

FLORIDA BUILDING COMMISSION



FACILITATOR'S SUMMARY OF ISSUES AND RECOMMENDATIONS FOR INCLUSION IN THE REPORT TO THE 2012 FLORIDA LEGISLATURE

OCTOBER 11, 2011

FACILITATION, MEETING AND PROCESS DESIGN BY



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FLORIDA BUILDING COMMISSION
REPORT AND RECOMMENDATIONS TO THE 2012 LEGISLATURE

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FLORIDA BUILDING COMMISSION
REPORT AND RECOMMENDATIONS TO THE 2012 LEGISLATURE

I. EXECUTIVE SUMMARY AND RECOMMENDATIONS

The primary focus of the Florida Building Commission during 2011 was the development and adoption of the 2010 Edition of the Florida Building Code and the 2012 Edition of the Florida Accessibility Code for Building Construction with an effective date of March 15, 2012. In addition to efficiency increases to the Florida Energy Code and its merger with the format of the national model energy code, major components of the Code Update process include enhancements to the wind, water intrusion and hurricane protection provisions of the Florida Building Code. The Commission engaged in rule development for the adoption of the 2010 Florida Building Code by conducting rule development workshops in July and August and rule adoption hearings in December of 2010, and February, June and August of 2011. In addition, numerous workgroups met over a two-year period to develop specific code recommendations to relevant areas of special Florida interest including swimming pools, hurricane resistance of several building components and systems, energy efficiency, and accessibility for persons with disabilities. The development of the 2012 Accessibility Code involved two years of Workgroup meetings to integrate Florida requirements into evolving national standards and culminating in a rule development workshop in July of 2011 and a rule adoption hearing in August of 2011.

During 2011 the Commission once again focused on consensus-building efforts regarding the implementation of Commission policy, with extensive input from stakeholders and interests affected by Commission policy. Chairman Raul L. Rodriguez, AIA, encouraged and led the Commission's consensus-building initiatives. Finally, the Commission continued with its focus of developing storm damage investigations and research and adopting code amendments related to making Florida's structures, and the products that comprise them, more storm resistant.

During the past year the Commission continued to explore economies of effort to reduce costs. The Commission has reduced meetings to two-day meetings every two months with workgroup meetings held in conjunction with Commission meetings, and Technical Advisory Committee (TAC) and Program Oversight Committees (POC) meetings conducted by teleconference when the complexity of issues being addressed lends itself to the format.

The Florida Building Code System was developed after Hurricane Andrew to streamline statewide adoption and enforcement of improved hurricane protection standards. Hurricanes Charley, Frances, Ivan and Jeanne in 2004 and Dennis, Katrina and Wilma in 2005 demonstrated the overall effectiveness of the Code, and identified areas that need additional refinements. Analyses of building systems and component failures identified in these storms were conducted throughout 2005, 2006, 2007, 2008 2009, 2010, and 2011 and will continue during the coming year (2012). Assessments indicate the design wind speeds required by the Code were adequate and buildings built to the new code did not experience nearly as severe damage as older buildings. While some new building

technologies did have weaknesses, the major structural systems failures seen in older buildings were avoided in buildings complying with the Florida Building Code. The Commission addressed many of the weaknesses through implementation of the expedited code amendments authorized by the 2005 Legislature, the code enhancements adopted during the 2006 annual interim amendment process, and the adoption of the 2007 Edition of the Code, which became effective on March 1, 2009. With the continuing work of the Hurricane Research Advisory Committee and various building component specific workgroups (e.g., Window Wall, Soffit System), the Commission remains committed to addressing building and product weaknesses. Working with industry the Commission identified and funded research, and implemented additional code amendments designed to strengthen the Code's building envelope protection through development of the 2010 Edition of the Florida Building Code, which will become effective on March 15, 2012. During 2011 the Commission continued to fund important hurricane resistant research by funding UF's existing roofing and soffit system research projects based on spending authority approved by the 2011 Florida Legislature for Fiscal Year 2011/2012, and to leverage additional funding sources to the extent possible (e.g., FEMA/DHS, NOAA/Sea Grant and RCMP/DEM).

The Code establishes minimum requirements to protect buildings and their occupants from wind, rain, flood and storm surge based on well-researched and continually-evolving engineering standards for buildings and the products that go into their construction. It is important that the Commission be able to quickly integrate these standards into the Code to keep pace with changes in building technology and advances in the sciences of storm dynamics and building performance. In addition to conducting research, developing state of the art hurricane resistance standards and integrating those standards in the Code at each revision cycle, the Commission seeks to maintain the Code to be up-to-date with the national engineering and product standards. As with each subsequent version the 2010 Florida Building Code will include several significant advances.

The Commission is required by Florida law to update the Florida Building Code every three years, and the 2010 Edition represents the third update and fourth edition of the Code. The update process is based on the code development cycle of the national model building codes, which serve as the "foundation" codes for the Florida Building Code.

Florida Statute, Chapter 553.77(1)(b), requires the Commission to make a continual study of the Florida Building Code and related laws and on a triennial basis report findings and recommendations to the Legislature for provisions of law that should be changed. The Commission conducted the first assessment in 2005 and effected changes to the System as a result of the assessment process. 2011 will mark the ten-year anniversary since the Florida Building Code became effective, and the Commission initiated a comprehensive assessment of the Building Code System with recommendations developed by participants during a series of workshops and reviewed by the Commission's Building Code System Assessment Ad Hoc Committee. Public input was a major component of the assessment process, and an on-line Survey in addition to multiple public comment opportunities were an integral part of the Commission's analysis of the Building Code System. While the Commission's report to the 2012 Legislature and Governor relay recommendations coming from the 2011 Code System Assessment Project the Project identified some areas that need more study to determine efficient and effective approaches to effecting improvements. The full set of recommendations from the 2011 Assessment project and the follow-up issue targeted studies will be presented to the 2013 Legislature for possible legislative action.

The 2010 Code Update process started in 2009 with the Commission initiating development of the 2010 Code by selecting the 2009 International Codes as the foundation codes for the 2010 Edition of the Florida Building Code. During 2011 the Commission adopted the 2010 Edition of the Florida Building Code with an effective date of March 15, 2012. During the 2010 Code Update process the Commission focused on removing (unnecessary) and maintaining (needed) Florida Specific requirements to the Code, with the goal of minimum variation from the foundations codes.

The Code is a complex interrelated document consisting of thousands of pages and containing myriad related standards and references that must be evaluated and updated on an ongoing basis. In the case of editorial and unintended glitches, it is important for the Commission to correct these non-controversial glitch and correlation issues as quickly as possible in order to prevent unintended consequences and unnecessary delays and complications for all of the building code system participants. During the 2010 Code Update the Commission was able to integrate the 2010 Code Update and the Glitch process into a single rule development initiative eliminating the need for a supplement to the Code and resulting in a fully integrated set of the nine (9) volumes comprising the 2010 Code.

Energy efficiency issues were again a primary focus of the Commission during 2011, and the Commission's Energy Code Workgroup met throughout 2010 to develop Energy Code recommendations for the 2010 Code Update cycle. The Chair appointed a Pool Efficiency Subcommittee to the Florida Energy Code Workgroup to provide recommendations regarding the pool equipment efficiencies subtask for pool pumps and heaters efficiencies and hydronic systems standards, and appointed a Green and Energy Efficient Roofs Subcommittee to the Energy Code Workgroup to provide recommendations on roof energy efficiency issues in response to directives added to law by the Legislature. The Commission adopted the 2009 International Energy Conservation Code (IECC) as the foundation for the 2010 FBC, Energy Volume; and evaluated energy conservation measures to ensure the 2010 Energy Code increased efficiency requirements by 20% relative to an earlier standard identified by law (the 2011 Legislature repealed the scheduled increases in thermal efficiency standards in Section 553.9061 F.S.); developed a strategic plan for achieving scheduled increases in energy efficiencies with subsequent editions of the code; and, evaluated specific building options for promoting the use of renewable energy technologies as required by law. The Commission's adopted strategic plan for achieving the energy standard revisions pursuant to requirements of Section 553.9061, F.S. requires the strategic plan to implement scheduled increases in the Code's energy performance standard, to recognize certain energy performance options, and to consider the cost effectiveness of the scheduled increases. The Commission implemented the Florida Energy Code Workgroup's recommendations with the adoption of the 2010 Florida Energy Code as follows: an energy efficiency cost-effectiveness tests for residential code consensus recommendations; energy efficiency cost-effectiveness tests for commercial code consensus recommendations; a definition of "consumer" (applies to both residential and commercial"); energy conservation measures for replacement of air conditioning equipment recommendations; a strategic plan for increased efficiency requirements required by law for future FBC editions; specific building options to achieve energy efficiency improvements recommendations; design criteria for energy efficient pools recommendations (Pool Efficiency Subcommittee); and, requirements for green roofs recognition in the Florida Building Code (Green and Energy Efficient Roofs Subcommittee).

Florida has been a leader in addressing accessibility of buildings and sites for persons with disabilities with codes based on early national standards and Florida concerns beginning in the middle 1970's.

After the national Americans with Disabilities Act (ADA) became law in 1992 Florida revised its code to be based on the US Department of Justice's (DOJ) regulations that established the ADA Accessibility Guidelines with DOJ enhancements as the national standard. Florida also revised its law to require that its Code is maintained to ensure certification by DOJ as substantially equivalent to the national standards so owners complying with the Code are also in compliance with the ADA. The fundamental guidelines the ADA Standards are based on, the Americans with Disabilities Act Accessibility Guidelines were updated in 2004 and in June 2008 the US Department of Justice published its Notice of Proposed Rule, "*Proposed ADA Standards for Accessible Design, June 2008*". In December 2008 the Commission convened an Accessibility Code/ADAAG 2.0 Workgroup to develop recommendations for amending the Florida Accessibility Code for Building Construction by integrating the relevant Florida standards of ss. 553.-553.513, F.S., into the Proposed ADA Standards for Accessible Design. Although DOJ's regulation adoption process was not complete at the time, the Workgroup began work with the Proposed Standards to develop the new draft Florida Accessibility Code for Building Construction (FACBC). The DOJ completed its adoption of revised regulations 28 CFR 35 and 28 CFR 36 establishing the 2010 ADA Standards for Accessible Design September 15, 2010 and the Workgroup revised the Draft 2012 Florida Accessibility Code for the few minor changes. The Commission made recommendations for changes to law essential to conforming it to the 2010 ADA Standards to ensure Florida requirements are substantially equivalent in order to maintain the Code certification by recommending revisions to Part II, Chapter 553, Florida Statutes, to conform requirements with the format and terminology of the 2010 ADA Standards for Accessible Design; to resolve possible not-equivalent standards; to eliminate redundant and non-essential requirements; and to enhance certain requirements for accessibility. As a result of the Commission's proactive Accessibility Code development initiative Florida's 2012 Accessibility Code for Building Construction fully integrates Florida Specific Requirements with the final 2010 ADA Standards for Accessible Design issued September 15, 2010. Florida's Accessibility Code is ready for certification concurrent with the effective date of the new SAD.

The product approval system is an internet based system operated by the Department and administered by a contracted Product Approval Administrator. With major consensus-based revisions to the system implemented through rule development in 2007, the system is processing hundreds of applications monthly with efficiency and satisfaction of the product manufacturers who use the system. The Commission's Product Approval Program Oversight Committee (POC) convenes prior to every Commission meeting to review product and entity applications, address petitions for declaratory statements, and consider enhancements to the product approval system. Since the system went into effect in October 2003, the Commission has approved 11,360 product applications and 50,104 products for statewide use within limitations established by the approvals, as well as approved 333 product approval entities. During 2011 the Commission implemented changes to enhance the efficacy of the Product Approval functionality of the Building Code Information System (BCIS), and completed rule adoption for expedited approval of products approved using the certification method.

Education is one of the cornerstones of the Building Code System, and the effectiveness of the Building Code depends on the knowledge of professionals who design and construct buildings. The Commission continues to work with the Department of Business and Professional Regulation and representatives of the licensing boards to establish a cooperative system for approving building code courses and integrating building code continuing education into licensing requirements. In collaboration with the System Administrator the Commission is working to ensure the accountability

and efficacy of the Education System. During 2011 the Commission continued to efficiently review and approve course and accreditor applications.

