such entities meet or exceed established State requirements.

**V-4.** The Board shall maintain a list of approved quality control agencies which provide independent quality control service and certify compliance with the standards specified in The Code. Products, methods

ted to be used statewide, without further evaluation.

**V-5.** The Code should provide two ways which products can be approved for use in Florida — Statewide or Local. Statewide Approval shall be granted by The Board for use of a product statewide. Local Approval shall be granted by a Local Building Official for use of a product in that official's jurisdiction only. Other local jurisdictions should have the opportunity to review and evaluate approval by a local Building Official in order to determine the acceptability of a product, method or system in that jurisdiction. The Board (for statewide use), or the Local Building Official (for local use) may approve a product, method or system of construction in one of the following ways:

- (1) A product, method or system of construction shall be approved upon the receipt and validation of a Product Evaluation Report from an approved Product Evaluation Entity (such as National Evaluation Service, SBCCI Product Safety Testing and Evaluation Service, Inc., etc.) indicating the product, method or system was tested in compliance with The Code or with the intent of The Code and the product method or system is, for the purpose intended, at least equivalent of that prescribed in The Code in quality, strength, effectiveness, fire resistance, durability and safety, as applicable.
- (2) When there is not Product Evaluation Report by an approved entity, a product, method or system of construction shall be approved upon receipt of a Product Evaluation Report which is signed and sealed by a Florida Licensed Professional Engineer or Architect who has no conflict of interest, certifying that the product, method or system was tested in compliance with The Code or with the intent of The Code; meets protocols and standards adopted by The Board; and by a subsequent review and finding that the product, method or system is, for the purpose intended, at least equivalent as prescribed in The Code in quality, strength, effectiveness, fire resistance, durability and safety, as applicable. Products approved under this procedure shall be required to be manufactured under a quality assurance program, certified by an approved independent, third-party quality control agency, to verify that the products continue to be manufactured to the specifications of the product which was tested and approved.
- (3) A product, method or systems of construction shall be approved upon receipt of a Rational Analysis, signed and sealed by a Florida Licensed Professional Engineer or Architect who has no conflict of interest, certifying that the product, method or system complies with The Code and upon subsequent review

least equivalent to that prescribed in The Code in quality, strength, effectiveness, fire resistance, durability and safety, as applicable Minimum criteria to be included in a Rational Analysis are: (1) basis of assumptions used; (2) specific section of The Code the analysis relates to; (3) national standards used for calculations; and (4) conclusions. Testing of the product, method or system should be accomplished if feasible, and the Rational Analysis shall contain a certification by the signer/sealer as to why such testing was not accomplished, if it is not tested.

**V-6.** All local jurisdictions should accept products for the use intended which have received Statewide Approval, so long as the product is being used in the same manner for which it received Statewide Approval. Local jurisdictions should not require any further testing, evaluation, or submission of other evidence to allow the use of a statewide approved product in its jurisdiction. The permit applicant shall be responsible for demonstrating to the Building Official that the product is being used in a manner for which it received Statewide Approval.

**V-7.** A Building Official may deny the local application of product or method of construction which has received Statewide Approval by The Board, based on a written report signed by the official, that concludes the product application is inconsistent with the Statewide Approval and that states the reason the application is inconsistent. Such denial of an application may be appealed to The Board.

**V-8.** A Building Official may appeal the required approval for local use of a product, method or system of construction to The Board. The Board shall establish expedited procedures to handle such appeals.

**V-9.** The Board should publish the list of the individually approved Products and Product Evaluation Entities, including by electronic means. The Board should establish reasonable time frames associated with the Product Approval Process and the publication of the list.

**V-10.** The Board (for statewide) and local government (for local) may establish and collect reasonable and appropriate fees for the Product Approval Process, as necessary to cover the cost of the Process.

**V-11.** All actions by The Board and local jurisdictions relative to Product Approval should be reviewable. The Board's decisions should be subject to the procedures set out as set forth in Section 120.57 of the Florida Statutes, except that the Administrative Law Judge's order shall be final agency action. The decisions by local jurisdictions should be appealable to a Local Board of Appeal (if one exists) and then to The Board whose actions are subject to review under section 120.57 of the







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## BACKGROUND: THE COMMISSION'S FINDINGS

### A. FLORIDA'S CURRENT BUILDING CODES SYSTEM

#### 1. Code Development and Adoption

Man's concern for the safety of his buildings has been recorded in the laws of some of the most ancient civilizations. The Code of Hammurabi, circa 1700 BC, dealt with this subject. Article 229 of that Code states, "If a builder has built a house for a man, and his work is not strong, and if the house he has built falls in and kills the householder, that builder shall be slain." The collapse of a wooden amphitheater near Rome in 27 A.D., killed or injured some 50,000 people, prompting the Senate to make regulations for the safety of public entertainment places. The designer of the collapsed structure was banished from the country. The modern building codes of today reflect these same concerns, although the penalties for violation are somewhat less draconian.

Building code regulations are developed to protect the public in general and at large, and to ensure a reasonable and affordable degree of safety, health and welfare of the public in the design and construction of buildings – the "Built Environment." These regulations protect lives and property; promote innovation and new technology; help ensure economic viability through the availability of safe and affordable buildings and structures. Building codes primarily establish minimum safe standards for the design and construction of new buildings by addressing such issues as structural integrity, mechanical, plumbing, electrical, light, heating, air conditioning, ventilation, fireproofing, and exit systems, safe materials, energy efficiency, and accessibility by persons with physical disabilities.

Historically, regulation of Florida's Built Environment, including the promulgation of codes and standards, was the sole responsibility of local jurisdictions. In the early seventies, however, the State began to recognize the importance of regulating, on a statewide basis, the way in which the State is developed. To that end, the Florida Legislature enacted such laws as the Environmental Land and Water Management Act of 1972, the Florida Housing Planning Act of 1973, thermal efficiency standards in a statewide energy code and, in 1974, an Act establishing Chapter 553, Building Construction Standards, which for the first time enumerated the State Minimum

To meet the goals of thoughtfully, fairly and consistently regulating and developing Florida's Built Environment, in 1972 the Legislature created the Board of Building Codes and Standards, the main function of which was to establish and enforce the State Minimum Building Codes. The Board was a technical body which received administrative support from the Department of Community Affairs. The Board members represented the various stakeholders in the Building Codes System, including local building officials, contractors and designers, and were appointed by the Governor and confirmed by the Senate. While the Board of Building Codes and Standards still exists today in roughly the same form, it no longer has the power to enforce the Minimum Codes which it is still responsible for adopting – those powers have been turned over to the more than 400 local jurisdictions, including local school boards, and State agencies with building construction regulation responsibilities.

Shortly after the State's assertion of its regulatory powers over the Built Environment, local governments also began to assert their authority through their home rule powers. In addition, during the 1980's, Florida experienced an unprecedented increase in development, particularly with respect to single family housing. This growth was the product of an economic environment with low interest rates, little unemployment and the perception of "boom town" opportunities. The assertion of home rule powers mixed with the unprecedented growth rate caused resistance State intervention with or oversight of local government's ability to control the rate and quality of construction in that local jurisdiction.

As result of the shift from State regulation to each local government separately regulating the Built Environment within its geographic boundaries, building construction currently is regulated by a range of codes, standards and administrative rules which are developed and adopted in relative isolation to one another. Section 553.73, Florida Statutes, requires each of Florida's approximately 400 local code enforcement jurisdictions and 14 State agencies to adopt and enforce one of the four minimum building codes set forth in that section. The adopted code must govern the construction, erection, alteration, repair or demolition of any building for which the local government or State agency has responsibility. The four minimum codes are eligible for adoption and subsequent change or modification by any local

jurisdiction and other agencies. The four minimum codes are:

1. The Standard Building Codes, pertaining to building, plumbing, mechanical, and gas (promulgated by the Southern Building Code Congress International, Inc. (SBCCI), a private not-for-profit agency.)
2. The One and Two Family Dwelling Code (promulgated by the Council of American Building Officials (CABO), a private not-for-profit agency.)
3. The South Florida Building Codes:
  - a. The Dade County Edition (promulgated and amended by the Dade County Commission.)
  - b. The Broward County Edition (promulgated and amended by the Broward County Board of Rules and Appeals.)
4. The EPCOT Code (promulgated by the Reedy Creek Improvement District (RCID), a Special Taxing District.)

The Standard "family" of Codes by SBCCI and the One and Two Family Dwelling Codes by CABO are promulgated and updated in the same manner. SBCCI is one of three model code organizations (the other two being the Building Officials and Code Administrators International (BOCA) and the International Conference of Building Officials (ICBO)). SBCCI is owned and governed by its voting members who are building department personnel, such as building officials, inspectors and plans reviewers, who are responsible for enforcing and administering building regulations. The area of focus of SBCCI is the Southern region of the United States (Louisiana, Florida, Texas, Tennessee, Georgia, South Carolina, Alabama, Virginia, North Carolina, Mississippi and Arkansas). CABO membership is made up of the membership of SBCCI, BOCA and ICBO whose membership is pulled from the other regions of the country.

In addition to voting members, these organizations have a range of other membership categories that provide designers, manufacturers, trade associations, contractors, builders and the like with the same level of services that are available to code enforcement jurisdictions. Such services as advisory interpretations, training, and product evaluation are available to all members.

The code development/promulgation process for both SBCCI and CABO codes are identical. Anyone may submit a proposed code change to SBCCI or CABO for consideration during the annual code change cycle. Presentations are made during midyear hearings by industry representatives, building department personnel and design profession-



on final changes, industry representatives who sit on committees vote on the initial changes to the code. New editions of the Codes are published every three years with yearly amendments promulgated during the interim.

The Three model code agencies have recently formed joint committees for the purpose of drafting the international Building Code (IBC), which is expected to be available for adopting in the year 2000. It is intended that the IBC and its family of codes will replace the model codes currently promulgated by SBCCI, ICBO and BOCA.

Unless the Board of Building Codes and Standards determines that one or more of the yearly amendments are crucial to ensuring continued health and safety to the public, such as recent amendments to the wind loading requirements, only the new editions of the Codes are designated for use by the Board. The Board may adopt either all or a part of these codes, except the Standard Plumbing Code, which either must be adopted as a whole or not adopted at all.

The Standard Family of Codes are the predominantly used codes in the State with all but three of the some 400 code enforcement jurisdictions in Florida using them (the exceptions are Dade County and its municipalities, which all use the Dade Edition of the South Florida Building Code; Broward County and its municipalities, which all use the Broward Edition of the South Florida Building Code; and RCID which is the only code enforcement jurisdiction which uses the EPCOT Family of Codes).

Presently, there are fourteen local jurisdictions which use the CABO code; however, Section 553.73(2) requires that "if the One and Two Family Dwelling Code is adopted for residential construction, then one of the other recognized model codes must be adopted for the regulation of other residential and non-residential structures."

The Dade Edition of the South Florida Building Code is promulgated and amended by the Dade County Commission on cycle established by the County Commission. Until this year, the code was amended on an as-needed basis. The current County Commission recently passed an ordinance which allows amendments only on a 3-year cycle. The County Commission is supported by the Dade County Building Code Compliance Office which, among other things, is responsible for the preparation and technical research of proposed amendments. All municipalities within Dade County must use the

version of the Dade County Edition adopted by the County Commission and may not make any amendments to the code.

Unlike the Dade Edition, the Broward Edition of the South Florida Building Code is promulgated and amended not by the Broward County Commission, but by the Broward County Board of Rules and Appeals (BORA) which has 21 members including industry representatives, fire service professionals, a consumer advocate and an advocate of the disabled. The members of the Board of Rules and Appeals are volunteers who are appointed by the County Commission. The code is amended on an as-needed basis by BORA.

Substantively, the South Florida Building Code and the two other minimum codes discussed above differ only slightly, the most significant difference being the Wind Borne Debris Standard.

The EPCOT Code originally was based on the nation's four standard model codes, SBCCI, ICBO, BOCA and the City of New York Building Code. The Code is amended every two years and any person may submit proposed code changes and present testimony during public hearings.

In addition to the codes detailed above, the Legislature specifically adopted a uniform set of electrical standards, which included the 1990 National Electrical Code (NEC). Only the Legislature has the authority to adopt any update of this code. The NEC has been updated since 1990, but the Legislature has not adopted any of the newer updates.

Each of the codes is updated periodically by the relevant promulgating entities. Florida's adoption of the updated versions of the various codes is a two-tiered process. First, the Florida Board of Building Codes and Standards determines whether all or part of the updated versions should be adopted. After the Board approves the latest versions for use, local jurisdictions typically adopt ordinances reflecting the codes approved by the Board, even though in the case of the Standard Codes, most jurisdictions are already involved in the code development process through membership in SBCCI. The local adoption process often can take a year or more, excluding time allotted for implementation, and may include a complete review of the updated version of the code, guidance to the adopting entity by the promulgator or the building official and public hearing process.

In addition Section 553.73(4), F. S. allows local governments to amend a revised or updated version of one of the model codes, provided such amendments are more stringent than one of the State Minimum Building Codes. Such amendments are allowed if the local governing body determines, following public hearing, that there is a need to strengthen the requirements of the Minimum Codes. Such determination must be based on a review demonstrating that local conditions justify more stringent requirements for the protection of life and property. Furthermore, discrimination against material, products or construction techniques of demonstrated capabilities is prohibited.

This two-tiered process of adoption of minimum codes first by the State followed by adoption and amendment of those minimum codes by local jurisdictions causes a delay in the implementation of the most recent and effective codes available for use. Moreover, because the choice of which code is used at the local level is within the sole discretion of local government, Florida's System promotes a patchwork of different versions of the minimum codes as amended and applied locally. (Please See Appendix 7 for maps reflecting the various codes and versions of these codes adopted by each of Florida's Code Enforcement jurisdictions.)

In addition to the State Minimum Building Codes, specialty codes regulating energy efficiency and accessibility for persons with disabilities also are adopted at the State level. The Florida Energy Efficiency Code for Building Construction (Energy Code) is a true Statewide Code, divided into components regulating residential and commercial facilities. The Energy Code is amended every three years by the Department of Community Affairs.

