FLORIDA BUILDING COMMISSION

TAC CHAIRPERSONS MEETING

AUGUST 21, 2014 MEETING SUMMARY REPORT

THURSDAY, AUGUST 21, 2014

MEETING SUMMARY AND OVERVIEW

At the Thursday, October 21, 2014 meeting the TAC/POC chairs considered and decided on whether the proposed projects met the three criteria for funding: 1.) definition of research and/or technical enrichment, 2.) urgency/immediacy, and needed for the 2014 FBC, and 3.) funding available (full or partial); and decided which met the requirements, and recommended them for approval by the Commission for funding based on the recommended priorities. The TAC Chairs' voted unanimously to recommended by the Commission approve funding the research projects for fiscal year 2014-2015 as recommended by the TAC chairs on the basis that the proposed projects evaluated meet the three criteria for funding, and are approved for funding based on the funding levels recommended by the TAC chairs, and staff administering and overseeing the research, and negotiating contracting as appropriate.

Background and Supporting Documents

The agenda and relevant background and supporting documents are linked to each agenda item. The Agenda URL for the October 21, 2014 TAC Chairs meeting is as follows: http://www.floridabuilding.org/fbc/commission/FBC_0814/TAC_Chair/TAC_Chair_Agenda_0814.htm

AGENDA ITEM OUTCOMES

OPENING AND MEETING ATTENDANCE

The meeting was opened at 1:00 PM once a quorum was established, and the following TAC chairs participated:

Dick Browdy (FBC Chair), Jay Carlson (Code Administration), Kevin Flanagan (Electrical), Jeff Gross (Accessibility), Darrell Phillips (Special Occupancy), Jim Schock (Structural), Brian Swope (Roofing), and Tim Tolbert (Swimming Pool).

Other Commissioners In Attendance: James Batts.

DBPR STAFF PRESENT

Robert Benbow, Chris Burgwald, Jim Hammers, April Hammonds, Mo Madini, and Jim Richmond.

Meeting Facilitation and Reporting

The TAC Chairs meeting was facilitated by Jeff Blair from the FCRC Consensus center at Florida State University. Information at: <u>http://consensus.fsu.edu/</u>



AGENDA REVIEW

The TAC chairs voted unanimously, 9 - 0 in favor, to approve the agenda for the August 21, 2014 meeting as posted/presented. Following are the key agenda items approved for consideration:

- To Hear a Report Regarding Available Funding
- To Review Workplan/Timelines
- To Evaluate Proposed Research Projects
- To Prioritize and Provide Recommendations on Proposed Research Projects

The complete Agenda is included as "Attachment 1" of this report.

(See Attachment 1—Agenda)

APPROVAL OF OCTOBER 2013 MINUTES

The TAC chairs voted unanimously, 9 - 0 in favor, to approve the minutes for the October 2013 meeting as posted/presented.

DEFINITIONS OF RESEARCH AND TECHNICAL ENRICHMENT

At the August 20013 meeting the TAC Chairs approved definitions to provide clarity and consistency regarding what is meant by "research" and "technical enrichment." The definitions are used as key criteria regarding funding proposed research projects, Following are the approved definitions:

<u>Research</u>: An important and necessary endeavor that aimed at studying specific code related issue(s)/topics for the purpose of providing solutions to a specific problem or future code change(s) directed at improving the implementation and enforcement of the FBC. The issue to be researched must be fully understood (i.e. with clear purpose of doing the research/goals); clearly defined with specific scope of work/approach; and within budget.

Technical Enrichment: An important and necessary endeavor that is aimed at evaluating complex related code issue(s)/topics for the purpose of providing educational/clarification experience or alternative solutions directed at improving the implementation and enforcement of the FBC. Method of delivery for these matters is through workshop/TAC meetings with specific participation of expert(s) in subject area of concern.

RESEARCH WORKPLAN AND TIMELINES UPDATE

Mo Madani reviewed the updated timelines and workplan for evaluating and approving proposed research projects. The Workplan is included as "*Attachment 2*" of this report.