The Commission's commitment to consensus-building on substantive issues was spotlighted during 2011, with Chairman Rodriguez appointing facilitated workgroups of Commission members and representative stakeholders to develop consensus on packages of recommendations in their respective subject areas. The workgroups convened and/or meeting during 2011 include: the Florida Accessibility Code Workgroup, Soffit Systems Workgroup, Uniform Mitigation Reporting Form Workgroup, Asphalt Shingles Workgroup, and the Hurricane Research Advisory Committee. Each of these groups worked with stakeholders to identify issues, evaluate a full range of options, and submit consensus recommendations to the Florida Building Commission on their respective topics. In addition, the Chair convened an ad hoc committee of Commissioners, the Building Code System Assessment Ad Hoc Committee, to evaluate the Florida Building Code System.

Monitoring the building code system and determining refinements that will make it function better is a primary responsibility of the Commission, and consequently the Commission is continually effecting refinements to the building code system by administrative rule amendment(s) where the statutes provide authority. However, the building code system is established in law, requiring that some refinements must be implemented through changes to law. The Commission's recommendations for 2012 legislative actions designed to improve the system's effectiveness are summarized below.

THE FLORIDA BUILDING COMMISSION'S RECOMMENDATIONS FOR LEGISLATIVE ACTIONS DESIGNED TO IMPROVE THE SYSTEM'S EFFECTIVENESS ARE SUMMARIZED AS FOLLOWS:

Florida Building Commission's 2011 Recommendations to the 2012 Florida Legislature:

Pending Commission action at the October and December 2011 meetings.

II. INTRODUCTION

In 1974, Florida adopted a state minimum building code law requiring all local governments to adopt and enforce a building code. The system provided four separate model codes that local governments could consider and adopt to establish minimum standards of health and life safety for the public. In that system the state's role was limited to adopting all or relevant parts of new editions of the four model codes. Local governments could amend and enforce their local codes as they saw fit.

Hurricane Andrew demonstrated in 1992 that this system of local codes did not provide the level of public protection that was necessary. The South Florida Building Code, that was the local code universally acknowledged to set the strongest standard for hurricane protection, essentially failed. The resulting problems had impacts well beyond southern Miami-Dade County. The state filled the property insurer void left by failed and fleeing private insurance companies and the federal government poured billions of dollars of aid into the disaster area. It became starkly apparent the state had a significant interest in the effectiveness of building codes.

After Andrew, Miami-Dade County conducted an exhaustive review of its building code and made significant changes to both the code and support systems for code enforcement. In other areas of the state the Florida Board of Building Codes and Standards (predecessor to the Florida Building Commission) adopted significant upgrades to the wind resistance standards of the model state minimum code that was used by the majority of other local governments. The state also began licensing local governments' building code enforcement personnel. These steps proved critical in leading to the building codes that produced improved building performance in the 2004 hurricane season.

Like Miami-Dade County, the state went beyond just modernizing the minimum building codes. In 1996 a study commission was appointed to review the system of local codes created by the 1974 law and make recommendations for modernizing the entire system. The 1998 Legislature adopted the study commission's recommendations for a single state building code and an enhanced oversight role for the state in local code enforcement. The 2000 Legislature authorized implementation of the Florida Building Code, and the first edition replaced all local codes on March 1, 2002.

To implement the new Florida Building Code, the Florida Building Commission was established in law. The Florida Building Commission, originally a 23 member, is now a 25 member Governor-appointed stakeholder group who successfully created, implemented, and maintains the statewide Florida Building Code, which became effective in 2002. The Commission is comprised of the Governor's Chair, and 24 members representing various industries and governmental interests as follows: four code officials, two state government representatives, a local government representative, a representative of persons with disability, and a representative of the green building industry; an architect, a structural engineer, a mechanical or electrical engineer, representatives of fire protection technology, the building management industry, and the insurance industry; and a general contractor, residential contractor, mechanical or air conditioning contractor, plumbing contractor, electrical contractor, roofing/sheet metal contractor, a manufactured building representative, a building product manufacturer, and a swimming pool contractor.

The first major tests of the building code enhancements put in place after Hurricane Andrew came with 2004's Hurricanes Charley, Frances, Ivan and Jeanne. All but Hurricane Charley produced winds below the design speeds required by the Code but they were long in duration and produced extensive rainfall. Hurricane Charley was a design wind speed storm that moved quickly across the state and produced less rainfall. Hurricane Ivan, similar to Hurricane Opal in 1995, was a category 4-5 storm in the Gulf but its winds diminished dramatically when it approached land, lowering winds below building code design wind speeds, but maintaining storm surges that wreaked havoc along barrier islands and mainland waterways. Each storm provided different kinds of tests and exposed different types of building failures. The difference in the building failures experienced by buildings built to older codes and those built to the new Florida Building Code was that older buildings had major damage to property and proved to be unsafe shelters. In contrast, buildings built to the Code had less property damage and provided safe shelter. The testimony of homeowners, who in 2002 were skeptical of the new code requirements and their added costs, was that they felt safe in their homes and found value in the additional costs associated with complying with the Florida Building Code.

During 2005 the code was again tested when Florida was battered by another series of hurricanes. Although Hurricanes Dennis, Katrina, and Wilma were devastating to the citizens of the state, they added further evidence that the Florida Building Code is working. In addition, the observations, investigations and research regarding storm-related damage provided additional insight on how to improve the products and construction methods used in Florida. The Commission continues to study how to enhance the Code through the work of its Hurricane Research Advisory Committee.

Engineering standards progress as new real-world tests like hurricanes provide the laboratory for expanding knowledge. It is essential that Florida maintain pace with the evolving standards because its coastal exposure and rapidly expanding population create a major risk and limit options for ensuring the safety of its citizens. The Commission keeps pace by amending the Code to adopt updated national codes and reference standards, and by implementing enhancements coming from its research and consensus-building standards development projects.

The Florida Building Commission's Hurricane Research Advisory Committee continues to meet to review research and make recommendations to the Commission regarding proposed code enhancements. Some of the Committee's recommendations were implemented in a specially authorized "expedited" code amendment process conducted in 2005. Other recommendations that required additional development effort were adopted with the Glitch Code amendments in 2006, and with adoption of the 2007 Edition of the Florida Building Code. Workgroup's formed as a result of the Committee's work developed recommendations for additional code amendment enhancements adopted by the Commission during the 2010 Code Update Process including soffit systems performance and enhancing the window and wall interface. The Committee continues to recommend and monitor research projects designed to enhance the performance of Florida's buildings during storms.

A primary focus for the Commission in 2009 was to develop a strategic plan for energy standard revisions pursuant to requirements of Section 553.9061, F.S., requiring the strategic plan to implement scheduled increases in the Code's energy performance standard, to recognize certain energy performance options, and to consider the cost effectiveness of the scheduled increases. In 2008 the Commission amended the Florida Energy Code to require 15% more efficiency in buildings by reviewing energy related code requirements adopted in the 2007 Florida Building Code

Update, and then adopting additional requirements necessary to achieve Governor Crist's directive of 15% increased efficiency. The efficiency increases took effect March 1, 2009 concurrent with the 2007 Florida Building Code.

During 2011 the Commission evaluated options for achieving an additional 5% increase in efficiencies for the 2010 Code Update consistent with their charge to increase the energy performance of new buildings by at least 20% as compared to the energy efficiency provisions of the 2007 Florida Building Code. Working with stakeholders using consensus-building workgroups, the Commission achieved the increases in efficiency in buildings stipulated in Florida Law (repealed by 2011 Legislature), and implemented code amendments that are efficient, consistent, understandable and enforceable for the full spectrum of Energy Code users.

The Florida Building Commission seeks to develop consensus decisions on its recommendations and policy decisions. Consensus is a participatory process whereby, on matters of substance, the members strive for agreements they all can accept, support, live with or agree not to oppose. In instances where unanimity is not possible, final decision on substantive decisions, and the Commission finds that 100% acceptance or support is not achievable, final decisions require at least 75% favorable vote of all members present and voting. This super-majority decision rule underscores the importance of actively developing consensus throughout the process on substantive issues. The Commission's consensus process is conducted as an open public process with multiple opportunities for the public to provide input to the Commission on substantive issues.

At each Commission meeting, the public is provided opportunity to speak during the public comment period provided for each substantive issue under consideration, as well as during general public comment periods provided at the end of each day's meeting. In addition, most substantive issues before the Commission go through a workgroup process where consensus recommendations are developed by appointed representative stakeholder groups, providing additional opportunities for public input. Workgroup recommendations approved by the Commission usually require rule development to implement, affording at least two additional opportunities for public comment.

Since its formation in July 1998, the Commission has demonstrated a commitment to working with affected interests to build consensus on complex issues. The adoption of the first edition of the Florida Building Code (2001 Edition), developed from September 1998 through January 2001, involved 27 Commission meetings, dozens of facilitated public workshops, and hundreds of Technical Advisory Council meetings. The Commission has recently adopted the third update and fourth edition of the Code (2010 Edition). The Commission consistently works with all affected interests in building the best possible consensus-based decisions for the citizens of Florida.

Through its committees and workgroups of experts, the Commission develops its decisions on the results of the best engineering-based science available. Since 1999 the Commission has convened 53 special issue stakeholder workgroups to develop broad based consensus recommendations. Although the Code is by law a minimum building code, the Florida Building Code is the strongest consensus and science-based building code in the country.

In summary, the Florida Building Commission provides a forum for stakeholders representing different interests to participate in a consensus-building process where issues affecting the construction industry are discussed and evaluated on both their technical merits and cost-benefits to the citizens of the State of Florida.

III. COMMISSION REPRESENTATION AND PROCESS

COMMISSION REPRESENTATION. The Florida Building Commission is a 25 member Governor appointed stakeholder group who successfully created, implemented, and maintains the statewide Florida Building Code, which became effective in 2002. The Commission is comprised of the Governor's Chair, and 24 members appointed according to criteria established by the American National Standards Institute (ANSI) for representation. They are as follows: in the *general interest category*: four code officials, two state government representatives, a local government representative, a representative of persons with disability, and a representative of the green building industry; in the *consumer category*: an architect, a structural engineer, a mechanical or electrical engineer, representatives of fire protection technology, the building management industry, and the insurance industry; and in the *producer category*: a general contractor, residential contractor, mechanical contractor, plumbing contractor, electrical contractor, roofing/sheet metal/air conditioning contractor, a manufactured building representative, a building product manufacturer, and a swimming pool contractor.

CONSENSUS PROCESS. The Florida Building Commission (FBC) seeks to develop consensus decisions on its recommendations and policy decisions. General consensus is a participatory process whereby, on matters of substance, the members strive for agreements which all of the members can accept, support, live with or agree not to oppose. In instances where, after vigorously exploring possible ways to enhance the members' support for the final decision on substantive decisions, and the Commission finds that 100% acceptance or support is not achievable, final decisions require at least 75% favorable vote of all members present and voting. This super majority decision rule underscores the importance of actively developing consensus throughout the process on substantive issues with the participation of all members and which all can live with and support. The Commission's consensus process is conducted as an open public process with multiple opportunities for the public to provide input to the Commission on substantive issues. At each Commission meeting, the public is welcome to speak during the public comment period provided for each substantive issue under consideration, as well as general public comment periods provided at the end of each day's meeting. In addition, most substantive issues before the Commission go through a workgroup process where consensus recommendations are developed by appointed representative stakeholder groups, providing additional opportunities for public input. Workgroup recommendations approved by the Commission usually require rule development to implement, affording at least two additional entry points for public comment. Since its formation in July of 1998, The Commission has demonstrated a commitment to working with affected interests to build consensus on complex issues. The adoption of the first edition of the Florida Building Code (2001 Edition), developed from September 1998 through January of 2001, involved 27 Commission meetings, dozens of facilitated public workshops, and hundreds of TAC meetings. The Commission has consistently worked with all affected interests to build the best possible consensus-based decisions for the citizens of Florida. Through its committees and workgroups comprised of experts, the Commission has always developed its decisions based on the results of the best engineering and science available. Although the Code is by law a minimum building code, the Florida Building Code is the strongest consensus and science based building code in the country. In summary, the Florida Building Commission provides a forum for stakeholders representing different interests to participate in a consensus-building process where issues affecting the construction industry are discussed and evaluated on their technical merits and cost-benefits to the citizens of the State of Florida.