The basic requirements for the Florida Accessibility Code for Building Construction (Florida Accessibility Code) were written into Florida law, but the 1997 Legislature allowed limited authority for the Board of Building Codes and Standards to make amendments. The 1997 edition of the Florida Accessibility Code reflects the technical provisions of the Americans with Disabilities Act Accessibility Guidelines (ADAAG) which were adopted by reference and amended to reflect certain Florida-specific requirements. Federal law requires that the Florida Accessibility Code must substantially reflect the ADAAG requirements and is otherwise in compliance with the federal American with Disabilities Act (ADA). As of the date of this Report, the Florida Accessibility



Code has been submitted to the federal Department of Justice (DOJ) for compliance review and has received preliminary certification pending two public hearings, one federal and one state. DOJ certification of a State or local code is significant in that such certification provides rebuttable evidence in a court of law that a building has been designed and constructed in compliance with the ADA if a discrimination complaint is filed with the DOJ. While not a complete "hold-harmless" assurance, certification helps ensure that architects and building owners will be less subject to frivolous lawsuits.

Both the Energy Code and the Florida Accessibility Code are enforced by local governments in the same manner as the State Minimum Building Codes, except these codes can only be amended by the Florida Legislature on a statewide basis.

In addition to the plethora of codes adopted and used by local governments, the State has granted building construction regulation responsibility to fourteen State agencies. The codes or standards established and enforced by these State agencies include minimum codes for building, plumbing, mechanical, electrical and fire, as well as special occupancies and uses, such as State-owned buildings, public schools, historic buildings, correctional facilities, restaurants, hospitals, nursing homes, day care centers, elevators and boilers. (Please See Appendix 8 for a complete listing of the State agencies with building construction regulation responsibility and the codes and standards of those agencies.) State agency codes and standards are adopted using the rulemaking process as set forth in the Administrative Procedures Act (Chapter 120, Florida Statutes).

All of the State agency codes and standards are applied in local jurisdictions, and often overlap with the administration of the codes adopted by local jurisdictions. For example, if an elevator is being installed, the builder is required to comply with the local jurisdiction's adopted building code, the mechanical code, the electrical code, the fire prevention code, and the life safety code, as well as the State elevator code and the Florida Accessibility Code. At least four different regulatory entities will have some influence over installation of the elevator. Conversely, in some instances, as in the case of public schools and correctional facilities, the local building and fire departments have no review and inspection authority at all.

## 2. Code Administration and Enforcement

Currently, local governments and State agencies with building construction regulation responsibility (Code Enforcement Jurisdictions, or CEJs) have the responsibility for administering and enforcing the minimum code adopted by the CEJ. CEJs include local building and fire departments, local school boards and the 14 State agencies with building construction regulation responsibility.

Administration and enforcement authority encompasses the ability to:

- promulgate and adopt amendments to the State Minimum Building Codes;
- conduct plan reviews and inspections and interpret the applicable codes and standards;
- establish programs for the maintenance of buildings and structures after the issuance of certificates of occupancy;
- establish mechanisms for the approval and use of new products, methods or systems;
- establish mechanisms for appealing decisions of building and fire officials; and
- establish mutual-aid programs.

These processes are established individually by each separate CEJ based upon the CEJs resources, manpower and level of productivity.

### a. Code Amendments

Under the current system, all CEJs adopting one of the minimum codes may, under certain conditions, amend the adopted minimum codes through the local ordinance process for local governments and through Chapter 120 rule-making procedures for State agencies. The State Minimum Building Codes Act, Chapter 553, Florida Statutes (the "Act") permits such amendments only under the following circumstances:

1. The amendment is more stringent than the adopted Minimum Code;
2. There is a demonstrated need to apply more stringent criteria;
3. There is a determination that local conditions justify more stringent requirements for the protection of life and property; and
4. The additional requirements are not discriminatory against materials, products or construction techniques of demonstrated capabilities.

While the Act provides CEJs with this authority, and prescribes the prerequisite standards for amending the Minimum Codes, the Act neither provides oversight with respect to these standards nor dictates a cycle for amendment adoption. As a result, amendments by local governments are made

be and routinely are adopted without regard to the statutory criteria, and on any cycle determined by the particular CEJ, which can be as often as every time the elected body meets. Furthermore, there appears to be no routine review of local amendments for compliance with the statutory criteria, nor does there appear to be any enforcement of the statutory criteria with regard to locally-adopted amendments. Moreover, neither the statutory criteria nor most local ordinances require a cost-benefit analysis to be performed on a proposed amendment. Therefore, amendments to the minimum codes can be adopted without any regard to the cost or benefits to government, the industry or the public.

The ability of CEJs to adopt amendments is a power which is most often used by local governments to change the administrative provisions of the particular Minimum Code adopted by the CEJ. In fact, it is rare that a CEJ adopts the complete suite of administrative provisions of a code. Instead, local amendments often change the administrative provisions to conform with that particular local government's local administrative procedures. For example, Chapter 1 of the Standard Building Code provides requirements relating to what types of projects are subject to permitting, when permitted, what inspections must occur and be passed before a job can continue, requiring a final inspection, and mandating issuance of a certificate of occupancy for projects permitted under that code. Each of these requirements may profoundly affect the check and balance provided by the enforcement arm of the code - the local building departments.

### b. Code Enforcement

Local governments and State agencies with building construction regulation responsibilities also are responsible for enforcement of the various codes and standards adopted by the CEJ. Enforcement includes the issuance of building permits through the plan review process, the continued enforcement of the code through the inspection process, establishment of programs to ensure the structure remains in a safe and sanitary condition, the approval of new products, methods and systems for use in a local CEJ, and establishment of appellate rights relative to decisions made on these enforcement issues. Although enforcement of the codes is mandated by Florida law, State law does not specify any particular organizational structure for building code enforcement. The organizational structure, requirements for enforcement



### **(1) Plan Reviews, Inspections and Interpretations**

The fundamental purpose of the plan review and inspection process is to ensure that the submitted plans are in compliance with the code and that the building or structure is being constructed in substantial compliance with the permitted documents and applicable codes. Inherent in the authority to review plans and conduct inspections for code compliance is the power to interpret the codes and standards being applied. While it clearly is the job of the various levels of local building and fire officials to perform these functions, it is not their job to actually comply with the codes. Code compliance falls squarely within the duties of the licensed design professionals and licensed contractors. Unfortunately, however, today's System does not provide a clear delineation of these roles. As such, design professionals and contractors often use the plan review and inspection processes to tell them how to comply with the applicable codes.

In addition to a confusion of role definitions, today's System does not provide any baseline requirements for the plan review and permitting processes. While the Minimum Building Codes all contain provisions which, if followed, would provide for an effective, efficient and uniform plan review and inspection process, the amendatory powers granted to CEJs not only permit, but promote changes to these suggested provisions. As such, each CEJ can and does adopt its own plan review and inspection requirements. For example, jurisdictions vary greatly in the types of projects which will be subject to plan review and inspection; what types of projects require the seal of a licensed professional designer; what inspections are mandatory; reinspection requirements; and whether a final inspection and certificate of occupancy is required.

Even if all CEJs followed standardized procedures for conducting plan reviews and inspections, the need to interpret the codes and standards being applied during those processes would undermine the benefits gained by a standardized process. During the plan review and inspection process, local building and fire officials constantly are required to interpret the applicable code provisions. The Commission found that interpretations not only will differ from jurisdiction to jurisdiction, but within a single jurisdiction, as well. In fact, the most common difference of opinion occurs between building and fire officials relative to life safety issues. Florida

requirement, but makes no provision for the resolution of that conflict.

Other differences of opinion as to how a code provision should be interpreted in the case of the Standard Codes are sometimes resolvable through the interpretations offered by SBCCI, via the written interpretations found in the codes or through the technical assistance of staff. Because SBCCI is a private entity, however, its interpretations are non-binding. Today's System contains no provisions for Binding Interpretations by the promulgating entities. Instead, those dissatisfied with the interpretation of a building or fire official are left with the remedies established by the local jurisdiction's appellate process, which usually requires the plan review or inspection process to come to a halt while the appeal is pending.

### **(2) Maintenance**

Each of the State Minimum Building Codes has general provisions regarding existing buildings and the extent of the local building department's authority. Essentially, the local building official has the right of entry if he has reasonable cause to suspect a building contains a code violation which makes such building or structure unsafe, dangerous, or hazardous. Upon confirmation of such a condition, the structure may then be declared unsafe and the deficiency required to be abated by repair and rehabilitation or by demolition.

However, instead of utilizing the authority of entry and inspection, local CEJs typically rely on complaints and periodic inspections made under the auspices of the local fire officials to ensure that buildings are maintained in accordance with life safety requirements. Local fire officials will coordinate with local building officials if situations are encountered which are hazardous, but the working relationship typically is informal, with little or no defined structure.

### **(3) Product Approval**

Florida has no formal Product Evaluation and Approval System. Each jurisdiction determines what types of products must be evaluated and approved and the testing protocols for such products. While each jurisdiction has this discretion, with the exception of one jurisdiction (Dade County), the great majority of jurisdictions exercise that discretion on an extremely limited basis. Instead, building officials rely on the listing of approved products as published by the SBCCI as part of the Standard Building Code. With respect to those products not listed, building officials have complete authority to require the

Laboratories or Factory Mutual, "rational analysis" certified by a licensed design professional, or some other protocol, to substantiate that the product will meet the applicable codes.

Unlike the other jurisdictions in Florida, Dade County does not utilize the SBCCI listings. Instead, it has established its own Product Evaluation and Approval System which includes the types of products which must receive approval prior to use in the County and protocols for the testing of designated products. Designated products must go through Dade County's process irrespective of what other testing has been previously performed and what other approvals the product has received. Other jurisdictions around the State and the country will accept a Dade County approval as evidence that a product meets applicable codes.

### **(4) Appeals**

Each local jurisdiction establishes the process by which a decision of a building or fire official is appealed. In some jurisdictions, the building official (on issues involving the various building codes) or the fire official (on issues involving the fire prevention code or life safety code) has the final word on interpretations. Conflicts between the two are resolved between the building and fire officials in favor of the more stringent provision. In other jurisdictions, the building or fire officials' interpretation can be appealed to a local Board of Appeals. Whether the final word belongs to the official or to a special board, the next level of appeal is to the Circuit Court through an extraordinary and discretionary writ called a writ of certiorari. If the Circuit Court accepts the case, the last level of appeal is to the District Court of Appeal.

Actions such as the adoption of an amendment to the Minimum Building Code by county or city commissions or councils are appealable only to the Circuit Court through an action for a writ of certiorari.

Currently, no local appeals are allowed to the Energy Code, the Florida Accessibility Code or the Uniform Fire Safety Standards. Accessibility Code waiver requests go to the Board of Building Codes and Standards. Interpretations of the Uniform Fire Safety Standards are handled through an in-house attorney in the Department of Insurance, and appeals go to the Division of Administrative Hearings (DOAH) under the Administrative Procedures Act (APA)(Ch. 120, F.S.). Appeals of rules adopted by the other State agencies with building construction



### c. Mutual-Aid Programs

The Department of Community Affairs is the State Agency responsible for coordinating emergency operations in the wake of a natural disaster like a hurricane. Part of that operation includes mobilizing plans reviewers, building inspectors and the industry from around the State to immediately move in and provide re-build services, including reviewing plans, issuing permits and performing inspections, to disaster-struck areas. In the wake of Hurricane Andrew, the Department of Community Affairs and the Building Officials Association of Florida have executed a Mutual-Aid Agreement which formalizes this process.

### 3. Code Compliance through Education, Training, Licensing and Discipline

Over and over again, the Commission heard testimony and read reports it was not the weaknesses in the codes themselves that contributed to the extensive storm damage from Hurricanes Andrew, Alberto, Beryl, Opal and Erin, but the failure to comply with and enforce today's complex and confusing System of multiple codes and administrative processes. As such, compliance became a major focus of the Commission. When studying the issues relative to compliance, the Commission found that the key to good compliance is to have a properly educated and trained workforce, coupled with the ability to effectively police that workforce through a strong, logical licensing and discipline program. As with the other areas of today's System, the Commission found Florida's current compliance tools to be deficient.

#### a. Education and Training – State Licensing and Discipline

State and local governments monitor education and training standards through licensing schemes. Florida Statutes establish licensing schemes for some, but not all participants in the Building Codes System:

- Chapter 468, Part XIII – Building Code Administrators and Inspectors
- Chapter 471 – Engineering
- Chapter 481 – Architecture, Interior Design and Landscape Architecture
- Chapter 489 – Contracting
- Chapter 633 – Fire Prevention and Control

These statutes set up the Professional Boards which govern each of these categories of licensees, and provide a prerequisite mixture of education and experience in order to become a licensing candidate.

may, but are not required to hold a State license in order to work in a particular jurisdiction, as local governments are free to establish requirements for obtaining a local license (called a registration) and permit anyone obtaining a local license from that jurisdiction to work only in that jurisdiction. The requirements for obtaining a local registration differ greatly from jurisdiction to jurisdiction. Unlike a local registration, a State Contractors License allows a contractor to work in any jurisdiction in the State without having to meet any further local requirements.

Each State licensing category is governed by a State Board comprised of individuals from the particular field governed by the Board. All of the Boards are housed at the Department of Business and Professional Regulation, with the exception of the Board which oversees Fire Officials. That Board is housed with the State Fire Marshal at the Department of Insurance.

Contractors are governed by two separate Boards – (1) The Construction Industry Licensing Board, which oversees the licensing and discipline of general, building, residential, roofing, sheet metal, air conditioning, mechanical, pool, plumbing, and underground utility and excavation contractors; and (2) the Electrical Contractors Licensing Board, which oversees electrical and alarm system contractors.

Each of these Boards is responsible for establishing the License Examination and continuing education requirements for, and the disciplining of, the licensees under its control. As such, these requirements differ greatly from Board to Board. For instance, the State Contractors' licensing exam is primarily directed at testing business acumen, while all of the other exams focus on testing of technical proficiencies. All of the Boards have established some level of continuing education requirements in order to retain a license, with the exception of the Engineering Board, which has chosen not to require continuing education as a prerequisite to maintaining a professional engineering license. Of the Boards which do require continuing education units, the number of units (hours) differs, and none dictate specific types of continuing education units which must be taken. For example, no Board required any CEU relative to codes/interpretations.