(See Attachment 2—Workplan/Timelines)

TAC CONSIDERATION AND EVALUATION OF PROPOSED RESEARCH PROJECTS

TAC chairs were asked to review the three criteria and to decide whether each of the proposed research projects met the three criteria for funding: 1.) definition of research and/or technical enrichment, 2.) urgency/immediacy, and 3.) funding available (full or partial). The TAC chairs voted that the following 7 projects met the criteria and should be evaluated for funding:

- Project #1: Investigation of the Effectiveness and Failure Rates of Whole-house Mechanical Ventilation Systems in Florida.
- Project #2: Developing Exhaust Air Energy Recovery Credits for the Florida Energy Code.
- Project #4: Phase II An Assessment of Energy Efficient Methods of Indoor Humidity Control in Florida Housing.
- Project #5: Impact of Spray Foam Insulation on Durability of Plywood and OSB Roof Decks.
- Project #6: Investigation of corrosion of fasteners for both roofing and screen enclosures.
- Project # 8: Screen enclosures Characterization of mechanical resistance of connection details and pressure loading in boundary layer wind tunnel including full-scale testing.
- Project #9: Structural wood panels Study catenary loads and develop equations for designer, design for CMU and brick veneers and opening.

Proponents of the proposed research projects that met the criteria were provided with up to fifteen minutes each to present their proposed research projects.

The members were informed that the 7 projects required \$502,917 to fully fund them, with \$346,477 available for funding (after funding project #13: hurricane damage investigation), leaving a funding deficit of \$156,440.

Following presentations and public comments the TAC chairs ranked each of the 7 projects on a 10point scale where 10 represents the highest priority and 1 the lowest. Following is the rank order of the projects considered for funding and the amount the TAC chairs recommended each be funded:

- 1. Project #5: Impact of Spray Foam Insulation on Durability of Plywood and OSB Roof Decks. Recommended for full funding: \$\$90,092
- 2. Project #6: Investigation of corrosion of fasteners for both roofing and screen enclosures. Recommended for full funding: \$85,030
- 3. Project #9: Structural wood panels Study catenary loads and develop equations for designer, design for CMU and brick veneers and opening. Recommended for full funding: \$67,049
- Project #1: Investigation of the Effectiveness and Failure Rates of Whole-house Mechanical Ventilation Systems in Florida.
 Recommended for partial funding: \$45,000 with staff to negotiate the scoping to ensure project has applied applications.
- 5. Project # 8: Screen enclosures Characterization of mechanical resistance of connection details and pressure loading in boundary layer wind tunnel including full-scale testing. Recommended for partial funding: \$30,000, with the \$53,523 funding already committed to investigations of buildings damaged by hurricanes (provided yearly in case of hurricane damage) applied to the project if the funding is not needed for hurricane damage investigation for 2014.
- 6. Project #2: Developing Exhaust Air Energy Recovery Credits for the Florida Energy Code. Recommended for partial funding: remainder or available funding ~\$29,306

 Project #4: Phase II An Assessment of Energy Efficient Methods of Indoor Humidity Control in Florida Housing. No funding allocated for this project.

(See Attachment 3—Research Proposal Costs/Full List of Proposed Research Projects)

TAC Actions:

MOTION—The TAC chairs' voted unanimously, 9 - 0 in favor, to recommend the Commission approve funding the research projects for fiscal year 2014-2015 as recommended by the TAC chairs on the basis that the proposed projects evaluated meet the three criteria for funding: 1.) definition of research and/or technical enrichment, 2.) urgency/immediacy, and needed for the 2014 FBC, and 3.) funding available (full or partial), and should be approved for funding based on the funding levels recommended by the TAC chairs, and staff administering and overseeing the research, and negotiating contracting as appropriate.