IV. LEGISLATIVE ASSIGNMENTS

The Florida Legislature through the passage of a number of bills during the 2010 and 2011 sessions charged the Commission with a range of assignments effecting the Building Code, Energy Code, Accessibility Code and the Product Approval System that required Commission implementation through rule development to the Building Code and the Product Approval rules.

In response, the Commission worked with stakeholders and affected interests to address each of the legislative assignments through facilitated processes yielding consensus-based recommendations and Commission decisions. The Commission's actions are detailed in the following section of this report.

In addition, in response to 2011 Legislative action the Commission transitioned from administrative support by the Department of Community Affairs (DCA) to support by the Department of Business and Professional Regulation (DBPR). The organizational change occurred October 1, 2011.

2011 LEGISLATIVE CODE ASSIGNMENTS STATUS

The 2011 Florida Legislature through passage of HB 849 delivered the following assignments to the Florida Building Commission, most of which were implemented through the development of the 2010 Florida Building Code and the 2012 Florida Accessibility Code for Building Construction (developed during 2010 and 2011).

2011 Legislative Action Resulting in Commission Tasks—HB 849 Chapter 2001-222, LOF:

Sections 21- 28. Revised Florida Accessibility Code law resulting in changes to the draft 2012 Florida Accessibility Code.

Action Required: Modify the draft 2012 Florida Accessibility Code to reflect changes to technical requirements established by Florida law and the federal ADA standards adopted as basis for the Code.

Status: The task was near completion at the time the law was passed and only required modifications to reflect changes to Florida specific technical requirements. The Commission conducted a Rule Development workshop at its June 2011 meeting and a final Rule Adoption hearing at its August 2011 meeting. The Code based on the new law is scheduled to take effect March 15, 2012 concurrent with the federal 2010 ADA Standards for Accessible Design.

Section 29. Allows use of the 2010 ADA Standards for Accessible design together with Florida requirements of Part II, Chapter 553, F.S. until the current Florida Accessibility Code is updated to implement the changes to Part II, Chapter 553, F.S.

Action Required: No action was directed by this provision of law.

Status: However, the 2012 Florida Accessibility Code incorporates all criteria of this option provided by the Legislature for code compliance. Its completion at the Commission's August 2011 meeting provided industry with a concise document of requirements to be used in lieu of the current Florida Accessibility Code.

Section 30.

1. Future Code update requirements. Eliminates carry forward in new editions of the FBC those Florida amendments not addressed by an update to the foundation codes. Except for state agency regulations, wind-resistance design requirements and HVHZ requirements. Establishing criteria that must be found to readopt a previously adopted Florida amendment and prohibiting re-adoption if the foundation code addresses the issue in a substantially equivalent manner.

Action Required: Application of the new criteria to development of the 2013 Florida Building Code.

Status: Initiation of development of the 2013 Florida Building Code is pending (the process will begin during 2012).

2. 2010 FBC exemption. Exempting one and two family storage sheds 400 square feet or less in size from Code door height requirements.

Action Required: A “glitch” amendment to the draft 2010 Florida Building Code to conform requirements to the new law.

Status: Glitch amendments including this provision were approved at the Commission’s June 2011 meeting. The 2010 Florida Building Code development and adoption concluded at the Commission’s August 2011 meeting.

Section 31. Expands qualification criteria for the Green Building Industry seat on the Commission.

Action Required: No action by the Commission required.

Section 32. Prohibits products from sale in the state as windstorm protection products unless approved by the Commission.

Action Required: None

Status: The Commission has approved several thousand products covered by the change to law.

Section 33. Repealed the energy efficiency targets for future Florida Energy Codes and eliminated the list of technologies the Energy Code must address.

Action Required: None required. The Commission will not be required to meet energy performance increases for the 2013 Code Update process.

Section 34. Eliminates requirement for pool heaters of all types. Defers pool pump and pool pump motor requirements to the Florida Energy Efficiency Code for Building Construction and removes standards from Statute.

Action Required: Adoption of standards for pool pumps and pool heaters in the Florida Energy Efficiency Code.

Status: Completed. Performance standards were adopted by the Commission and are included in the 2010 Florida Energy Code.

2010 LEGISLATIVE CODE ASSIGNMENTS STATUS

The 2010 Florida Legislature through passage of HB 663 delivered the following assignments to the Florida Building Commission, all of which were also implemented through the development of the 2010 Florida Building Code (effective March 15, 2012):

- Require upgrade of elevators in condos and multi-family buildings having a C.O. before July 1, 2008 for Phase II Firefighter Service pursuant to ASME 17.1 and 17.3 when it is replaced or undergoing a major modification.
- Coordinate the Code with statutory changes to SFM requirements for uniform lock boxes for elevator keys.
- Require illumination in classrooms for all schools to be an average 40 foot-candles of light at each desk-top.
- Exempt from the Code certain pre-manufactured/site assembled family mausoleums.
- Exempt temporary housing provided by Department of Corrections for prisoners.
- Remove from the IRC foundation code requirements for sprinklers.
- Clarify AC equipment must meet wind resistance standards.
- Require existing AC equipment on roof surfaces to comply when they are required to be removed or replaced.
- Implement changes to statutory requirements for CO detectors.
- Include energy saving options and elements for buildings added to the law that are not already included in the Code, e.g. energy efficient centralized computer data centers in office buildings.
- Clarify energy performance requirements for pool pumps apply only to filtration pumps and change the maximum run time cycle override at high speed from 2 hours to 24 hours (or on changeover cycle whichever is less).
- Clarify sprinklers cannot be required for certain residential property used as rental property or changed in use category to primary rental use.

The 2010 Florida Legislature through passage of HB 663 delivered the following assignment to the Florida Building Commission regarding the Product Approval System, which was implemented through amendments to Rule 9N-3 (f.k.a. 9B-72), Product Approval completed in 2011:

- Implement new expedited process for approval of products based on certificate from a Certification Agency.

The 2010 Florida Legislature through passage of HB 7243 delivered the following assignment to the Florida Building Commission, which the Commission is in the process of evaluating:

- Develop recommendations that increase recycling and composting and the use of recyclable construction materials and construction and demolition debris.

V. The FLORIDA BUILDING CODE

The Commission is required by law to update the Florida Building Code (FBC) every three years, and the 2010 Edition represents the third update and fourth edition of the Code. The Commission conducted the 2010 Code Update process during 2010 and 2011 and the new Code will become effective on March 15, 2012. The code update process is based on the code development cycle of the national model building codes, which serve as the “foundation” codes for the Florida Building Code, and 2009 represented the first time the Commission adopted the International Energy Conservation Code (IECC) as the foundation for the 2010 Florida Energy Code. National model building codes and most engineering standards are updated every three years and the intent is to keep the Code up-to-date with evolving national standards of health, safety and welfare of the public.

The model building codes on which the Florida Building Code is based have undergone a major transformation since work began on the Florida Building Code in 1998. In 1998 there were three model code organizations, each with a separate model code that included a “building” code for structural, fire safety and general building design requirements and separate plumbing and mechanical (heating, cooling and ventilation) codes. The code for electrical systems and fuel gas systems are essentially based on common reference standards developed by separate organizations. During the late 1990s the three regional model code organizations transitioned into a single organization, the International Code Council, which was to develop a single national model code. When that code was completed and the organizations merged, the three prior model codes were abandoned. In late 1998 when the Commission selected a model code to provide the base requirements for the Florida Building Code, the International Plumbing, Mechanical and Fuel Gas sub-codes were in place but the “Building” Codes were still under development. The first edition of the Florida Building Code was based on the International sub-codes, the National Electrical Code, and the Standard Building Code, which was used in sixty-five Florida counties, municipalities and state agencies since the mid-1970s, for the “building” volume. The last edition of the Standard code was published in 1999. The first edition of the new International Building Code was in place by 2000 and has since been updated with a fourth edition, the 2009 International Building Code and has added a Residential Code and Existing Building Code. With the adoption of the Second Edition of the Florida Building Code, the Code is now based on the International Family of Codes, modified with Florida-specific amendments. Florida-specific amendments go through a rigorous review process including posting to the Building Code Information System (BCIS) for 45 days prior to a review by the Commission’s Technical Advisory Committees (TAC), posting the TAC’s recommendations for 45 days prior to Commission consideration, and then the Chapter 120 rule development process. The Commission provides multiple input opportunities for public comment, and once the Code is published six months must pass before the Code’s effective date.

Florida Statute, Chapter 553.73(6), requires the Commission to update the Florida Building Code every 3 years; by selecting the most current version of the International Family of Codes; the Commission may modify any portion of the foundation codes only as needed to accommodate the specific needs of this state, maintaining Florida-specific amendments previously adopted by the commission and not addressed by the updated foundation code.

The initiation of the 2010 Florida Building Code Update process represents the development of the third update and fourth edition of the Code. Commencing the triennial code update process for the 2010 Edition of the Florida Building Code was a major focus of the Commission during 2010. The Update process was initiated with selection of the 2009 I Codes as foundation for the 2010 Florida Building Code. Section 553.73(8) requires that existing Florida amendments that overlap with changes to foundation codes from one edition to the next must be reviewed for retention or deletion. The Commission's technical advisory committees conducted the preliminary review and developed recommendations for which to retain or delete. In addition, the Fire TAC reviewed and developed recommendations regarding overlaps and correlation issues between the Florida Fire Prevention Code and the Florida Building Code.

The Commission's TACs reviewed 850 proposed code amendments during rule development workshops conducted during July and August of 2010. The Commission's TACs then met in November to review comments submitted during the 45-day review period for the purpose of providing the Commission with TAC feedback on the comments. The Commission conducted a rule development workshop on Rule 9N-1, Florida Building Code, for the purpose of deciding on proposed Code modifications at the December 7-8, 2010 meeting (deciding on TAC recommendations regarding proposed modifications to the Florida Building Code), conducted a rule adoption hearing at the February 1, 2011 meeting for the purpose of considering public comment on the draft 2010 Florida Building Code, and conducted an additional rule adoption hearing at the June 7, 2011 meeting to consider Glitch amendments to the Commission's approved Code modifications. The Commission conducted a final Rule Adoption Hearing at the August 2011 meeting culminating in adoption of the 2010 Florida Building Code with an effective date of March 15, 2012, concurrent with the effective date of the 2012 Florida Accessibility Code for Building Construction. In considering whether to adopt proposed code amendments the Commission is required to evaluate the following criteria:

- Rational.
- Impact to local entity relative to enforcement of code.
- Impact to industry relative to the cost of compliance with code.
- Has a reasonable and substantial connection with the health, safety, and welfare of the public.
- Strengthens or improves the code, and provide equivalent or better products, methods, or systems of construction.
- Does not discriminate against materials, products, methods, or system of construction of demonstrated capabilities.
- Does not degrade the effectiveness of the code.

ADOPTION OF THE 2011 NATIONAL ELECTRIC CODE BY SEPARATE 2011 GLITCH AMENDMENT

The 2010 FBC development and adoption proceeded consistent with the process required by law and Florida amendments to the 2009 I-Codes (the new foundation codes as required by law) were published online as a Supplement to the 2009 I-Codes. The codebooks publishing process began when the Supplement was posted to the web. The glitch amendment proceeding began at this point also with the intent to limit glitch amendments to those identified by code professionals contracted to monitor the development of the 2010 FBC and to adopt the 2011 National Electric Code pursuant to law.

INTEGRATION OF FLORIDA ACCESSIBILITY LAW INTO THE NEW ADAAG ADOPTED BY THE US DEPARTMENT OF JUSTICE

The Commission's Accessibility TAC recommended and the Commission approved convening a workgroup to evaluate and develop recommendations regarding the integration of the Florida Accessibility Law into the 2004 ADAAG that was the core of the ADA Standards proposed by the U.S. Department of Justice. The Commission convened the Florida Energy Code Workgroup in December 2008 and the Workgroup developed consensus recommendations to the Commission during 2009 and 2010 regarding integrating Florida Specific Requirements from law into the new DOJ Standards for Accessible Design.