#### b. Education and Training – Local Licensing and Discipline

In addition to the State requirements, each local government may set higher continuing education requirements for

building inspectors and plans reviewers). Local governments also may locally register contractors who are not already licensed by the State and may establish local licensing requirements for contracting categories not already covered by Chapter 489 of the Florida Statutes so called "specialty licenses." Under Florida law, local registration and specialty licensing may not interfere with a State Licensed Contractor's ability to work in any jurisdiction in the State; however, local governments routinely use the specialty licenses to adopt requirements in their adopted minimum code that a State Licensed Contractor also obtain a local license or have locally licensed individuals on the jobsite at all times. Local governments established these requirements with the laudable aim of ensuring that the people on the jobsite who are actually overseeing and doing the work (usually a superintendent and subcontractors, not the contractor) understood the local codes and processes. The end result, however, was to (undermine the reason for obtaining and maintaining a statewide license) – that is, to be able to pull permits and use any workforce in any jurisdiction.

The authority of local governments to discipline individuals who hold a State license is limited to causing a violation to be corrected, including stopping a job until a violation is corrected; and suspending or revoking permitting privileges within a jurisdiction, even though it is the local building official, not the State Board Members, who see the day-to-day lack of compliance by design professionals in plans submitted, and by contractors on the jobsite. Local government may not fine a State licensee, nor does it have the authority to suspend or revoke a license. Those disciplinary measures are the sole authority of the State Boards. Moreover, there is no mechanism for local building officials to notify the State boards of "bad actors" in their jurisdictions.

#### c. Education and Training – Nonlicensed Individuals

Three critical participants in the Building Codes System are not licensed at either the State or local levels – the residential designer, the superintendent and the worker on the job. The residential designer is responsible for designing a major percentage of single-family residential housing which is at risk of weather-related damage. Although the design and construction documents from these residential designers must meet all applicable codes, it is the licensed contractor (or Owner) who is ultimately responsible for that design because it is



pancy. Current Florida law for design professionals, therefore exempts a major portion of the single-family design industry from licensure and regulation, resulting in thousands of structures being constructed each year without any participation by a licensed design professional.

The superintendent is the person hired by the owner or contractor to oversee the actual day-to-day work on a project. Superintendents are not typically used on single family residences, but are reserved for large residential or commercial projects. On such projects it is often the unlicensed superintendent, not the licensed contractor, who is on the job when inspections occur. Since the superintendent oversees the day-to-day work on the site and handles the inspections, the ability to read the plans and specifications and understand how to comply with The Code is crucial.

The worker is the person on the job doing the actual construction work, and includes everyone from the person hammering the nails and sawing the wood to the Journeyman plumber and electrician. While some local jurisdictions have registration requirements for journeymen, there are no licensing requirements at the State level. Moreover, there are no licensing requirements for any other worker on the job. Therefore, it is left to the design professional and the contractor, the only individuals associated with the project who hold a license, to ensure the project is in compliance with The Code – i.e., that the people overseeing and doing the work are competent and properly trained. Interestingly, neither the licensed design professional nor the contractor are required to be physically present on the jobsite at any point during the construction or inspection process.

## **B. THE PROBLEMS CAUSED BY FLORIDA'S CURRENT BUILDING CODES SYSTEM**

Florida's current System of adopting, administering and enforcing the codes which govern Florida's Built Environment, together with the way in which the participants in the Building Codes System are educated, trained and disciplined has a layered effect on the Building Codes System, the Built Environment and the overall welfare of the citizens of the State. The Commission has found that no single deficiency has caused a breakdown in the current System's ability to protect the health, safety and welfare of all of Florida's citizens in an efficient, effective and coherent manner. However, the manner in which the System has devel-

technical and administrative processes which allow for too many people to determine what codes are used, how those codes are administered and enforced, and interpreted, and to what level the participants in the System are educated, trained and disciplined. What follows are the Commission's findings, based upon 18 months of presentations, discussions and debates, with respect to the problems caused by each of the System's elements – Code Development and Adoption, Code Administration and Enforcement, and Code Compliance through Education, Training and Discipline.

### **1. Code Development and Adoption**

The first two "layers" of concern with Florida's current Building Codes System occur at the code development and adoption stage. The first "layer" is caused by the initial adoption by the Board of Building Codes and Standards of essentially five Minimum Codes – (1)The Standard Family of Codes; (2)The CABO One and Two Family Dwelling Code; (3)The South Florida Building Code – Dade Edition; (4) The South Florida Building Code – Broward Edition; and (5) The EPCOT Code – and then the subsequent adoption by some 400 CEJs of one (or in the case of the CABO Code, two) of the Minimum Codes on the list.

This two-tiered adoption process allows best for a delay in the implementation of the most recent and effective codes available for use and, at the worst for the continued use of an outdated version of the adopted codes. As is illustrated by the maps attached to this Report as Appendix 7, this phenomenon occurs whether the CEJ is adopting the Standard Family of Codes (even though the local building department personnel are intimately involved in the promulgation of the code) or the South Florida Codes (in which case each municipality within the county, while perhaps not so directly involved in the promulgation, theoretically is given no choice as to which code or code version it uses).

Thus, the first "layer" provides Florida with a multitude of codes, and versions of those codes, in use in over 400 code enforcement jurisdictions around the State.

The second "layer" is generated by the additional construction regulation responsibility granted to 14 State agencies. These responsibilities include promulgation of Florida's Energy and Accessibility Codes by the Department of Community Affairs, which is enforced by local building departments; the promulgation of a Uniform School Construction Code by the Department of

promulgation of the Uniform Fire Safety Standards by the Department of Insurance, which is enforced by local fire departments; construction standards and plan review and inspection processes for State prisons, promulgated and enforced by the Department of Corrections; as well as a plethora of other standards relating to State-owned buildings, State universities and community colleges, restaurants, hospitals, nursing homes, child care centers, historic buildings, amusement rides, boilers and elevators. (see Appendix 8). Some of these codes and standards are administered solely by the State (e.g., correctional facilities), some solely by local building and fire departments (e.g., the Florida Energy and Accessibility Codes and the Life Safety and Fire Prevention Codes) and some by both the State and local building and fire departments (e.g. historic buildings) or local school board (e.g., public schools).

These State regulations, along with the ability of some 400 jurisdictions to choose (or not choose) one of five Minimum Codes, present a confusing array of codes and standards applicable to Florida's Built Environment. This scheme of development and adoption has caused differences to occur from city to city and county to county in the applicable minimum codes and standards. This variation marks the beginning of a complex and confusing web of codes, standards and administrative processes which make-up Florida's current Building Codes System.

### **2. Code Administration and Enforcement**

The next several "layers" of concern with the current System involve the administration and enforcement of the various adopted codes and standards. The authority of every CEJ to:

- promulgate and adopt amendments to the State Minimum Building Codes;
- establish programs for the maintenance of buildings and structures after the issuance of certificates of occupancy;
- conduct plan reviews and inspections and interpret the applicable codes and standards;
- establish mechanisms for the approval and use of new products, methods or systems;
- establish mechanisms for appealing decisions of building and fire officials and
- provide mutual-aid in the wake of disasters.

#### **a. Code Amendments**

The Florida Building Codes Act grants CEJs the authority to adopt amendments, at any time, to the



Minimum Building Codes only upon a showing that:

1. The amendment is more stringent than the adopted Minimum Code;
2. There is a demonstrated need to apply more stringent criteria;
3. There is a determination that local conditions justify more stringent requirements for the protection of life and property; and
4. The additional requirements are not discriminatory against materials, products or construction techniques of demonstrated capabilities.

All of the specified criteria must be met in order for a local amendment to satisfy the Statute of criteria.

Most CEJs adopt amendments through their ordinance process to better serve their constituency by tailoring construction requirements and codes to solve what appear to be local problems and to improve enforcement. The Commission found that when adopting amendments to the Minimum Codes, CEJs adopt amendments on a cycle determined by the CEJ (which might be as often as the adopting entity meets) and routinely do not follow the prescriptions set forth in the Act. Furthermore, the Act fails to provide for any oversight or review of whether amendments meet the stated criteria.

This fact is most clearly evidenced by the types of amendments typically adopted – amendments to the administrative provisions of the particular Minimum Code adopted by the CEJ. It is rare that a CEJ adopts the complete suite of administrative provisions of a code. Instead, local amendments are adopted which significantly change the administrative provisions established in the minimum codes. For example, Chapter 1 of the Standard Building Code provides requirements for final inspections and certificates of occupancy. However, at least one jurisdiction in Florida has chosen to amend that provision to eliminate final inspections and certificates of occupancy, an amendment which, if questioned, would more than likely not pass muster under the Chapter 553 requirements. (It is difficult to imagine how elimination of an inspection is strengthened.)

Minimum inspections is another area where CEJs have amended administrative provisions of the adopted codes in order to address the work-load problem of insufficient numbers of inspectors. Instead of addressing the problem through an increase in permit fees to hire more inspectors or an interlocal agreement with another jurisdiction to perform inspection functions, several CEJs have amended the provisions relat-

the CEJ has adopted de facto amendments by simply failing to perform the inspections required by the adopted code. Included in the types of inspections which some CEJs have chosen to omit are structural inspections to examine roof trusses, roof sheathing and wall framing connections, a critical structural element in hurricane-prone Florida.

Technical amendments are not adopted as frequently as administrative ones. Most building officials who testified before the Commission admitted that because of the power to interpret the codes in the field and the ability to suggest and vote upon changes to the technical requirements of the Standard Building Code (the Code most used in Florida) during the promulgating process, the need for local technical amendments is limited. In fact, the Commission was unable to identify a single unique local condition that would warrant a more stringent requirement and that could not be handled in a single code like the Standard Building Code. For example, one jurisdiction testified that it adopted an amendment to the Standard Building Code to require copper piping because the local drinking water treatment system utilized saline, which tended to corrode the type of piping required in the code. When queried further, it was determined that many jurisdictions in Florida use saline in their water treatment systems and therefore also have a need to require copper pipes. A statement in the applicable code relative to the type of water treatment systems used would cover any jurisdiction in the State which encountered this same problem. Interestingly, there was never any attempt to have SBCCI recognize this apparently prevalent problem in the State.

In addition to the fact that there is no oversight as to whether the statutory criteria have been met, neither the statutory criteria nor most local ordinances require a cost-benefit analysis to be performed on a proposed amendment. Therefore, amendments to the minimum codes can be adopted without regard to the cost or benefits to government. An important element of any Building Codes System is a balance between sound and safe structures and costs. Failure to analyze the impact of changes to the codes, ignores this crucial component.

Another impact of the current method for adopting changes to codes is that different State agencies promulgate changes to their functional areas through the Chapter 120 rulemaking process. These changes often affect portions of other agency codes adopted through

taking affirmative steps to coordinate efforts, other agencies are relegated to receiving notice of proposed changes in the same manner as the general public – i.e., through notices published in the Florida Administrative Weekly. Because efforts are not coordinated, the resulting workshops may conflict with other rule-making efforts, or new State and federal legislation. Lack of coordination means that even though State agencies are required to follow the Chapter 120 rule-making process, that process does not require any coordination between the various agencies.

After extensive testimony and debate on the issue of amendments, the Commission found that so long as the applicable codes properly account for the variations in location, population, soil conditions and the like found in Florida, there is little need for amendments to the Minimum Codes. The altruistic motives of CEJs to utilize their amendatory powers for the benefit of their constituencies does not offset the unintended, negative consequences that unchecked amendment power has on the System as a whole – adding yet another “layer” of codes and regulations on a System made up of numerous, complex and inconsistent codes and regulations.

## **b. Code Enforcement**

### **(1) Plan Reviews, Inspections and Interpretations**

The current processes used to conduct plans reviews and inspections have caused several problems. The first of these problems arises out of a confusion over each participant's role in the System. While it is clear to most that the fundamental purpose of the plan review and inspection processes is to ensure that the submitted plans are in compliance with the applicable codes and standards and that the building or structure is being constructed in substantial compliance with the permitted documents and applicable codes and standards, there are marked differences of opinion as to the role of the building and fire officials in performing these functions. That confusion has caused licensed design professionals and licensed contractors to regularly use the plan review and inspection processes to tell them how to comply with the applicable codes. In those cases, the building and fire officials are assuming both the quality assurance function (which is a natural result of the plan review and inspection processes) and the quality control function (which more naturally belongs to the designer and contractor whose obligations to the owner of the project include the design and construction of a



The second problem arises out of the fact that the current System does not provide any baseline plan review and inspection requirements. While the Minimum Building Codes all contain provisions which, if followed, would provide for an effective, efficient and uniform plan review and inspection process, the amendatory powers granted to CEJs not only permit, but promote changes to these suggested provisions. As such, each CEJ can and does adopt its own plan review and inspection requirements. For example, jurisdictions vary greatly in the types of projects which will be subject to plan review and inspection; what types of projects require the seal of a licensed professional designer; what inspections are mandatory; reinspection requirements; and whether a final inspection and certificate of occupancy is required.

The third and perhaps the greatest problem with Florida's current System of performing plan reviews and inspections has also caused the most confusion over exactly what codes and standards apply to any given project – that is, interpretations by local building and fire officials as to what codes and standards apply to a particular project and the meaning of those codes and standards as applied to a particular project. These interpretations vary greatly from jurisdiction to jurisdiction (e.g., city to city) and from local official to local official (e.g., from building inspector to building inspector or from building official to fire official), primarily because there is no means for anyone to obtain binding interpretations relative to the thousands of code provisions applied to each job during the plan review and inspection process.

These varying interpretations are tantamount to amendments to the adopted minimum codes, but occur much more frequently than amendments and without the benefit of the local ordinance process (or, in the case of a State agency interpretation, the chapter 120 rulemaking process). In addition, the only recourse from disputed interpretation is an appeal under the local jurisdiction's established appellate process, which usually requires that the project come to a halt while the appeal is pending. There currently is no relief from conflicting interpretations by different jurisdictions.