TAC RECOMMENDATIONS FOR COMMISSION ACTION

MOTION—The TAC chairs' voted unanimously, 9 - 0 in favor, to recommend the Commission approve funding the research projects for fiscal year 2014-2015 as recommended by the TAC chairs on the basis that the proposed projects evaluated meet the three criteria for funding: 1.) definition of research and/or technical enrichment, 2.) urgency/immediacy, and needed for the 2014 FBC, and 3.) funding available (full or partial), and should be approved for funding based on the funding levels recommended by the TAC chairs, and staff administering and overseeing the research, and negotiating contracting as appropriate.

Adjourn

Commissioner Browdy, Commission Chair, thanked TAC chairs and the public for their attendance and participation, and adjourned the meeting at 4:30 PM on Thursday, October 21, 2013 following an unanimous vote of 9 - 0 in favor of adjournment.

TAC CHAIRS REPORT

ATTACHMENT 1 October 21, 2014 Meeting Agenda

1. Welcome and Opening Roll Call Review and Approval of Agenda and October 2013 Minutes

Technical Advisory Committees (TACS) of the Commission:

	<u>Chairperson</u>
Chairman/FBC	Dick Browdy
Accessibility	Jeffrey Gross
Code Administration	Jay Carlson
Structural	James Schock
Fire	Hamid Bahadori
Electrical	Kevin Flanagan
Energy	Drew Smith
Mechanical	Steve Bassett
Plumbing	Robert Boyer
Product Approval POC	Jeff Stone
Roofing	Brian Swope
Special Occupancy	Darrell Phillips
Swimming Pools	Tim Tolbert

Definitions for "Research" and "Technical Enrichment"

<u>Research:</u> An important and necessary endeavor that aimed at studying specific code related issue(s)/topics for the purpose of providing solutions to a specific problem or future code change(s) directed at improving the implementation and enforcement of the FBC. The issue to be researched must be fully understood (i.e. with clear purpose of doing the research/goals); clearly defined with specific scope of work/approach; and within budget.

<u>Technical Enrichment</u>: An important and necessary endeavor that is aimed at evaluating complex related code issue(s)/topics for the purpose of providing educational/clarification experience or alternative solutions directed at improving the implementation and enforcement of the FBC. Method of delivery for these matters is through workshop/TAC meetings with specific participation of expert(s) in subject area of concern.

2. Available Funding Sources

3. Review research Workplan/Timeline

4. TAC considers, evaluates and recommends list of research topics for consideration by the Commission.

A. Presentations of proposed research projects by proponents. (15 - minutes per project)

1. Investigation of the Effectiveness and Failure Rates of Whole-house Mechanical Ventilation Systems in Florida. (Jeff Sonne) (Mechanical TAC) **Project Files**

Jim Richmond

Chairman

Mo Madani

- 2. Developing Exhaust Air Energy Recovery Credits for the Florida Energy Code. (Energy TAC)(Bereket Nigusse/Muthusamy Swami) **Project Files**
- **3.** Phase 2 Investigation of Potential Benefits from Sealing Building Cavities in Conditioned Space Used for Return Air Plenums in Existing Homes. (Energy TAC) (Janet McIlvaine and David Beal) **Project Files**
- 4. Phase II An Assessment of Energy Efficient Methods of Indoor Humidity Control in Florida Housing. (Energy TAC) (Chuck Withers) **Project Files**
- 5. Impact of Spray Foam Insulation on Durability of Plywood and OSB Roof Decks. (Roofing TAC) (David Prevatt) **Project Files**
- 6. Investigation of corrosion of fasteners for both roofing and screen enclosures. (Roofing/Structural TACs) (Kurtis Gurley) **Project Files**
- 7. Developing Incentives for the Voluntary Installation of Fire Sprinklers in One-and Two Family Dwelling. (Fire TAC) (Kurtis Gurley) **Project Files**
- Screen enclosures Characterization of mechanical resistance of connection details and pressure loading in boundary layer wind tunnel including full-scale testing. (Structural TAC) (Forrest Masters) Project Files
- Structural wood panels Study catenary loads and develop equations for designer, design for CMU and brick veneers and opening. (Structural TAC) (Forrest Master) Project Files
- **10.** Retrofitting of historic operable shutters as means of windborne debris protection. (Special Occupancy TAC) (Forrest Master) **Project Files**
- Clarify the scoping requirements of Chapter 2 of the Florida Accessibility Code for the purpose of simplifying and clarifying FL specific requirements. (Accessibility TAC) (Note: this is not a research topic)
- 12. Statewide analysis of the uniformity of code administration including permitting fees, time, and inspections. (Code Admin TAC) (Voted down by the TAC)
- 13. Survey and investigation of building damaged by Hurricanes in Florida. (Staff) (Forrest Masters) **Project Files**
- 14. Code consideration for appliances, lighting and miscellaneous electric loads in Florida homes. (Energy TAC) (Karen Sutherland) **Project Files**
- **B.** TAC evaluation of each research project. (11/2 hr.) Prioritization of proposals based on immediate needs.