The Commission convened a Workgroup of stakeholders to develop recommendations for updating the Florida Accessibility Code for Building Construction with US Department of Justice's adoption of the next generation of the ADA Standards for Accessibility Design (ADA Standards), and held workshops soliciting comments from interested stakeholders regarding the integration of Florida Specific Requirements into the new ADA Standards, and proposed changes to Florida Law which were adopted by the 2011 Florida Legislature. The task was to integrate the relevant revised Florida standards in ss. 553.501-553.513, F.S., into the 2004 ADAAG as adopted by 28 CFR 36. The Workgroup began with the 2004 ADAAG and DOJ's additions currently adopted in 28 CFR 36 and further additions proposed in its June 8, 2008 Notice of Proposed Rule. The DOJ completed their adoption process and soon thereafter Florida finalized the new FACBC with adoption of the 2012 Florida Accessibility Code for Building Construction, effective March 15, 2012 and is positioned to receive DOJ certification.

(Appendix F—Florida Accessibility Code Project Update)

VI. ENERGY EFFICIENCY INITIATIVES AND CODE CHANGES

In the development of the 2010 Edition of the Florida Energy Code the Commission achieved a 20% increase in thermal efficiency standards from the 2007 Edition of the Code pursuant to requirements in effect prior to changes made during the 2011 Legislative Session (the 2011 Legislature repealed mandatory scheduled increases in thermal efficiency standards for future editions of the Code pursuant to Section 553.9061, F.S.).

FLORIDA ENERGY CODE WORKGROUP 2011 CONSENSUS RECOMMENDATIONS

In its 2010 and 2011 Reports to the Florida Legislature the Commission reported in detail energy related actions and recommendations. The Commission completed all of its energy related legislative assignments and implementation was achieved through adoption of the 2010 Florida Energy Code effective March 15, 2012.

The Commission's Energy Code Workgroup worked with stakeholders beginning in early 2009 on a comprehensive evaluation of options for achieving energy efficiency initiatives for the Florida Building Code including: mandated increases in energy efficiencies for subsequent editions of the Code, criteria for cost effectiveness test for increases in energy efficiency, studying energy conservation measures for replacement of air conditioning equipment, investigating humidity and moisture control problems for hot and humid climates, and evaluating rainwater collection and reuse and waste water recycling techniques. The Workgroup finalized their recommendations in 2010 and delivered consensus-based recommendations to the Commission that were implemented through amendments to the Florida Energy Code as part of the 2010 Code Update process.

The Florida Energy Code Workgroup developed consensus recommendations and the Commission adopted thermal efficiency standards increases through adoption of the 2010 Florida Energy Code as follows: a energy efficiency cost-effectiveness tests for residential code; energy efficiency cost-effectiveness tests for commercial code; a definition of "consumer" (applies to both residential and commercial"); energy conservation measures for replacement of air conditioning equipment; a strategic plan for increased efficiency requirements required by law for the 2010 Edition of the Florida Building Code; specific building options to achieve energy efficiency improvements; design criteria for energy efficient pools recommendations; and, requirements for green roofs recognition in the Florida Building Code.

VII. HURRICANE RESPONSE AND CODE CHANGES

Developing the scientific foundation for the building code is fundamental to solving hurricane problems in the most efficient and effective ways. To support code development and other legislative assignments the Commission contracted with the University of Florida for studies to address wind-borne debris risks, water intrusion, wind resistance of roof systems, and other construction systems and practices that effect the hurricane resistance of buildings.

As a result of hurricanes affecting Florida during the 2004 and 2005 seasons, the Florida Building Commission's Hurricane Research Advisory Committee (HRAC) continues to meet at selected Commission meetings to review research and make recommendations to the Commission regarding proposed code enhancements and research needs. Many of the Committee's recommendations were adopted in a special legislatively authorized amendment process in 2005. Other recommendations were adopted with the 2006 Code amendments to the 2004 Code and during the 2007 Code Update cycle, and additional proposals were evaluated and adopted during the 2010 Code Update process. The Committee continues to consider enhancements to the Florida Building Code based on sound science. In addition, the Committee recommended research to advance the science and allow the Commission to continually study and update the storm protection provisions of the Florida Building Code. The Committee is continuously monitoring current research and recommending the development of standards and installation practices related to protecting against wind damage and water infiltration.

RESEARCH FOR HURRICANE RESISTANCE CODE ENHANCEMENTS

During 2007, the Committee prioritized the funding of research including: sealing of masonry walls, soffit systems, window water infiltration standards, aggregate roof blow-off, testing procedures for hurricane zones, lightening protection systems, and tile roof systems. During 2008 the Committee recommended and the Commission approved funding a variety of research projects including evaluating water leakage at the window/wall interface, and soffit system performance. During 2009 the Committee recommended continuing these studies and expanded research to include studies of the resistance of residential window glass to lightweight windborne debris including shingles and tree branches, study of the residual resistance of steel and aluminum storm panels to roof tiles, study of the structural resistance of commercial soffit systems, study of the resistance of field fabricated and factory manufactured residential window mullions to water intrusion and studies of primary and secondary roof coverings.

Research was begun on roof coverings and components during 2008-2009 in response in part to the Legislature's Hurricane Mitigation (Roofing) Initiative and in part as extension of the Wind-Borne Debris Studies begun in prior years. The studies included construction and testing of large scale model roof samples at the UF hurricane simulator test facility and testing of soffit components of the roof system. Experimental work also was conducted in wind tunnel test facilities via contract with UF that evaluated wind pressures on roof systems and roof component failure. Results of these tests verified the under-prediction of wind forces at roof edges by the ASCE 7 design standard and demonstrated the acceleration nature of roof cladding failures.

In 2009-2010 the Commission sponsored roof systems research that leveraged larger sources of funding at UF. Commission resources provided wind tunnel tests to determine large scale wind simulator design characteristics and begin test equipment construction. This project leverages larger resources from Florida State University and Oak Ridge National Laboratory to begin roof system evaluations with shingle systems. A small source of funds also went to supplement research and testing of closed cell foam adhesive systems for increasing roof diaphragm resistance to wind forces that is funded primarily by a NOAA Sea Grant.

Each project investigates questions identified during the Commission's and its committees' and workgroups' deliberations of systems for improving hurricane performance of roofing systems. This funding track of leveraging outside funded roof research projects that answer fundamental building construction questions was continued in 2010-2011. Roof research continued to look at shingle system evaluation and improvement, innovative roof deck strength enhancement systems, roof tile wind-borne debris potential and innovative roof covering system wind performance. The goal is to ensure that technologies being introduced into the Florida market are appropriately evaluated for their application to this high wind region and ultimately establishing standards for uniform evaluation of different manufacturers' systems.

The study of roof component and cladding and roof attached structures and equipment must be conducted by various hurricane wind effects simulation methods. The beginning point of any such simulation studies is accurate characterization of the wind field and its effects. Then simulation models can be constructed to test various components and attachments. Research conducted in response to the 2004 and 2005 hurricanes was initially directed primarily to window and wall components and cladding. Work was began in 2009 on roof systems. Current year funding was directed to supporting studies to characterize the wind field on roofs and to leveraging funding for roof systems related research provided by federal organizations including FEMA/DHS, NOAA/Sea Grant and RCMP/DEM.

Due to the ongoing recession's impact on the construction industry and resulting decline in fees the Committee recommended prioritizing research projects that leverage the funding of other agencies for projects that support resolution of Florida hurricane related building failures. The Commission voted unanimously in favor of the recommendation. Research projects will evaluate shingle roof covering systems and roof deck attachment alternatives.

The HRAC met during 2011 to receive updates on ongoing research projects, and to continue developing consensus on recommendations to the Commission for additional code enhancements for consideration during the 2013 Code Update process.

During 2011 the HRAC voted and the Commission approved continuing to fund UF's existing roofing and soffit system research projects based on spending authority approved by the 2011 Florida Legislature for Fiscal Year 2011/2012, and to leverage additional funding sources to the extent possible (e.g., FEMA/DHS, NOAA/Sea Grant and RCMP/DEM).

Following is an overview of current hurricane resistance research conducted by UF and supported by the Florida Building Commission:

TASK	DESCRIPTION
Task 1	Survey and investigation of buildings damaged by Category III hurricanes impacting Florida.
Task 2	Investigate the performance of energy conserving vegetative roof systems appropriate to Florida building for performance in hurricane wind and rain conditions.
Task 3	Roof tile frangibility and puncture of residential building envelope.
Task 4	Residential roof covering investigation of wind resistance of asphalt shingles. (SERRI)
Task 5	Investigation of structural performance of residential soffit systems.

The Committee will continue to meet as needed to review research project updates, provide recommendations on needed research projects and funding for same, and provide recommendations regarding proposed code amendments relevant to hurricane and storm protection enhancements. Of particular note regarding the Hurricane Research Advisory Committee Project is the extensive opportunity for public input provided during Committee and Commission meetings. In addition, each Hurricane Research Advisory Committee meeting provides opportunities for individuals and entities to present the results of their observations, studies, and research regarding the effects of the 2004, 2005 and 2008 hurricanes on the citizens of Florida and the built environment.

Of interest, with the adoption of the 2010 Florida Building Code the Commission updated ASCE 7 to the 2010 Edition and introduced new ultimate design speed maps in the Code. The new standard incorporates the latest knowledge and research on the determination of design wind loads on buildings and structures and provides for the latest building design technologies, which is used by building designers (engineers and architects) nation-wide. In addition, the Commission updated the minimum requirements for soffit systems, established installation criteria, provided guidance for interchanging components, provided a reference to design loads of Chapter 16, and specified manufactured soffits will be tested at 1.5 times the design pressure similar to that required for windows and impact resistant coverings. This code change will increase the effectiveness of the code in addressing a key weakness by establishing installation criteria and specifying a safety factor for manufactured soffit testing which will result in a better water intrusion resistance system in buildings.

Additional information on the Hurricane Research Advisory Committee’s activities are found in “Appendix D” of this Report.

(Appendix D—Hurricane Research Advisory Committee Project Update)

VIII. PRODUCT APPROVAL

The Florida Building Code establishes standards for products integrated into buildings in addition to standards for the design of buildings themselves. Where compliance with prescriptive standards such as location of fire exits can be determined by reviewing building plans and onsite inspections during construction, how well products such as windows perform cannot be determined by review of drawings or inspection of the product alone. Yet compliance of the individual products is fundamental to compliance of the overall building. To determine whether products and building systems comply, the building official must rely on engineers and testing laboratories to evaluate performance then rely on the manufacturers to maintain quality control of production to ensure that production products perform like the ones tested. The product approval system framed in law and implemented through rule requires accreditation of the product evaluators and quality assurance monitors and standardizes the information that must be provided to demonstrate code compliance.

The Commission directed a major part of its efforts since its inception in 1998 to developing a standardized system for public regulation from the many combinations of product evaluation and quality control monitoring services provided by private companies. The diversity of approaches used in different industries for product evaluation and quality control monitoring make standardization particularly difficult, and a considerable amount of time and effort have been dedicated to this task. Patience and hard work characterize the contributions of all parties.

With the significant enhancements to the Product Approval system implemented through revisions to Rule 9B-72, State Product Approval—details of the revisions were described in the 2006 and 2007 Reports to the Legislature—and the hiring of a Product Approval administrator to process applications, the Product Approval System is functioning more efficiently and user satisfaction, as determined by surveys, is very high.

During 2011 the Commission revoked product approvals for products that no longer complied with the requirements of their product approvals. The ability to determine the need for product revocation demonstrates the efficacy of the Product Approval System.

During 2011 the Product Approval Rule, Rule 9N-3 (f.k.a. 9B-72), was amended to expedite approval of products that rely on a product certification mark or listing from an approved certification agency, updated the Rule to conform to the approved validation entities in statute, and revised the Building Code Information System to allow payment of fees to the administrator and to add a provision for approval of products by DCA. In order to implement this Legislative assignment the Commission voted to proceed with rule adoption for Rule 9N-3 (9N-3.002, 9N-3.007, 9N-3.008), Product Approval {f.k.a. Rule 9B-72}, to implement HB 663 product approval provisions, including expedited product approval for the certification method and revision to the list of approved evaluation entities.