## **(2) Maintenance**

Even though the State's Minimum Building Codes contain general provisions relative to existing buildings and maintaining of those buildings in a safe and sanitary condition, most CEJs do not adopt any specific maintenance programs, mostly due to the workload such

family and commercial buildings in each jurisdiction); the lack of manpower, training, and fee structure to perform such inspections; and the difficulties which naturally exist when government must impede private property rights. Instead, building officials rely on complaints and periodic inspections made under the auspices of the local fire officials to ensure that buildings are maintained in accordance with life safety requirements. In addition, many owners of commercial projects have their own maintenance program in place in order to avoid major, costly repairs due to neglect.

Although there have been a number of dramatic instances of building failure resulting from neglect or lack of maintenance and many instances in which buildings needed to be condemned on that account, the stumbling blocks to establishing a maintenance program beyond what exists today most appropriately leaves this issue in the hands of the local government to appropriately divide its resources.

## **(3) Product Approval**

Current technological advances have created new products that improve construction and often decrease the overall cost of materials and installation. However, the current system of product approval places authority for establishing what products must be approved and the testing protocols for those products with local building officials. Most jurisdictions do not, however, use this authority and establish their own product approval process. Instead, most building officials rely on the listing of approved products by the SBCCI, product evaluation reports done by certified testing laboratories or licensed engineers, or rational analysis performed and sealed by a licensed engineer when (all of which evidence that a product, method or system complies with applicable codes and standards) when determining whether a product, method or system can be used in a particular jurisdiction.

However, Dade County, as a result of the devastation wrought by Hurricane Andrew, has established its own, distinct Product Approval Process to which manufacturers must submit to, and pay a fee, if they want their product to be used in Dade County, irrespective of what other testing has been performed on the products or what other jurisdictions in the country have accepted the use of the product. The approval, once obtained, is short-term.

Manufacturers claim Dade County's process is unnecessarily duplicative and, in any event, extraordinarily expensive.

Manufacturers further claim that this Process also impedes competition. Not only does the cost of going through the Dade County process impede or preclude smaller manufacturers from entering the market, it discourages (rather than promotes) larger companies from bringing new technology to Dade County as it often is economically infeasible to recover the cost of Dade County's Process.

## **(4) Appeals**

Overall, the process by which an individual challenges a disputed interpretation of building and fire officials works fairly well. The aggrieved party goes up the chain of command, until it reaches the top, which in some jurisdictions is the building or fire official and other, larger jurisdictions, it is a local board of appeal. The break down in the system occurs in the attempt to get relief from the last link in the chain. In that instance, an aggrieved party must attempt to avail himself of an uncertain and laborious legal process called a petition for writ of certiorari. This writ is completely discretionary with the court and if the court agrees to take the case there are limitations as to the level of review it can perform. This same process also must be used to contest actions by the elected officials such as the passing of an amendment to the adopted minimum code.

While most issues are small ones and usually are resolved in the field, the certiorari process does not provide a quick, simple resolution to the more difficult and potentially costly interpretations. In fact, it may cause more issues to be resolved outside of the formal processes, thereby hampering the ability for resolving conflicting interpretations by different jurisdictions on the same provisions of the code.

## **c. Mutual Aid**

Although Florida has a state of the art Emergency Operations Center and formalized, detailed Mutual Aid Agreements, the number of codes, along with the inconsistencies in the administration and enforcement of the codes, serve to undermine re-build efforts after a natural disaster such as a hurricane. The inability of a building official to help another jurisdiction in need is severely limited by the fact that the official must first learn another set of codes and standards and administrative processes. As evidenced from the aftermath of Hurricane Andrew, delay in rebuilding and repairing damaged structures allows further damage from the elements, continues the displacement of the occupants of those buildings, and increases the costs beyond the initial damage.



While there has been some improvement in organizing for mutual-aid support agreements for building construction (such as with the Building Officials Association of Florida), Hurricane Andrew clearly demonstrated that cross-jurisdictional differences in building codes, together with locally-mandated construction qualifications and methods can make it extremely difficult to bring in qualified building officials and contractors to assist in near-term emergency recovery, repair, and reconstruction operations.

### **3. Code Compliance through Education, Training, Discipline and Licensing**

Post-mortem workshops and reviews of hurricanes Andrew, Erin, and Opal, revealed that too few building officials were too often relied upon to find and correct too many design and construction deficiencies that developed too frequently in the work performed on the job-site. The Commission found that problem still to prevalent today around the State. Building officials testified before the Commission that incomplete and inaccurate plans are routinely submitted during the plan review process and that comments made relative to those incomplete or inaccurate items are, time and time again, ignored by designers who continue to resubmit incomplete plans.

Building Officials further testified that they must stop work and educate subcontractors on the proper methods for installation of the subcontractors' own work, as well as how the work relates to work being done by other trades. In support of that contention, the Commission heard testimony that contractors have persistent difficulties with finding subcontractors who understand the efforts of other trades and are able to identify scheduling and work conflicts before they occur on the job-site. For example, post-hurricane investigations revealed that houses failed when doors, windows, roof sheathing, and hurricane clips and anchors blew off, in, or out. These components and cladding often were covered up by workers in other trades, who, although they saw that the components or cladding did not have many nails or fasteners, failed to recognize that the other installation was incomplete and simply proceeded with their construction task.

Moreover, a lack of qualified trades personnel in the State has caused shortages of qualified supervisors to ensure that work meets the minimum code requirements (the quality control element of the System). Many contractors rely on building officials to stop work

to be corrected, and then have a reinspection – the cost for reinspection and correction being often cheaper than having to hire additional, qualified supervisors and trades personnel.

The programs relating to those who are required to be licensed (building department officials, design professionals and contractors) are fragmented among numerous agencies and offices at both the State and local levels. For those individuals who are not required to have a license (superintendents, residential designers and construction workers), there is no accountability to either the State or local government relative to the type and amount of training held by these major contributors to Florida's Built Environment.

These problems all arise out of the current organization of education and training through licensing and discipline of some, but not all of the participants in the System and add yet another "layer" of confusion to Florida's complex web of codes and administrative processes.

#### **a. Education and Training – State and Local Licensing and Discipline**

The existence of separate boards in separate agencies, classified by individual types of contracting and specialty skills or knowledge, to oversee the State's licensed Contractors and tradesmen, together with local government's ability to establish differing criteria for obtaining licenses through registration programs that do not meet the qualifications of State certification has created a confusing and nonuniform System of educating and training the State's construction industry through licensing and discipline schemes. The multiplicity of enforcement programs that have resulted at the State level for these individual licensing requirements also has created unnecessary duplication of efforts and lack of uniformity within and between agencies and offices. The dual system has required the State Construction Industry Licensing Board to take additional review efforts to ensure that local licensing authorities can and do maintain disciplinary controls similar or equal to the State's – in effect policing the authorities without ever addressing the construction problems. This dual system is inefficient and does not address discipline for the offending parties. Similarly, the ability to improve the quality and control of education efforts for upgrading knowledge and maintaining licensure is limited when there are few common areas of contact between licensing agencies.

The same situation occurs for building code enforcement officials, where

State agency inspectors are licensed separately from local building inspectors. There is a general lack of uniform procedures, training, and minimum qualification requirements. This can result in different construction criteria and interpretations being followed for State buildings being built adjacent to similarly designed commercial buildings, or even adjacent to another State agency's inspected, similarly designed buildings. In the end, contractors and material suppliers are confused and construction costs can vary greatly depending on who are the inspectors for the projects.

The education programs of the industry, professional designers, and building code enforcement officials all have the same problem – that is, there is a lack of coordination and control between the multitude of State agencies and offices that develop, administer, or run the education and certification programs for these construction partners. Conflicts develop between what are (or are not) taught as core requirements, course modules, and curricula for building code issues. There are questions and doubts raised about the quality of courses and how they are developed and taught by various trade and industry organizations and interest groups; this doubt can contribute to making it harder for building departments and contractors to justify funding for continuing education, when the value of the education programs is questionable.

Under the current laws, procedures and codes systems, for example, building officials could accept the registration seal of a professional engineer on a set of plans and not know that the professional engineer's discipline or expertise is not related to the design and construction of buildings, and the engineer has not taken any continuing professional education courses in order to develop or meet those requirements (and is in effect practicing outside their area of expertise). The result can be, and has been, poor designs that fail.

Finally, because the current System fails to ensure that courses for professional designers, industry personnel, and building code enforcement officials are coordinated, the current System does not ensure that what designers design is the same as what building officials actually inspect and what builders can understand and build.

#### **b. Education and Training – Nonlicensed Individuals**

Three critical participants in the Building Codes System are not licensed at either the State or Local levels – the residential designer, the superintendent and the worker on the job. The building



dential housing which is at risk of weather-related damage. Although the design and construction documents from these residential designers must meet all applicable codes, it is the licensed contractor (or Owner) who is ultimately responsible for that design because it is the contractor (or Owner) who obtains the building permit and secures required inspections and the certificate of occupancy. Current Florida law for design professionals, therefore exempts a major portion of the single-family design industry from licensure and regulation, resulting in thousands of structures being constructed each year without any participation by a licensed design professional.

The superintendent is the person hired by the owner or contractor to oversee the actual day-to-day work on a project. Superintendents are not typically used on single family residences, but are reserved for large residential or commercial projects. On such projects it is often the unlicensed superintendent, not the licensed contractor, who is on the job when inspections occur. Since the superintendent oversees the day-to-day work on the site and handles the inspections, the ability to read the plans and specifications and understand how to comply with The Code is crucial.

The worker is the person on the job doing the actual construction work, and includes everyone from the person hammering the nails and sawing the wood to the Journeyman plumber and electrician. While some local jurisdictions have registration requirements for journeymen, there are no licensing requirements at the State level. Moreover, there are no licensing requirements for any other worker on the job. Therefore, it is left to the design professional and the contractor, the only individuals associated with the project who hold a license, to ensure the project is in compliance with The Code – i.e., that the people overseeing and doing the work are competent and properly trained. Interestingly, neither the licensed design professional nor the contractor are required to be physically

present on the jobsite at any point during the construction or inspection process.

### C. THE SOLUTIONS TO THE PROBLEMS – IMPLEMENTATION OF COMMISSION'S FOUNDATIONS AND RECOMMENDATIONS

After 18 months of study and deliberation, culminating in the finding that our current Building Codes System is ineffective, the Commission determined that an effective Building Codes System must protect the health, safety and welfare of the citizens of Florida, and in doing so:

1. Be simple to use and clearly understood;
2. Be uniform and consistent in its administration and application;
3. Be flexible;
4. Be affordable; and
5. Promote innovation and new technology.

When the Commission applied these criteria to the current System, it became clear that, when looked at jurisdiction by jurisdiction, the current System is generally protective of the health, safety and welfare of the citizens of Florida, but when looked at from a statewide perspective, the System became a patchwork of complex codes and processes which are ineffective at simply and consistently protecting the public's health, safety and welfare.

As a result of that conclusion, the Commission focused on reforming the System to meet the effectiveness criteria and thereby resolve the problems (as found by the Commission and as set forth in this Report) caused by decades of piecemeal development of regulation governing how Florida's codes are developed and adopted; administered and enforced; and how those responsible for complying with the codes are educated and trained. Therefore, the Commission is recommending a Building Codes System with the following characteristics:

1. A single, Statewide Building Code ("The Code") will be implemented which will govern all technical requirements for Florida's public and private Built Environment and which will take into account appropriate local variations such as, climatic conditions, soil types, termites, weather-related events, risks associated with

coastal development, life safety issues and maintenance inspections. The Code will be effective for use statewide, without the need for subsequent adoption by local jurisdictions.

2. Enforcement of The Code will occur solely at the local level with updates accomplished by a newly constituted State-level Board ("The Board") on a year cycle. Local governments will have the ability to address local and regional concerns through an amendments process.
3. To ensure strong consistency, decisions of local Officials or Boards of Appeal will be reviewable by The Board, and The Board will have the power to issue Binding Interpretations.
4. There will be a strengthened Enforcement and Compliance Program, based on a clear and precise definition of roles and responsibilities for all participants in the System and reinforced with expanded education, training and discipline.
5. There will be a strong Product Evaluation and Approval Process which is responsible, but streamlined and affordable and which will promote innovation and new technology.

It is the Commission's firm belief that developing and adopting a System with these characteristics will produce a System which promotes uniformity, consistency and predictability of regulation while at the same time, allowing for flexibility by promoting the use of innovation and new technology without adversely affecting affordability. (Please see Appendix 9 for a discussion of the results of the fiscal analysis performed on the Commission's recommended reforms). In addition, the Commission's recommended reforms are aimed at assigning authority and responsibility to all parts of the System to the proper parties by clearly defining the roles of all participants in the System.

These recommended reforms represent a comprehensive approach in overcoming the weaknesses the Commission found in all facets of Florida's current Building Codes System and were formulated from exhaustive study, deliberation and ultimate consensus by the Commission. Therefore, it is the Commission's hope that the Foundations and Recommendations set forth in this Report will be considered in light of the overall, comprehensive and connected context in which they were developed and adopted, resulting in a more uniform, streamlined, simpler, and therefore, more effective Building Codes System.