5. Adjournment

Chairman

ATTACHMENT 2

RESEARCH WORKPLAN AND TIMELINE

RESEARCH WORKPLAN	
TIMELINE	MILESTONE
June 13, 2014	Send out email to TAC members to solicit research topics.
June 24-July 14, 2014	Convene all the TACs.
August 1, 2014	Compile outcomes of TACs meetings/various research topics by TAC.
August 11, 2014	Make available list of research topics/Scope of Work for review at the Chairs meeting.
August 21, 2014	Chair meeting to consider and recommend list of research topics for consideration by the Commission.
August/Sept. 2014	Contract with the UF/UCF to conduct research. Funding is contingent upon budget appropriation and must be spend within the Fiscal year.
June 1, 2014	Complete research or partial research.

ATTACHMENT 3

RESEARCH PROPOSAL COSTS

- Investigation of the Effectiveness and Failure Rates of Whole-house Mechanical Ventilation Systems in Florida. (Mechanical TAC) - \$59,500
- Developing Exhaust Air Energy Recovery Credits for the Florida Energy Code. (Energy TAC) - \$35,200
- <u>Phase II</u> Investigation of Potential Benefits from Sealing Building Cavities in Conditioned Space Used for Return Air Plenums in Existing Homes. (Energy TAC) - \$48,872
- <u>Phase II</u> An Assessment of Energy Efficient Methods of Indoor Humidity Control in Florida Housing. (Energy TAC) - \$31,500
- Impact of Spray Foam Insulation on Durability of Plywood and OSB Roof Decks. (Roofing TAC) - \$90,092
- 6. Investigation of corrosion of fasteners for both roofing and screen enclosures. (Roofing/Structural TACs) - \$85,030
- Developing Incentives for the Voluntary Installation of Fire Sprinklers in One-and Two Family Dwelling. (Fire TAC) - \$27,468
- 8. Screen enclosures Characterization of mechanical resistance of connection details and pressure loading in boundary layer wind tunnel including full-scale testing. (Structural TAC) \$134,546
- 9. Structural wood panels Study catenary loads and develop equations for designer, design for CMU and brick veneers and opening. (Structural TAC) \$67,049
- 10. Retrofitting of historic operable shutters as means of windborne debris protection.
 (Special Occupancy TAC) \$33,545
- 11. Clarify the scoping requirements of Chapter 2 of the Florida Accessibility Code for the purpose of simplifying and clarifying FL specific requirements. (Accessibility TAC) (Note: this is not a research topic) No funds needed
- 12. Statewide analysis of the uniformity of code administration including permitting fees, time, and inspections. (Code Admin TAC) (TBD) Projected \$30,000
- 13. Survey and investigation of building damaged by Hurricanes in Florida. (Staff) \$53,523
- 14. Code consideration for appliances, lighting and miscellaneous electric loads in Florida homes. (Energy TAC) - \$47,000
- Total Cost.....\$743,323

TAC CHAIRS REPORT