In the past the Commission subsidized costs to develop, revise and maintain the Building Code Information System (BCIS) for product approval. The Commission agreed that the true costs of implementing program changes will have to be reflected in the fees charged for these programs. As a result of declining funds during 2009 the Commission revised the fee schedule for product approvals to make them self-supporting and to repay some of the development costs funded by the Commission for the product approval system.

Since inception, the Commission has approved 5,593 product applications under the 2004 Florida Building Code, and 9,475 product applications under the 2007 Florida Building Code. In addition, the Commission approved 8 accreditation body, 15 certification agencies, 6 evaluation entity, 27 quality assurance entities, 47 testing laboratories, and 13 validation entities. In addition, the Commission has approved 22,575 products under the 2004 Code, and 24,334 products under the 2007 Code. Following are relevant product approval system statistics:

PRODUCT APPROVAL AND ENTITIES STATISTICS UPDATE

Entities	Accreditation Body	Certification Agency	Evaluation Entity	Quality Assurance Entity	Testing Laboratory	Validation Entity	Totals
Approved	11	16	6	30	53	14	129
Pending	0	0	0	0	0	0	0
Pending Accreditation	0	0	0	0	0	0	0
Denied	0	0	0	0	0	0	0
Suspended	0	0	0	0	0	0	0
Expired	1	6	0	11	29	16	63
Renewed / Revised	0	18	0	33	66	24	141
Totals	11	40	6	74	148	54	333

CODE VERSION	2004		2007	
	Applications	Products	Applications	Products
Approved	5,593	22,575	5,767	27,529
Applied For	31	39	103	433
Denied	154	482	11	26
Validated	15	28	50	184
Suspended	0	0	0	0
Re-Apply	3	3	19	282
Pending FBC Approval	1	1	76	244
Revoked	6	17	1	1
Archived	528	1828	675	2582
Over 180 Days Old and Not Approved, Denied, Validated, or Pending Status	3	7	32	207
Totals	6,334	24,980	6,734	31,488

IX. BUILDING CODE TRAINING PROGRAM

Education is one of the cornerstones of the Building Code System, and the effectiveness of the Building Code depends on the knowledge of professionals who design and construct buildings. The Commission continues to work with the Department of Business and Professional Regulation and representatives of the licensing boards to establish a cooperative system for approving building code courses and integrating building code continuing education into licensing requirements.

The state building code system, first established in 1974, was overhauled in 1998 to improve its effectiveness. The Legislature recognized that the effectiveness of the Florida Building Code depended on the various participants' knowledge of the codes. The Building Code Training Program was intended to improve compliance and enforcement by providing a focus for code-related education through coordination of existing training resources, including those of universities, community colleges, vocational technical schools, private construction schools and industry and professional associations. As specified in law, the Commission's role is limited to the approval of code related courses, which are developed and submitted by private sector education and training providers to the Commission for approval. The Commission has no authority to determine the number of hours or courses for code related education and training. The licensing board for the respective category of affected licensee makes this determination.

During 2011, the Commission, based on recommendations developed by the Commission's Education Program Oversight Committee (POC) in collaboration with the program administrator and other entities, implemented education and outreach initiatives designed to ensure that Florida construction and design industries licensees are informed about Florida Building Code requirements and related specific duties.

During 2011, the Commission amended the Education Rule, 9B-70.002, Florida Administrative Code, to allow for administrative approval of a correction or update of a reference, table, diagram, or quoted building code provision in an existing course and to specify that a change to a course delivery format requires accreditation and approval.

During 2011 the Commission's Education Program Oversight Committee conducted five meetings and in which they managed the review and approval of course and accreditor applications; handled inquiries from licensees, providers, and the public; and, developed and refined guidelines and information on course development and processing.

Through the education administrator, and using the clearinghouse developed to bring together information on needs and availability of continuing education courses, process, and underlying information, the Commission addressed specific education and outreach needs as follows:

- Developed and executed modifications to the Building Code Information System adding enhancement and usefulness to the system.

- Conducted ten extensive training sessions for building department personnel, design and construction licensees, and home inspectors on hurricane mitigation design and construction and property insurance code requirements and issues.
- Conducted two education and training workgroup meetings to solicit input and recommendations from interested parties.
- Developed and delivered Florida Building Code-related education, training, and outreach specific to the Florida Building Code and mitigation and energy, including e-mail and other messaging notifications, print and electronic media campaigns, website links between sites, development and preparation for seminars, as well as outreach promoting energy (Green Building Show) and mitigation (Hurricane Alley) zones at a Florida-based trade conference, Southeastern Builders Conference.
- Provided non-binding opinions relating to interpretations of building code provisions.
- Performed random audits of approved courses to ensure compliance with laws and rules regulating development, approval, and instruction for advanced codes courses.
- Administered five meetings and tasks of the Commission's Education and Outreach Program Oversight Committee, including conducting meetings, managing course applications, review, and approval, handling inquiries from licensees, providers, and the public; and development, refinement, and modifications of guidelines and information on course development and processing.

X. FLORIDA BUILDING CODE SYSTEM UPDATES AND COMMISSION 2011 ACTIONS

FLORIDA BUILDING CODE SYSTEM

Florida Statute, Chapter 553.77(1)(b), requires the Commission to make a continual study of the Florida Building Code and related laws and on a triennial basis report findings and recommendations to the Legislature for provisions of law that should be changed. The Commission conducted the first assessment in 2005 and effected changes to the System as a result of the assessment process. 2011 marked the ten-year anniversary since the Florida Building Code became effective, and the Commission initiated a comprehensive assessment of the Building Code System with recommendations being developed by the Commission’s Building Code System Assessment Ad Hoc Committee.

Florida Statute, Chapter 553.77(1)(b), requires the Commission to make a continual study of the Florida Building Code and related laws and on a triennial basis report findings and recommendations to the Legislature for provisions of law that should be changed. The Commission conducted the first assessment in 2005, and during 2010 the Commission again solicited stakeholder input in the form of an on-line survey (conducted from June 25 – August 30, 2010), and at the October 2010 meeting the Commission voted to conduct a comprehensive evaluation of the Building Code System. The Commission decided to conduct an expanded survey running from June 2010 through January 2011 and to use the results as one of the inputs for developing a package of recommendations for enhancements to the key components of the Florida Building Code System. Public input was a major component of the assessment process and an on-line Survey in addition to multiple public comment opportunities were an important part of the Commission’s analysis of the Building Code System. The Goals of the 2011 Florida Building Code System Assessment were to evaluate the System for its successes and deficiencies, and to identify and select options for improvement. The Foundations of the Building Code System that were evaluated are:

Foundation I	The Code and the Code Development Process
Foundation II	The Commission
Foundation II	Local Administration of the Code (Enforcement)
Foundation IV	Strengthening Compliance and Enforcement (Education)
Foundation V	Product Approval

To coordinate the project the Chair appointed an ad hoc committee of Commission members to review the results of the Building Code System Assessment Surveys (I and II) as well as comments received during a series of workshops, and to develop recommendations for the Commission regarding any proposed changes to the Building Code System. This was a facilitated consensus-building process and the Ad Hoc delivered their recommendations at the December 2011 meeting for inclusion in the Report to the 2012 Legislature. The goal of the project was to conduct a comprehensive assessment of the Florida Building Code System at the ten-year anniversary of the Florida Building Code, and to deliver recommendations to the 2012 Florida Legislature.

(Appendix E—Building Code System Assessment Project Update)

Following are 2011 Commission initiatives and actions related to the Florida Building Code System:

THE FLORIDA BUILDING CODE AND THE CODE DEVELOPMENT PROCESS. The Florida Building Code is a statewide code implemented in 2001 and updated every three years. The Florida Building Commission developed the Florida Building Code from 1999 through 2001, and is responsible for maintaining the Code through annual interim amendments and a triennial foundation code update. In 2009, the Commission selected the 2009 I Codes as foundation for the 2010 Florida Building Code, and during 2010 and 2011, it developed and adopted the 2010 Edition of the Code, representing the third update and Fourth Edition of the Florida Building Code. During the 2010 Code Update process the Commission focused on removing (unnecessary) and maintaining (needed) Florida Specific requirements to the Code, with the goal of minimum variation from the foundations codes. In addition, during the 2010 Code Update the Commission was able to integrate the 2010 Code Update and the Glitch Amendment process into a single rule development initiative eliminating the need for a supplement to the Code and resulting in a fully integrated set of the nine (9) volumes comprising the 2010 Florida Building Code. The development of the 2010 Code involved multiple special issue stakeholder workgroups, numerous rule development workshops and adoption hearings all providing extensive opportunity for public participation. The 2010 Florida Building Code integrated Flood Resistant Standards and a 20% increase in thermal efficiency into the 2010 Florida Building Code.

THE COMMISSION. The Commission is an appointed representative stakeholder body that develops, amends and updates the Code. The Commission is composed of members representing each of the key interests in the Building Code System. The Commission meets every eight weeks and, in addition to its code development responsibilities, regularly considers petitions for declaratory statements, accessibility waiver requests, the approval of products and entities, and the approval of education courses and course accreditors. The Commission also monitors the Building Code System and reports to the Legislature annually with its recommendations for changes to statute and law.

LOCAL ADMINISTRATION OF THE CODE. Florida Law requires that the Code be administered and enforced by local government building and fire officials. The Commission has certain authorities in this respect such as the number and type of required inspections. In 2007, the Commission conducted an assessment survey to review and address the code administration needs of local governments with consideration of measures to improve uniform and effective enforcement of the Code. The Commission identified a need to address the code administration needs of local governments with an emphasis on identifying measures to improve uniform and effective enforcement of the Code. This important component of the Building Code System was evaluated during 2011 as a part of the Building Code System Assessment project.

STRENGTHENING COMPLIANCE AND ENFORCEMENT. Compliance and enforcement of the Code is a critical component of the system, and the Commission's emphasis in this regard is on education and training. The Commission's Education Program Oversight Committee (POC), working with the program administrator and other entities, implemented initiatives collaboratively to ensure Florida construction and design industries licensees are informed about Florida Building Code requirements and aware of related specific duties. This important component of the Building Code System was evaluated during 2011 as a part of the Building Code System Assessment project.

PRODUCT EVALUATION AND APPROVAL. To promote innovation and new technologies, a product and evaluation system was determined to be the fifth cornerstone of an effective Building Code System. The product approval process should have specific 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 and testing laboratories that meet stated criteria and are periodically inspected. A quality assurance program was also deemed essential. The Commission adopted a Product Approval System by rule and currently approves products for state approval and product approval entities. Local product approval remains under the purview of local building officials a part of the building permit approval process. This important component of the Building Code System was evaluated during 2011 as a part of the Building Code System Assessment project.

2011 COMMISSION ACTIONS

(Appendix A—Commission 2011 Milestones)

COMMISSION 2011 POLICY IMPLEMENTATIONS

The following are policy decisions by the Commission implemented during 2011 with existing Commission authority through administrative rule development:

In order to provide a transparent and efficacious rule development process for the 2010 Code Update the Commission voted to incorporate the 2011 Glitch Amendment process into the 2010 Code Update via a combined Rule Adoption Hearing providing for a single integrated 2010 Florida Building Code. The 2010 Code Update process provided extensive public input opportunities.

The Commission convened a comprehensive assessment process to evaluate the Florida Building Code System and developed recommendations for enhancements to the System for delivery to the 2012 Florida Legislature. The process included an on-line survey, public workshops conducted at Commission meetings, and an Ad Hoc Committee of Commissioners in order to identify and evaluate a full range of issues and options regarding Florida Building Code System enhancements.

COMMISSION 2011 INTERAGENCY COLLABORATION INITIATIVES

EVALUATE RAINWATER COLLECTION AND REUSE FOR PROCESS WATER AND OTHER “GREEN” TECHNOLOGIES IN COORDINATION WITH DOH, HEALTH OFFICIALS, DEP AND OTHER WATER MANAGEMENT AGENCIES

The Plumbing TAC identified rainwater collection as a growing “Green Building” practice that should be evaluated by building and health regulators. It is expected that appropriate requirements would facilitate implementation of the practice, and the Commission will decide whether to convene a workgroup to address this issue during 2012 based on availability of project funding.