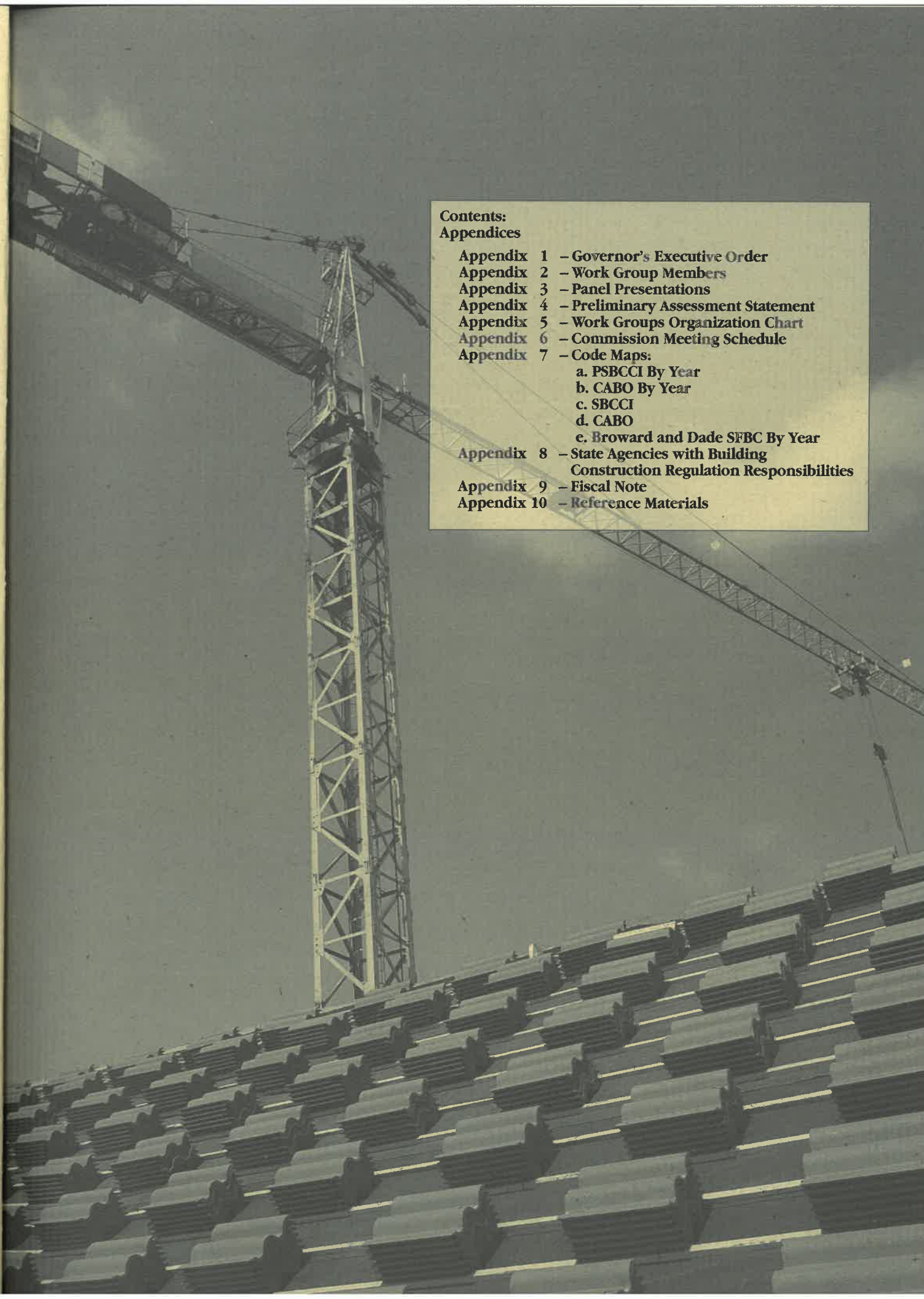




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# State of Florida

## OFFICE OF THE GOVERNOR

### EXECUTIVE ORDER NUMBER 96-234

WHEREAS, the State of Florida is very susceptible to tropical hurricanes and other natural disasters which produce high winds and rising waters; and

WHEREAS, such natural disasters can severely tax the ability of local, state and federal governments to respond to public safety concerns and adverse economic impacts; and

WHEREAS, national, state and local policies now recognize the primary importance of pre-disaster mitigation of the potential adverse impacts of natural disasters; and

WHEREAS, within the last decade the frequency and impact of natural disasters has established a degree of risk to the private sector insurance industry resulting in a disturbing reduction in the availability of property insurance; and

WHEREAS, maintaining an adequate housing stock and sustaining strong economic growth is dependent upon the availability of insurance; and

WHEREAS, the quality of construction is a strong determining factor in the level of damage sustained by buildings during natural disasters, especially hurricanes; and

WHEREAS, construction quality is strongly linked to minimum building codes and other standards; and

WHEREAS, the current Florida building codes and standards system which has been in operation for over twenty years, has resulted in a complex web of codes which are sometimes inconsistent with one another and out of date; and

WHEREAS, the health, safety and welfare of Florida citizens, and the viability and strength of Florida's economy, are increasingly dependent upon an efficient, effective and coherent system of building codes and standards; and

WHEREAS, construction of safe, energy efficient, accessible and affordable buildings is fundamental to the development of sustainable communities in the state of Florida; and

WHEREAS, through the development of a consensus among the various stakeholders, it is appropriate to examine and evaluate alternatives to measurably improve the way we regulate construction standards; and

WHEREAS, it is further appropriate to afford the public the opportunity to be included in this evaluation.

NOW, THEREFORE, I, LAWTON CHILES, Governor of the State of Florida, pursuant to the Constitution and Laws of the State of Florida, do hereby promulgate the following executive order, effective immediately:

#### Section 1.

The Governor's Building Codes Study Commission is hereby created.

#### Section 2.

The purpose of the Commission shall be to evaluate the current effectiveness of, and through general consensus among the Commission members, recommend any necessary steps to reform the Florida building code system.

#### Section 3.

In pursuing and achieving its purpose, the Commission shall look at the overall inventory of building codes and standards controlling the quality of Florida's built environment, the administration of these codes and standards, and issues relating to code compliance. To that end, the Commission's inquiry shall include, but not be limited to, the following questions:

1. How effective is the current system of building codes and standards and are any changes needed?
2. What is the current level of competence in the administration and enforcement of building codes and standards and what, if any, steps should be taken to strengthen that administration and
3. If any change is recommended, how can the State ensure that code reform allows participation by all future stakeholders including industry, local government, and the general public?
4. What steps should be taken to ensure that the inspection process under our building code system is effective and timely and does not unreasonably burden those seeking permits?
5. How should the code system address the quality of workmanship and the knowledge of code provisions among construction trades people?
6. What steps should be taken to minimize unnecessary regulation that adds to the cost of construction?
7. What limits should be applied to the authority and applicability of building codes enforcement?
8. Should the Florida building code system be redesigned under a single unified code?
9. Should speciality codes, such as energy codes and codes relating to accessibility for persons with disabilities, be incorporated under a unified code and if so, how and to what extent?
10. If the Commission recommends that a unified code be adopted, what criteria should govern code development and amendment to ensure appropriate and necessary flexibility, continued effectiveness, and avoid unnecessary complexity or obsolescence?

11. Should the various codes and code functions existing in state agencies be consolidated under a unified code and if so, how and to what extent?

12. How and to what extent should a proposed unified code encourage innovation and private sector-based programs to improve overall building quality?

#### Section 4.

The Commission shall submit a written report to the Governor by January 31, 1997. The Commission's final report shall be due by October 31, 1997 and shall include recommendations for the reform of the current building codes and standards regulatory system, if appropriate. It shall include findings relative to legislative, executive, and private sector initiatives to achieve the provision of safe, energy efficient and affordable buildings under the proposed code system. To that end, the Commission meetings shall be held around the state.

#### Section 5.



A Chairperson appointed by the Governor;  
 Two members of the Florida Senate;  
 Two members of the Florida House of Representatives;  
 The State Insurance Commissioner or his designee;  
 The Secretary of the Department of Labor and Employment Security or his designee;  
 The Secretary of the Department of Community Affairs or his designee;  
 The Secretary of the Department of Business and Professional Regulation or his designee;  
 A Citizen of the State representing the State University System;  
 A person belonging to a statewide organization representing persons with disabilities;  
 A person representing the Florida League of Cities;  
 A person representing the Florida Association of Counties;  
 A person representing the State's building officials;  
 A person representing building owners;  
 A person representing the residential construction industry;  
 A person representing commercial building contractors;  
 A person representing general contractors;  
 A person representing the industry of manufacturing building construction;  
 A person representing the industry of engineering professionals;  
 A person representing the industry of architectural professionals;  
 A person representing real estate professionals;  
 A person representing the insurance industry;  
 A person representing the banking industry;  
 A person representing union members in the building construction industry;  
 Three Private Citizens actively involved in private real estate development, the construction industry or representing the general public interest.

#### Section 6.

In order for the Commission to receive input, and to assist it in its evaluations, assessment of options and formulation of recommendations, the Chairman of the Commission may establish one or more technical or other special advisory committees. Such advisory committees may include Commission and non-commission members, including representatives of those industries that may be affected by the Commission's recommendations.

#### Section 7.

Commission members and the members of any technical or policy resource committees or citizen advisory committees shall not receive remuneration for their services. Commission members shall be reimbursed for travel and expenses in accordance with Chapter 112, Florida Statutes, to the extent funds are available for this purpose. Public officers and employees shall be reimbursed by their respective agencies in accordance with Chapter 112, Florida Statutes.

#### Section 8.

Administrative, research and staff support to the Commission shall be funded by the Department of Community Affairs in coordination with the Florida Conflict Resolution Consortium and Florida State University. The Department of Insurance, The Department of Labor and Employment Security and The Department of Business and Professional Regulation are requested to cooperate with and render assistance to the Commission. All state agencies are requested to provide such assistance to the Commission necessary to effectuate the purpose of this executive order.

#### Section 9.

This executive order shall expire June 30, 1998, unless otherwise extended.



IN TESTIMONY WHEREOF, I have hereunto set my hand and have caused the Great Seal of the State of Florida to be affixed at Tallahassee, the Capitol, this 31<sup>st</sup> day of July, 1996.

*Lanto Chiles*  
GOVERNOR

ATTEST:

*Sandra B. Northam*  
SECRETARY OF STATE

## Governor's Building Codes Study Commission Work Group Members

### Organization, Relationships and Standards

Lou Clendaniel  
Symmons Industries, Inc.  
Orlando, FL

Sam Dunn  
Dunn Lumber and Hardware  
Daytona Beach, FL

Thomas J. Kopec  
Advanced Glazing Products  
DuPont Circleville Plant  
Circleville, OH

Laura Ogles  
Simon Roofing & Sheet Metal, Inc.  
Largo, FL

J. C. Robertson  
Florida Fire Chiefs Association  
Gainesville, FL

Chris T. Sanidas  
Building Official, Orange County  
Orlando, FL

### Adoption, Appeals, Inspections and Product Evaluation

Bob Crowell  
Crowell Plumbing, Inc.  
Tampa, FL

Dennis Graber  
Florida Concrete and Products Assoc.  
Orlando, FL

David Lewis  
APA-The Engineered Wood Association  
Orlando, FL

Steven Randall  
Florida Fire Marshals Association  
City of Altamonte Springs  
Altamonte Springs, FL

Russell Snyder, General Manager  
Asphalt Roofing Manufacturers Assoc.  
Rockville, MD

Cos Tornese, P. E.  
Director, Building and Permitting Division  
Broward County Commission  
Dept. of Strategic Planning & Growth Mgt.  
Ft. Lauderdale, FL

Jeffrey B. Stone, Ph.D., CBO  
Southeast Regional Manager  
American Forest & Paper Association  
Tierra Verde, FL

George J. Wiggins, CBO  
Director of Code Enforcement  
and Chief Building Official  
Winter Park, FL

Dick Wilhelm  
Monsanto  
Tallahassee, FL

### Amendments and Interpretations

Chief Michael Cato  
Fire Marshall  
Delray Beach Fire Dept.  
Delray Beach, FL

Lee Martin  
Chief, Permit Services Division  
Metropolitan Dade County  
Miami, FL

Chuck Meyer  
Florida Heating and Air Conditioning  
Margate, FL

Robert L. Moore  
Director, Planning & Zoning  
Town of Palm Beach  
Palm Beach, FL

Martha Nebelsiek  
Florida Assoc. of Counties  
Tallahassee, FL

Ken Pangborn  
Binnings Pan American  
Miami, FL

Gloria M. Velasquez  
Director, Governmental Affairs,  
Dade County  
Building Industry Assoc. of So. Fla.  
Miami Lakes, FL

### Education, Discipline and Licensing

Tarry Baker  
International Association  
of Electrical Inspectors  
Coconut Creek, FL

Dave Beitz, CBO  
Seminole County Government  
Sanford, FL

Carl Coughlin  
Suncoast Fire Sprinkler Company  
Pinellas Park, FL

Jack Downey  
R&S Companies  
Miami, FL

Wellington Meffert  
Director of Governmental Affairs  
Florida Home Builders Assoc.  
Tallahassee, FL

George A. Rogers, Jr.  
Director of Inspections  
City of Pensacola  
Pensacola, FL

Chief Jon Wesley  
Fire Marshall  
Metro-Dade Fire Rescue  
Miami, FL



## Panel Presentations

### • October 10-11, 1996

Dade County regarding the South Florida Building Code - Dade Edition  
Charles Danger, Director of Building Code Compliance; Raul Rodriguez, Product Control Supervisor; and Lee Martin, Building Official, Dept. of Planning, Development and Regulation.

Broward County regarding the of the South Florida Building Code - Broward Edition

James Pillon, Administrative Director, Broward County Board of Rules and Appeals and Cos Tornese, P.E., Director, Broward County Commission, Building and Permitting Division.

Reedy Creek Improvement District regarding the EPCOT Code

Tom Moses, District Administrator, Reedy Creek Improvement District.

### • November 14-15, 1996

SBCCI regarding the Standard Building Code

Bill Tangye, CEO and Rick Vognild, Director of Technical Services

Local Government Panel -

Administration and Enforcement of the Standard Building Code

Burt Folce, Director of Development Services and Building Official, Hillsborough County; Nick D'Andrea, Manager, Commercial Development Services, City of Tampa; James Pybus, Building Official, Bay County; and George Wiggins, CBO, City of Winter Park.

User Panel

Bob Crowell, subcontractor; Chris Wickberg, Senior Project Manager, Beers Construction (commercial builder); Steve Hedrick, Suarez Housing Corp. (GC); and Foard Meriweather, Director of Architecture, HOK.

Manufacturer Panel

Gary Duren, Code Compliance, Inc.; Shawn Donovan, Monsanto; and Robert Strehle, Rinker Materials.