EVALUATE IN-HOME WASTE WATER RECYCLING IN COORDINATION WITH DEPARTMENT OF HEALTH AND DEPARTMENT OF ENVIRONMENTAL PROTECTION

This task was originated at the request of the Florida Department of Health and Florida Department of Environmental Protection. It was first addressed for the 2007 Code and resulted in the inclusion of the Florida Department of Health requirements for home grey water capture and reuse for irrigation outside homes. This task will be further evaluated as interest and commitment to green building standards mature.

FLOOD PLAIN MANAGEMENT STANDARDS INTEGRATION INTO THE 2010 FBC

At the request of the Florida Division of Emergency Management (DEM) and the Federal Emergency Management Agency (FEMA), the Florida Building Commission convened a Flood Resistant Standards Workgroup charged with developing recommendations for integrating the International Code Series (I-Codes: IBC, IRC, etc.) flood damage-resistant provisions (for buildings and structures) in the Florida Building Code. The Commission conducted a facilitated stakeholder process from March to May of 2009. The Workgroup developed a package of consensus recommendations adopted by the Commission and implemented with adoption of the 2010 Florida Building Code.

EVALUATE RESOLUTION OF CCCL AND V ZONE REQUIREMENT INCONSISTENCIES

The Commission and the Commission’s Flood Resistant Standards Workgroup voted unanimously that inconsistencies between the CCCL and V Zone requirements shall continue to be resolved at the local level, and on a case-by-case basis and a process should be convened to evaluate the issue further. The Commission is working with DEM and DEP to develop consistent polices relative to the CCCL and V Zone requirements.

DEVELOPMENT OF RECOMMENDATIONS THAT INCREASE RECYCLING AND COMPOSTING AND THE USE OF RECYCLABLE CONSTRUCTION MATERIALS AND CONSTRUCTION AND DEMOLITION DEBRIS

The Commission will appoint a stakeholder workgroup to work in a facilitated consensus-building process to develop recommendations for the Commission. The Commission will decide whether to convene a workgroup to address this issue during 2012 based on availability of project funding.

COMMISSION ANNUAL ASSESSMENT AND PLANNING EXERCISES

EFFECTIVENESS ASSESSMENT SURVEY

Each year the Commission conducts an Effectiveness Assessment Survey to gauge the Commission’s perspective on a variety of key topical issue areas. Over the years the survey input has been the basis for many enhancements to the Commission’s procedures. The exercise is conducted annually as an on-line activity, and the Commission reviews the results each January. Following are the compiled annual Effectiveness Assessment Survey results from 2000 – 2011:

FBC EFFECTIVENESS ASSESSMENT SURVEY RESULTS										
ANNUAL COMPILATION 2000—2011										
<i>Annually, Commission members are asked to pick the number that best describes how the Commission functions in key topical issue area metrics: Scale Range 10 – 1 (10 highest rating to 1 lowest rating)</i>										
KEY TOPICAL ISSUE	2011	2010	2009	2008	2007	2006	2005	2004	2001	2000
Decision Making Process	9.6	9.8	9.7	9.4	9.2	9.3	9.3	8.8	9.1	8.8
Participation and Communication	9.4	9.3	9.4	9.0	8.9	9.2	9.1	8.4	7.5	8.2
Commission Relationship to Agency (DCA)	8.9	8.8	9.0	8.6	7.9	8.7	8.7	7.8	—	—
Commission Relationship to Staff	9.8	9.5	9.6	9.1	8.7	8.9	9.1	8.8	—	—
Time for Consideration	8.9	8.6	8.9	8.0	7.7	8.2	7.5	6.5	7.7	8.3
Information and Analysis	9.1	8.7	9.1	8.1	8.1	8.7	8.1	7.5	7.8	7.6
Process/Meeting Facilitation	9.4	9.5	9.8	9.7	9.7	9.5	9.5	—	—	—
Controversy or Planning Orientation	—	—	—	—	—	—	—	—	7.8	7.8
Overall Average	9.3	9.2	9.4	8.8	8.6	8.9	8.8	7.8	7.8	8.1

WORKPLAN PRIORITIZATION EXERCISE

Each year the Commission conducts a Workplan Prioritization Exercise to help determine priorities for the coming year. Commissioners are asked to rank each of the Commission’s Workplan Tasks on a five point continuum/scale where a 5 equals the highest level of priority and a 1 equals the lowest level of priority. Members are asked to rank the priority of each task independently and not in relation to the other tasks. Each of the Workplan Task’s rankings are tallied and arranged in order of highest priority to lowest priority. The exercise is conducted annually as an on-line activity, and the Commission reviews the results each January. Following are the results of the Commission’s Workplan Prioritization Exercise conducted in 2011:

WORKPLAN PRIORITIZATION EXERCISE RESULTS 2011		
FEBRUARY 1, 2011		
WORKPLAN TOPICS (TASK/TOPIC #)	AVERAGE (5 TO 1)	OVERALL RANKING
2010 Update to FBC (5.)	4.53	1
Glitch amendments to 2010 FBC (6.)	4.37	2
Report to 2012 Legislature (1.)	4.32	3
Integration of Accessibility Law (DOJ SAD) into FBC (8.)	4.11	4
Code amendments directed by Legislature (18.)	4.11	4
Amend rules to establish fees: waivers/declaratory statements/opinions (20.)	3.84	6
Triennial BCS Assessment (21.)	3.84	6
Bedroom definition for septic tank sizing (DOH) (9.)	3.58	8
Corrosive gypsum board (DOH) (10.)	3.16	9
Recommendations: increase recycling and composting, and recyclable construction materials (22.)	2.79	10

FLORIDA BUILDING COMMISSION
REPORT AND RECOMMENDATIONS TO THE 2012 LEGISLATURE

XI. APPENDICES

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APPENDIX A

COMMISSION MILESTONES FOR 2011

http://consensus.fsu.edu/FBC/fbc_documents.html

February 2011

Commission conducts rule adoption hearing on Rule 9N-01, Florida Building Code, for the purpose of considering public comment on the draft 2010 Florida Building Code, and votes to conduct a supplemental rule adoption hearing. Commission adopts criteria for submitting and process for evaluating Glitch amendments to the 2010 Florida Building Code. Commission recommends Revisions to Part II, Chapter 553, Florida Statutes, to conform requirements with the format and terminology of the 2010 ADA Standards for Accessible Design, to resolve possible not-equivalent standards, to eliminate redundant and non-essential requirements, and to enhance certain requirements for accessibility. Commission reviews results of annual effectiveness assessment survey and Workplan prioritization exercise.

April 2011

Commission adopts 2011 Glitch Amendment Review Process. Commission approves continuing funding for hurricane resistance research for Fiscal Year 2011/2012. Commission conducts first of a series of workshops soliciting stakeholder input regarding enhancements to the Florida Building Code System Assessment. Commission convenes a Uniform Mitigation Reporting Form Workgroup to provide recommendations to the Department of Financial Services.

June 2011

Commission conducts a Rule Adoption Hearing on Rule 9N-1, 2010 Florida Building Code, concurrently considers Glitch Amendments to the 2010 Code, and votes to proceed with rule adoption. Commission conducts Rule Development Workshop on Rule 9N-4, 2012 Florida Accessibility Code, and votes to proceed with rule adoption with an implementation date of March 15, 2011. Commission receives welcome to their new administrative agency, from Department of Business and Professional Regulations, Division of Professions Director, Tim Vaccaro. Commission conducts second in a series of workshops soliciting stakeholder input regarding enhancements to the Florida Building Code System Assessment.

August 2011

Commission conducts third and final Rule Adoption Hearing on Rule 9N-1, 2010 Florida Building Code, votes to revise the 2010 Code implementation date to March 15, 2012, and to file the Rule for adoption. Commission conducts a Rule Adoption Hearing on Rule 9N-4, 2012 Florida Accessibility Code, and votes to proceed with rule adoption with an implementation date of March 15, 2012. Commission conducts third workshop regarding the Florida Building Code System Assessment project.

- October 2011** Commission concludes Florida Building Code System Assessment project by convening the Building Code System Assessment Ad Hoc Committee to review and adopt stakeholder recommendations for evaluation by the Commission.
- December 2011** Commission adopts Florida Building Code System Assessment project recommendations for enhancements to the System and submittal to the 2012 Legislature. Commission adopts Issues and Recommendations for Report to the 2012 Legislature.

APPENDIX B
COMMISSION SPECIAL ISSUE PROJECTS 1999–2011

COMMISSION SPECIAL ISSUE PROJECTS 1999-2011	
PROJECT	DATE PROJECT CONVENED
1. Product Approval Ad Hoc	1999
2. South Florida Code Integration Ad Hoc	1999
3. Code Formatting Ad Hoc	1999
4. State Agencies Review Ad Hoc	1999
5. Alternative Procedures Review (Chapter 120) Ad Hoc	2000
6. Economic Criteria Ad Hoc	2000
7. Education Training System Ad Hoc	2000
8. Building Departments Partnerships Ad Hoc (Building Departments Oversight Ad Hoc)	2000
9. Plans Review Ad Hoc	2000
10. Rules of Procedure Ad Hoc	2000
11. Statutory Review Ad Hoc	2000
12. Swimming Pool Safety Ad Hoc	2001
13. Local Product Approval Workgroup	2004
14. Alternative Plans Review and Inspection Workgroup	2004
15. ICC Participation Workgroup	2004
16. Wind Forum Workgroup	2004
17. Product Approval II Workgroup	2005
18. <i>Hurricane Research Advisory Committee</i>	2005
19. Panhandle Windborne Debris Region Workgroup	2005
20. Attic Ventilation Workgroup	2005
21. Building Code System Assessment Ad Hoc	2005
22. Product Approval Validation Workgroup	2005
23. Construction Practices Assessment Project	2005
24. FBC and FFPC Coordination Assessment Project	2005
25. Energy Code Transition Study Workgroup	2006
26. Code Amendment Process Review Workgroup	2006
27. Committee Organization and Process Ad Hoc	2006
28. Joint Building Fire Coordination Workgroup	2006
29. Garage Door and Shutter Labeling Workgroup	2006
30. Termite Workgroup	2006
31. Code Assembly Ad Hoc	2007
32. Green Buildings Workgroup	2007
33. Energy Forum	2007
34. Hurricane Mitigation Workgroup	2007
35. Commission Processes Ad Hoc	2008
36. Regional AC Efficiency Workgroup	2008
37. Humidity and Moisture Control Workgroup	2008

38. CO Detector Workgroup	2008
39. Septic System Sizing (Bedroom Definition) Workgroup	2008
40. Soffit Systems Workgroup	2008
41. Wind Mitigation Workgroup	2008
42. Window Workgroup	2008
43. Code Administration Assessment Workgroup	2008
44. Commission Process Review Ad Hoc	2009
45. Florida Energy Code Workgroup	2009
46. Flood Resistant Standards Workgroup	2009
47. Pool Efficiency Subcommittee	2009
48. Swimming Pool Subcommittee	2009
49. Window and Wall Workgroup	2009
50. Green and Energy Efficient Roofs Workgroup	2010
51. Accessibility Code Workgroup	2010
52. <i>Building Code System Assessment Project</i>	2010
53. <i>Asphalt Shingles Workgroup</i>	2011
<i>Note: Projects in italics are currently active.</i>	

APPENDIX C
KEY TO COMMON ACRONYMS

ACRONYM	DEFINITION
ADA	Americans With Disabilities Act
ADAAG	ADA Accessibility Guidelines for Buildings and Facilities
BCSA	Florida Building Code System Assessment
BOAF	Building Officials Association of Florida
DACS or FDACS	Florida Department of Agriculture and Consumer Services
DBPR	Department of Business and Professional Regulations
DCA	Department of Community Affairs
DEP or FDEP	Florida Department of Environmental Protection
DOH or FDoH	Florida Department of Health
EPA	U.S. Environmental Protection Agency
FACBC	Florida Accessibility Code for Building Construction
FAW	Florida Administrative Weekly
FBC	Florida Building Code
FBC	Florida Building Commission
FECC	Florida Energy and Conservation Code
IBC	International Building Code
ICC	International Code Council
POC	Program Oversight Committee (Education, Product Approval)
SAD	ADA Standards for Accessibility Design
TAC	Technical Advisory Committee

APPENDIX D

HURRICANE RESEARCH ADVISORY COMMITTEE



At the January 26, 2005 Commission meeting, Chairman Rodriguez appointed a small coordinating group consisting of Commissioners and other stakeholder representatives, charged with identifying what research is being conducted related to building failure issues resulting from the 2004 hurricanes, identifying any research gaps on key issues identified but not being researched, and finally, to ensure that the Commission is provided with all relevant research findings on each of the major issues, prior to the Commission considering code enhancements resulting from lessons learned. The Committee has been instrumental in evaluating and making recommendations to the Commission on a broad suite of proposals regarding Building Code enhancements and research projects.

As a result of hurricanes affecting Florida during the 2004 and 2005 seasons, the Florida Building Commission's Hurricane Research Advisory Committee (HRAC) continues to meet at most Commission meetings to review research and make recommendations to the Commission regarding proposed code enhancements and research needs. Some of the Committee's recommendations were adopted with the 2006 Glitch Code amendments to the 2004 Code and others were adopted during the 2007 Code Update cycle, others were implemented during the 2008 "Glitch" code annual interim amendment process, and still others will be implemented during the 2010 Code Update process. The Committee continues to consider enhancements to the Florida Building Code based on sound science. In addition, the Committee has recommended research to advance the science and allow the Commission to continually study and update the storm protection provisions of the Florida Building Code. The Committee is continuously monitoring current research and recommending the development of standards and installation practices related to protecting against wind damage and water infiltration, and the development of hurricane resistant construction standards.

During 2011 the Committee continued to focus on implementing Code enhancements regarding the window-wall interface, soffit labeling and performance standards, flood resistant standards, and roof mounted mechanical equipment. In addition, the Commission continued to fund important hurricane resistant research by funding UF's existing roofing and soffit system research projects based on spending authority approved by the 2011 Florida Legislature for Fiscal Year 2011/2012, and to leverage additional funding sources to the extent possible (e.g., FEMA/DHS, NOAA/Sea Grant and RCMP/DEM).

HURRICANE RESEARCH ADVISORY COMMITTEE MEMBERSHIP	
MEMBER	REPRESENTATION
Raul Rodriguez, AIA (FBC chair)	Architects
Joe Crum, CBO	Building Officials
Jaime Gascon, P.E.	Local Government
Jack Glenn, CBO	Home Builders
John Ingargiola	Federal Government (FEMA)
Do Kim, P.E.	Insurance Industry
Craig Parrino, P.E.	Product Manufacturers (concrete products)
Tim Reinhold, PhD, P.E.	Insurance Industry/Researchers
Richard Reynolds	Insurance Industry
Jim Schock, CBO, P.E.	Building Officials
Chris Schulte	Roofing Contractors
<i>Pending New Appointment</i>	Product Manufacturers

HURRICANE RESISTANCE RESEARCH UPDATE

The Commission voted unanimously that FY 2010/2011 research funding be directed to support studies to characterize the wind field on roofs and to leveraging funding for roof systems related research provided by federal organizations including FEMA/DHS, NOAA/Sea Grant and RCMP/DEM, and to continue funding post-hurricane buildings investigation research on a contingency basis.

Summary of Hurricane Resistance Research:

Research was begun on roof coverings and components during 2008-2009 in response in part to the Legislature’s Hurricane Mitigation (Roofing) Initiative and in part as extension of the Wind-Borne Debris Studies begun in prior years. The studies included construction and testing of large-scale model roof samples at the UF hurricane simulator test facility and testing of soffit components of the roof system. Experimental work also was conducted in wind tunnel test facilities via contract with UF that evaluated wind pressures on roof systems and roof component failure. Results of these tests verified the under-prediction of wind forces at roof edges by the ASCE 7 design standard and demonstrated the acceleration nature of roof cladding failures.

In 2009-2010 the Commission sponsored roof systems research that leveraged larger sources of funding at UF. Commission resources provided wind tunnel tests to determine large scale wind simulator design characteristics and begin test equipment construction. This project leverages larger resources from Florida State University and Oak Ridge National Laboratory to begin roof system evaluations with shingle systems. A small source of funds also went to supplement research and testing of closed cell foam adhesive systems for increasing roof diaphragm resistance to wind forces that is funded primarily by a NOAA Sea Grant.

Each project investigates questions identified during the Commission’s and its committees’ and workgroups’ deliberations of systems for improving hurricane performance of roofing systems. It is proposed that this funding track of leveraging outside funded roof research projects that answer fundamental building construction questions be continued going forward. Roof research will continue to look at shingle system evaluation and improvement, innovative roof deck strength

enhancement systems, roof tile wind-borne debris potential and innovative roof covering system wind performance. The goal to be ensuring technologies being introduced into the Florida market are appropriately evaluated for their application to this high wind region and ultimately establishing standards for uniform evaluation of different manufacturers' systems.

The study of roof component and cladding and roof attached structures and equipment must be conducted by various hurricane wind effects simulation methods. The beginning point of any such simulation studies is accurate characterization of the wind field and its effects. Then simulation models can be constructed to test various components and attachments. Research conducted in response to the 2004 and 2005 hurricanes was directed primarily to window and wall components and cladding. Work then began on roof systems. Future work will continue to focus primarily on roofing systems.

The Commission previously voted to support DCA funding research projects that leverage the funding of other agencies for projects that support resolution of Florida hurricane related building failures and continued that strategy in 2011 by voting to continue funding UF's existing roofing and soffit system research projects based on spending authority approved by the 2011 Florida Legislature for Fiscal Year 2011/2012, and to leverage additional funding sources to the extent possible (e.g., FEMA/DHS, NOAA/Sea Grant and RCMP/DEM).

PROJECT FACILITATION

The project is being facilitated by Jeff Blair from the FCRC Consensus Center at Florida State University. Information at: <http://consensus.fsu.edu/>



PROJECT WEB PAGE

Information on the project, including recommendations, agenda packets, meeting reports, and related documents may be found in downloadable formats at the project web page below: <http://consensus.fsu.edu/FBC/hrac.html>

APPENDIX E
BUILDING CODE SYSTEM ASSESSMENT PROJECT

TRIENNIAL REPORT TO THE LEGISLATURE. Chapter 553.77(1)(b), requires the Commission to make a continual study of the Florida Building Code and related laws and on a triennial basis report findings and recommendations to the Legislature for provisions of law that should be changed. The Commission conducted the first assessment in 2005 and effected changes to the System as a result of the assessment process. 2011 will mark the ten-year anniversary since the Florida Building Code became effective, and the Commission will initiate a comprehensive assessment of the Building Code System with recommendations being developed by the Commission’s Building Code System Assessment Ad Hoc Committee. Public input will be a major component of the assessment process and this Survey in addition to multiple public comment opportunities will be an important part of the Commission’s analysis of the Building Code System. The Commission’s recommendations will be a major component of their Report to the 2012 Legislature.

Chairman Rodriguez appointed an ad hoc committee of Commission members (Building Code System Assessment Ad Hoc Committee) to review the results of the Building Code System assessment survey and develop recommendations for the Commission regarding any proposed changes to the Building Code System. This will be a facilitated consensus-building process and will conclude with recommendations for enhancements to the System submitted to the 2012 Legislature.

AD HOC COMMITTEE MEMBERSHIP	
MEMBER	REPRESENTATION
Raul Rodriguez (FBC chair)	Architects
Hamid Bahadori	Fire Officials and Fire Protection Technologist
Dick Browdy (FBC vice-chair)	Home Builders
Ed Carson	Contractors, Manufactured Buildings, Product Approval
Herminio Gonzalez	Code Officials (SE Florida) and Product Evaluation Entities
Dale Greiner	Code Officials (Central Florida) and Local Government
Jeff Gross	Building Management Industry
Jon Hamrick	Public Education and State Agencies
John Scherer	General Contractors
Jim Schock	Code Officials (NE Florida)
Chris Schulte	Roofing/Sheet Metal and AC Contractors
Tim Tolbert	Code Officials (NW Florida)
Mark Turner	Electrical Contractors and Construction Subcontractors

BUILDING CODE SYSTEM ASSESSMENT PROJECT SCOPE OVERVIEW

Florida Statute, Chapter 553.77(1)(b), requires the Commission to make a continual study of the Florida Building Code and related laws and on a triennial basis report findings and recommendations to the Legislature for provisions of law that should be changed. The Commission conducted the first assessment in 2005, and during 2010 the Commission again solicited stakeholder input in the form of an on-line survey (conducted from June 25 – August 30, 2010), and at the October 2010 meeting, at the ten-year anniversary of the Florida Building Code, the Commission voted to conduct a comprehensive evaluation of the Building Code System. The Commission decided to conduct an expanded survey running from June 2010 through January 2011 and to use the results as one of the inputs for developing a package of recommendations for enhancements to the key components of the Florida Building Code System. The Goals of the 2011 Florida Building Code System Assessment are to evaluate the System for its successes and deficiencies, and to identify and select options for improvement. The Foundations of the Building Code System that were evaluated are:

Foundation I	The Code and the Code Development Process
Foundation II	The Commission
Foundation II	Local Administration of the Code (Enforcement)
Foundation IV	Strengthening Compliance and Enforcement (Education)
Foundation V	Product Approval

To coordinate the project Chairman Rodriguez appointed an ad hoc committee of Commission members to review the results of the Building Code System Assessment Surveys (I and II) as well as comments received during a series of workshops, and to develop recommendations for the Commission regarding any proposed changes to the Florida Building Code System. This was a facilitated consensus-building process and the Ad Hoc met for the first time at the October 2010 Commission meeting, and the Commission evaluated the Ad Hoc’s recommendations at the December 2011 meeting for inclusion in the Report to the 2012 Legislature. The goal of the project was to conduct a comprehensive assessment of the Florida Building Code System at the ten-year anniversary of the Florida Building Code.

BUILDING CODE SYSTEM ASSESSMENT PROJECT CHRONOLOGY	
DATE	ACTIVITY
June 25 – August 30, 2010	On-Line Survey
June 25, 2010 – January 28, 2011	On-Line Survey Extension
October 12, 2010	Building Code System Assessment Ad Hoc Committee Meeting
October 13, 2010	Public Comment Opportunity I
December 7, 2010	Public Comment Opportunity II
April 5, 2011	Building Code System Assessment Workshop I
June 6, 2011	Building Code System Assessment Workshop II
August 8, 2011	Building Code System Assessment Workshop III
October 10, 2011	Building Code System Assessment Ad Hoc Committee Meeting
December 6, 2011	Commission Adopts Recommendations for Submittal to the 2012 Legislature
January 1, 2012	Report to 2012 Legislature

SUMMARY OF COMMENTS FROM SURVEY

In reviewing the over 4,070 individual comments submitted by 324 respondents regarding the Florida Building Code System there were divergent stakeholders'/respondents' comments representing the full range of perspectives on each specific component of the Florida Building Code System ranging from complete support to indifference to neutrality to complete dissatisfaction to no knowledge of or experience with a specific component of the System. The following summary provides an overview of commonly offered stakeholder perspectives that enjoyed a high level of support.

Many respondents appreciate the consensus-building and stakeholder involvement aspects of the process, including the workgroup process for special issue topics. There is broad support for a Florida Building Code with a preference for aligning the FBC with the IBC as closely as possible, with variations for only truly needed Florida specific requirements. There is concern with the quantity and frequency of amending the Code, and a strong desire for the FBC code development cycle to more closely align with the IBC cycle. The FBC and FFPC should be coordinated and correlated as much as possible and conflicts resolved. There is a desire for readily accessible web-based codes and relevant standards and information. Many respondents expressed a desire for an enhanced BCIS/Commission website with an integrated (Florida Building Code, Product Approval, Education and all relevant Commission programs and functions) data-base that is user-friendly, fully searchable, comprehensive, and linked to relevant documents and websites. There is a strong desire for the Commission to regularly and effectively communicate to AHJs, associations and stakeholders regarding Commission policy decisions, code changes, declaratory statements, updates, and all other relevant information. There is concern for political and special interest interference with the consensus process. There is a desire to make the System as user friendly and responsive as possible, and to eliminate any duplication or effort and unnecessary requirements. There is agreement state agency regulations and enforcement should be coordinated and consistent across jurisdictions. Product Approval Program users appreciate the timely review and approval of products and the searchable on-line functionality of the Program. Many respondents' expressed that there are inadequate resources at the state and local levels to support needed training, education, enforcement and development of the Code and a dedicated, protected and adequate funding source should be secured.