Division of State Fire Marshal's and local fire authority regarding the Minimum and Uniform Fire Safety Codes

Jim Radcliff, Bureau Chief, Bureau of Fire Prevention, Division of State Fire Marshal, Department of Insurance; James E. Goodloe, Fire Marshal, City of Clearwater Fire Department; and Michael Ertz, Second Vice President, Florida Fire Chiefs' Association.

### • December 12-13, 1997

Florida & Federal ADA

Doug Buck, and Rick Dixon, Department of Community Affairs

Development of State Facilities (DOE, DMS, DOT, and DOC)

Suzanne Marshall, Director, Division of Educational Facilities, DOE; Boyd Baxter, Engineer III, Div. of Building Construction, DMS; Dean Perkins, Architect, Special Facilities, DOT; and Steve Watson, Architect, Bureau of Facilities Services.

1st Regulatory Panel (DCA, DBPR, DMV, and AHCA)

Rick Dixon, Program Administrator, Codes and Standards Section, DCA; Ron Webb (hotels and restaurants) and Lee Rugby (elevators), DBPR; Phil Burgelt, Bureau of Mobile Homes and RV Construction, DMV; James Gregory, Architect and Bureau Chief, Office of Plans and Constructions, AHCA.

2nd Regulatory Panel (DOI, DEP, DOS, DOH, and DOA)

Greg Lundbert, Division of Boiler Safety, DOI; Gene Chalecki, Beaches and Coastal Systems, DEP; Ken Widergren, DOH; and Bobby Bickley, Administrator, Food Store Inspection Program, Dept of Agriculture.

### • January 16-17, 1997

Insurance Services Office (ISO)

Dennis Gage

Board of Building Codes and Standards  
Doug Murdock, Chairman

First Licensing Boards Panel

Rodney Hunt, Executive Director, Construction Licensing Board; Arnold Abreu, Chairman, Electrical Contractors Licensing Board; and Don Fuchs, Chairman, Inspectors Board.

Second Licensing Boards Panel

Carl Gerken and Janice Young (ex-Board Members) Architecture and Interior Design Board.

States of New Jersey, Virginia and North Carolina

Lee Hauser, Sr. Deputy Commissioner of the N.C. Dept. of Insurance; Susan McLaughlin, Supervisor of the Education Unit in the Div. of Codes and Standards in the NJ Dept. of Community Affairs; and Jack Proctor, Deputy Director of the Virginia Dept. of Housing and Community Development.

Division of State Fire Marshal's Office regarding Licensing

Jim Radcliff, Division of State Fire Marshal, Dept. of Insurance.

### • February 13-14, 1997

International Code Council on the status of an International Building Code

Rick Vognild, Director of Technical Services, SBCCI.

National Fire Protection Association on

National Center for Construction Education and Research on Education and Training Programs

Steven Green

### • March 13-14, 1997

FAMU regarding code comparison

Tom Pugh and Tom Martineau, Institute of Building Sciences, School of Architecture.

ADA Advocates Panel

Tom Nicholson, Chairman, Accessibility Advisory Council, FL Board of Building Codes and Standards; Barbara Bernhart, Director ADA Work Group; Angel Watson, Tri-Counties Paralyzed Veterans Association; and Jack Humburg, Abilities, Inc.

SBCCI

Sam Gerace, Southern Building Code Congress International

### • April 17-18, 1997

ADA User Panel

Ronnie Spooner, CBC, Building and Zoning Official, City of Tallahassee, Building Officials Association of Florida; Larry Schneider, Accessibility Consultant, Dade Aviation Consultants, Florida Association of the American Institute of Architects; DK Mink, Legislative Coordinator, Building Owners and Managers Association of Florida; and David Ferro, Architect Supervisor, Bureau of Historic Preservation, Dept. of State.

Florida Administrative Procedures Act

Bill Williams, Chairman, Administrative Law Section, The Florida Bar

Bob Stroh, Shimberg Center for Affordable Housing, regarding cost of current system on construction.

### • August 14-15, 1997

Funding Presentation regarding fiscal impacts of the Commission's recommendations

Mike Richardson and Bob Stroh

### • September 17-18, 1997

Florida Insurance Council

Cecil Pierce, President, Florida Insurance Council, Sam Miller, Vice President, Florida Insurance Council and Rose Grant, State Farm

### • October 16-17, 1997

Florida School Boards Association

Tatjana Martinez, General Counsel, Florida School Boards Association; Sally Osborne, Director of Governmental Affairs and Land use Policy and Acquisition, Dade County Schools; and Rebecca Blackwood, Senior Supervisor, Inspection and Code Compliance, Broward County Schools.



## Preliminary Assessment Statement

Over the past 5 months, the Commission has received a vast amount of information and input on the framework and effectiveness of Florida's Building Codes System. As a result of our initial 5 meetings, the Commission developed this Assessment Statement which articulates its current perspective on those aspects of Florida's Building Codes System which need to be examined for possible change. This Statement also, therefore, provides an initial guidepost for the Commission's Work Groups to explore potential problems which exist and to develop any appropriate recommendations to reform Florida's Building Codes System. In order to achieve this purpose, the Commission developed criteria it believes to be essential for an effective Building Codes System:

1. Protect the health, safety, and welfare of the citizens of Florida; and in doing so:
2. Be simple to use and clearly understood;
3. Be uniform and consistent in its administration and application;
4. Be flexible;
5. Be affordable; and
6. Promote innovation and new technology.

Applying these criteria to the information received by the Commission to date and using its Members' own knowledge of and experiences in the system, the Commission believes, at this point in its process, that there are several elements of Florida's current building codes system that are ineffective. These elements generally fall into 4 categories:

1. Organization, Relationships and Standards (relating to the number of codes and code-like laws, rules and regulations; the application and types of standards used; coordination within and among those "codes;" definition of the roles of the various players in the building codes system and the relationships among those players; consistency; and ongoing building maintenance);
2. Adoption, Appeals and Inspections (relating to the process by which "codes" are initially adopted; the process by which decisions relating to the "codes" and violations of the "codes" are handled; the inspections process; and the dissemination of information relating to the building codes system such as, interpretations, amendments, product approvals, etc.);
3. Amendments and Interpretations (relating to the process by which already existing "codes" are updated; the process by which already adopted "codes" are amended, including who, if anyone, should have the authority to amend; and how and by whom interpretations should be made); and
4. Education, Discipline and Licensing (relating to the general education of the public and the players in the system on the system itself; the basic and continuing education of the players in the system; the discipline process, including who should be disciplined, who should do the disciplining, and under what circumstances should discipline occur; who should be granted the authority to license; categories of licensing and whether licensing requirements should be part of a building code).

These are all issues which need to be examined for possible changes and improvements. The Commission Chairman has established and made appointments to four Work Groups to facilitate this examination. The Commission, through those Work Groups and the public input process, will look specifically at these areas as it formulates its final recommendations.

## Governor's Building Codes Study Commission Work Groups Organization Chart

Work Group	Topics to Consider
<p><b>Organization, Relationships and Standards</b></p> <p><b>WORK GROUP MEMBERS</b>  <i>Steve Pfeiffer, Chair</i>  <i>Len Tylka, Vice Chair/Recorder</i></p> <p><i>Frank Bosak – persons with disabilities</i>  Lou Clendaniel – Plumbing Manufacturer  Sam Dunn – FL Bldg. Material Assoc.  <i>Charlie Clary – State Senator</i>  Tom Kopec – DuPont  <i>Pete Mitchell – DOI</i>  Laura Ogles – Nat. Roof'g Cont. Assoc. &amp; FRSMACCA</p> <p>J.C. Robertson – FL Fire Chiefs Assoc.  Chris Sanidas – Local Bldg Off. (Orange Cty)  <i>Katy Sorenson – Florida Association of Counties</i>  <i>Chuck Weeder – Manufactured Housing Industry</i></p>	<ul style="list-style-type: none"> <li>• Number of codes</li> <li>• Coordination within or among codes (including main streaming, FL ADA v Fed. ADA, local flexibility etc.)</li> <li>• Type of standards</li> <li>• Definition of Roles</li> <li>• Relationship among/between individuals</li> <li>• Ongoing Building Maintenance</li> </ul>
<p><b>Adoption, Appeals, Inspections and Product Evaluation</b></p> <p><b>WORK GROUP MEMBERS</b>  <i>Mike Smith, Chair</i>  <i>Melody Linger, Vice Chair/Recorder</i></p> <p><i>Eduardo Camet – Private Citizen in Construction</i>  Bob Crowell – FL Assoc. Plumb, Htg, &amp; Cooling  Jack Downey – R &amp; S Co. (Win. &amp; Doors)  Dennis Graber – FL Concrete Assoc  <i>Roger Jeffery – Engineering Profession</i>  <i>Ed Lee – Private Citizen in Real Estate Development</i>  David Lewis – APA-Engineered Wood Assoc.</p> <p><i>Matt Meadows – State Senator</i>  Steven Randall – FL Fire Marshals Assoc.  Russ Snyder – Asphalt Roofing Manuf. Assoc.  Cos Tornese – Broward County  Jeffrey Stone – Amer. Forest &amp; Paper Assoc.  George Wiggins – Local Bldg. Off. (Winterpark)  Dick Wilhelm – Monsanto</p>	<ul style="list-style-type: none"> <li>• Adoption process</li> <li>• Product evaluation, use and determination</li> <li>• Information dissemination</li> <li>• Inspections</li> <li>• Categories of appealable decisions (interpretations, amendments, code violations, license revocation, etc.)</li> <li>• Appellate Process</li> </ul>
<p><b>Amendments and Interpretations</b></p> <p><b>WORK GROUP MEMBERS</b>  <i>Vikki Robbins, Chair</i>  <i>Larry Schultz, Vice Chair/Recorder</i></p> <p><i>Pete Billing – Insurance Industry</i>  Chief Michael Cato – Fire Marshall, Delray Beach  <i>John Kalaf – Commercial Building Contractors</i>  Lee Martin – Dade County  Chuck Meyer – FL AC Cont. Assoc.</p> <p>Bob Moore – Local Bldg Official (Town of P.B.)  Martha Nebelsiek – FL Assoc. of Counties  Ken Pangborn – Binnings Pan American  <i>Ken Pruitt – State Representative</i>  Gloria Velazquez – Bldg. Ind. Assoc. of So. FL  <i>Gussie Young – Private Citizen</i></p>	<ul style="list-style-type: none"> <li>• Authority to amend</li> <li>• Amendatory Process</li> <li>• Interpretations</li> <li>• Updating process</li> </ul>
<p><b>Education, Discipline and Licensing</b></p> <p><b>WORK GROUP MEMBERS</b>  <i>Wayne Drummond, Chair</i>  <i>Doug Bartley, Vice Chair/Recorder</i></p> <p>Tarry Baker-Int'l Assoc. of Electrical Inspectors  Dave Beitz – Seminole Cty. Bld.&amp; Fire Prevention  <i>Mary Brennan – State Representative</i>  <i>Arnell Bryant-Willis – FL Department of Labor</i></p> <p><i>G.W. Harrell – DBPR</i>  <i>Jack Ricketson – AFL-CIO</i>  <i>Bob Mathews – General Contractors</i>  Wellington Meffert – FHBA  George Rogers – Local Bldg. Official – Pensacola  Chief Ion Weslev – Fire Marshall. Metro-</p>	<ul style="list-style-type: none"> <li>• General Education (public/industry/process)</li> <li>• Basic Education</li> <li>• Continuing Education</li> <li>• Discipline</li> <li>• Licensing</li> </ul>



## Governor's Building Codes Study Commission Meeting Schedule

### Full Commission Meetings

**September 19-29, 1996**  
Orlando, Florida

**October 10-11, 1996**  
Miami, Florida

**November 14-15, 1996**  
Tampa, Florida

**December 12-13, 1997**  
Pensacola, Florida

**January 16-17, 1997**  
Jacksonville, Florida

**February 13-14, 1997**  
Orlando, FL

**March 13-14, 1997**  
Ft. Myers, Florida

**April 17-18, 1997**  
Tallahassee, FL

**May 22-23, 1997**  
Ft. Lauderdale, Florida

**June 26-27, 1997**  
Orlando, Florida

**July 16-18, 1997**  
West Palm Beach, Florida

**August 14-15, 1997**  
Daytona Beach, Florida

**September 17-18, 1997**  
Panama City, Florida

**October 16-17, 1997**  
Miami, Florida

**November 13-14, 1997**  
St. Pete Beach, Florida

**December 4, 1997**  
Orlando, Florida

### Work Group Interim Meetings

**March 5, 1997**  
Orlando, Florida

**April 2, 1997**  
Orlando, Florida

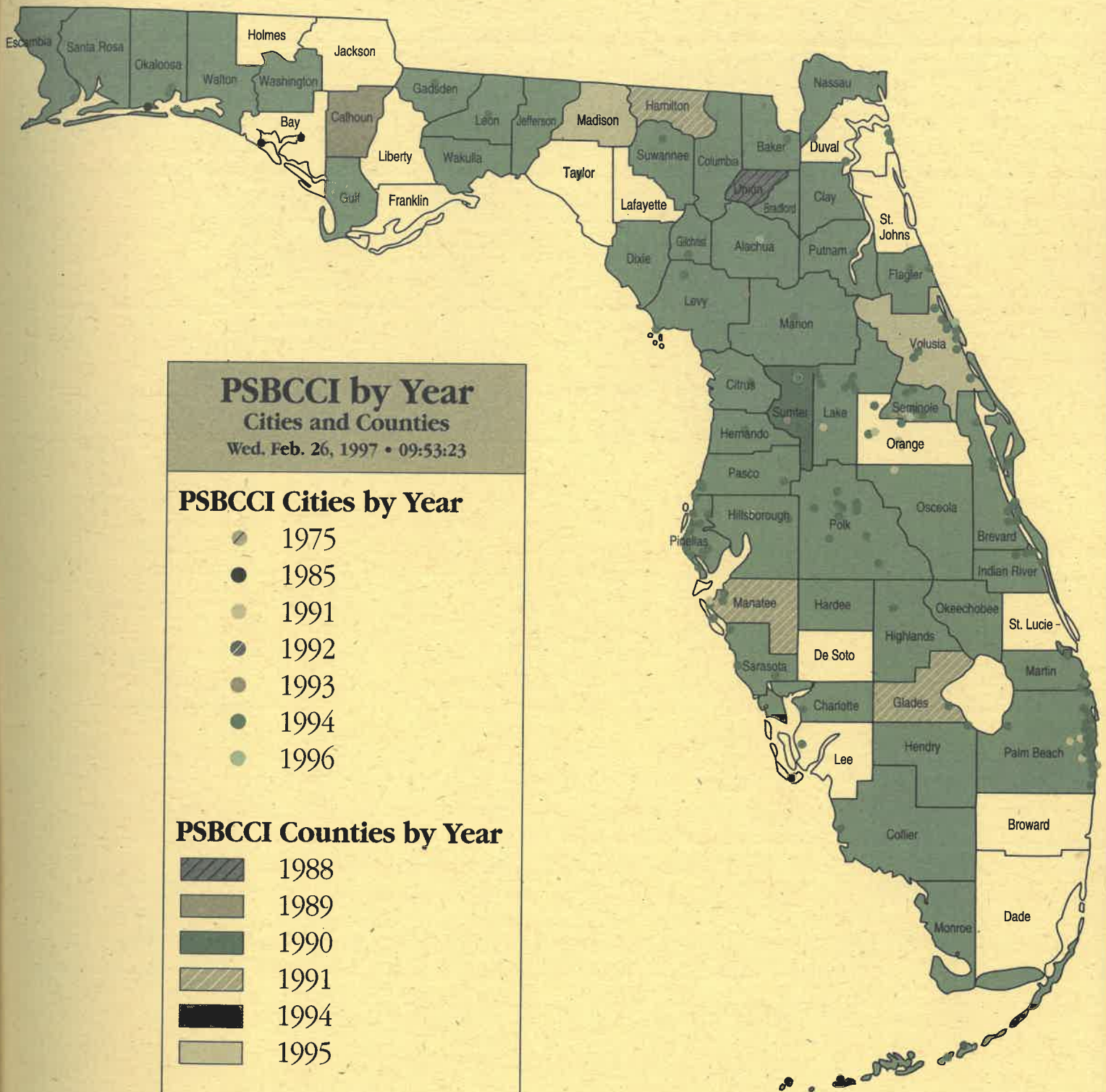
**May 7, 1997**  
Orlando, Florida

**July 28, 1997**  
Orlando, Florida

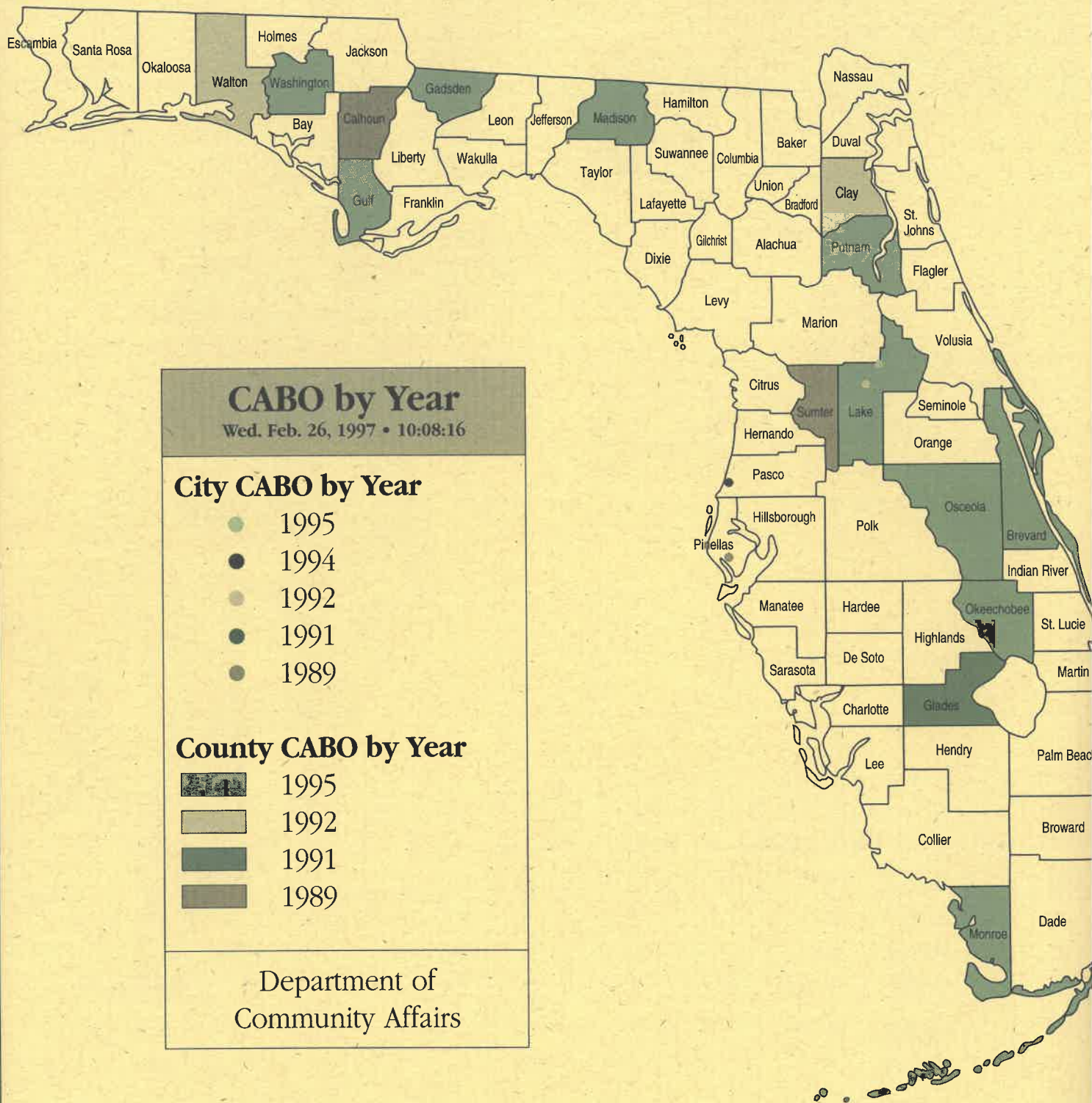
### Workshops and Public Hearing

**January 16, 1997**  
Jacksonville, Florida

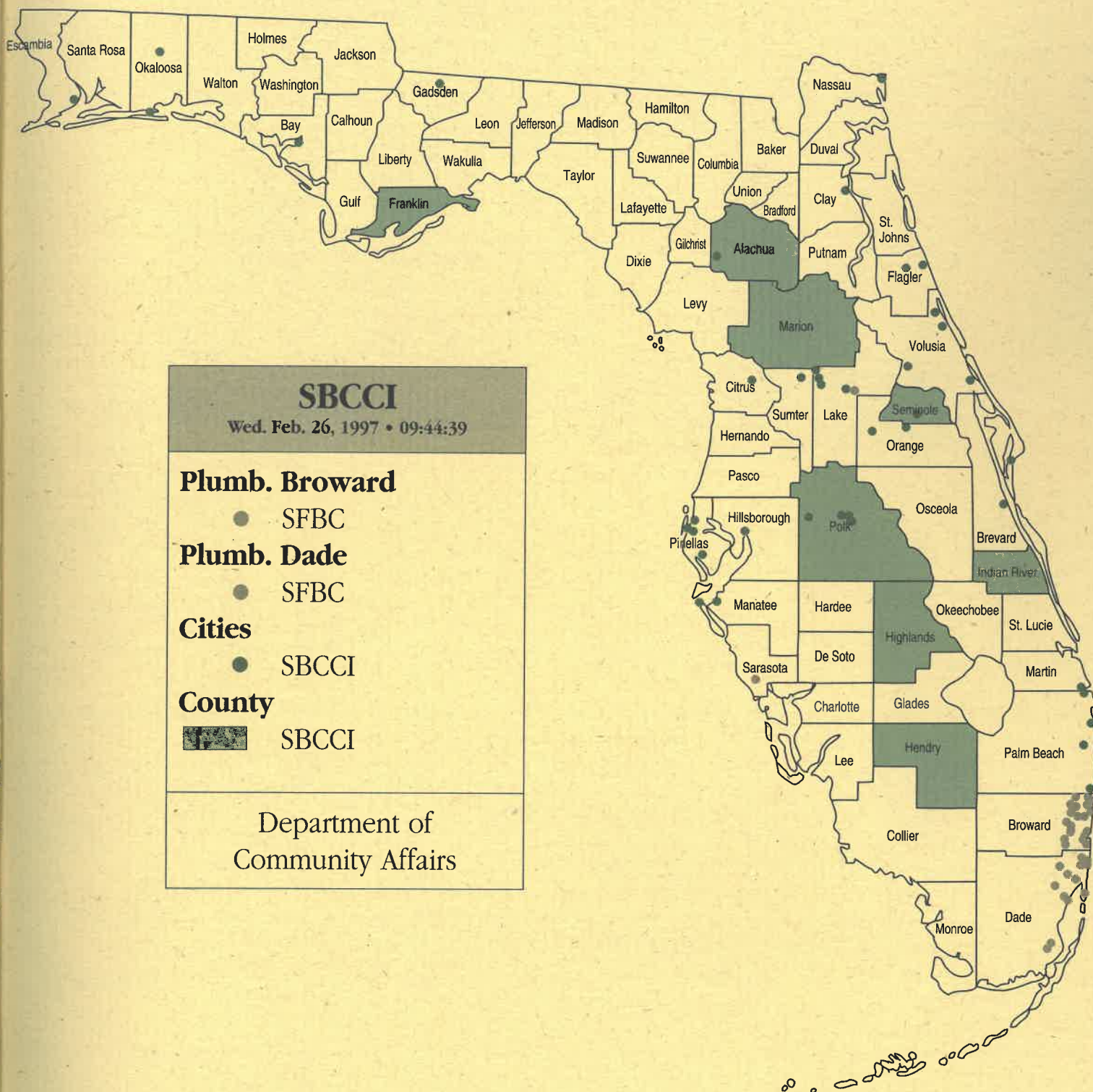
**December 4, 1997**  
Orlando, Florida

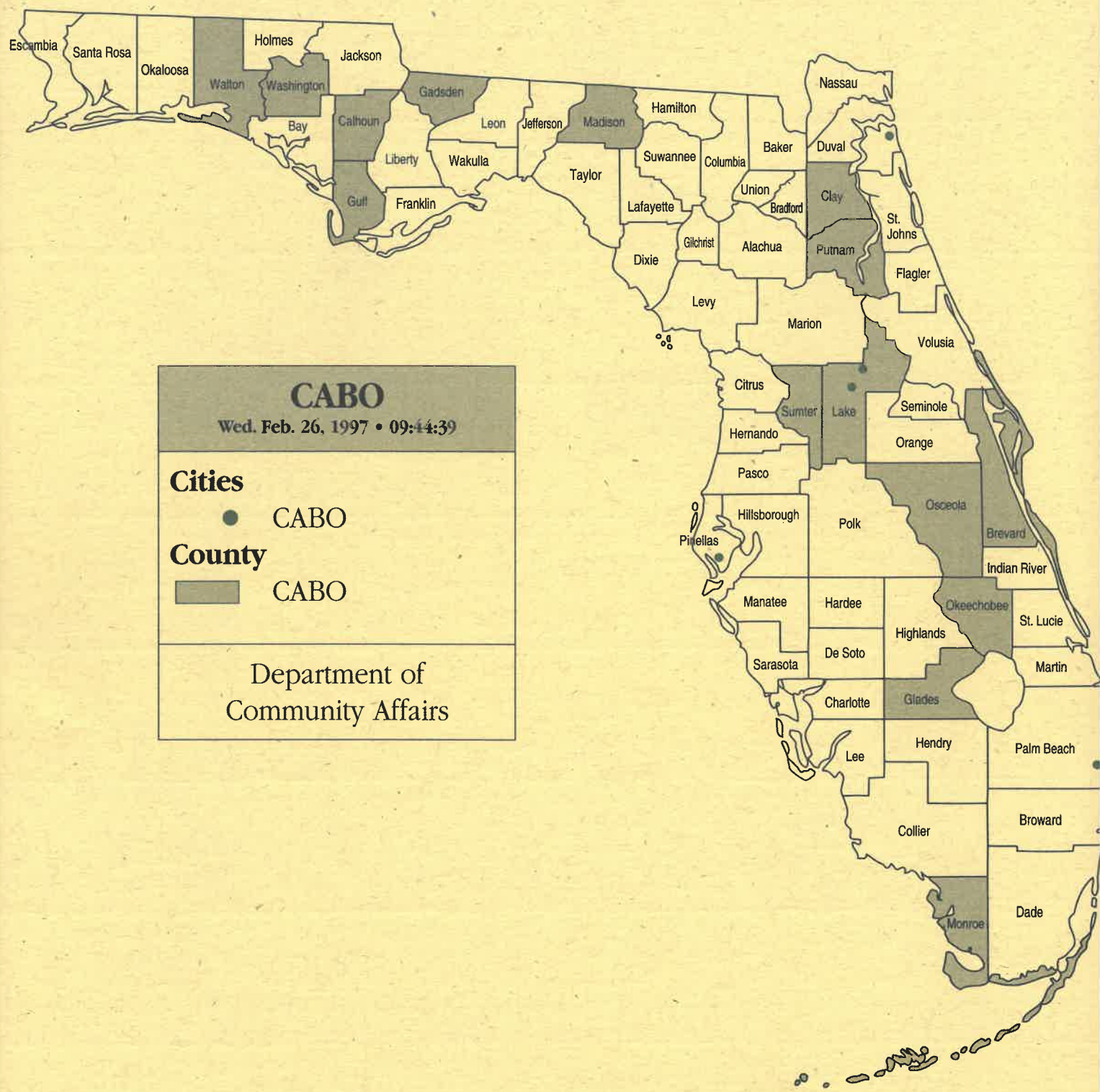














# Broward & Dade

## SFBC by Year

Wed. Feb. 26, 1997 • 09:44:39

## SFBC by Year

- 1978
- 1994
- 1995
- 1996

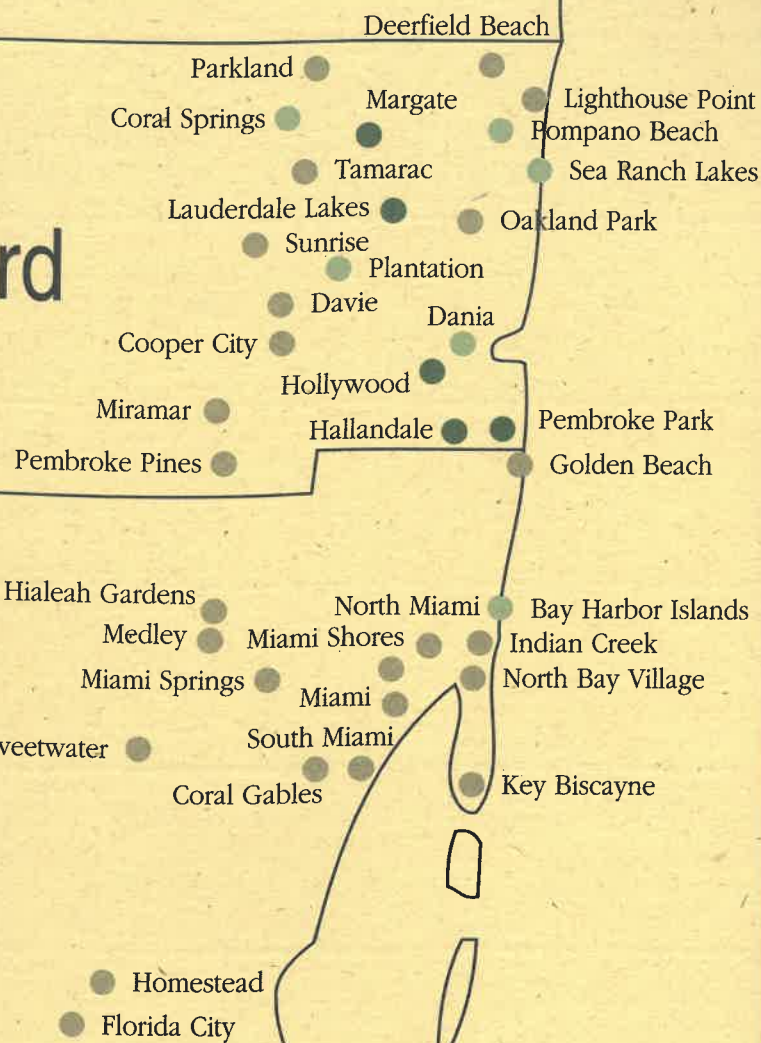
Department of  
Community Affairs

# Palm Beach

# Collier

# Broward

# Dade





## State Agencies with Building Construction Regulation Responsibilities

### Agency for Health Care Administration

- Chapter 395.01639 (hospital construction)
- Chapter 483 (health testing services)

### Department of Administration

- Chapter 760.23 (discrimination in housing)

### Department of Agriculture and Consumer Services

- Chapter 500 (food building permits)

### Department of Business and Professional Regulation

- Chapter 20.165 (definition?)
- Chapter 399 (elevators)
- Chapter 468 (BCAI – building inspectors)
- Chapter 471 (engineering)
- Chapter 481 (architects)
- Chapter 489 (construction contractors, electrical, septic tank)
- Chapter 509 (lodging & food service establishments)

### Department of Community Affairs

- Chapter 163 (comprehensive plans)
- Chapter 377 (energy resources)
- Chapter 553 (building construction standards)

### Department of Corrections

- Chapter 944.10 (building provision, sale & purchase of land)
- Chapter 951.23 (local detention facilities)
- Chapter 957.04 (private facilities contract requirements)

### Department of Education

- Chapter 232.258(5)(facilities)
- Chapter 235 (facilities)
- Chapter 240 (universities)

### Department of Environmental Protection

- Chapter 161 (coastal building zone)
- Chapter 403.087 (environmental control)

### Department of Health and Rehabilitative Services

- Chapter 400 (nursing homes)
- Chapter 402.305 (child care facilities)
- Chapter 404 (radiation)

### Department of Highway Safety and Motor Vehicles

- Chapter 320.824

### Department of Insurance

- Chapter 554.103 (boiler code)
- Chapter 627.0629 (residential property insurance)
- Chapter 633 (fire safety standards)

### Department of Management Services

- Chapter 255 (public buildings)
- Chapter 287.055 (personal services, fees, penalties)

### Department of State

- Chapter 267.061 (historical resources)

### Department of Transportation

- Chapter 316 (parking)
- Chapter 331.319 (airport building codes)
- Chapter 333 (airport zoning)
- Chapter 334 (transportation administration)
- Chapter 336.045 (county roads)

### Historic Preservation Boards

- Chapter 266 (locations)

### Public Service Commission

- Chapter 366.04 (jurisdiction)

## Fiscal Note

The Commission's recommendations naturally have fiscal implications for the state and local government agencies which must implement regulatory and educational programs related to building code administration, as well as the construction industry and the ultimate owners of buildings and structures, both private and public. The governmental fiscal implications consist of such things as savings from eliminated functions, costs of new duties and services, and additional or fewer government revenues from fees. The private sector fiscal implications involve such things as savings from a more consistent, streamlined, and professional regulatory system and increased fees paid for government services.

To help the Commission, the Governor and Legislature, and the public better understand and evaluate these recommendations, an attempt was made to identify and roughly estimate as many of these fiscal implications as possible. Available data was supplemented with new survey data and information from state and local government agencies and the construction industry. This data and information was used to determine current situations and practices and to estimate the extent to which these recommendations might have fiscal impacts. Below is a synopsis of the fiscal findings:

### Construction Industry:

- All local government costs associated with these recommendations and over 60% of the state government costs will be paid by the industry through permitting, inspection, and other fees
- Despite having to shoulder most of these additional governmental costs, the industry should experience an overall savings of at least \$70 to \$87 million annually due to a more consistent, streamlined, and professional regulatory system.

### Local Government:

- Local government should experience savings in the range of \$1.2 to \$1.6 million annually, primarily related to updating and amending building codes.