OVERVIEW OF THE FLORIDA BUILDING CODE SYSTEM

In 1997, the Governor's Building Codes Study Commission recommended that a single state-wide building code be developed to produce a more effective system for a better Built Environment in Florida. It was determined that in order to be effective, The Building Code 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 affordable; and
5. Promote innovation and new technology.

The Study Commission determined that an effective system must address five key components: the Code, the Commission, code administration, compliance and enforcement, and product evaluation and approval.

The Florida Building Code System is comprised of five essential components. A summary of each follows:

I. THE FLORIDA BUILDING CODE AND THE CODE DEVELOPMENT PROCESS. Historically the promulgation of codes and standards was the responsibility of local jurisdictions. It was determined that Florida'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". A critical component for an effective building code system was to develop and implement a single state-wide code.

The purpose of developing a single state-wide building code was 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 and providing exceptions when necessary.
3. Establish the standards and requirements through performance-based and prescriptive based criteria where applicable.
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.

The new Florida Building Code is a state-wide code implemented in 2001 and updated every three years. The Florida Building Commission developed the Florida Building Code from 1999 through 2001, and is responsible for maintaining the Code through annual interim amendments and a triennial foundation code update.

II. THE COMMISSION. The Commission is an appointed representative stakeholder body that develops, amends and updates the Code. The Commission is comprised of members representing each of the key interests in the building code system. The Commission meets every six weeks and in addition to their code development responsibilities, regularly consider petitions for declaratory statements, accessibility waiver requests, the approval of products and entities, and the approval of education courses and course accreditors. The Commission also monitors the building code system and reports to the Legislature annually with their recommendations for changes to statute and law.

III. LOCAL ADMINISTRATION OF THE CODE. The Study Commission recommended, and subsequent legislation maintained, that the Code shall be administered and enforced by local government building and fire officials. The Commission has certain authorities in this respect such as the number and type of required inspections. However, the Commission's main responsibility remains amending the Code, hearing appeals of local building officials decisions, and issuing binding interpretations of any provisions of the Florida Building Code.

IV. STRENGTHENING COMPLIANCE AND ENFORCEMENT. Compliance and enforcement of the Code is a critical component of the system with the Commission's emphasis in this regard is on education and training. The Study Commission determined that in order to have an effective system a clear delineation of each participant's role and accountability for performance must be effected. There should be a formal process to obtain credentials for design, construction, and enforcement professionals with accountability for performance. Opportunities for education and training were

seen as necessary for each participant to fulfill their role competently. Although many of the Commission's functions related to education were recently assigned to a legislatively created Education Council, education remains a cornerstone of the building code system. The Commission remains focused on the approval of course accreditors and the courses developed/recommended by approved accreditors.

V. PRODUCT EVALUATION AND APPROVAL. In order to promote innovation and new technologies a product and evaluation system was determined to be the fifth cornerstone of an effective Building Code System. The product approval process should have specific 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 and testing laboratories which meet stated criteria and are periodically inspected. A quality assurance program was also deemed essential. The Commission adopted a Product Approval System by rule and currently approves products for state approval and product approval entities. Local product approval remains under the purview of the local building official as a part of the building permit approval process.

ADDITIONAL KEY BUILDING CODE SYSTEM PROGRAMS ARE AS FOLLOWS:

A. BUILDING CODE INFORMATION SYSTEM. The Building Code Information System (BCIS) was developed in early 2000 to implement the new responsibilities, business practices, and automated systems required by the Florida Building Code. The BCIS is a multi-functional database that provides building professionals, the general public, local governments, and manufacturers with single-point access to the Florida Building Code, Manufactured Building Program, Product Approval System, Prototype Program, local code amendments, declaratory statements, nonbinding opinions, and the interested party list.

Since its initial deployment, significant new functionality has been added to the BCIS in response to new legislation and to accommodate the changing needs of the Commission and DCA. The amount of information now available via the BCIS has more than doubled in the last four years; the number and type of users has correspondingly increased as new needs are addressed. The web site has become more complex and more difficult to locate needed information. As a result, the Department is in the process of updating the BCIS to address the overall accessibility of information contained within the BCIS.

B. MANUFACTURED BUILDINGS PROGRAM. Chapter 553, Part I, FS, known as the Manufactured Buildings Act of 1979, governs the design, plans review, construction and inspection of all buildings (excluding mobile homes) manufactured in a facility to ensure compliance with the Florida Building Code. Rule Chapter 9B-1 FAC was subsequently adopted by the Commission to adequately govern the program and to ensure that manufacturers and independent Third Party Inspection Agencies maintain performance standards. Inspections agencies qualified under this program and serving as agents for the State, provide construction plan reviews and in-plant inspections. All manufacturers and Third Party Agencies are monitored at least once per year to ensure quality assurance and adequate code enforcement. Manufactured Buildings approved under this program are exempted from local code enforcement agency plan review except for provisions of the code relating to erection, assembly or construction at the site.

C. PROTOTYPE BUILDINGS PROGRAM. §553.77(5) F.S., Rule 9B-74 Prototype Plan Review and Approval program. The plans review program was developed by the Florida Building Commission to address public and private entities such as buildings and structures that could be replicated throughout the state. The Program was suspended due to the lack of use by industry, and the administrator's inability to generate sufficient revenue. The Commission was unable to find another entity willing to administrator the Program under a no-cost contract (no cost to the State) and decided to suspend the Program until the situation improves.

D. ALTERNATIVE PLANS REVIEW AND INSPECTIONS—PRIVATE PROVIDER SYSTEM FOR PLANS REVIEW AND INSPECTION FUNCTIONS. §553.791, Florida Statutes, was created in 2002 to allow property owners to utilize the services of a private interest to perform plan review and/or inspection services in lieu of, but subject to review by the local permitting authority. The legislation creating the process also directed the Commission to review the system and report the results to the legislature which was accomplished in the Commission's 03-04 report. In addition, the Commission as a result of a consensus stakeholder process convened in 2004, proposed, additional refinements to the system in the Commission's 04-05 report. In 2005 the Florida Legislature adopted a package of refinement to the program that were signed into law in the summer of 2005.

E. INTERACTION AND COORDINATION BETWEEN THE FLORIDA BUILDING CODE AND OTHER STATE BASED BUILDING CONSTRUCTION REGULATIONS. The Florida Building Commission is committed to coordinating with other State agencies charged with implementing and enforcing their respective State based building construction regulations. The Commission only has authority to amend the Florida Building Code and respective rules, and other state agencies have similar authority for their respective rules and regulations. The Commission has worked closely with other state agencies to ensure consistency and coordination between the various codes and rules.

F. ENFORCEMENT OF OTHER STATE BASED BUILDING CONSTRUCTION REGULATIONS AT THE LOCAL LEVEL. Enforcement of state agency regulations occurs primarily at the local level under the jurisdiction of the respective agency's local officials. Regulations should be clear and consistent across the State, and coordination is required between the Florida Building Code's and other agency's requirements.

PROJECT FACILITATION

The project is being facilitated by Jeff Blair from the FCRC Consensus Center at Florida State University. Information at: <http://consensus.fsu.edu/>



PROJECT WEB PAGE

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<http://consensus.fsu.edu/FBC/bcsa.html>

APPENDIX F

FLORIDA ACCESSIBILITY CODE UPDATE PROJECT

The federal agency responsible for updating the ADA Accessibility Guidelines (ADAAG) completed the current update in 2004. Since that time the Department of Justice, which is responsible for adopting standards for compliance of buildings with Title II (state and local government facilities) and Title III (privately owned facilities), has been in the process of adopting the 2004 ADAAG and modifying additional standards, which together constitute the ADA Standards for Accessible Design (SAD). The DOJ has just completed the final step in the rule update process, publishing of its updated rules (Rules 28 CFR 35 and 28 CFR 36) in the September 15, 2010 Federal Register.

The new federal standards become mandatory March 15, 2012 and the Florida Accessibility Code must be updated to the new federal standards by that date in order to keep building owners from having to comply with two different standards. The Florida Legislature directed by law that the Florida Accessibility Code and laws must be updated by the Commission to maintain its federal certification as substantially equivalent to the Federal Standards for Accessible Design so designers and owners would have non-conflicting requirements and owners would have liability protection for violations of the architectural standards for their buildings.

It should be noted that if Florida was starting from ground zero, the State would be under great pressure to conform the Florida Accessibility Code with the newly published Standards in the required timelines. However, recognizing that the DOJ was in the process of finalizing its rules updating the Standards for Accessible Design, Commissioner Gross, Accessibility TAC chair, asked the Chairman in 2008 to establish a workgroup to begin modifying the Florida Accessibility Code so the draft would be ready in advance of the deadline for the updated Standards. The Accessibility Code Workgroup starting meeting in February of 2009 and at the June 2010 Commission meeting completed work on a Draft of the Integration of Florida Specific Requirements with the New DOJ Standards. They are in the process now of conforming the Draft Integration document with the final published DOJ rule.

Florida law adopts the federal ADA Standards for Accessible Design as the basis for the Accessibility Code and establishes some additional requirements. It references specific sections of the federal Standards so at minimum, the section references in the law should be changed to correspond to section numbers in the new version of the federal Standards. It may also be necessary to modify some requirements in Florida law that were more stringent or at least as stringent as the first version of the federal Standards but need to be evaluated based on the new federal Standards.

In addition, the draft code based on the new federal Standards and any potential changes to current legislated policy in Florida law need to be vetted with groups representing persons with disabilities and with building owners and designers. The Commission conducted its first workshop Monday to explain the new draft code to the public and to solicit comments on the draft and current policies in Florida law. This moves us closer to our end goal of having the Florida Code certified to the new Federal standards, but there is still much to be done to ensure the Florida code is updated before the new federal Standards become mandatory in March 2012.

The Commission is requesting statutory changes necessary to update the Accessibility Code to maintain its federal certification as follows:

The Commission recommended and Legislature adopted revisions to Part II, Chapter 553, Florida Statutes, to conform requirements with the format and terminology of the 2010 ADA Standards for Accessible Design; to resolve possible not-equivalent standards; to eliminate redundant and non-essential requirements; and to enhance certain requirements for accessibility.

Project Phases Overview

The process for developing the new Florida Accessibility Code for Building Construction is comprised of three phases.

Phase I of the project focused on the integration of Florida Specific Requirements into the Proposed DOJ ADA Standards, June 2008, and was divided into major tasks as follows:

Task 1: Integration of Florida standards established in s.553.501-s.553.513, F.S. into sections of the 2004 ADAAG that have a one for one parallel section in the 1994 ADA Standards.

Task 2: Deciding what to do with Florida standards that are in sections/subsections of the Florida Accessibility Code for Building Construction (1994 ADA Standards with Florida amendments) that do not have a one for one parallel section in the 2004 ADAAG.

Task 3: Integration of Florida standards into new sections in the 2004 ADAAG that have no parallel in the current Florida Accessibility Code (e.g., recreational facilities).

Task 4: Revising the draft Florida Accessibility Code developed from completion of Tasks 1 – 3 (above) for changes made by DOJ in its final rule.

Phase II of the project focused on identifying changes to Florida law necessary to update references to section numbers in the 2010 ADA Standards and to adopt and clarify Florida requirements to maintain current policies and prepare for code certification by DOJ.

Phase III A of the project focused on indentifying changes to Florida law necessary to conform the FACBC with the DOJ Rules 28 CFR 35 and 28 CFR 36 as Revised September 15, 2010.

Phase III B of the project focused on reviewing all of the current Florida Specific Requirements and recommending whether there should be any revisions or clarifications.

PROJECT FACILITATION

The project is being facilitated by Jeff Blair from the FCRC Consensus Center at Florida State University. Information at: <http://consensus.fsu.edu/>



PROJECT WEB PAGE

Information on the project, including recommendations, agenda packets, meeting reports, and related documents may be found in downloadable formats at the project web page below:

<http://consensus.fsu.edu/FBC/accessibility-code.html>