- Increased net costs of somewhere between \$17 to \$25 million, primarily associated with assuming inspection and permitting duties now handled by state agencies (including public schools, universities, and community colleges) will be funded totally through permit and inspection fees paid by builders (owners).
- Almost 90 % of the additional fee revenue that local governments would receive to fund additional responsibilities should be able to be generated without raising local fee rates. The rest may require increasing permit and inspection fee rates to cover costs.

### State Government:

- State government should experience savings in the range of \$15 to \$18 million annually, primarily related to relinquishing to local government current inspection and permitting duties related to state government buildings and some other public and private facilities.
- Inspection and Permit fees of between \$12 and \$14 million annually will have to be paid to local government for state-owned facilities, including public schools, universities, and community colleges, that are constructed or renovated.
- It will cost about \$3.4 and \$4.3 million annually, after start-up, for the proposed Florida Building Code Board to carry out its regulatory duties and for the Department of Business and Professional Regulation to assume its new duties.

- An additional \$ 2.9 to \$3.6 million annually after start-up phase, will be required for the code training program. Almost all of this is for course delivery, which could be privatized completely and removed from the state's budget and appropriation process.
- The new Board's costs are offset somewhat by a reduction of between \$630,000 and \$770,000 annually for the current funding of the code-related duties now performed by the Department of Community Affairs and the Board of Building Codes and Standards. The net costs of the new Board could be funded by the permit fee surcharge currently collected as part of the local permit fee process and used to fund the department's code-related functions, although it would need to be increased from 6 to 10 per square foot of building floor area.
- Between 54% and 65% of the additional fee revenue that state government could receive to fund additional responsibilities should be able to be generated without raising current or imposing new fee rates. The rest may require increasing permit and inspection fee rates or imposing new fees to cover costs.

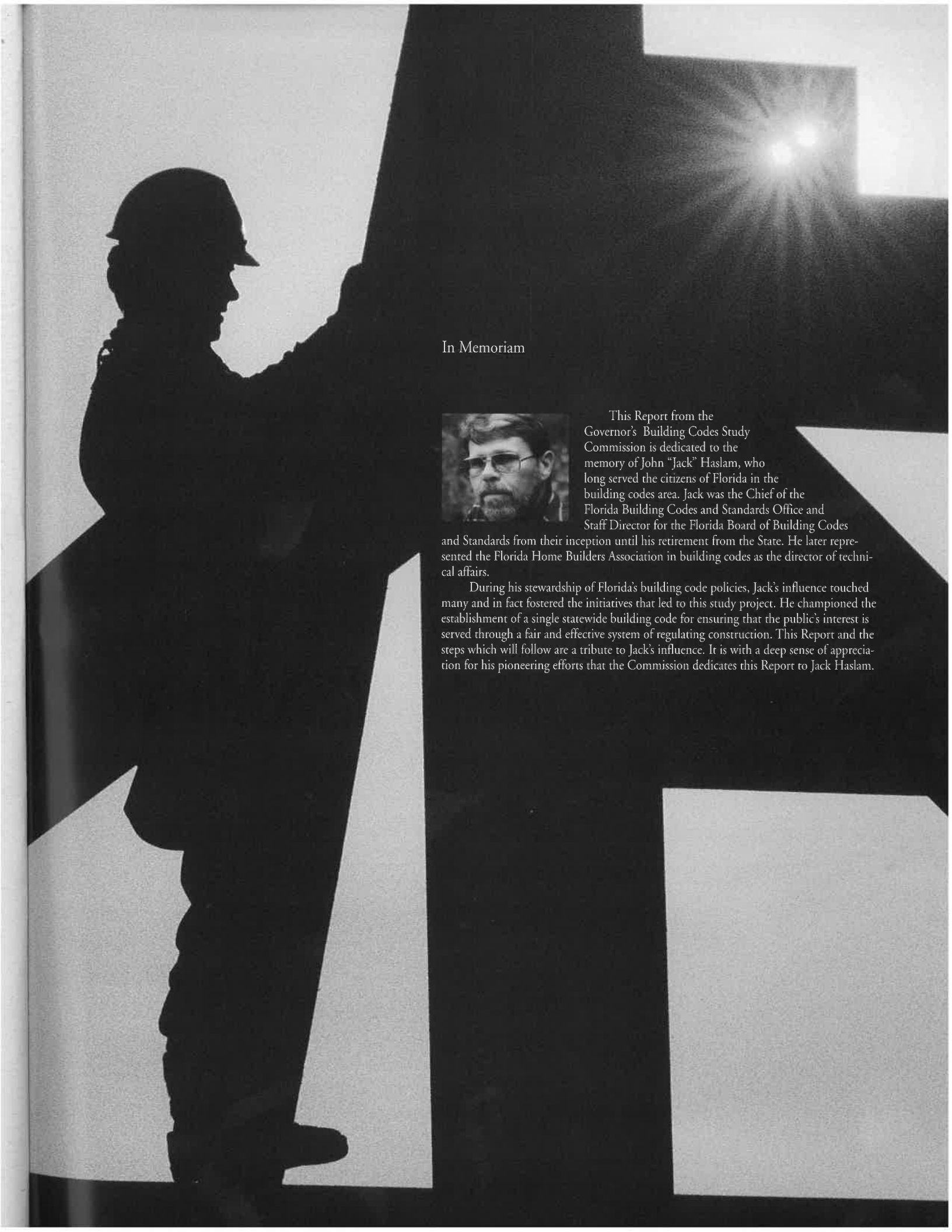
Details of the fiscal analysis are available from the Commission's staff or DCA.



## Reference Materials

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  - Building Construction Regulations in Florida. Report Number One. Task No. 1. External Input – Selected Experiences from Other States; Florida A & M University, School of Architecture, Institute for Building Science; May 1987.
  - Building Construction Regulations in Florida. Report Number Two. Task No. 2. Round Table Discussions; Florida A & M University, School of Architecture, Institute for Building Sciences; May, 1987.
  - Building Construction Regulations in Florida. Report Number Three. Task No. 3. Code Comparison and Experiences of Franchise Builders; Florida A & M University, School of Architecture, Institute for Building Sciences; May, 1987.
  - Building Construction Regulations in Florida. Report Number Four. Summary and Recommendations for Code Reform Actions; Florida A & M University, School of Architecture, Institute for Building Sciences; May, 1987.
2. Florida's Property Insurance Crisis; Florida House of Representatives, Committee on Insurance; November, 1994.
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4. Changes in the Building Regulatory Environment – A Look at Forces Impacting State Governments and Their Meaning; Robert C. Wible, Executive Director, National Conference of States on Building Codes and Standards; November 4, 1995.
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  - Statewide Building Code Feasibility Study. Final Report; Florida A & M University, School of Architecture, Institute for Building Sciences; February 16, 1996.
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11. Report of the Construction Industry Study Committee; Florida Department of Business and Professional Regulation; December, 1996.
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14. Pocket Code Primer; National Conference of States on Building Codes and Standards; January, 1991.
15. The Standard Building Code; Southern Building Code Congress International; 1994 Edition.
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30. Florida Accessibility Code Building Construction; Florida Department of Community Affairs; 1994 Edition.





## In Memoriam



This Report from the Governor's Building Codes Study Commission is dedicated to the memory of John "Jack" Haslam, who long served the citizens of Florida in the building codes area. Jack was the Chief of the Florida Building Codes and Standards Office and Staff Director for the Florida Board of Building Codes

and Standards from their inception until his retirement from the State. He later represented the Florida Home Builders Association in building codes as the director of technical affairs.

During his stewardship of Florida's building code policies, Jack's influence touched many and in fact fostered the initiatives that led to this study project. He championed the establishment of a single statewide building code for ensuring that the public's interest is served through a fair and effective system of regulating construction. This Report and the steps which will follow are a tribute to Jack's influence. It is with a deep sense of appreciation for his pioneering efforts that the Commission dedicates this Report to Jack Haslam.



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